



Prof. Dr.-Ing. habil. Suchart Siengchin

**President
King Mongkut's University
of Technology North Bangkok
Thailand**

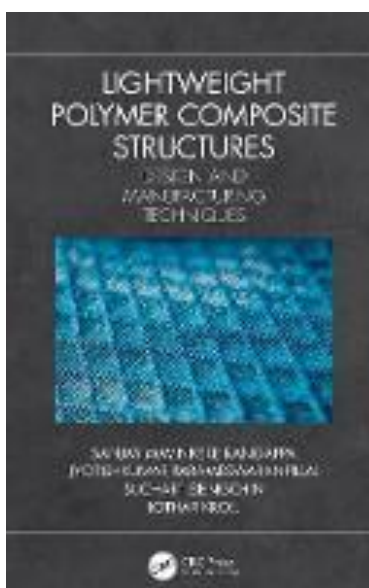
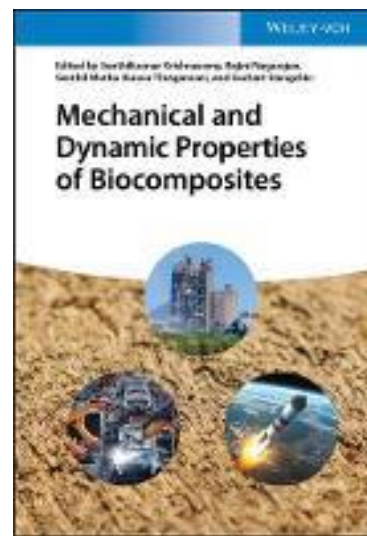
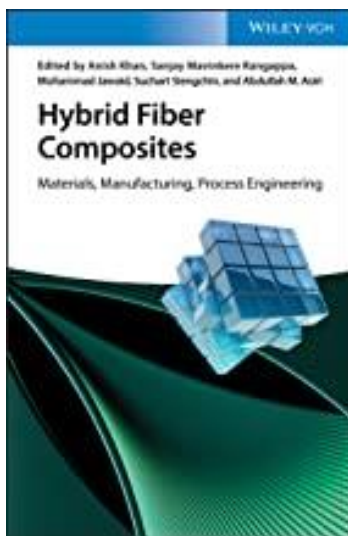
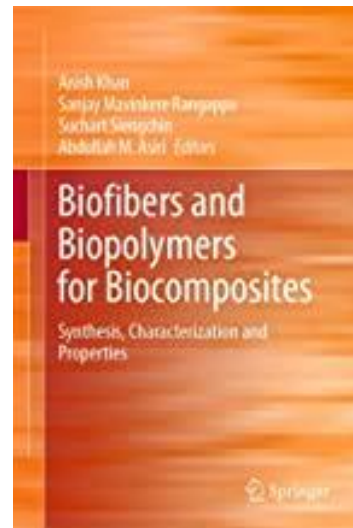
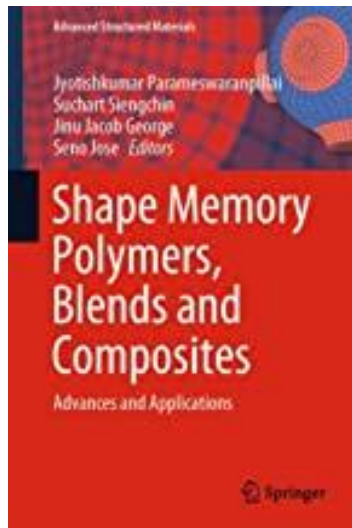
Prof. Dr.-Ing. habil. Suchart Siengchin is President of King Mongkut's University of Technology North Bangkok (KMUTNB), Thailand. He received his Dipl.-Ing. in Mechanical Engineering from University of Applied Sciences Giessen/Friedberg, Hessen, Germany, M.Sc. in Polymer Technology from University of Applied Sciences Aalen, Baden-Wuerttemberg, Germany, M.Sc. in Material Science at the Erlangen-Nürnberg University, Bayern, Germany, Doctor of Philosophy in Engineering (Dr.-Ing.) from Institute for Composite Materials, University of Kaiserslautern, Rheinland-Pfalz, Germany and Postdoctoral Research from School of Materials Engineering, Purdue University, USA. In 2016 he completed the Habilitation (Dr.-Ing. habil.) in Mechanical Engineering from Chemnitz University of Technology, Saxony, Germany and worked as a Lecturer for Mechanical and Process Engineering Department at The Sirindhorn International Thai-German Graduate School of Engineering (TGGS), KMUTNB. He has been full Professor at KMUTNB and became the Vice President for Research and Academic Enhancement in 2012 and elected President of KMUTNB in November 2016. He won the Outstanding Researcher Award in 2010, 2012, 2013 at KMUTNB and National Outstanding Researcher Award for the year 2021 in engineering and industrial research by National Research Council of Thailand (NRCT) and Honorary Fellow of RWTH Aachen university Award 2024. His research interests in Polymer Processing and Composite Material. He is Editor-in-Chief: Applied Science and Engineering Progress and International Advisory Board, eXPRESS Polymer Letters and Journal of Production Systems and Manufacturing Science and the author of more than 584 peer reviewed Journal Articles and edited books and book chapters more than 164 books. He has participated with presentations in more than 451 International and National Conferences with respect to Materials Science and Engineering topics.

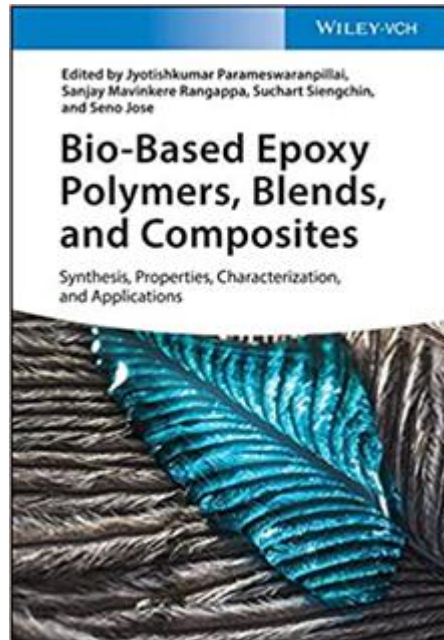
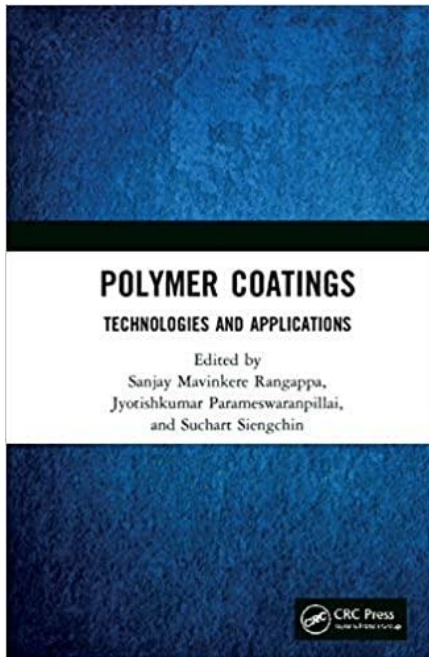
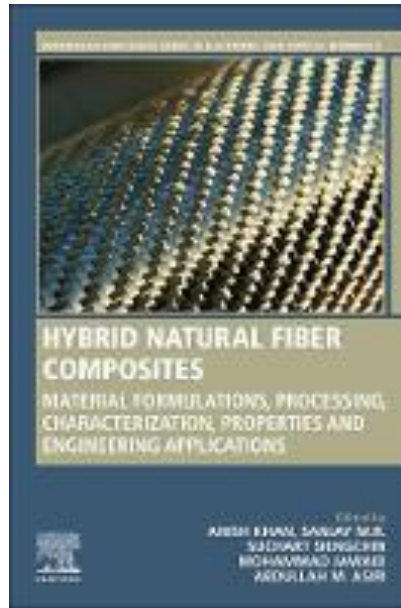
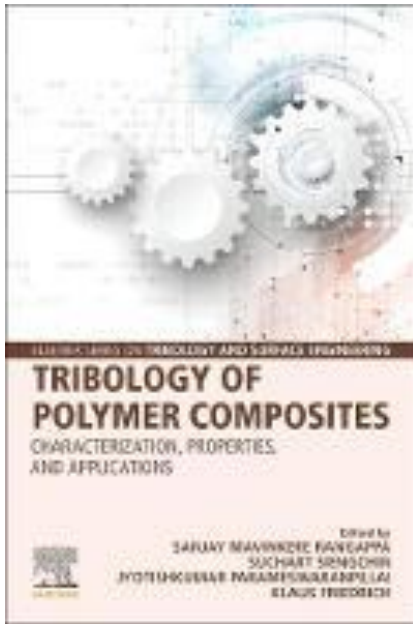
FIELD OF INTEREST

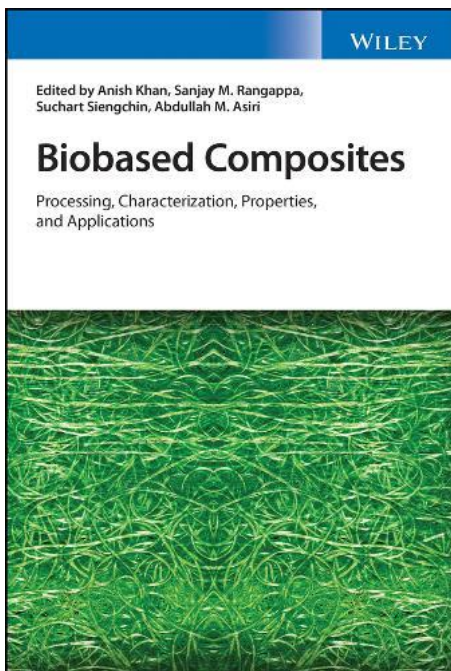
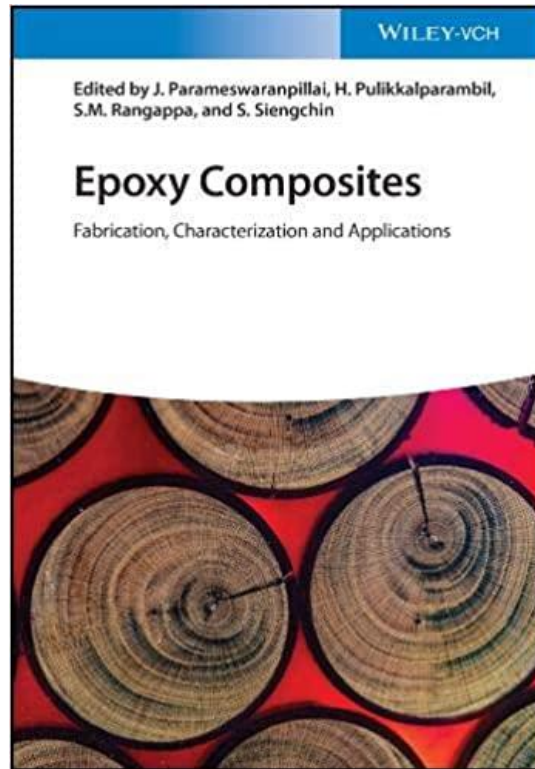
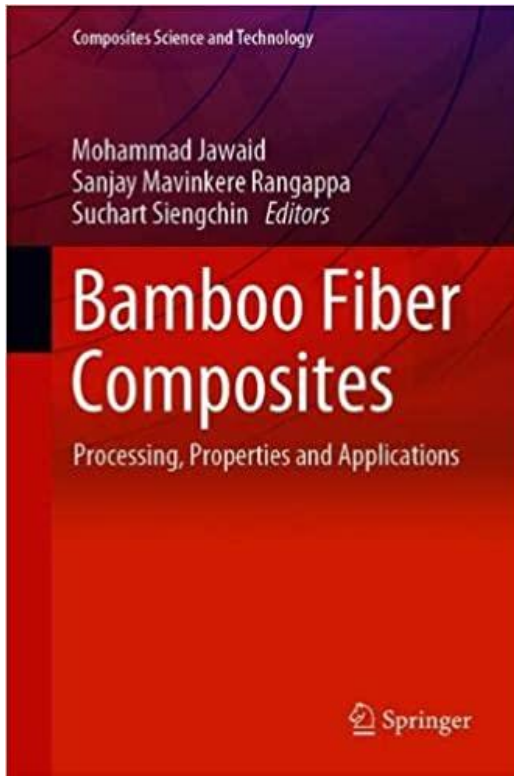
- Polymer and composite processing
- Structure-property relationships
- Natural fiber and Composite material
- Modeling and Rheology based on Polymer

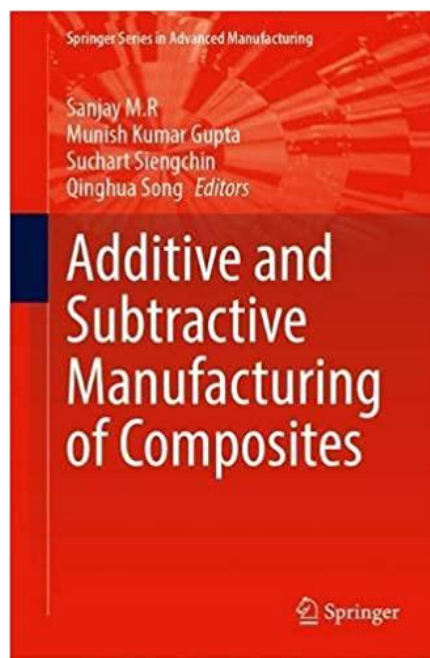
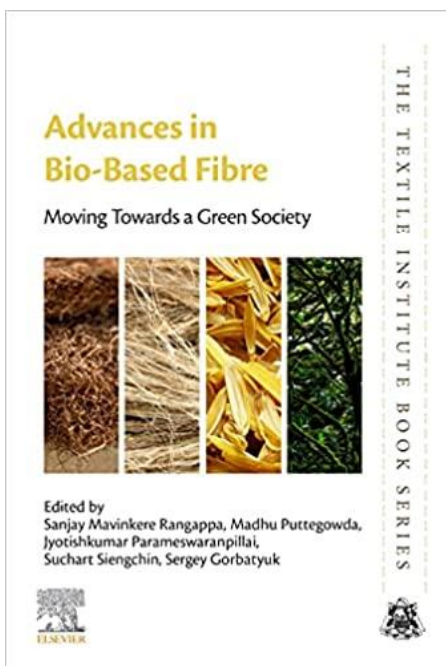
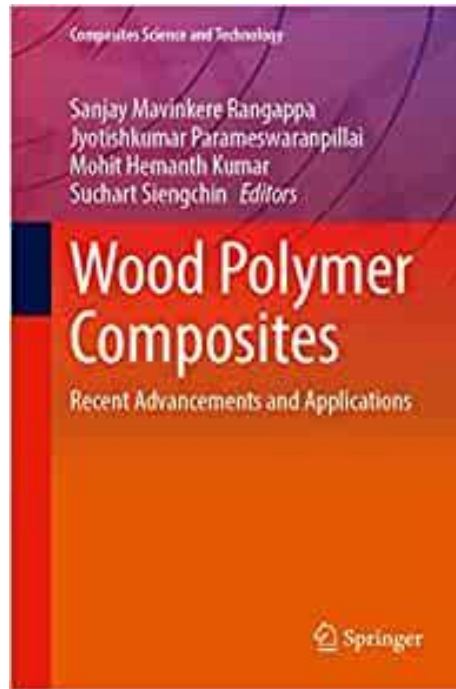
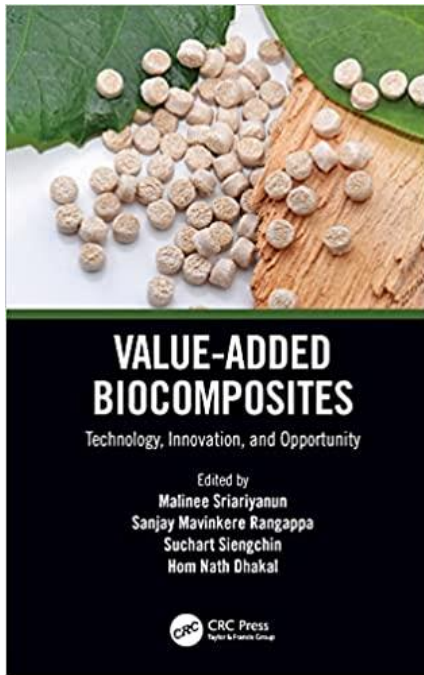
FELLOWSHIPS/AWARDS

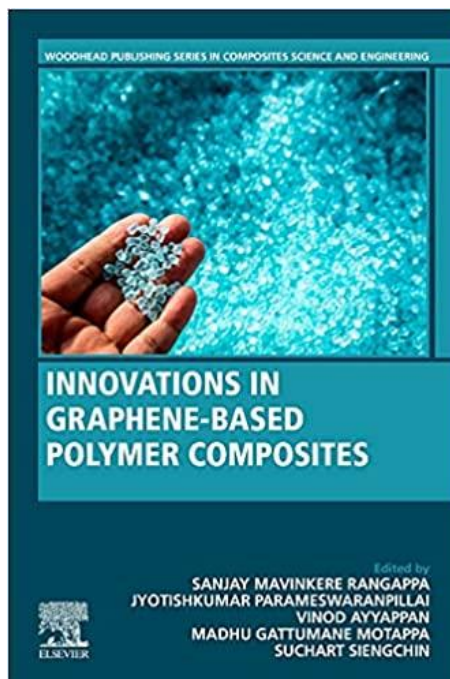
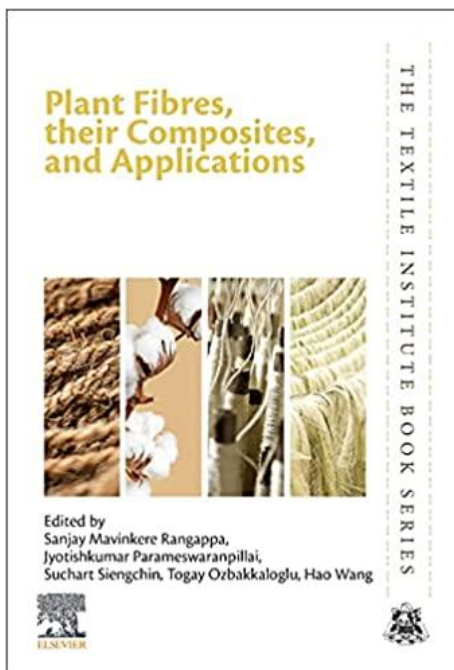
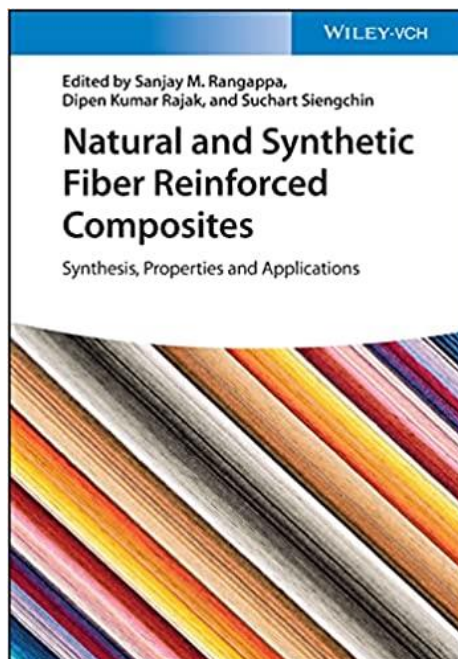
- | | |
|-------------|--|
| 1999 | Deutcher Akademisher Austauschdienst (DAAD)
Master Thesis- scholarships - 6 months |
| 2005 | Deutsche Forschungsgemeinschaft, DFG (German Research Foundation)
Research Training Groups: 2005-2008 |
| 2006 | DAAD/IKYDA program, Deutcher Akademisher Austauschdienst (DAAD)
and Greek State Institute of Scholarships (IKY)
Research trip: University of Patras, Department of Materials Science - 2 weeks |
| 2007 | DAAD/IKYDA program, Deutcher Akademisher Austauschdienst (DAAD)
and Greek State Institute of Scholarships (IKY)
Research trip: University of Patras, Department of Materials Science - 2 weeks |
| 2008 | DAAD/IKYDA program, Deutcher Akademisher Austauschdienst (DAAD)
and Greek State Institute of Scholarships (IKY)
Research trip: University of Patras, Department of Materials Science - 2 weeks |

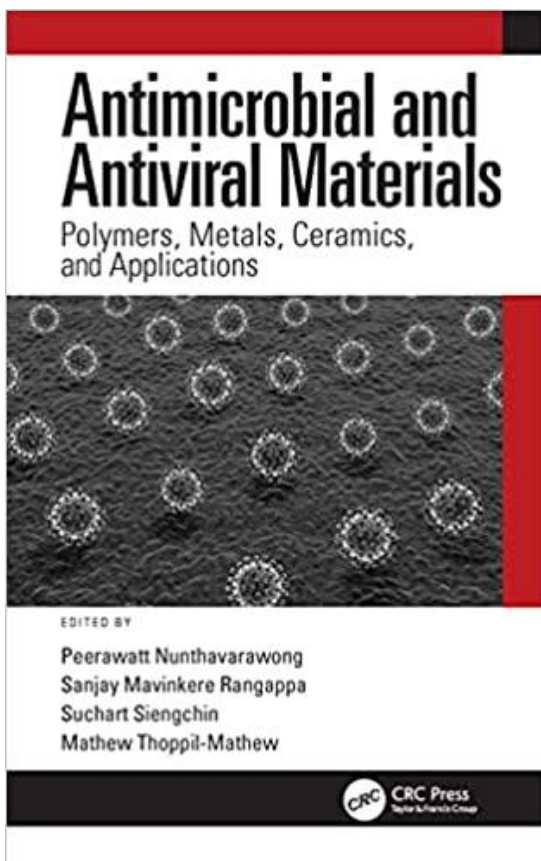
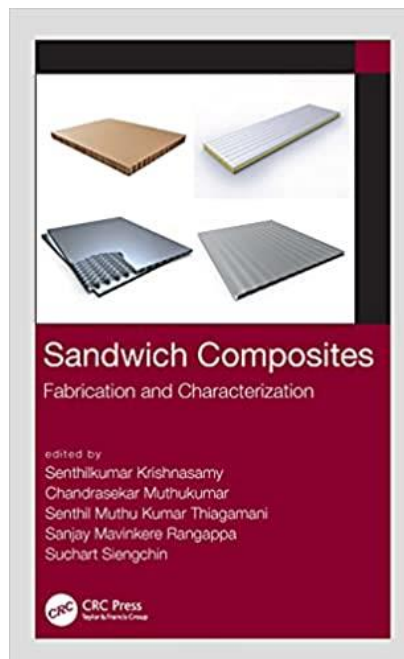
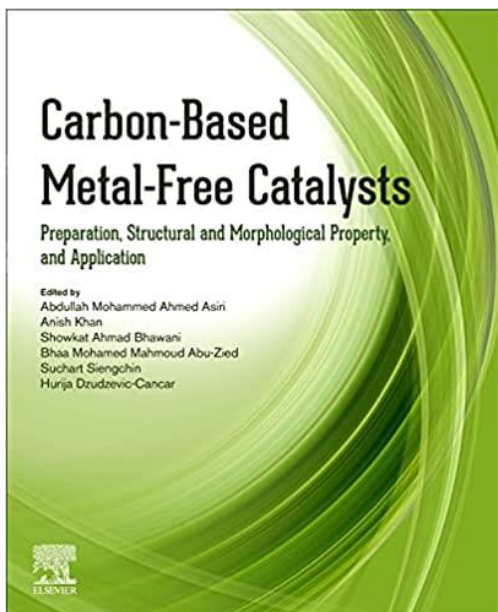


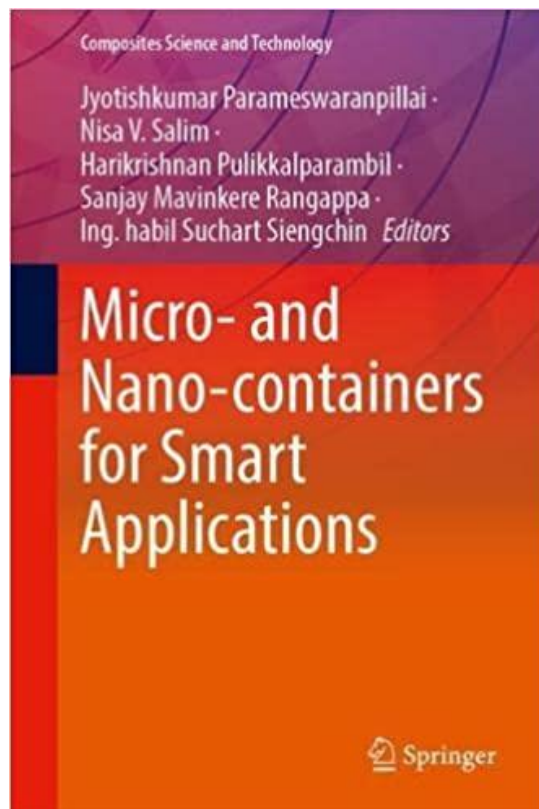
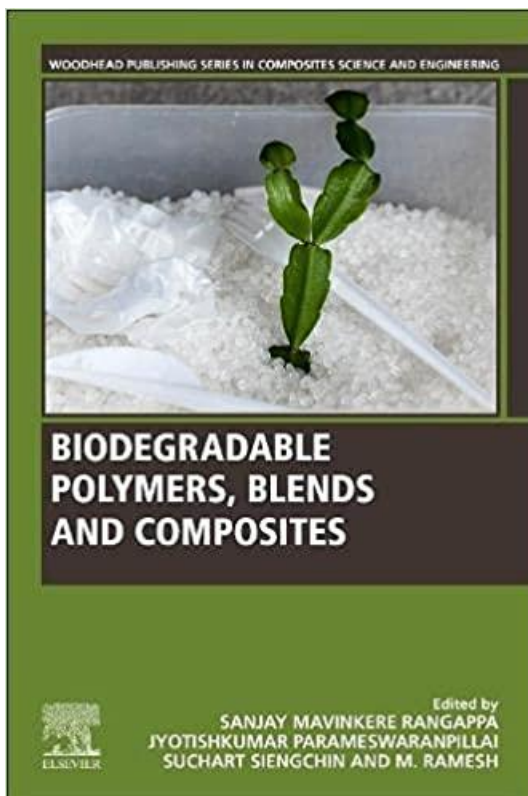
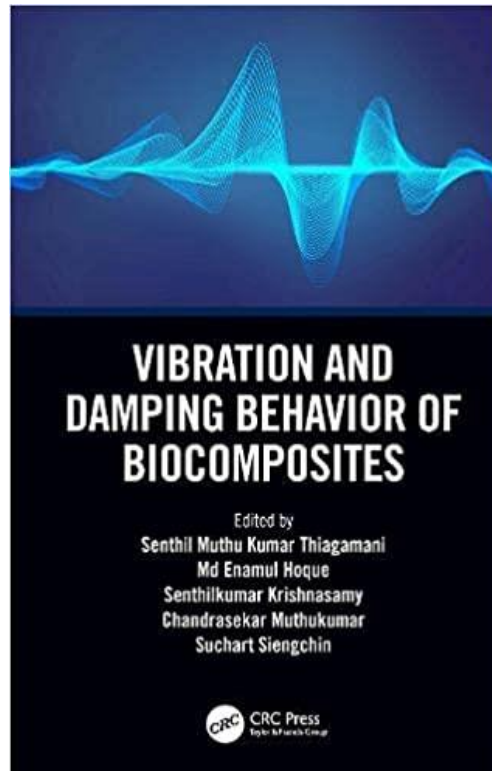
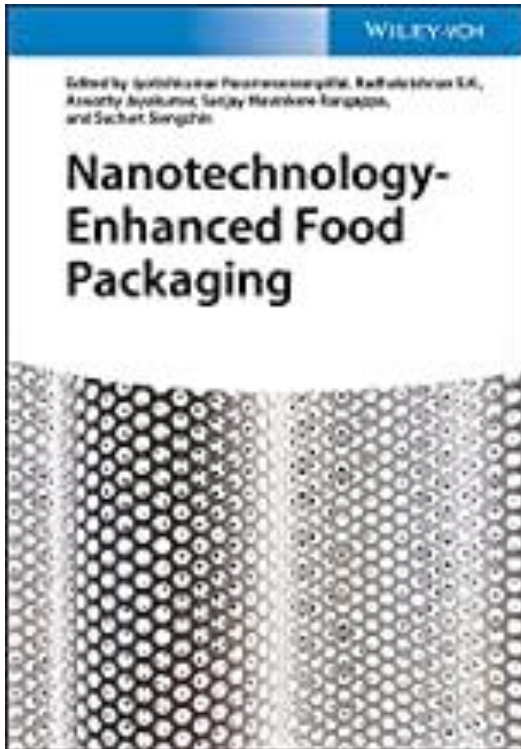


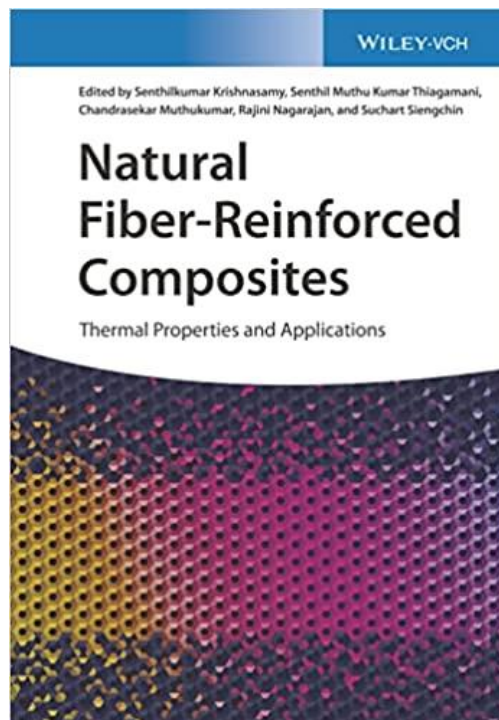
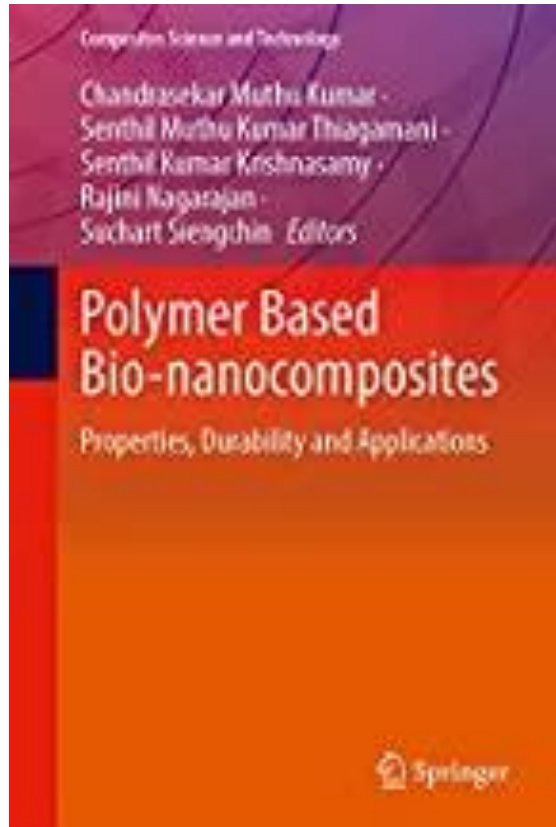
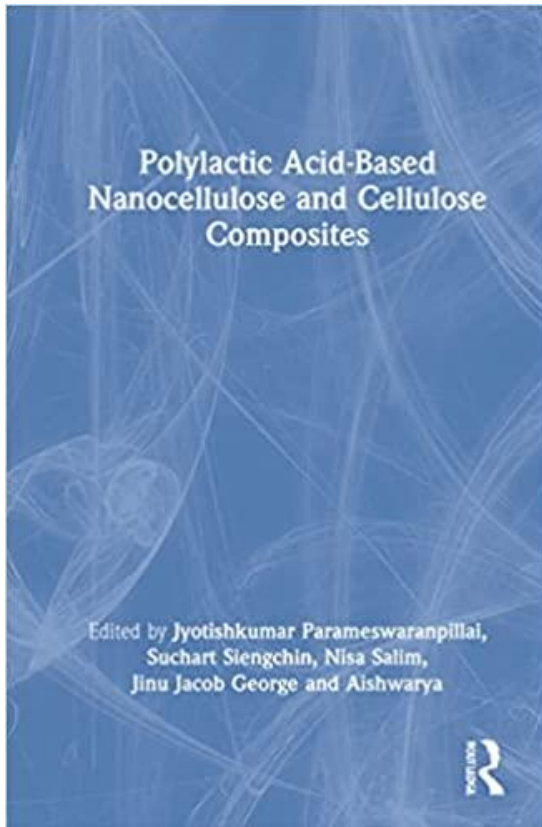


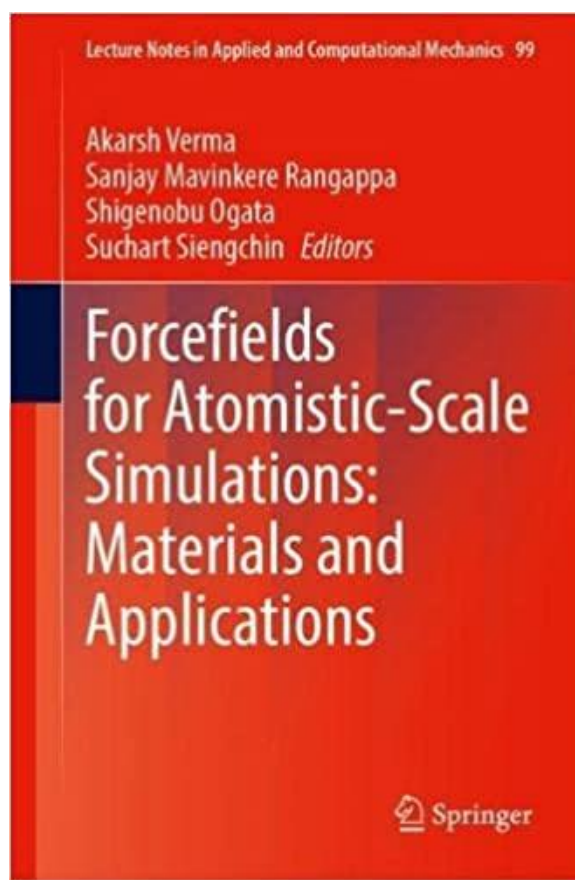
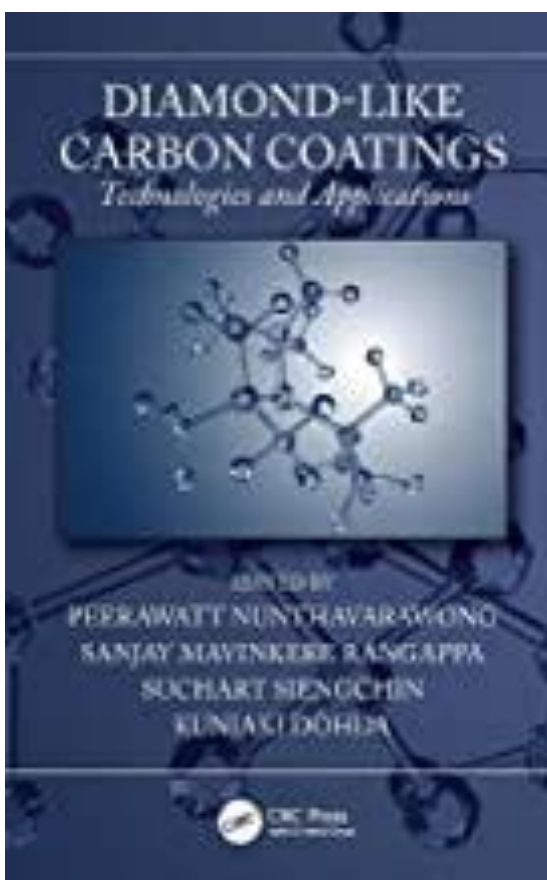
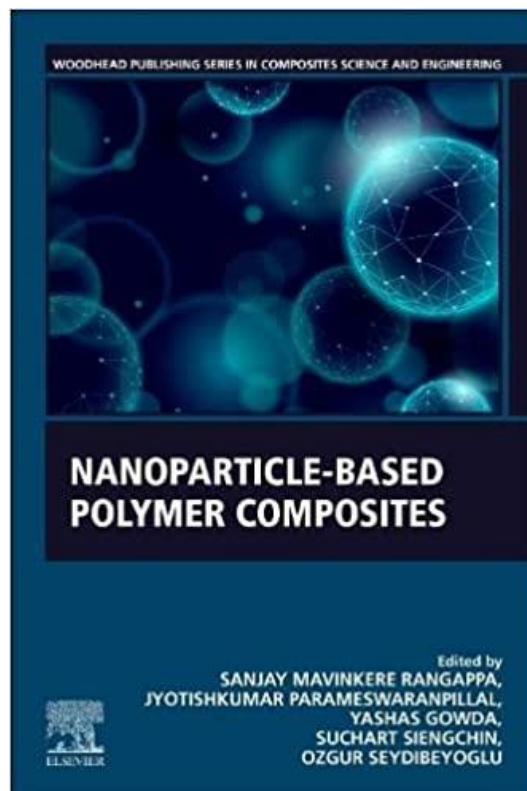
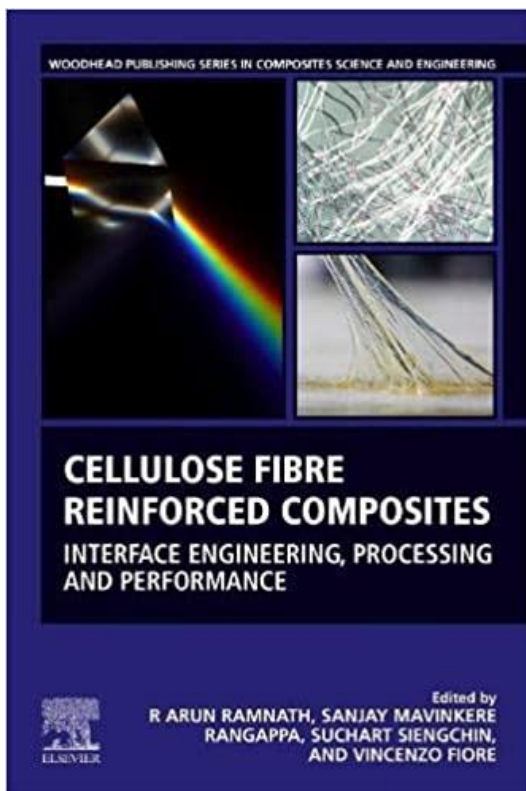


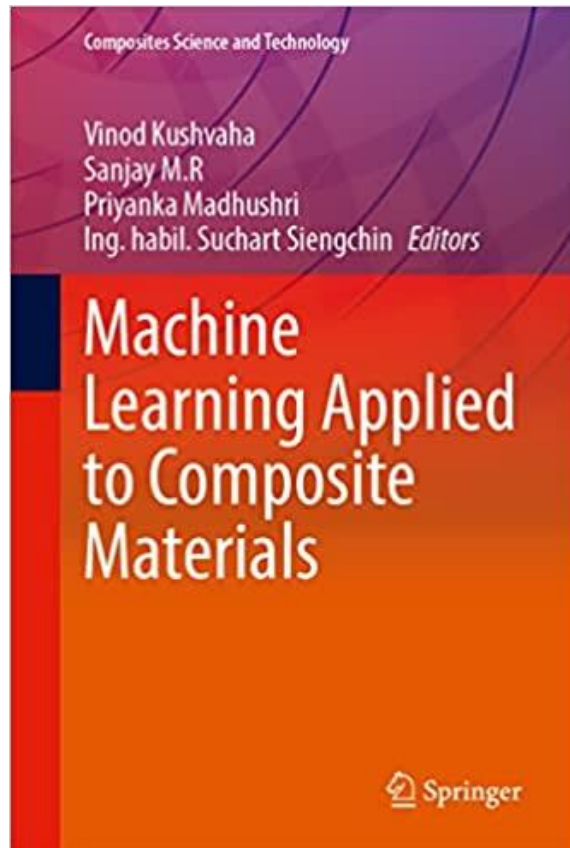
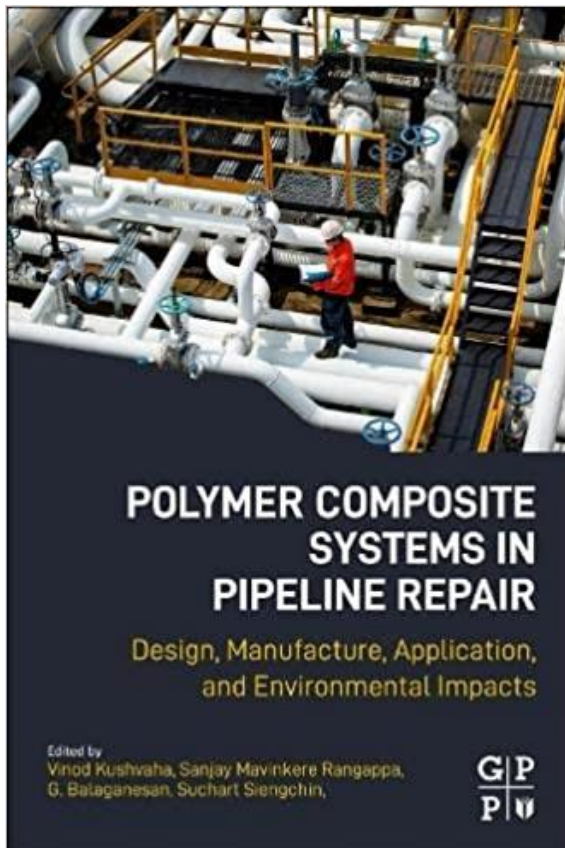
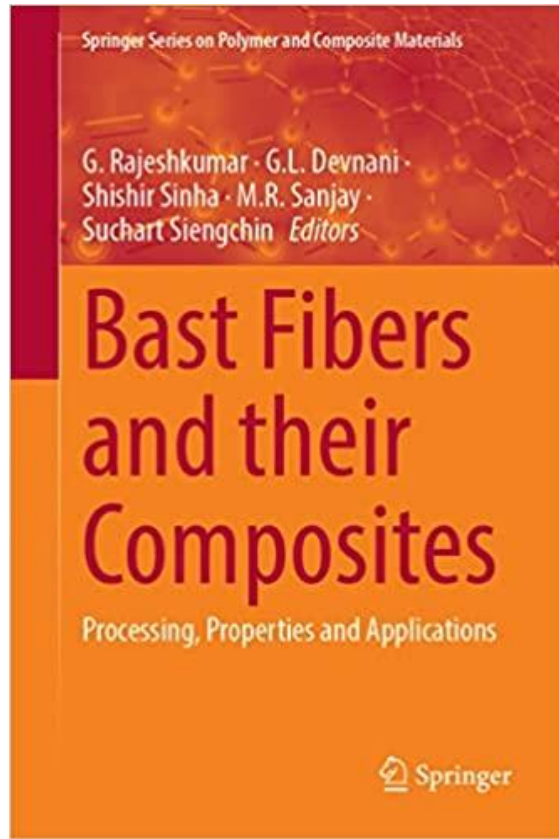
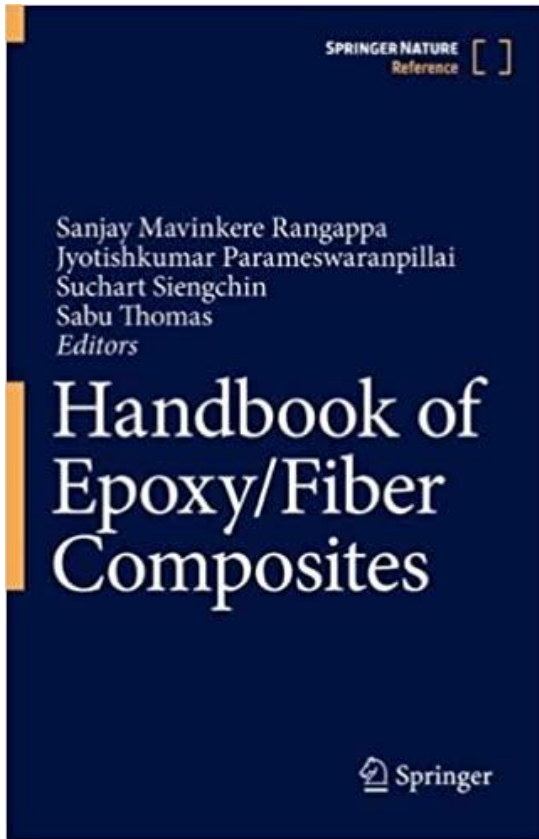


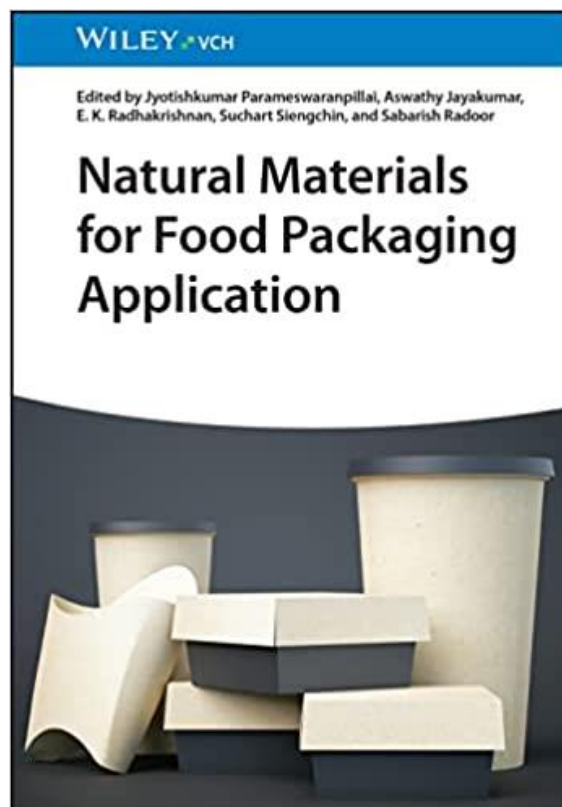
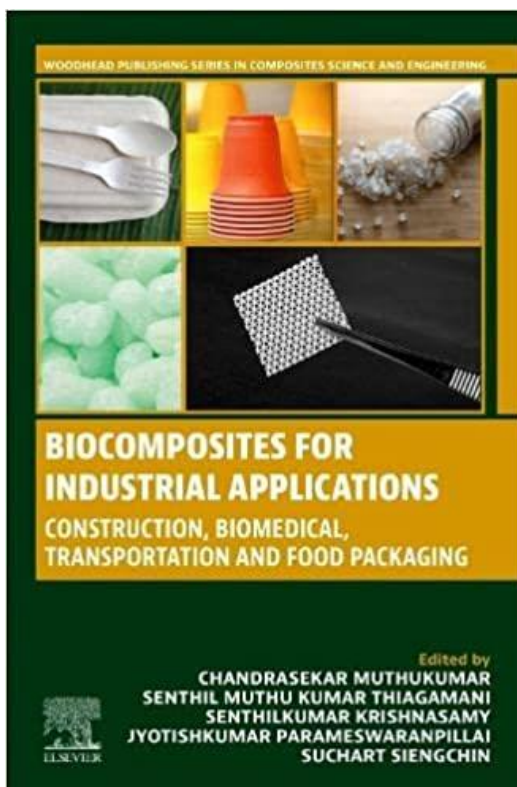
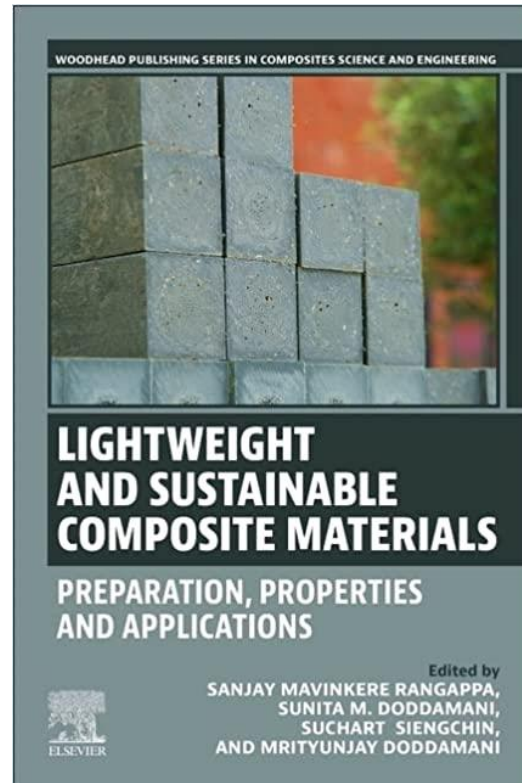
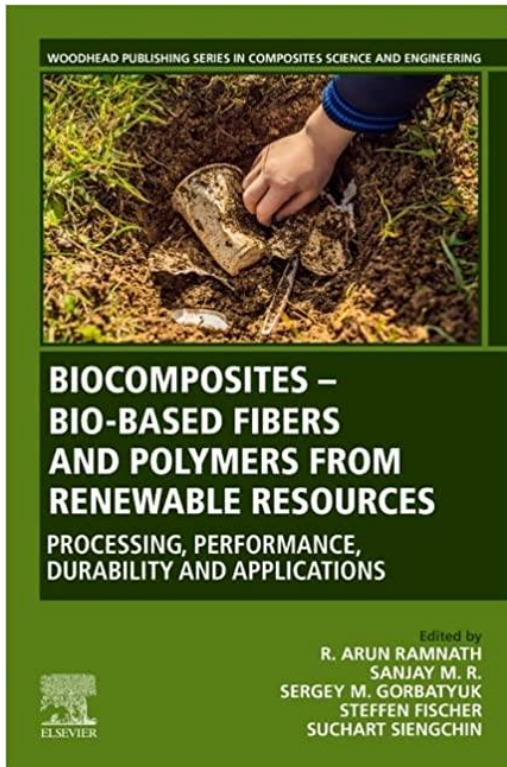


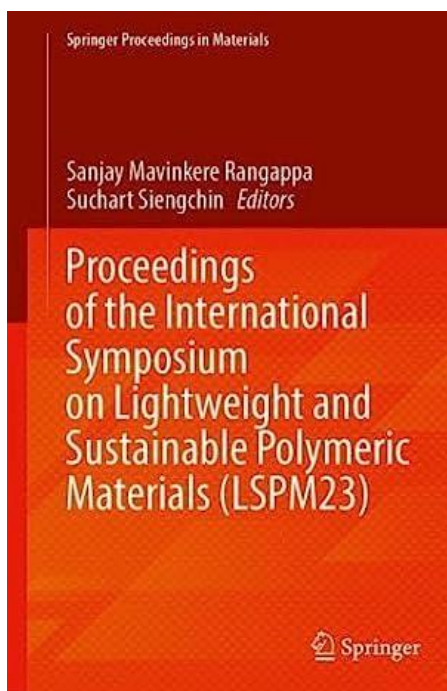
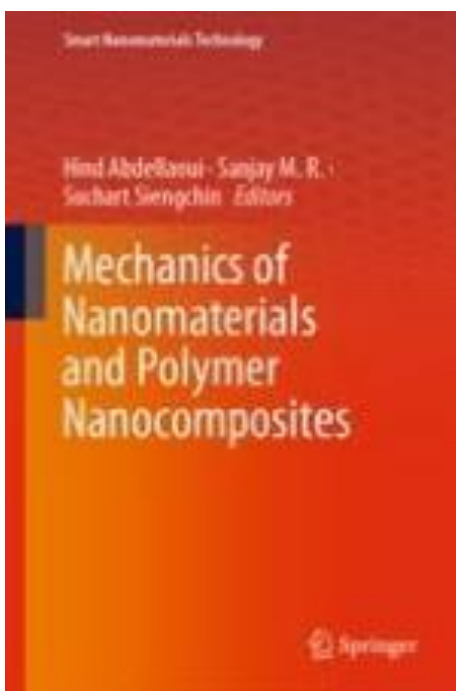
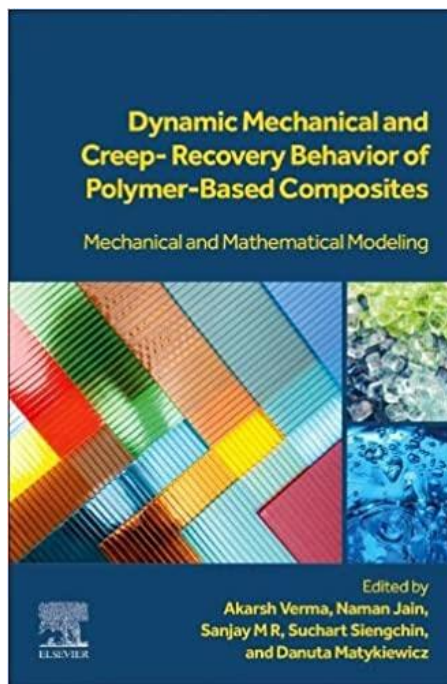
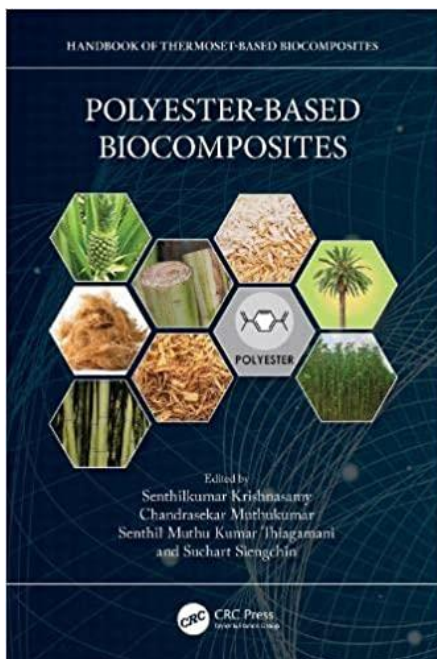


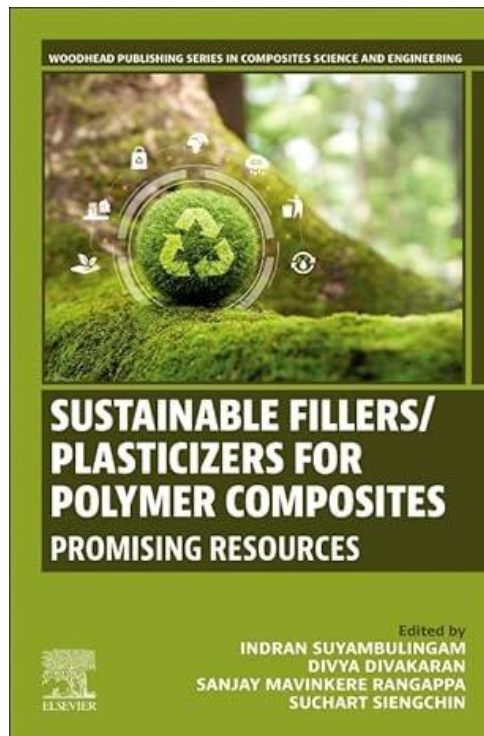
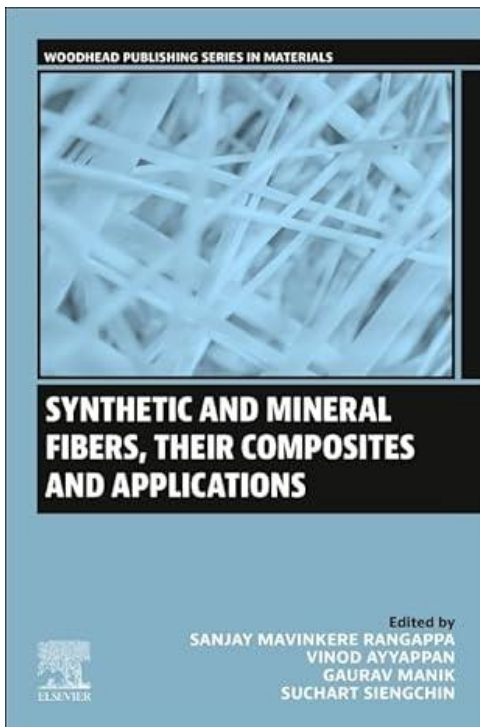
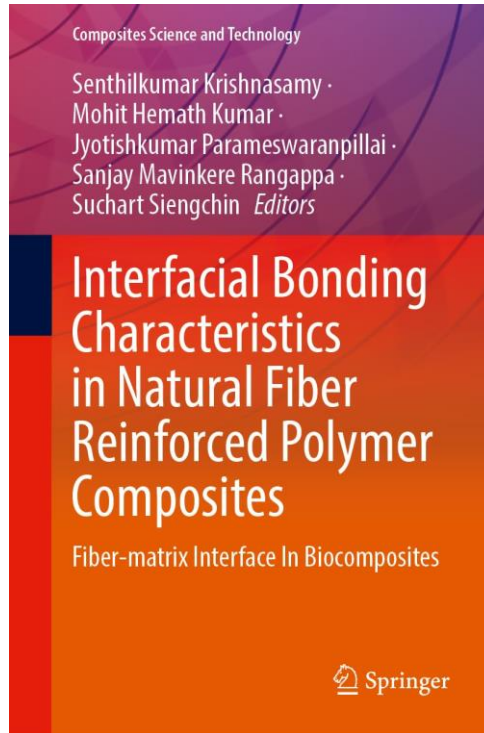


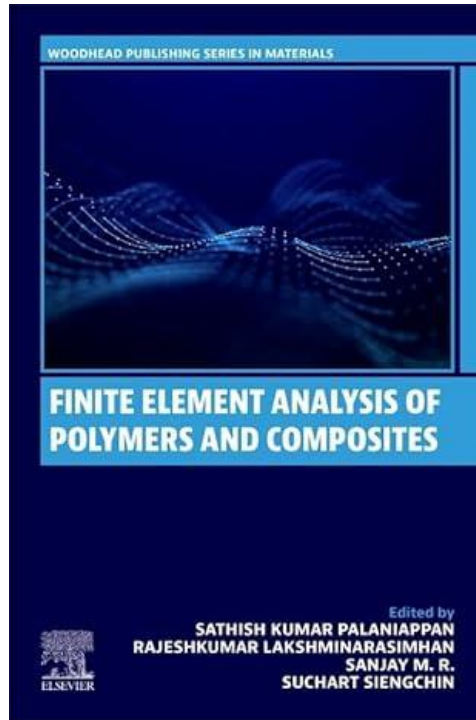
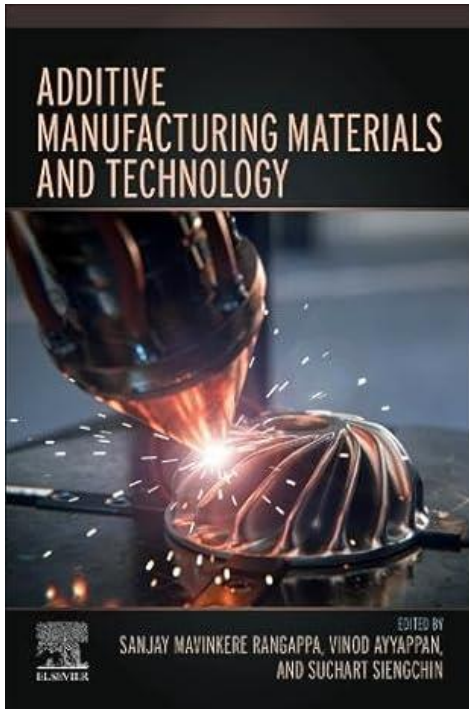












PROFESSIONAL ACTIVITIES

- International Journal Reviewer, Polymer International
- International Journal Reviewer, Journal of Thermoplastic Composite Materials
- International Journal Reviewer, Express Polymer Letters
- International Journal Reviewer, Polymer
- International Journal Reviewer, Polymer Composites
- International Journal Reviewer, Polymer Engineering and Science
- International Journal Reviewer, Journal Applied Polymer Science
- International Journal Reviewer, Journal of Reinforced Plastics and Composites
- International Journal Reviewer, Asian International Journal of Science and Technology
- International Journal Reviewer, Composites Science and Technology
- International Journal Reviewer, Composites Part B: Engineering
- International Journal Reviewer, Composites Part A: Applied Science and Manufacturing
- International Journal Reviewer, Journal of Thermal Analysis and Calorimetry
- International Journal Reviewer, Journal of Elastomers and Plastics
- International Journal Reviewer, Journal of Particulate Science and Technology
- International Journal Reviewer, Polymer International
- International Journal Reviewer, Journal of Materials Science
- International Journal Reviewer, Journal of Natural Fibers
- International Journal Reviewer, Journal of Biological Macromolecules
- International Journal Reviewer, Polymers from Renewable Resources
- International Journal Reviewer, Journal of Engineered Fibers and Fabrics
- International Journal Reviewer, ACS Applied Materials & Interfaces
- International Journal Reviewer, Colloids and Surfaces A
- International Journal Reviewer, Journal of Mechanical and Materials Engineering
- International Journal Reviewer, Materials Today Communications
- International Journal Reviewer, Scientific Reports
- International Journal Reviewer, Materials Science & Engineering C
- International Journal Reviewer, Chemical Engineering Journal
- International Journal Reviewer, Progress in Organic Coatings
- International Journal Reviewer, Materials Letters
- International Journal Reviewer, Journal of Food Engineering
- International Journal Reviewer, Journal of Materials Research and Technology
- International Journal Reviewer, Polymers for Advanced Technologies
- International Journal Reviewer, Macromolecular Symposia

- Internatinal Journal Reviewer, Journal of Renewable Materials
- Internatinal Journal Reviewer, Construction & Building Materials
- Internatinal Journal Reviewer, Applied Surface Science
- Internatinal Journal Reviewer, Journal of Polymers and the Environment
- Internatinal Journal Reviewer, Journal of Cleaner Production
- Internatinal Journal Reviewer, European Journal of Wood and Wood Products
- Internatinal Journal Reviewer, Cellulose
- Internatinal Journal Reviewer, Waste and Biomass Valorization
- Internatinal Journal Reviewer, Materials & Design
- Internatinal Journal Reviewer, Iranian Polymer Journal
- Internatinal Journal Reviewer, Industrial Crops & Products
- Internatinal Journal Reviewer, Biomass Conversion and Biorefinery
- Internatinal Journal Reviewer, Carbohydrate Polymers
- Internatinal Journal Reviewer, European Polymer Journal
- Internatinal Journal Reviewer, Polymer Analysis and Characterization
- Internatinal Journal Reviewer, Cleaner Materials
- Internatinal Journal Reviewer, ACS Sustainable Chemistry & Engineering
- Internatinal Journal Reviewer, RSC Advances
- Internatinal Journal Reviewer, Bioresource Technology Reports
- Internatinal Journal Reviewer, Materials
- Internatinal Journal Reviewer, Journal of Industrial Textiles
- Internatinal Journal Reviewer, Materialia
- Internatinal Journal Reviewer, Composite Structures
- Internatinal Journal Reviewer, Journal of the Mechanical Behavior of Biomedical Materials
- Internatinal Journal Reviewer, Polymer Degradation and Stability
- Internatinal Journal Reviewer, Polymer Bulletin
- Internatinal Journal Reviewer, Journal of Testing and Evaluation
- Internatinal Journal Reviewer, Heliyon
- Internatinal Journal Reviewer, Materials Chemistry and Physics
- Internatinal Journal Reviewer, Journal of Engineering Research
- Internatinal Journal Reviewer, Energy Science & Engineering
- Editor-in-Chief: KMUTNB Journal
- Editor-in-Chief: Applied Science and Engineering Progress
- International Advisory Board, eXPRESS Polymer Letters
- International Editorial Board, Journal of Polymer Letters

- International Editorial Board, Journal of Production Systems and Manufacturing Science
- Special Issue Editors: Polymers Journal (MDPI)
- Special Issue Editors: Frontiers in Materials

FIELD OF INTEREST

- Polymer and composite processing
- Structure-property relationships
- Natural fiber and composite material
- Modeling and Rheology based on Polymer

PUBLICATION

Books

- [1] **SIENGCHIN S.**: Water Mediated Melt Compounding to Produce Thermoplastic Polymer Based Nanocomposites: Structure-Property Relationships. IVW Schriftenreihe Band 82, *A.K. Schlarb (Hrsg.)*, Kaiserslautern, 2008, ISBN: 978-3-934930-78-0.
- [2] **SIENGCHIN S.**: Natural Fiber Reinforced Thermoplastics. **Universitätsverlag Chemnitz** 2017, ISBN: 978-3-96100-019-7.
- [3] Editors: Jyotishkumar Parameswaranpillai, **Suchart Siengchin**, Jinu Jacob George and Seno Jose, Shape Memory Polymers, Blends and Composites - Advances and Applications, **Publisher: Springer Nature** 2019, ISBN 978-981-13-8573-5 DOI 10.1007/978-981-13-8574-2
- [4] Editors: Anish Khan, Sanjay M.R, **Suchart Siengchin** and Abdullah M. Asiri: Biofibers and Biopolymers for Biocomposites - Synthesis, Characterization and Properties, **Publisher: Springer Nature** 2020, ISBN 978-3-030-40300-3 DOI 10.1007/978-3-030-40301-0
- [5] Editors: Anish Khan, Sanjay M.R, Mohammed Jawaid, **Suchart Siengchin** and Abdullah M. Asiri, Hybrid Fiber Composites. Materials, Manufacturing, Process Engineering, **Publisher: Wiley-VCH Verlag** 2020, ISBN 978-3527346721
- [6] Editors: Sanjay M.R, **Suchart Siengchin**, Jyotishkumar Parameswaranpillai, Klaus Friedrich, Tribology of Polymer Composites: Characterization, Properties, and Applications, **Publisher: Elsevier** 2020, ISBN 978-01281-97677
- [7] Editors: Sanjay Mavinkere Rangappa, Jyotishkumar Parameswaranpillai, **Suchart Siengchin**, Lothar Kroll, Lightweight Polymer Composite Structures Design and Manufacturing Techniques, **Publisher: CRC Press** 2020, ISBN 978-03671-99203
- [8] Editors: Sanjay Mavinkere Rangappa, Jyotishkumar Parameswaranpillai, Senthil Muthu Kumar Thiagamani, Senthilkumar Krishnasamy, **Suchart Siengchin**, Food Packaging Advanced Materials, Technologies, and Innovations, **Publisher: CRC Press** 2020, ISBN 978-03673-35380
- [9] Editors: Jyotishkumar Parameswaranpillai, Sanjay Mavinkere Rangappa, Seno Jose, **Suchart Siengchin**, Bio-Based Epoxy Polymers, Blends and Composites: Synthesis, Properties,

- Characterization and Applications, **Publisher: Wiley-VCH Verlag** 2020, ISBN 978-35273-46486
- [10] Editors: Anish Khan, Sanjay M.R., **Suchart Siengchin** and Mohammed Jawaid, Hybrid Natural Fiber Composites, **Publisher: Elsevier** 2020, ISBN 978-01281-99008
- [11] Editors: Senthilkumar Krishnasamy, Rajini Nagarajan, Senthil Muthu Kumar Thiagamani and **Suchart Siengchin**, Mechanical and Dynamic Properties of Biocomposites, **Publisher: Wiley-VCH Verlag** 2021, ISBN 978-3527346264
- [12] Editors: Jyotishkumar Parameswaranpillai, Sanjay Mavinkere Rangappa and **Suchart Siengchin**, Polymer Coatings: Technologies and Applications, **Publisher: CRC Press** 2020, ISBN 978-03671-89211
- [13] Editors: Mohammed Jawaid, Sanjay M.R. and **Suchart Siengchin**: Bamboo Fiber Composites: Processing, Properties and Applications, **Publisher: Springer Nature** 2021, ISBN 978-9811584886
- [14] Editors: Jyotishkumar Parameswaranpillai, Hari Pulikkalparambil, Sanjay Mavinkere Rangappa, **Suchart Siengchin**, Epoxy Composites. Fabrication, Characterization and Applications, **Publisher: Wiley-VCH Verlag** 2021, ISBN 978-35273-46783.
- [15] Editors: Anish Khan, Sanjay M.R., **Suchart Siengchin** and Abdullah M. Asiri, Biobased Composites: Processing, Characterization, Properties, and Applications, **Publisher: Wiley-VCH Verlag** 2021, ISBN 978-1119641797.
- [16] Editors: Sanjay Mavinkere Rangappa, T.P. Satishkumar, Marta Maria Moure Cuadrado, **Suchart Siengchin**, Claudia Baile, Fracture failure Analysis of fiber reinforced polymer matrix composites, **Publisher: Springer Nature** 2021, ISBN 978-981-16-0641-0.
- [17] Editors: Malinee Sriariyanun, Sanjay Mavinkere Rangappa, Jyotishkumar Parameswaranpillai, **Suchart Siengchin** and Hom Nath Dhakal, Value-Added Biocomposites: Technology, Innovation, and Opportunity, **Publisher: CRC Press** 2020, ISBN 978-0367679262.
- [18] Editors: Sanjay Mavinkere Rangappa, Jyotishkumar Parameswaranpillai, Mohit Hemanth Kumar, **Suchart Siengchin**, Wood Polymer Composites: Recent Advancements and Applications, **Publisher: Springer Nature** 2021, ISBN 978-9811616051.
- [19] Editors: Sanjay Mavinkere Rangappa, Madhu Puttegowda, Jyotishkumar Parameswaranpillai, **Suchart Siengchin**, Sergey Gorbatyuk, Advances in Bio-based Fibre: Moving Towards a Green Society **Publisher: Elsevier** 2021, ISBN 978-0128245439.
- [20] Editors: Sanjay Mavinkere Rangappa, Munish Kumar Gupta, **Suchart Siengchin** and Song Qinghua, Additive and Subtractive Manufacturing of Composites, **Publisher: Springer Nature** 2021, ISBN 978-9811631832.
- [21] Editors: Jyotishkumar Parameswaranpillai, Sanjay Mavinkere Rangappa, Arpitha G R, **Suchart Siengchin**, Recent Developments in Plastic Recycling, **Publisher: Springer Nature** 2021, ISBN 978-9811636264.

- [22] Editors: Sanjay Mavinkere Rangappa, Jyotishkumar Parameswaranpillai, **Suchart Siengchin**, Togay Ozbakkaloglu and Hao Wang, PLANT FIBRES, THEIR COMPOSITES, AND APPLICATIONS **Publisher: Elsevier** 2021, ISBN 978-0128245286.
- [23] Editors: Sanjay Mavinkere Rangappa, Jyotishkumar Parameswaranpillai, **Suchart Siengchin** and M. Ramesh, Biodegradable Polymers, Blends and Composites, **Publisher: Elsevier** 2022, ISBN 978-0128237915.
- [24] Editors: Sanjay Mavinkere, Dipen Kumar Rajak and **Suchart Siengchin**, Natural and Synthetic Fiber Reinforced Composites: Synthesis, Properties and Applications, **Publisher: Wiley-VCH Verlag** 2022, ISBN 978-3527349302.
- [25] Editors: Sanjay Mavinkere Rangappa, Jyotishkumar Parameswaranpillai, Vinod Ayyappan, G.M. Madhu and **Suchart Siengchin**, Innovations in Graphene-Based Polymer Composites, **Publisher: Elsevier** 2022, ISBN 978-0128237892.
- [26] Editors: Abdullah Mohammed Ahmed Asiri, Anish Khan, Showkat Ahmad Bhawani, Bahaa Mohamed Mahmoud Mohamed Abu-Zied, **Suchart Siengchin** and Hurija Dzudzevic-Cancar, Carbon-Based Metal Free Catalysts: Preparation, Structural and Morphological Property and Application, **Publisher: Elsevier** 2022, ISBN 978-0323885157.
- [27] Editors: Senthilkumar KRISHNASAMY, Muthu Kumar Chandrasekar, Senthil Muthu Kumar Thiagamani, Sanjay Mavinkere Rangappa and **Suchart Siengchin**, Sandwich Composites: Fabrication and Characterization, **Publisher: CRC Press** 2022, ISBN 978-0367697273.
- [28] Editors: Peerawatt Nunthavarawongi, Sanjay Mavinkere Rangappa, **Suchart Siengchin** and Mathew Thoppil-Mathew, Antimicrobial and Antiviral Materials: Polymers, Metals, Ceramics, and Applications, **Publisher: CRC Press** 2022, ISBN 978-0367697440.
- [29] Editors: Sanjay Mavinkere Rangappa, Jyotishkumar Parameswaranpillai, **Suchart Siengchin** and Togay Ozbakkaloglu, Elastomer Blends and Composites: Principles, Characterization, Advances, and Applications, **Publisher: Elsevier** 2022, ISBN 978-0323858328.
- [30] Editors: Jyotishkumar Parameswaranpillai, Radhakrishnan E.K, Aswathy Jayakumar, Sanjay Mavinkere and **Suchart Siengchin**, Nanotechnology–Enhanced Food Packaging, **Publisher: Wiley-VCH Verlag** 2022, ISBN 978-3527347735.
- [31] Editors: Senthil Muthu Kumar Thiagamani, Md Enamul Hoque, Senthilkumar Krishnasamy, Chandrasekar Muthukumar and **Suchart Siengchin**, Vibration and Damping Behavior of Biocomposites, **Publisher: CRC Press** 2022, ISBN 978-1032003122.
- [32] Editors: Jyotishkumar Parameswaranpillai, Nisa Salim, Pulikkalparambil Harikrishnan, Sanjay Mavinkere Rangappa, **Suchart Siengchin**, Micro- and Nano-containers for Smart Applications, **Publisher: Springer Nature** 2022, ISBN 978-9811681455.

- [33] Editors: Jyotishkumar Parameswaranpillai, **Suchart Siengchin**, Nisa Salim, Jinu Jacob George, and Aishwarya Poullose, *Polylactic Acid-Based Nanocellulose and Cellulose Composites*, **Publisher: CRC Press** 2022, ISBN 978-0367749521.
- [34] Editors: Chandrasekar Muthu Kumar, Senthil Muthu Kumar Thiagamani, Senthil Kumar Krishnasamy, Rajini Nagarajan, **Suchart Siengchin**, *Polymer Based Bio-nanocomposites: Properties, Durability and Applications*, **Publisher: Springer Nature** 2022, ISBN 978-9811685774.
- [35] Editors: Chandrasekar Muthu Kumar, Senthil Muthu Kumar Thiagamani, Senthil Kumar Krishnasamy and **Suchart Siengchin**, *Aging Effects on Natural Fiber-Reinforced Polymer Composites: Durability and Life Prediction*, **Publisher: Springer Nature** 2022, ISBN 978-9811683596.
- [36] Editors: Senthilkumar Krishnasamy, Senthil Muthu Kumar Thiagamani, Rajini Nagarajan, Chandrasekar Muthukumar and **Suchart Siengchin**, *Natural Fiber-Reinforced Composites: Thermal Properties and Applications*, **Publisher: Wiley-VCH Verlag** 2022, ISBN 978-3527348831.
- [37] Editors: Sanjay Mavinkere Rangappa, Jyotishkumar Parameswaranpillai, Yashas Gowda T.G., **Suchart Siengchin** and Ozgur Seydibeyoglu, *Nanoparticle-Based Polymer Composites*, **Publisher: Elsevier** 2022, ISBN 978-0128242728.
- [38] Editors: R Arun Ramnath, Sanjay Mavinkere Rangappa, **Suchart Siengchin** and Vincenzo Fiore, *Cellulose Fibre Reinforced Composites: Interface Engineering, Processing and Performance*, **Publisher: Elsevier** 2022, ISBN 978-0323901253.
- [39] Editors: Peerawatt Nunthavarawong, Sanjay Mavinkere Rangappa, **Suchart Siengchin** and Kuniaki Dohda, *Diamond-Like Carbon Coatings: Technologies and Applications*, **Publisher: CRC Press** 2022, ISBN 978-1032038575.
- [40] Editors: Akarsh Verma, Sanjay Mavinkere Rangappa, Shigenobu Ogata and **Suchart Siengchin**, *Forcefields for Atomistic-Scale Simulations: Materials and Applications*, **Publisher: Springer Nature** 2022, ISBN 978-9811930911.
- [41] Editors: Sanjay Mavinkere Rangappa, Jyotishkumar Parameswaranpillai, **Suchart Siengchin**, Sabu Thomas, *Handbook of Epoxy/Fiber Composites*, **Publisher: Springer Nature** 2022, ISBN 978-9811936029.
- [42] Editors: G. Rajesh Kumar, G. L. Devnani, Shishir Sinha, Sanjay Mavinkere Rangappa, **Suchart Siengchin**, Sabu Thomas, *Bast Fibers and their Composites: Processing, Properties and Applications*, **Publisher: Springer Nature** 2022, ISBN 978-9811948657.
- [43] Editors: Sanjay Mavinkere Rangappa, **Suchart Siengchin**, G. Balaganesan and Vinod Kushvaha, *Polymer Composite Systems in Pipeline Repair: Design, Manufacture, Application, and Environmental Impacts*, **Publisher: Elsevier** 2023, ISBN 978-0323993401.

- [44] Editors: Vinod Kushvaha, Sanjay Mavinkere Rangappa, Priyanka Madhushri and **Suchart Siengchin**, Machine Learning Applied to Composite Materials, **Publisher: Springer Nature** 2022, ISBN 978-9811962776.
- [45] Editors: Arun Ramnath, M.R. Sanjay, Sergey Gorbatyuk, Steffen Fischer and **Suchart Siengchin**, Biocomposites - Bio-based Fibers and Polymers from Renewable Resources: Processing, Performance, Durability and Applications, **Publisher: Elsevier** 2023, ISBN 978-0323972826.
- [46] Editors: Sanjay, Sunita M. Doddamani, **Suchart Siengchin** and Mrityunjay Doddamani, Lightweight and Sustainable Composite Materials: Preparation, Properties and Applications, Performance, Durability and Applications, **Publisher: Elsevier** 2023, ISBN 978-0323951890.
- [47] Editors: Chandrasekar Muthukumar, Senthil Muthu Kumar Thiagamani, Senthilkumar Krishnasamy, Jyotishkumar Parameswaranpillai and **Suchart Siengchin**, Biocomposites for Industrial Applications: Construction, Biomedical, Transportation and Food Packaging, Performance, Durability and Applications, **Publisher: Elsevier** 2023, ISBN 978-0323918664.
- [48] Editors: Jyotishkumar Parameswaranpillai, Aswathy Jayakumar, E. K. Radhakrishnan, **Suchart Siengchin** and Sabarish Radoor, Natural Materials for Food Packaging Application, **Publisher: Wiley-VCH Verlag** 2023, ISBN 978-3527350407.
- [49] Editors: Senthilkumar Krishnasamy, Chandrasekar Muthukumar, Senthil Muthu Kumar Thiagamani and **Suchart Siengchin**, Polyester-Based Biocomposites, **Publisher: CRC Press** 2022, ISBN 978-1032220468.
- [50] Editors: Akarsh Verma, Naman Jain, Sanjay Mavinkere Rangappa, **Suchart Siengchin** and Danuta Matykiewicz, Dynamic Mechanical and Creep-Recovery Behavior of Polymer-Based Composites: Mechanical and Mathematical Modeling, **Publisher: Elsevier** 2024, ISBN 978-0443190094.
- [51] Editors: Hind Abdellaoui, Sanjay Mavinkere Rangappa, **Suchart Siengchin**, Mechanics of Nanomaterials and Polymer Nanocomposites, **Publisher: Springer Nature** 2023, ISBN 978-981-99-2351-9.
- [52] Editors: Sanjay Mavinkere Rangappa, **Suchart Siengchin**, Proceedings of the International Symposium on Lightweight and Sustainable Polymeric Materials (LSPM23), **Publisher: Springer Nature** 2023, ISBN 978-9819955664.
- [53] Editors: Chandrasekar Muthukumar, Senthil Muthu Kumar Thiagamani, Senthilkumar Krishnasamy, **Suchart Siengchin** and Ahmad Ilyas Bin Rusdan, Handbook of Thermoset-Based Biocomposites, Three-Volume, **Publisher: CRC Press** 2023, ISBN 978-1032220437.
- [54] Editors: Senthilkumar Krishnasamy, Mohit Hemath Kumar, Jyotishkumar Parameswaranpillai, Sanjay Mavinkere Rangappa, **Suchart Siengchin**, Interfacial Bonding Characteristics in

- Natural Fiber Reinforced Polymer Composites: Fiber-matrix Interface In Biocomposites, **Publisher: Springer Nature** 2024, ISBN 978-9819983261.
- [55] Editors: Sanjay Mavinkere Rangappa, Vinod Ayyappan, Gaurav Manik and **Suchart Siengchin**, Synthetic and Mineral Fibers, Their Composites and Applications, **Publisher: Elsevier** 2024, ISBN 978-0443136238.
- [56] Editors: Indran Suyambulingam, Divya Divakaran, Sanjay Mavinkere Rangappa and **Suchart Siengchin**, Sustainable Fillers/Plasticizers for Polymer Composites: Promising Resources, **Publisher: Elsevier** 2024, ISBN 978-0443156304.
- [57] Editors: Sanjay Mavinkere Rangappa, Vinod Ayyappan and **Suchart Siengchin**, Additive Manufacturing Materials and Technology, **Publisher: Elsevier** 2024, ISBN 978-0443184628.
- [58] Editors: Sathish Kumar Palaniappan, Rajeshkumar Lakshminarasimhan, Sanjay Mavinkere Rangappa and **Suchart Siengchin**, Finite Element Analysis of Polymers and its Composites, **Publisher: Elsevier** 2024, ISBN 978-0443140877.
- [59] Editors: Manoj Kumar Singh, Gaurav Arora, Sunny Zafar, Sanjay Mavinkere Rangappa, **Suchart Siengchin**, Composite Materials Processing Using Microwave Heating Technology, **Publisher: Springer Nature** 2024, ISBN 978-9819727711.

Book Chapters

- [1] FRICK A., **SIENCGHIN S.**, ROCHMAN A.: Simulation des Thermoformprozesses von Kunststoffteilen in Frenz, Wehrstedt (Hrsg.): Kennwertermittlung für die Praxis; **WILEY-VCH Verlag, Weinheim** (2003), S.324-327, ISBN: 978-352-730-674-9 - Book Chapter)
- [2] **SIENGCHIN S.**: Nano-Scale Reinforcing and Toughening Thermoplastics: Processing, Structure and Mechanical Properties, Chapter 11, **InTech - Open Access Publisher** (2011), ISBN 978-953-307-420-7- Book Chapter)
- [3] **SIENGCHIN S.**: Thermo mechanical analysis and processing of polymer blend, **WILEY-VCH Verlag** (2014), ISBN 978-3-527-33153-6- Book Chapter)
- [4] KARGER-KOCSIS J., **SIENGCHIN S.**: Shape Memory Systems with Biodegradable Polyesters, **WILEY-VCH Verlag** (2015), ISBN: 978-352-733-086-7- Book Chapter)

- [5] SIVARANJANA P., NAGARSJAN E.R., RAJINI N., VARADA RAJULU A., **SIENGCHIN S.**: Green Synthesis of Copper-Reinforced Cellulose Nanocomposites for Packaging Applications, *Springer* (2018), ISBN: 978-3-319-67318-9- Book Chapter)
- [6] SENTHILKUMAR K., SILVA I., RAJINI N., WINOWLIN JAPPES J.T., **SIENGCHIN S.**: Mechanical characteristics of tri-layer eco-friendly polymer composites for interior parts of aerospace application, *Woodhead Publishing, Elsevier* (2018), ISBN: 978-0-08-102131-6- Book Chapter)
- [7] MAYANDI K., RAJINI N., MANOJPRABHAKAR M, **SIENGCHIN S.**, AYRILMIS N.: Recent studies on durability of natural/synthetic fiber reinforced hybrid polymer composites, *Woodhead Publishing, Elsevier* (2018), ISBN: 978-0-08-102290-0- Book Chapter).
- [8] SUMRITH N., SANJAY M.R., DANGTUNGEE R., **SIENGCHIN S .**, JAWAID M., PRUNCU I.C.: Biopolymers Based Nanocomposites: Properties and Applications, In book. Biobased polymers & Nanocomposites : Preparation, Processing, Properties & Performance. **SPRINGER International Publishing AG, Switzerland** (2019, ISBN 978-3-030-05824-1-Book chapter, Pages 255-272).
- [9] SANJAY M.R., **SIENGCHIN S.**, PARAMESWARANPILLAI J.:“Rheology of Shape Memory Polymers, Polymer Blends and Composites” In book. Shape Memory Polymers, Blends and Composites - Advances and Applications. **SPRINGER International Publishing AG, Switzerland** (2020), ISBN: 978-981-13-8573-5 - Book Chapter).
- [10] PARAMESWARANPILLAI J., **SIENGCHIN S.**, JOSE S., JACOB J.: “Introduction to shape memory polymers, polymer blends and composites: State of the Art, Opportunities, New Challenges and Future Outlook” In book. Shape Memory Polymers, Blends and Composites - Advances and Applications. **SPRINGER International Publishing AG, Switzerland** (2020), ISBN: 978-981-13-8573-5 - Book Chapter).
- [11] SANJAY M.R., **SIENGCHIN S .**, PRUNCU I.C., JAWAID M., SENTHIL MUTHU KUMAR T., RAJINI N.: Biomedical Applications of Polymer/Layered Double Hydroxide Bionanocomposites, In book. Nanostructured Polymer Composites for Biomedical Applications. Woodhead Publishing UK , **ELSEVIER** (2019), ISBN: 978-012-13-8167-717 - Book Chapter).
- [12] PULIKKALPARAMBILA H., SANJAY M.R., **SIENGCHIN S.**, KHAN A., JAWAID M., PRUNCU I.C.: Self-repairing hollow fiber composites, In book. Self-Healing Composite Materials: From Design to Applications. Woodhead Publishing, **ELSEVIER** (2020), ISBN: 978-012-8173-541- Book Chapter).
- [13] VARGESE S.A., SANJAY M.R., **SIENGCHIN S.**, PARAMESWARANPILLAI J.: Natural polymers and the hydrogels prepared from them: In book. Hydrogels based on natural polymers. **ELSEVIER** (2020), - Book ISBN: 978-0-12-816421 Chapter).
- [14] KUMAR R., HYNES R.J., SENTAMARA KANNAN P., KHAN A., SANJAY M.R., **SIENGCHIN S.**, SUNDARA BHARATHI S.R., ASIRI A.M., KHAN I.: Self-repairing fiber polymer composites: mechanisms and properties, In book. Self-Healing Composite Materials:

- From Design to Applications. Woodhead Publishing, **ELSEVIER** (2020), ISBN: 978-012-8173-541- Book Chapter).
- [15] VERMA A., JAIN N., PARASHAR A., SINGH V.K., SANJAY M.R., **SIENGCHIN S.** : Surface modification techniques for the preparation of different novel biofibers for composites. In book. Biofibers and Biopolymers for Biocomposites - Synthesis, Characterization and Properties, *Springer* (2020), ISBN: 978-3-030-40300-3- Book Chapter.
- [16] SIAKENG R., JAWAID M., PARIDAH MD. TAHIR, **SIENGCHIN S.**, ASIM M.: Improving the Properties of Pineapple Leaf Fibres by Chemical Treatments, In book. Pineapple Leaf Fibers Processing, Properties and Applications. *Springer* (2020), ISBN: 978-981-15-1415-9 - Book Chapter).
- [17] SABARISH R., JASILA K, **SIENGCHIN S.**, UNNIKRISHNAN G.: Hierarchically Structured Zeolites by Using Green Templates, In book. Zeolites: Advances in Research and Applications. *Nova Science Publishers* (2020), ISBN: 978-1-53617-735-0 - Book Chapter.
- [18] AJITHRAM A., WINOWLIN JAPPES J.T., SENTHIL MUTHU KUMAR T., RAJINI N., VARADA RAJULU A., SANJAY M.R., **SIENGCHIN S.** : Water Hyacinth for Biocomposites—An Overview. In book. Biofibers and Biopolymers for Biocomposites - Synthesis, Characterization and Properties, *Springer* (2020), ISBN: 978-3-030-40300-3- Book Chapter.
- [19] RADOOR S., KARAYIL J., JAYAKUMAR A., RADHAKRISHNAN E.K., MUTHLAKSHMI L., SANJAY M.R., **SIENGCHIN S.**, PARAMESWARANPILLAI J.: Structure and Surface Morphology Techniques for Biopolymers. In book. Biofibers and Biopolymers for Biocomposites - Synthesis, Characterization and Properties, *Springer* (2020), ISBN: 978-3-030-40300-3- Book Chapter.
- [20] SENTHIL MUTHU KUMAR T., SENTHILKUMAR K., CHANDRASEKAR M., SUBRAMANIAM S., SANJAY M.R., **SIENGCHIN S.**, RAJINI N.: Influence of Fillers on the Thermal and Mechanical Properties of Biocomposites: An Overview. In book. Biofibers and Biopolymers for Biocomposites - Synthesis, Characterization and Properties, *Springer* (2020), ISBN: 978-3-030-40300-3- Book Chapter.
- [21] SANJAY M.R., PARAMESWARANPILLAI J., **SIENGCHIN S.**, KLAUS F.: Outline to tribology of polymer composites. In book. Tribology of Polymer Composites: Characterization, Properties, and Applications, *Elsevier* (2020), ISBN: 978-0-12-819767-7- Book Chapter.
- [22] SENTHILKUMAR K., **SIENGCHIN S.**, SENTHIL MUTHU KUMAR T., KARTHIKEYAN S., CHANDRASEKAR M., YORSENG K., UNGTRAKUL T., RAJINI N.: Tribological characterization of cellulose fiber-reinforced polymer composites. In book. Tribology of Polymer Composites: Characterization, Properties, and Applications, *Elsevier* (2020), ISBN: 978-0-12-819767-7- Book Chapter.
- [23] CHANDRASEKAR M., SENTHILKUMAR K., SENTHIL MUTHU KUMAR T., SIVA I., VENKATANARAYANAN P.S., PHUTHOTHAM M., RAJINI N., **SIENGCHIN S.**, ISHAK M.R.: Effect of adding sisal fiber on the sliding wear behavior of the coconut sheath fiber-reinforced composite. In book. Tribology of Polymer Composites: Characterization, Properties, and Applications, *Elsevier* (2020), ISBN: 978-0-12-819767-7- Book Chapter.

- [24] YASHAS T.G., SANJAY M.R., PARAMESWARANPILLAI J., **SIENGCHIN S.**, KLAUS F.: Tribological applications of polymer composites. In book. Tribology of Polymer Composites: Characterization, Properties, and Applications, *Elsevier* (2020), ISBN: 978-0-12-819767-7- Book Chapter.
- [25] VERMA A., JAIN N., PARASHAR A., SINGH V.K., SANJAY M.R., **SIENGCHIN S.**: Lightweight Graphene Composite Materials. In book. Lightweight Polymer Composite Structures Design and Manufacturing Techniques, **Publisher: CRC Press** 2020, ISBN 978-03671-99203- Book Chapter.
- [26] VERMA A., JAIN N., PARASHAR A., SINGH V.K., SANJAY M.R., **SIENGCHIN S.**: Design and Modeling of Lightweight Polymer Composite Structures. In book. Lightweight Polymer Composite Structures Design and Manufacturing Techniques, **Publisher: CRC Press** 2020, ISBN 978-03671-99203- Book Chapter.
- [27] CHANDRASEKAR M., SENTHIL MUTHU KUMAR T., SENTHILKUMAR K., MOHD NURAZZI N., SANJAY M.R., RAJINI N., **SIENGCHIN S.**: Inorganic Nanofillers-Based Thermoplastic and Thermosetting Composites. In book. Lightweight Polymer Composite Structures Design and Manufacturing Techniques, **Publisher: CRC Press** 2020, ISBN 978-03671-99203- Book Chapter.
- [28] VARGHESE S.A., SANJAY M.R., SENTHILKUMAR K., RADOOR S., **SIENGCHIN S.**, PARAMESWARANPILLAI J.: Environmental Issues Related to Packaging Materials. In book. Food Packaging Advanced Materials, Technologies, and Innovations, **Publisher: CRC Press** 2020, ISBN 978-03673-35380 - Book Chapter.
- [29] CHANDRASEKAR M., SENTHILKUMAR K., SENTHIL MUTHU KUMAR T., RADOOR S., PARAMESWARANPILLAI J., **SIENGCHIN S.**: Chitosan-Based Hybrid Nanocomposites for Food Packaging Applications. In book. Food Packaging Advanced Materials, Technologies, and Innovations, **Publisher: CRC Press** 2020, ISBN 978-03673-35380 - Book Chapter.
- [30] JAYAKUMAR A., RADOOR S., KARAYIL J., RADHAKRISHNAN E.K., SANJAY M.R., **SIENGCHIN S.**, PARAMESWARANPILLAI J.: Applications of Nanotechnology in Food Packaging. In book. Food Packaging Advanced Materials, Technologies, and Innovations, **Publisher: CRC Press** 2020, ISBN 978-03673-35380 - Book Chapter.
- [31] YASHAS T.G., PUTTEGOWDA M., SANJAY M.R., PARAMESWARANPILLAI J., **SIENGCHIN S.**: Effect of Process Engineering on the Performance of Hybrid Fiber Composites. In book. Hybrid Fiber Composites. Materials, Manufacturing, Process Engineering, **Publisher: Wiley-VCH Verlag** 2020, ISBN 978-3527346721 - Book Chapter.
- [32] HERMATH M., SELVAN VARADHAPPAN A.M., GOVINDARAJULU H.K., SANJAY M.R., **SIENGCHIN S.**, KUMAR H.: Mechanical and Physical Test of Hybrid Fiber Composites. In book. Hybrid Fiber Composites. Materials, Manufacturing, Process Engineering, **Publisher: Wiley-VCH Verlag** 2020, ISBN 978-3527346721 - Book Chapter.

- [33] JESUDOSS HYNES N.R., SANKARANARAYANAN R., SENTHILKUMAR J., SANJAY M.R., **SIENGCHIN S.**: Mechanical Behavior of Synthetic/Natural Fibers in Hybrid Composites. In book. Hybrid Fiber Composites. Materials, Manufacturing, Process Engineering, **Publisher: Wiley-VCH Verlag** 2020, ISBN 978-3527346721 - Book Chapter.
- [34] RAMESH M., DEEPA C., SANJAY M.R., **SIENGCHIN S.**: Biocomposites Reinforced with Animal and Regenerated Fibers. In book. Hybrid Fiber Composites. Materials, Manufacturing, Process Engineering, **Publisher: Wiley-VCH Verlag** 2020, ISBN 978-3527346721 - Book Chapter.
- [35] VERMA A., PARASHAR A., SINGH S.K., SANJAY M.R., **SIENGCHIN S.**, PARAMESWARANPILLAI J.: Modelling and simulation in polymer coatings. In book. Polymer Coatings: Technologies and Applications, **Publisher: CRC Press** 2020, ISBN 978-03671-89211 - Book Chapter.
- [36] VERMA A., JAIN N., RASTOGI S., SANJAY M.R., **SIENGCHIN S.**, PARAMESWARANPILLAI J.: Mechanism, Anti-corrosion Protection and Components of Anti-corrosion polymer coatings. In book. Polymer Coatings: Technologies and Applications, **Publisher: CRC Press** 2020, ISBN 978-03671-89211 - Book Chapter.
- [37] REMANAN S., PULIKKALPARAMBILA H., SANJAY M.R., **SIENGCHIN S.**, PARAMESWARANPILLAI J., DAS N.C.: Hydrophobic and Hydrophilic Polymer Coatings. In book. Polymer Coatings: Technologies and Applications, **Publisher: CRC Press** 2020, ISBN 978-03671-89211 - Book Chapter.
- [38] MOHIT H., HEMATH KUMAR G., MOZHI SELVAN A.M, SANJAY M.R., **SIENGCHIN S.**, RUBAN R.: Future Challenges and Applications of Polymer Coatings. In book. Polymer Coatings: Technologies and Applications, **Publisher: CRC Press** 2020, ISBN 978-03671-89211 - Book Chapter.
- [39] RADOOR S., SENTHILKUMAR K., **SIENGCHIN S.**, KARAYIL J., MALAYIL V., MANNEKOTE S.J., CHANDRASEKAR M., SENTHIL MUTHU KUMAR T., RAJINI N.: Plastics in Fabric, Textile and Clothing. In *Encyclopedia of Materials: Plastics and Polymers* doi:10.1016/B978-0-12-820352-1.00056-0, *Elsevier* (2020), Page 1-16, - Book Chapter.
- [40] YASHAS T.G., AYYAPPAN V., PUTTEGOWDA M., SANJAY M.R., PARAMESWARANPILLAI J., **SIENGCHIN S.**: Plastics in Automotive Applications. In *Encyclopedia of Materials: Plastics and Polymers* doi:10.1016/B978-0-12-820352-1.00052-3, *Elsevier* (2020), Page 1-11, - Book Chapter.
- [41] SENTHIL MUTHU KUMAR T., CHANDRASEKAR M., SENTHILKUMAR K., AYRILMIS N., **SIENGCHIN S.** , RAJINI N.: Utilization of Bamboo Fibres and Their Influence on the Mechanical and Thermal Properties of Polymer Composites. In book. Bamboo Fiber Composites: Processing, Properties and Applications, *Springer* (2021), Page 81-96, ISBN: 978-9811584886- Book Chapter.

- [42] SENTHILKUMAR K., PULIKKALPARAMBILA H., SENTHIL MUTHU KUMAR T., BRITTO J.J., PARAMESWARANPILLAI J., **SIENGCHIN S** ., KARTHIKEYAN S., RAJINI N.: Free Vibration Analysis of Bamboo Fiber-Based Polymer Composite. In book. Bamboo Fiber Composites: Processing, Properties and Applications, *Springer* (2021), Page 96-110, ISBN: 978-9811584886- Book Chapter.
- [43] VISHWANATH H.B., MOHIT H., SANJAY M.R., **SIENGCHIN S** ., RUBAN R.: Effect of Chemically Treated Bamboo Fiber Reinforcement on the Dielectric Properties of Epoxy Composites. In book. Bamboo Fiber Composites: Processing, Properties and Applications, *Springer* (2021), Page 111-126, ISBN: 978-9811584886- Book Chapter.
- [44] VERMA A., JAIN N., PARASHAR A., GAUR A., SANJAY M.R., **SIENGCHIN S** .: Lifecycle Assessment of Thermoplastic and Thermosetting Bamboo Composites. In book. Bamboo Fiber Composites: Processing, Properties and Applications, *Springer* (2021), Page 235-246, ISBN: 978-9811584886- Book Chapter.
- [45] MOHIT H., VISHWANATH H.B., HEMATH KUMAR G., MOZHI SELVAN V.A., SANJAY M.R., **SIENGCHIN S** .: Applications and Drawbacks of Bamboo Fiber Composites. In book. Bamboo Fiber Composites: Processing, Properties and Applications, *Springer* (2021), Page 247-270, ISBN: 978-9811584886- Book Chapter.
- [46] DHANDAPANI A., SENTHILKUMAR K., CHANDRASEKAR M., SENTHIL MUTHU KUMAR T., RAJINI N., **SIENGCHIN S** .: Plastics in Marine Engineering. In Encyclopedia of Materials: Plastics and Polymers doi:10.1016/B978-0-12-820352-1.00058-4, *Elsevier* (2020), Page 1-12, - Book Chapter.
- [47] CHANDRASEKAR M., SENTHILKUMAR K., SENTHIL MUTHU KUMAR T., JEYAGURU S., **SIENGCHIN S** ., RAJINI N.: Polymers in Aerospace Applications. In Encyclopedia of Materials: Plastics and Polymers, doi:10.1016/B978-0-12-820352-1.00077-8, *Elsevier* (2021), Page 1-10, - Book Chapter.
- [48] MOHIT H., HEMATH KUMAR G., MOZHI SELVAN V.A., SANJAY M.R., **SIENGCHIN S** ., RUBAN R.: Machinability of Fiber-Reinforced polymers. In Book. Fiber-reinforced polymers: Processes and applications, *Nova Science Publishers* (2021), Page 257-290, ISBN: 978-1536 191219 - Book Chapter.
- [49] SENTHILKUMAR K., PULIKKALPARAMBILA H., CHANDRASEKAR M., RADOOR S., SENTHIL MUTHU KUMAR T., RAJINI N., **SIENGCHIN S** ., PARAMESWARANPILLAI J.: Aging Effect on Fibre-Reinforced Polymers. In Book. Fiber-reinforced polymers: Processes and applications, *Nova Science Publishers* (2021), Page 311-343, ISBN: 978-1536 191219 - Book Chapter.
- [50] SENTHIL MUTHU KUMAR T., SENTHILKUMAR K., CHANDRASEKAR M., KARTHIKEYAN S., AYRILMIS N., RAJINI N., **SIENGCHIN S** .: Mechanical, Thermal, tribological and Dielectric Properties of Biobased Composites. In book. Biobased Composites: Processing, Characterization, Properties, and Applications, **Publischer: Wiley-VCH Verlag** (2021), Page 53-74, ISBN 978-1119641797- Book Chapter.

- [51] DIVYA D., INDRAN S., SANJAY M.R., **SIENGCHIN S.**: Forecast of natural Fiber Reinforced Polymeric Composites and Its Degradability Concern – A reiview. In book. Biobased Composites: Processing, Characterization, Properties, and Applications, **Publischer: Wiley-VCH Verlag** (2021), Page 175-196, ISBN 978-1119641797- Book Chapter.
- [52] CHANDRASEKAR M., SENTHILKUMAR K., SENTHIL MUTHU KUMAR T., ISHAK M.R., RAJINI N., **SIENGCHIN S.**: Use of Innovative High-Density Polyethylene (HDPE) Environmentally Friendly Adhesives for Wood Composites. In book. Eco-Friendly Adhesives for Wood and Natural Fiber Composites, **Springer** (2021), Page 123-130, ISBN: 978-981-33-4748-9 - Book Chapter.
- [53] CHANDRASEKAR M., NAVEEN J., SENTHIL MUTHU KUMAR T., SENTHILKUMAR K., VENKATANARAYANAN P.S., ISHAK M.R., **SIENGCHIN S.**: Fire Retardant Properties of Bio-phenolic Hybrid Composites. In book. Phenolic Polymers Based Composite Materials, **Springer** (2021), Page 111-121, ISBN: 978-981-15-8931-7 - Book Chapter.
- [54] SENTHILKUMAR K., SIVA I., KARTHIKEYAN S., PULIKKALPARAMBILA H., PARAMESWARANPILLAI J., SANJAY M.R., **SIENGCHIN S.**: Mechanical, Structural, Thermal and Tribological Properties of Nanoclay Based Phenolic Composites. In book. Phenolic Polymers Based Composite Materials, **Springer** (2021), Page 123-138, ISBN: 978-981-15-8931-7 - Book Chapter.
- [55] VERMA A., JAIN N., KALPANA, SANJAY M.R., **SIENGCHIN S.**, JAWAID M.: Natural Fibers Based Bio-phenolic Composites. In book. Phenolic Polymers Based Composite Materials, **Springer** (2021), Page 153-168, ISBN: 978-981-15-8931-7 - Book Chapter.
- [56] CHANDRASEKAR M., SENTHIL MUTHU KUMAR T., SENTHILKUMAR K., SAPUAN S.M., IYAS R.A., ISHAK M.R., SHAHROZE R.M., **SIENGCHIN S.**: Socioeconomic Impact of Bio-Based Packaging Bags. In book. Bio-Based Packaging: Material, Environmental and Economic Aspects, **Publischer: John Wiley & Sons** 2021, Page 428-434, ISBN 978-1119381044 - Book Chapter.
- [57] PULIKKALPARAMBILA H., SANJAY M.R., **SIENGCHIN S.**, PARAMESWARANPILLAI J.: Introduction to Epoxy Composites. In book. Epoxy Composites. Fabrication, Characterization and Applications, **Publischer: Wiley-VCH Verlag** (2021), Page 1-13, ISBN 978-35273-46783- Book Chapter.
- [58] JOSE S., SMITHA V.K., SANJAY M.R., SENTHILKUMAR K., NANDI D., **SIENGCHIN S.**, PARAMESWARANPILLAI J.: Micro- and Nanoscale Structure Formation in Epoxy-Clay Nanocomposites. In book. Epoxy Composites. Fabrication, Characterization and Applications, **Publischer: Wiley-VCH Verlag** (2021), Page 61-73, ISBN 978-35273-46783- Book Chapter.

- [59] RADOOR S., KARAYIL J., JAYAKUMAR A., **SIENGCHIN S.**: Investigation on Mechanical Properties of Surface-Treated Natural Fibers-Reinforced Polymer Composites. In book. Mechanical and Dynamic Properties of Biocomposites, **Publisher: Wiley-VCH Verlag** (2021), Page 135-162, ISBN 978-3527346264 - Book Chapter.
- [60] CHITTIMENU H., PASUPUREDDY M., CHANDRASEKAR M., SENTHILKUMAR K., SENTHIL MUTHU KUMAR T., **SIENGCHIN S.**: Fracture Toughness of the Natural Fiber-Reinforced Composites: A Review. In book. Mechanical and Dynamic Properties of Biocomposites, **Publisher: Wiley-VCH Verlag** (2021), Page 293-304, ISBN 978-3527346264 - Book Chapter.
- [61] HEMATH M., KUMAR G.H., MOZHI V.A., SELVAN M.R., **SIENGCHIN S.**: Effect of Micro-Dry-Leaves Filler and Al-SiC Reinforcement on the Thermomechanical Properties of Epoxy Composites. In book. Mechanical and Dynamic Properties of Biocomposites, **Publisher: Wiley-VCH Verlag** (2021), Page 191-206, ISBN 978-3527346264 - Book Chapter.
- [62] CHANDRASEKAR M., SENTHILKUMAR K., SENTHIL MUTHU KUMAR T., RADOOR S., **SIENGCHIN S.**: Morphological Characterization of the Wood Polymer Composites. In book. Wood Polymer Composites: Recent Advancements and Applications, **Springer** (2021), Page 93-112, ISBN: 978-9811616051 - Book Chapter.
- [63] SUBRAMANIAN K., SENTHILKUMAR K., CHANDRASEKAR M., **SIENGCHIN S.**, GNANIAR K., KANAGARAJ A.: Tribology of Wood Polymer Composites. In book. Wood Polymer Composites: Recent Advancements and Applications, **Springer** (2021), Page 179-193, ISBN: 978-9811616051 - Book Chapter.
- [64] RADOOR S., KARAYIL J., SHIVANNA J.M., **SIENGCHIN S.**: Water Absorption and Swelling Behaviour of Wood Plastic Composites. In book. Wood Polymer Composites: Recent Advancements and Applications, **Springer** (2021), Page 195-212, ISBN: 978-9811616051 - Book Chapter.
- [65] JAYAKUMAR A., KUMAR V.P., RADOOR S., NAIR I.C., **SIENGCHIN S.**, PARAMESWARANPILLAI J., RADHAKRISHNAN E.K.: Chitosan-based bionanocomposites for cancer therapy. In book. Bionanocomposites in Tissue Engineering and Regenerative, **Elsevier** (2021), Page 277-293, ISBN: 978-0-12-821280-6 - Book Chapter.
- [66] RADOOR S., KARAYIL J., JAYAKUMAR A., RADHAKRISHNAN E.K., PARAMESWARANPILLAI J., **SIENGCHIN S.**: Alginate-based bionanocomposites in wound dressings. In book. Bionanocomposites in Tissue Engineering and Regenerative, **Elsevier** (2021), Page 351-376, ISBN: 978-0-12-821280-6 - Book Chapter.
- [67] SENTHILKUMAR K., NANDI D., CHANDRASEKAR M., SENTHIL MUTHU KUMAR T., KARTHIKEYAN S., PARAMESWARANPILLAI J., **SIENGCHIN S.**: An overview of metal oxide-filled Biocomposites. In book. Green Biocomposites for Biomedical Engineering Design,

- Properties, and Applications, *Elsevier* (2021), Page 97-111, ISBN: 978-0-12-821553-1 - Book Chapter.
- [68] CHANDRASEKAR M., VENKATANARAYANAN P.S., SENTHILKUMAR K., **SIENGCHIN S.**, BRITTO J.J.: Computational modeling of biocomposites. In book. Green Biocomposites for Biomedical Engineering Design, Properties, and Applications, *Elsevier* (2021), Page 19-34, ISBN: 978-0-12-821553-1 - Book Chapter.
- [69] KARTHIKEYAN S., SENTHILKUMAR K., PRADEEP KUMAR G., ARAVIND D., CHANDRASEKAR M., **SIENGCHIN S.**: Tribo Performance Analysis on Polymer-Based Composites. In book. Polymer-Based Composites Design, Manufacturing, and Applications, **Publisher: CRC Press** 2021, ISBN 9781003126300 - Book Chapter 8 – 16 pages.
- [70] IYYAS, R.A., SAPUAN S.M., HARUSSANI M.M., ATIKAH M.S.N., IBRAHIM R., ASYRAF M.R.M., RADZI A.M., NADLENE R., MALI S., ASROFI M., SANJAY M.R., **SIENGCHIN S.**: Chapter 18 - Development and Characterization of Roselle Nanocellulose and Its Potential in Reinforced Nanocomposites. In book. Roselle, Production, Processing, Products and Biocomposites 2021, Pages 285-317, *Elsevier* (2021), ISBN: 978-0-323-85213-5 - Book Chapter.
- [71] JAGADEESH P., PUTTEGOWDA M., YASHAS T.G., SANJAY M.R., GUTA M.K., **SIENGCHIN S.**: Mechanical, Electrical and Thermal Behaviour of Additively Manufactured Thermoplastic Composites for High Performance Applications. In book. Additive and Subtractive Manufacturing of Composites, *Springer* (2021), Page 167-199, ISBN 978-9811631832 - Book Chapter.
- [72] MOHIT H., HEMATH KUMAR G., SANJAY M.R., **SIENGCHIN S.**, RAMESH P.: Hybrid nanocomposites based on cellulose nanocrystals/nanofibrils: From preparation to applications, In book. Cellulose Nanocrystal/Nanoparticles Hybrid Nanocomposites From Preparation to Applications, *Elsevier* (2021), Page 223-246, ISBN: 978-0-12-823090-9 - Book Chapter.
- [73] RAMESH M., SANJAY M.R., PARAMESWARANPILLAI J., **SIENGCHIN S.**: Introduction to biodegradable polymers. In book. Biodegradable Polymers, Blends and Composites, *Elsevier* (2022), Page 1-18, ISBN: 978-0128237915 - Book Chapter.
- [74] JAYAKUMAR A., RADOOR S., RADHAKRISHNAN E.K., NAIR I.C., **SIENGCHIN S.**, PARAMESWARANPILLAI J.: Soy protein-based polymer blends and composites. In book. Biodegradable Polymers, Blends and Composites, *Elsevier* (2022), Page 39-58, ISBN: 978-0128237915 - Book Chapter.
- [75] GOUND R.K., GUPTA M.K., SINGH H., SANJAY M.R., **SIENGCHIN S.**: Extraction and properties of cellulose for polymer composites. In book. Biodegradable Polymers, Blends and Composites, *Elsevier* (2022), Page 59-86, ISBN: 978-0128237915 - Book Chapter.

- [75] VERMA A., JAIN N., SINGH K., SINGH V.K., SANJAY M.R., **SIENGCHIN S.**: PVA-based blends and composites. In book. Biodegradable Polymers, Blends and Composites, *Elsevier* (2022), Page 309-326, ISBN: 978-0128237915 - Book Chapter.
- [76] VIBHA C., PARAMESWARANPILLAI J., SENTHILKUMAR K., **SIENGCHIN S.**, JAYAKUMAR A., RADOOR S., SANJAY M.R., SALIM N.V., HAMEED N., PRAVEEN G.L., DOMINI C.D.M.: Biodegradable polymers and green-based antimicrobial packaging materials. In book. Biodegradable Polymers, Blends and Composites, *Elsevier* (2022), Page 717-734, ISBN: 978-0128237915 - Book Chapter.
- [77] CHANDRASEKAR M., SENTHILKUMAR K., SENTHIL MUTHU KUMAR T., RAJINI N., **SIENGCHIN S.**: Thermal Characterization of the Natural Fiber-Based Hybrid Composites: An Overview. In book. Natural Fiber-Reinforced Composites: Thermal Properties and Applications, **Publisher: Wiley-VCH Verlag** (2022), Page 1-16, ISBN 978-3527348831 - Book Chapter.
- [78] VINOD A., YASHAS T.G., SENTHILKUMAR K., SANJAY M.R., **SIENGCHIN S.**: Thermal Properties of Hybrid Natural Fiber-Reinforced Thermoplastic Composites. In book. Natural Fiber-Reinforced Composites: Thermal Properties and Applications, **Publisher: Wiley-VCH Verlag** (2022), Page 17-30, ISBN 978-3527348831 - Book Chapter.
- [79] PARAMESWARANPILLAI J., SENTHILKUMAR K., **SIENGCHIN S.**, RADOOR S., JOY R., GEORGE J.J., CHANDRASEKAR M., SENTHIL MUTHU KUMAR T., SALIM N.V., HAMEED N.: Thermal Properties of the Natural Fiber-Reinforced Hybrid Polymer Composites: An Overview. In book. Natural Fiber-Reinforced Composites: Thermal Properties and Applications, **Publisher: Wiley-VCH Verlag** (2022), Page 31-51, ISBN 978-3527348831 - Book Chapter.
- [80] RADOOR S., KARAYIL J., SOMAN R., JAYAKUMAR A., RADHAKRISHNAN E.K., PARAMESWARANPILLAI J., **SIENGCHIN S.**: Influence of Nanoclay on the Thermal Properties of the Natural Fiber-Based Hybrid Composites. In book. Natural Fiber-Reinforced Composites: Thermal Properties and Applications, **Publisher: Wiley-VCH Verlag** (2022), Page 239-254, ISBN 978-3527348831 - Book Chapter.
- [81] HERMATH M., HERMATH B.V., GOVINDORAJULU H.K., SANJAY M.R., **SIENGCHIN S.**, SUNDARAM S.: Effect of CNT Fillers on Thermal Properties of the Bamboo Fiber-Based Hybrid Composites. In book. Natural Fiber-Reinforced Composites: Thermal Properties and Applications, **Publisher: Wiley-VCH Verlag** (2022), Page 255-271, ISBN 978-3527348831 - Book Chapter.
- [82] HERMATH M., GOVINDORAJULU H.K., SANJAY M.R., **SIENGCHIN S.**, RAMALINGOM R., HERMATH B.V.: Effect of Metal Oxide Fillers on Thermal Properties of the Natural Fiber-Based Hybrid Composites. In book. Natural Fiber-Reinforced Composites: Thermal Properties and Applications, **Publisher: Wiley-VCH Verlag** (2022), Page 273-290, ISBN 978-3527348831 - Book Chapter.

- [83] CHANDRASEKAR M., SENTHIL MUTHU KUMAR T., SENTHILKUMAR K., RADOOR S., IYYAS R.A.:, SAPUAN S.M., NAVEEN J., **SIENGCHIN S.**: Performance of Natural Fiber Reinforced Recycled Thermoplastic Polymer Composites Under Aging Conditions. In book. Recycling of Plastics Metals, and their Composites, **Publisher: CRC Press** 2022, ISBN 9781003148730 - Book Chapter 127 – 139 pages.
- [84] MADHU P., PRAVEENKUMARA J., SANJAY M.R., **SIENGCHIN S.**, GORBATYUK S.: Introduction to bio-based fibers and their composites. In book. Advances in Bio-based Fiber: Moving Towards a Green Society, *Elsevier* (2022), Page 1-20, ISBN: 978-0-12-824543-9 - Book Chapter.
- [85] RADOOR S., KARAYIL J., SHIVANNA J.M., JAYAKUMAR A., VARGEHESE S.A., RADHAKRISHNAN E.K., PARAMESWARANPILLAI J., **SIENGCHIN S.**: Environmental and Toxicological Aspects of Nanostructures in Food Packaging. In book. Nanotechnology–Enhanced Food Packaging, **Publisher: Wiley-VCH Verlag** (2022), Page 361-378, ISBN 978-3527347735 - Book Chapter.
- [86] RUBAN R., RAJASHEKHAR V.S., NIVEDHA B., MOHIT H., SANJAY M.R., **SIENGCHIN S.**: Role of Additive Manufacturing in Biomedical Engineering. In book. Innovations in Additive Manufacturing, *Springer* (2022), Page 139-157, ISBN: 978-3-030-89401-6 - Book Chapter.
- [87] PARAMESWARANPILLAI J., MIDHUN DOMINIC C.D., SANJAY M.R., **SIENGCHIN S.**, OZBAKKALOGLU T.: Introduction to elastomers. In book. Elastomer Blends and Composites: Principles, Characterization, Advances, and Applications, *Elsevier* (2022), Page 1-10, ISBN: 978-0323858328 - Book Chapter.
- [88] JAYAKUMAR A., RADOOR S., PARAMESWARANPILLAI J., RADHAKRISHNAN E.K., NAIR I.C., **SIENGCHIN S.**: Elastomer-based blends. In book. Elastomer Blends and Composites: Principles, Characterization, Advances, and Applications, *Elsevier* (2022), Page 33-44, ISBN: 978-0323858328 - Book Chapter.
- [89] RADOOR S., KARAYIL J., BEMPLASSERY A., JAYAKUMAR A., PARAMESWARANPILLAI J., **SIENGCHIN S.**: Spectroscopy of elastomer blends and composites. In book. Elastomer Blends and Composites: Principles, Characterization, Advances, and Applications, *Elsevier* (2022), Page 195-208, ISBN: 978-0323858328 - Book Chapter.
- [90] JAYAKUMAR A., RADOOR S., KIM J.T., RHIM J.W., PARAMESWARANPILLAI J., **SIENGCHIN S.**: Lignin-based bionanocomposites for food packaging applications, *Elsevier* (2022), Page 323-338, ISBN: 978-0-323-88528-7 - Book Chapter.

BOOKS IN PROGRESS

- [1] Innovations in Woven and Non-woven Fabrics based Laminated Composites
 Editors: M.R. Sanjay, Vinod Ayyappan, Jiratti Tengsuthiwat and Suchart Siengchin
Publisher: Springer Nature

Last date of book submission to publishers – 30 May 2023

- [2] SURFACE MODIFICATION AND COATING OF FIBERS, POLYMERS, AND COMPOSITES: TECHNIQUES, PROPERTIES, AND APPLICATIONS,
Editors: Rajeshkumar Lakshminarasimhan, Sathish Kumar Palaniappan, Ramesh Manickam, Sanjay Mavinkere Rangappa and Suchart Siengchin
Publisher: Elsevier
Last date of book submission to publishers – 01 April 2024
- [3] SUSTAINABLE COMPOSITES FOR AUTOMOTIVE ENGINEERING,
Editors: Vijay Raghunathan, Sanjay Mavinkere Rangappa, Vinod Ayyappan and Suchart Siengchin
Publisher: Elsevier
Last date of book submission to publishers – 30 June 2024
- [4] POLYMER NANO-BIOCOMPOSITES: PREPARATION, PROPERTIES AND APPLICATIONS,
Editors: Rajeshkumar Lakshminarasimhan, Hind Abdellaoui, Sanjay Mavinkere Rangappa and Suchart Siengchin
Publisher: Elsevier
Last date of book submission to publishers – 31 August 2024
- [5] ECO-FRIENDLY FIBER REINFORCED POLYMER COMPOSITE MATERIALS: CHARACTERIZATION, APPLICATIONS AND LIFE CYCLE ANALYSIS,
Editors: Sanjay Mavinkere Rangappa, Suchart Siengchin, Alcides Leao and Ryszard M. Kozlowski
Publisher: Elsevier
Last date of book submission to publishers – 31 January 2025
- [6] ECO-FRIENDLY FIBER REINFORCED POLYMER COMPOSITE MATERIALS: CHARACTERIZATION, APPLICATIONS AND LIFE CYCLE ANALYSIS,
Editors: R. Arun Ramnath, Vinod Ayyappan, Sanjay Mavinkere Rangappa, and Suchart Siengchin
Publisher: CRC Press
Last date of book submission to publishers – 15 February 2025
- [7] BIOBASED EPOXY VITRIMER COMPOSITES: DESIGN, MANUFACTURE, PROPERTIES, APPLICATIONS, AND ENVIRONMENTAL IMPACTS,
Editors: Sudheer Kumar, Sukhila Krishnan, K. Prabakaran, Ananthakumar Ramadoss, Sanjay Mavinkere Rangappa and Suchart Siengchin
Publisher: Elsevier
Last date of book submission to publishers – 02 December 2024
- [8] Nanocellulose: Market insights, Production, and Global Industrial Applications,
Editors: Hind Abdellaoui, Rajeshkumar Lakshminarasimhan, Sanjay M. R., and Suchart Siengchin
Publisher: CRC Press
Last date of book submission to publishers – 30 August 2024
- [9] Advanced Ceramics and Composite Materials - Energy and Environmental Applications
Editors: Neethu Bhaskar, Sathish Kumar Palaniappan, M.R. Sanjay and Suchart Siengchin
Publisher: Springer Nature

Last date of book submission to publishers – 30 June 2024

- [10] PLANT EXTRACT LOADED BIOPOLYMERS FOR WOUND HEALING,
Editors: C. Balaji Ayyanar, Trishna Bal, H. Esther Nalini, Sofiene Helaili, Sanjay Mavinkere Rangappa and Suchart Siengchin
Publisher: Elsevier
Last date of book submission to publishers – 01 August 2024
- [11] Renewable and Sustainable Materials from Fibers and Polymers - Part of the Advanced Materials Processing and Manufacturing Series – Series Editor: Kapil Gupta,
Editors: Sanjay Mavinkere Rangappa, Indran Suyambulingam, Sathish Kumar Palaniappan and Suchart Siengchin
Publisher: CRC Press
Last date of book submission to publishers – 31 July 2025
- [12] Engineered Ceramics and Composite Materials: From Fundamentals to Applications Part of the Advanced Materials Processing and Manufacturing Series – Series Editor: Kapil Gupta,
Editors: Neethu Bhaskar, Sathish Kumar Palaniappan, Sanjay Mavinkere Rangappa and Suchart Siengchin
Publisher: CRC Press
Last date of book submission to publishers – 31 December 2024
- [13] TRIBOLOGY OF FIBER MATERIALS AND COMPOSITES,
Editors: Vijay Raghunathan, Vinod Ayyappan, S. Vigneshwaran, Sanjay Mavinkere Rangappa and Suchart Siengchin
Publisher: Elsevier
Last date of book submission to publishers – 31 July 2025
- [14] INNOVATIONS AND ADVANCEMENTS IN LIGHTWEIGHT FIBER COMPOSITES,
Editors: Laongdaw Techawinyutham, Vinod Ayyappan, S. Vigneshwaran, Sanjay Mavinkere Rangappa and Suchart Siengchin
Publisher: Elsevier
Last date of book submission to publishers – 01 October 2025
- [15] MECHANICAL BEHAVIOR OF FIBER-REINFORCED POLYMER COMPOSITES: FUNDAMENTALS, ADVANCED STUDIES, AND CURRENT TRENDS,
Editors: Manoj Kumar Singh, Sanjay Mavinkere Rangappa, Suchart Siengchin, Manjusri Misra and Amar K. Mohanty
Publisher: Elsevier
Last date of book submission to publishers – 01 October 2025

International Journals

- [1] **SIENGCHIN S.**, KARGER-KOCSIS J.: Creep Behaviour of Polystyrene/Fluorohectorite Micro- and Nanocomposites, *MACROMOLECULAR RAPID COMMUNICATIONS* 27, (2006), 2090-2094.

- [2] **SIENGCHIN S.**, KARGER-KOCSIS J., THOMANN R.: Alumina Filled Polystyrene Micro- and Nanocomposites Prepared by Melt Mixing with and Without Latex Precompounding: Structure and Properties, *JOURNAL OF APPLIED POLYMER SCIENCE* 105 (2007), 2963-2972.
- [3] **SIENGCHIN S.**, KARGER-KOCSIS J., APOSTOLOV A.A., THOMANN R.: Polystyrene-Fluorohectorite Nanocomposites Prepared by Melt Mixing with Latex Precompounding: Structure and Mechanical properties, *JOURNAL OF APPLIED POLYMER SCIENCE* 106 (2007), 248-254.
- [4] ABRAHAM T.N., **SIENGCHIN S.**, KARGER-KOCSIS J.: Dynamic Mechanical Thermal Analysis of all-PP Composites based on β and α Polymorphic Forms, *JOURNAL OF MATERIALS SCIENCE* 43 (2008), 3697-3703.
- [5] **SIENGCHIN S.**, KARGER-KOCSIS J., PSARRAS G.C., THOMANN R.: Polyoxymethylene/Polyurethane/ Alumina Ternary Composites: Structure, Mechanical, Thermal and Dielectrical Properties, *JOURNAL OF APPLIED POLYMER SCIENCE* 110 (2008), 1613-1623.
- [6] ABRAHAM T.N., RATNA D., **SIENGCHIN S.**, KARGER-KOCSIS J.: Rheological and Thermal Properties of Poly(ethylene) Oxide/ Multi Wall Carbon Nanotube Composites, *JOURNAL OF APPLIED POLYMER SCIENCE* 110 (2008), 2094-2101.
- [7] **SIENGCHIN S.**, ABRAHAM T.N., KARGER-KOCSIS J.: Structure-Stress Relaxation Relationship in Polystyrene/Fluorohectorite Micro- and Nanocomposites, *MECHANICS OF COMPOSITE MATERIALS* 44 (2008), 495-504.
- [8] **SIENGCHIN S.**, KARGER-KOCSIS J., THOMANN R.: Nanofilled and/or Toughened POM Composites Produced by Water-Mediated Melt Compounding: Structure and Mechanical Properties, *eXPRESS Polymer Letters* 2 (2008), 746-756.
- [9] ABRAHAM T.N., RATNA D., **SIENGCHIN S.**, KARGER-KOCSIS J.: Structure and Properties of Poly (Ethylene Oxide) Organo Clay Nanocomposite Prepared via Melt Mixing, *POLYMER ENGINEERING AND SCIENCE* 49(2009), 379-390.
- [10] **SIENGCHIN S.**, KARGER-KOCSIS J.: Structure and Creep Response of Toughened and Nanoreinforced Polyamides Produced via the Latex Route: Effect of Nanofiller Type, *COMPOSITES SCIENCE AND TECHNOLOGY* 69(2009), 677-683.
- [11] JIANG Z., **SIENGCHIN S.**, ZHOU L., STEEG M., KARGER-KOCSIS J., CHUNG MAN H.: Poly (butylene terephthalate)/Silica Nanocomposites Prepared from Cyclic Butylene Terephthalate, *COMPOSITES PART A: APPLIED SCIENCE AND MANUFACTURING* 40 (2009), 273-278.
- [12] RATNA D., ABRAHAM T.N., **SIENGCHIN S.**, KARGER-KOCSIS J.: Novel Method for Dispersion of Multiwall Carbon Nanotubes in Poly (Ethylene Oxide) Matrix using Dicarboxylic Acid Salts, *JOURNAL OF POLYMER SCIENCE PART B: POLYMER PHYSICS* 47 (2009), 1156-1165.

- [13] **SIENGCHIN S.**: Long and Short -term Creep of Polyoxymethylene/Polyurethane/ Alumina Ternary Composites by Comparison, *MECHANICS OF COMPOSITE MATERIALS* 45 (2009), 415-422.
- [14] **SIENGCHIN S.**, HAAG R., SINPAYAKUN P.: A Review of Creep Resistance of Nano -Scale Reinforcing Thermoplastics, *ASIAN INTERNATIONAL JOURNAL OF SCIENCE AND TECHNOLOGY* 2 (2009), 15-20.
- [15] **SIENGCHIN S.**, KARGER-KOCSIS J.: Mechanical and Stress Relaxation Behavior of Santoprene® Thermoplastic Elastomer/Boehmite Alumina Nanocomposites Produced by Water-Mediated and Direct Melt Compounding, *COMPOSITES PART A: APPLIED SCIENCE AND MANUFACTURING* 41 (2010), 768-773.
- [16] **SIENGCHIN S.**, PSARRAS G.C., KARGER-KOCSIS J.: POM/PU/Carbon Nanofiber Composites Produced by Water-Mediated Melt Compounding: Structure, Thermo-Mechanical and Dielectrical Properties, *JOURNAL OF APPLIED POLYMER SCIENCE* 117 (2010), 1804-1812.
- [17] ABRAHAM T.N., **SIENGCHIN S.**, RATNA D., KARGER-KOCSIS J.: Effect of Modified Layered Silicates on the Confined Crystalline Morphology and Thermo-mechanical Properties of Poly (Ethylene Oxide), *JOURNAL OF APPLIED POLYMER SCIENCE* 118 (2010), 1297-1305.
- [18] **SIENGCHIN S.** , SINPAYAKUN P., SUTTRUENGWONG S., ASAWAPIROM U.: Effect of Aspect Ratio of Nanofillers on Stress Relaxation and Creep Response of toughened POM Composites, *MECHANICS OF COMPOSITE MATERIALS* 46 (2010), 341-348.
- [19] **SIENGCHIN S.**: Processing, Structure and Mechanical Properties of Alumina-Nanofilled Polystyrene Composites, *MECHANICS OF COMPOSITE MATERIALS* 46 (2010), 443-450.
- [20] ABRAHAM T.N., WANJALE S., **SIENGCHIN S.**, KARGER-KOCSIS J.: Dynamic Mechanical and Perforation Impact Behavior of All-PP Composites Containing Beta-Nucleated Random PP Copolymer as Matrix and Stretched PP Homopolymer Tape as Reinforcement: Effect of Draw Ratio of the Tape, *JOURNAL OF THERMOPLASTIC COMPOSITE MATERIALS* 24 (2011), 377-388.
- [21] **SIENGCHIN S.**, BERGMANN C., DANTUNGEE R.: Experimental Comparison of Manufacturing Techniques of Toughened and Nanoreinforced Polyamides, *MECHANICS OF COMPOSITE MATERIALS* 47 (2011), 505-512.
- [22] PSARRAS G.C., **SIENGCHIN S.**, KARAHALIOU P.K., GEORGA S.N., KRONTIRAS C.A., KARGER-KOCSIS J.: Dielectric Relaxation Phenomena and Dynamics in Polyoxymethylene/Polyurethane/Alumina Hybrid Nanocomposites, *POLYMER INTERNATIONAL* 60 (2011), 1715-1721.
- [23] **SIENGCHIN S.**: Carbon nanofiber reinforced and PU-toughened POM ternary composites: Friction, wear and creep properties, *MECHANICAL ENGINEERING RESEARCH* 01 (2011), 69-78.

- [24] **SIENGCHIN S.**, KARGER-KOCSIS J.: Structure, Mechanical and Fracture Properties of Nanoreinforced and HNBR-Toughened Polyamide-6, *JOURNAL OF APPLIED POLYMER SCIENCE* 123 (2012), 897-902.
- [25] **SIENGCHIN S.**, PIPES R.B.: Rheological and Dynamic Mechanical Thermal Properties of Epoxy Composites reinforced with Single- and Multiwalled Carbon Nanotubes, *MECHANICS OF COMPOSITE MATERIALS* 47 (2012), 663-670.
- [26] DANTUNGEE R., PETCHAROEN, K., PINIJSATTAWONG K., **SIENGCHIN S.**: Investigation of rheological properties and die swell of filled nanoclay PLA composites in a capillary rheometer, *MECHANICS OF COMPOSITE MATERIALS* 47 (2012), 505-512.
- [27] **SIENGCHIN S.**, KARGER-KOCSIS J.: Polystyrene Nanocomposite Produced by Melt Compounding with Polymer Coated Magnesium Carbonate Nanoparticles, *JOURNAL OF REINFORCED PLASTICS AND COMPOSITES* 31 (2012), 145-152.
- [28] DANTUNGEE R., SOMCHUA S., **SIENGCHIN S.**: Recycling Glass Fiber/Epoxy Resin of Waste Print Circuit Board: Morphology and Mechanical properties, *MECHANICS OF COMPOSITE MATERIALS* 48 (2012), 325-330.
- [29] **SIENGCHIN S.**: Impact, Thermal and Mechanical Properties of High Density Polyethylene/Flax/SiO₂ Composites: Effect of Flax Reinforcing Structures, *JOURNAL OF REINFORCED PLASTICS AND COMPOSITES* 31 (2012), 959-966.
- [30] **SIENGCHIN S.**, ABRAHAM T.N.: Morphology and Rheological properties of High Density Polyethylene/Fluorothermoplastics Blends, *JOURNAL OF APPLIED POLYMER SCIENCE* 127 (2013), 919-925.
- [31] **SIENGCHIN S.**, KARGER-KOCSIS J.: Binary and ternary composites of polystyrene, styrene-butadiene rubber and boehmite produced by water-mediated melt compounding: Morphology and mechanical properties, *COMPOSITE PART B: ENGINEERING* 45 (2013), 1458-1463.
- [32] **SIENGCHIN S.**, POHL T., MEDINA L., MITSCHANG P.: Structure and Properties of Flax/Poly(lactic acid) (PLA)/Alumina Nanocomposites, *JOURNAL OF REINFORCED PLASTICS AND COMPOSITES* 32 (2013), 23-33.
- [33] **SIENGCHIN S.**: Dynamic Mechanic and Creep Behaviors of Polyoxymethylene/Boehmite Alumina Nanocomposites Produced by Water Mediated Compounding: Effect of Particle Size, *JOURNAL OF THERMOPLASTIC COMPOSITE MATERIALS* 26 (2013), 863-877.
- [34] **SIENGCHIN S.**, RUNGSARDTHONG V.: HDPE reinforced with nanoparticle, natural and animal fibers: Morphology, thermal, mechanical, stress relaxation, water absorption and impact properties, *JOURNAL OF THERMOPLASTIC COMPOSITE MATERIALS* 26 (2013), 1007-1024.
- [35] **SIENGCHIN S.**, DANTUNGEE R.: Effect of Flax Reinforcing Structures on Morphology and Properties of Woven Flax Fiber/Un- and Modified Poly(lactide) (PLA) Composites, *JOURNAL OF THERMOPLASTIC COMPOSITE MATERIALS* 26 (2013), 1424-1440.

- [36] **SIENGCHIN S.**: Reinforced Flax mat/modified Polylactide (PLA) Composites: Impact, Thermal and Mechanical Properties, *MECHANICS OF COMPOSITE MATERIALS* 50 (2014), 257-266.
- [37] KARGER-KOCSIS J., **SIENGCHIN S.**: Single-Polymer Composites: Concepts, Realization and Outlook: Review, *KMUTNB international Journal of Applied Science and Technology* 7 (2014), 1-9.
- [38] DANTUNGEE R., SRISUK R., **SIENGCHIN S.**: Rice bran/poly(lactic acid) composites in packaging product, *ADVANCED MATERIALS RESEARCH* 931-932 (2014), 57-62.
- [39] PURITUNG C., **SIENGCHIN S.**, DANTUNGEE R.: Rheological properties and Extrudate Swell of PHBV-bagasse composites, *ADVANCED MATERIALS RESEARCH* 931-932 (2014), 83-89
- [40] DANTUNGEE R., **SIENGCHIN S.**, KITPAOSONG C.: Novel Method for Recycle Epoxy Resin from Waste Printed Circuit Board, *ADVANCED MATERIALS RESEARCH* 931-932 (2014), 90-94.
- [41] **SIENGCHIN S.**, WONGMANEE S.: Mechanical and impact properties of PLA/ woven flax textiles 2x2 and 4x4 produced by interval hot press technique, *MECHANICS OF COMPOSITE MATERIALS* 50 (2014), 387 -394.
- [42] **SIENGCHIN S.**, DANTUNGEE R.: Polyethylene and polypropylene hybrid composites based on nano-silicon dioxide and different flax structures, *JOURNAL OF THERMOPLASTIC COMPOSITE MATERIALS* 27 (2014), 1428-1447.
- [43] CHUAPING S., MANN T., DANTUNGEE R., **SIENGCHIN S.**: Effect of weld line formation on morphology and mechanical properties for 3D-MID technology , *Key Engineering Materials* 659 (2015), 659-665.
- [44] PHONGAM N., DANTUNGEE R., **SIENGCHIN S.**: Comparative Studies of Mechanical Properties between non- and Woven Flax Fiber- Reinforced Poly(Butylene Adipate -Co- Terephthalate)-based Composites Laminates, *MECHANICS OF COMPOSITE MATERIALS* 51 (2015), 17 -24.
- [45] DANTUNGEE R., **SIENGCHIN S.**: Siver Nano Polymer Composites: Production and Efficiency, *MECHANICS OF COMPOSITE MATERIALS* 51 (2015), 239-244.
- [46] DANTUNGEE R., TENGSUTHIWAT J., BOONYASOPON P., **SIENGCHIN S.**: Sisal natural fiber / clay reinforced poly(hydroxybutyrate-co-hydroxyvalerate) hybrid composites, *JOURNAL OF THERMOPLASTIC COMPOSITE MATERIALS* 28 (2015), 879-895.
- [47] SRISUK R., KITPAOSONG C., **SIENGCHIN S.**, DANTUNGEE R.: Hot Solvent Extraction Method for Recycle Epoxy Resin in Waste Printed Circuit Board with Polyethylene Glycol, *Materials Science Forum* 857 (2016), 524-529.

- [48] PRATUMMA A., PIYAMONGKALA K., **SIENGCHIN S.**, SRISUK R., DANTUNGEE R.: Acid treatment of aluminium dross: properties and application, *Materials Science Forum* 857 (2016), 547-552.
- [49] NGAOWTHONG C., RUNGSARDTHONG V., **SIENGCHIN S.**: Polypropylene/Hemp Fiber Composites: Morphology, Mechanical, Thermal Properties and Water Absorption Behaviors, *Advances in Mechanical Engineering* 8 (2016), 1-10.
- [50] TENG SUTHIWAT J., BOONYASOPON P., DANTUNGEE R., **SIENGCHIN S.**: Characterization of poly(hydroxybutyrate-cohydroxyvalerate)/sisal fiber/clay bio-composites prepared by casting technique, *Periodica Polytechnica Mechanical Engineering* 60 (2016), 103-112.
- [51] PARAMESWARANPILLAI J., DUBEY V.K., JOSE S., ZACHARIAH A.K., **SIENGCHIN S.**, SALIM N.V., HAMEE N.: Tailoring of interface of polypropylene/polystyrene/carbon nanofibre composites by polystyrene-block-poly(ethylene-ran-butylene)-block-polystyrene, *Polymer Testing* 51 (2016), 131-141.
- [52] TECHAWINYUTHAM L., FRICK A., **SIENGCHIN S.**: Polypropylene/Maleic Anhydride Grafted Polypropylene (MAGPP)/Coconut Fiber Composites, *Advances in Mechanical Engineering* 8 (2016), 1-9.
- [53] PARAMESWARANPILLAI J., SISANTH K.S., JOSE S., SALIM N.V., **SIENGCHIN S.**, PIONTECK J., MAGUERESSE A., GROHENS Y., HAMEED N.: Micro phase separated epoxy/poly(ϵ -caprolactone)-block-poly(dimethyl siloxane)-block-poly(ϵ -caprolactone)/4,4'-diaminodiphenylsulfone systems: Morphology, viscoelasticity, thermo-mechanical properties and surface hydrophobicity, *Polymer Testing* 55 (2016), 115-122.
- [54] PARAMESWARANPILLAI J., SISANTH K.S., JOSE S., HAMEED N., SALIM N.V., **SIENGCHIN S.**, PIONTECK J., MAGUERESSE A., GROHENS Y.: Miscibility, Phase Morphology, Thermomechanical, Viscoelastic and Surface Properties of Poly(ϵ -caprolactone) Modified Epoxy Systems: Effect of Curing Agents, *Industrial & Engineering Chemistry Research* 55 (2016), 10055-10064.
- [55] **SIENGCHIN S.**, CHUAPING S., MANN T.: Glass fiber/Polyphthalamide Composites for 3D-Molded Interconnect Devices Application: Structure and Properties, *Polymer-Plastics Technology and Engineering* 55 (2016), 1613-1622.
- [56] PARAMESWARANPILLAI J., SISANTH K.S., JOSE S., **SIENGCHIN S.**, PIONTECK J., MAGUERESSE A., GROHENS Y., HAMEED N.: Reaction induced phase separation and resulting thermomechanical, and surface properties of epoxy resin/poly(ethylene oxide)-poly(propylene oxide)-poly(ethylene oxide) (PEO-PPO-PEO) blends cured with 4,4'-diaminodiphenylsulfone (DDS), *JOURNAL OF APPLIED POLYMER SCIENCE* 134 (2017), 44406 (1-8).

- [57] LOYPETCH N., TROELTZSCH J., KROLL L., **SIENGCHIN S.**: Glass Fiber/Polypropylene Composites Produced by Film Extrusion for Local Reinforcements, *Key Engineering Materials* 728 (2017), 223-2281.
- [58] PARAMESWARANPILLAI J., SISANTH K.S., HARIKRISHNAN P., PIONTECK J., **SIENGCHIN S.**, UNNI B.A., MAGUERESSE A., GROHENS Y., HAMEED N., JOSE S.: Morphology, thermo-mechanical properties and surface hydrophobicity of nanostructured epoxy thermosets modified with PEO-PPO-PEO triblock copolymer, *Polymer Testing* 59 (2017), 168-176.
- [59] **SIENGCHIN S.**, WAREESANGAD T., HAESAKUL P., BOONYASOPON P., SUWARAT J.: Investigation and Analysis for Pattaya's Progress in Stepping towards the AEC การศึกษาวิจัยและวิเคราะห์ ข้อมูลเพื่อพัฒนาเมืองท่าชายฝั่งภาคตะวันออก, *The Journal of KMUTNB* 27 (2017), 379-391.
- [60] **SIENGCHIN S.**: Potential use of "green" composites in automotive applications, *eXPRESS Polymer Letters* 11 (2017), 600.
- [61] MUTHULAKSHMI L., RAJINI N., VARADA RAJULU A., **SIENGCHIN S.**, KATHIRESAN T.: Synthesis and Characterization of Cellulose/Silver Nanocomposites from Bioflocculant Reducing Agent, *International Journal of Biological Macromolecules* 103 (2017), 1113-1120.
- [62] JANTIVA P., **SIENGCHIN S.**, BOONYASOPON T., KETUSINGHA V.: Competency Development Model for Executive Secretaries in Industrial Enterprises, *The Journal of KMUTNB* 27 (2017), 379-391.
- [63] PULIKKALPARAMBILA H., PARAMESWARANPILLAI J., JACOB GEORGEA J., YORSENG K., **SIENGCHIN S.**: Physical and thermo-mechanical properties of bionano reinforced poly (butylene adipate-co-terephthalate), hemp/CNF/Ag-NPs composites, *AIMS Materials Science*, 2017, 4(3), 814-831.
- [64] PARAMESWARANPILLAI J., JOSE S., **SIENGCHIN S.**, HAMEED N.: Phase morphology, mechanical, dynamic mechanical, crystallization, thermal degradation and surface properties of PP and PP/PS blends modified with SEBS elastomer, *International Journal of Plastics Technology*, 2017, 21 (1), 79-95.
- [65] SENTHIL MUTHU KUMAR T., RAJINI N., HUAFENG T., VARADA RAJULU A., WINOWLIN JAPPES J.T., **SIENGCHIN S.**: Development and Analysis of Biodegradable Poly (Propylene Carbonate)/Tamarind Nut Powder Composite Films, *International Journal of Polymer Analysis and Characterization*, 2017, 22(5), 415-423.
- [66] KARAHALIOU P.K., PSARRAS G.C., GEORGA S.N., KRONTIRAS C.A., **SIENGCHIN S.**, KARGER-KOCSIS J.: Dielectric relaxation mechanisms in polyoxymethylene/polyurethane/layered silicates hybrid nanocomposites, *European Polymer Journal*, 2017, 95, 304-313.
- [67] SENTHILKUMAR K., SIVA I., SULTAN M.T.H., RAJINI N., **SIENGCHIN S.**, JAWAID M.: Static and Dynamic Properties of Sisal Fiber Polyester Composites- Effect of Fiber Orientation, *BioResources*, 2017, 12 (4), 7819-7833.

- [68] SENTHIL MUTHU KUMAR T., RAJINI N., JAWAIDE M., VARADA RAJULU A., **SIENGCHIN S.**: Utilization of chemically treated municipal solid waste (spent coffee bean powder) as reinforcement in cellulose matrix for packaging applications, *Waste Management*, 2017 (69), 445-454.
- [69] PARAMESWARANPILLAI J., RAMANAN S.P., JOSE S., **SIENGCHIN S.**, MAGUERESSE A., JANKE A.; PIONTECK J.: Shape memory properties of epoxy/PPO-PEO-PPO triblock copolymer blends with tunable thermal transitions and mechanical characteristics, *Industrial & Engineering Chemistry Research* 56 (2017), 14069-14077.
- [70] KARTHIKETANA S., RAJINI N., JAWAIDB M., WINOWLIN JAPPESA J.T., THARIQB M.T.H., **SIENGCHIN S.**, SUKUMARAND J.: A review on tribological properties of natural fibre based sustainable hybrid composite, *Part J: Journal of Engineering Tribology* 231 (2017), 1616-1634.
- [71] **SIENGCHIN S.**, BOONYASOPON T., TONGPRASIT C., BOONYASOPON P., PIBOON K., ROOPSING T., WISUTTIPAT S.: Feasibility of Electric Bus Implementation for Long-distance Public Transportation, *The Journal of KMUTNB* 27 (2017), 1-10.
- [72] TENG SUTHIWAT J., ASAWAPIROM U., **SIENGCHIN S.**, KARGER-KOCSIS J.: Mechanical, thermal and water absorption properties of melamine-formaldehyde-treated sisal fiber containing polylactic acid composites, *JOURNAL OF APPLIED POLYMER SCIENCE*, 2018, 135 (2), 45681.
- [73] BENNET C., RAJINI N., WINOWLIN JAPPESA J.T., **SIENGCHIN S.**: Effect of Curing Temperature on Mechanical Properties of Sansevieria Cylinfrica Polyester Composites, *ADVANCED SCIENCE, ENGINEERING AND MEDICINE*, 2018, 10, 1-4.
- [74] MAYANDI K., RAJINI N., WINOWLIN JAPPESA J.T., **SIENGCHIN S.** ABILASH M.S.: Effect of Chemical Treatment on Tensile and flexural Performance of Cyperus Pangorei Fibre Reinforced Polyester Composites, *ADVANCED SCIENCE, ENGINEERING AND MEDICINE*, 2018, 10, 1-4.
- [75] KALIRASU S., RAJINI N., RAJESH S., **SIENGCHIN S.**, RAMASWAMY S.N: AWJ machinability performance of CS/UPR composites with the effect of chemical treatment, *Materials and Manufacturing Processes*, 2018, 33, 452-461.
- [76] PHANYAWONG S., **SIENGCHIN S.**, PARAMESWARANPILLAI J., POLPANICH D., ASAWAPIROM U.: Melamine-formaldehyde microcapsules filled sappan dye modified polypropylene composites: encapsulation and thermal properties, *Materials Research Express*, 2018, 5, 015505.
- [77] SENTHIL MUTHU KUMAR T., RAJINI N., OBI REDDY K., VARADA RAJULU A., **SIENGCHIN S.**, AYRILMIS N., : All-cellulose composite films with cellulose matrix and Napier grass cellulose fibril fillers, *International Journal of Biological Macromolecules* 112 (2018), 1310-1315.

- [78] PARAMESWARANPILLAI J., RAMANAN S.P., GEORGE J., JOSE S., ZACHARIAH A., **SIENGCHIN S.**, YORSENG K., JANKE A.; PIONTECK J.: PEG-ran-PPG modified epoxy thermosets: A simple approach to develop tough shape memory polymers, *Industrial & Engineering Chemistry Research* **57** (2018), 3583-3590.
- [79] TENG SUTHIWAT J., **SIENGCHIN S.**, Berényi R., KARGER-KOCSIS J.: Ultraviolet nanosecond laser ablation behavior of silver nanoparticle and melamine-formaldehyde resin coated short sisal fiber modified PLA composites, *JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY* **132** (2018), 955-965.
- [80] SENTHILKUMAR K., SABA N., RAJINI N., CHANDRASEKAR M., JAWAID M., **SIENGCHIN S.**: Mechanical Properties Evaluation of Sisal Fibre Reinforced Polymer Composites: A Review, *Construction & Building Materials* **174** (2018), 713-729.
- [81] INDIRADAVI M.P., NALLAMUTHU N., RAJINI N., VARADA RAJULU A., HARIRAM N., **SIENGCHIN S.**: Cellulose hybrid nanocomposites using Napier grass fibers with in situ generated silver nanoparticles as fillers for antibacterial applications, *International Journal of Biological Macromolecules* **118** (2018), 99-106.
- [82] SANJAY M.R., **SIENGCHIN S.**: Natural Fibers as Perspective Materials, *KMUTNB international Journal of Applied Science and Technology* **11** (2018), 233.
- [83] ASHOKA B., OBI REDDY K., KRIT K., RAJINI N., HARI RAM N., **SIENGCHIN S.**, VARADA RAJULU A.: Modification of natural fibers from Thespesia lampas plant by in situ generation of silver nanoparticles in single-step hydrothermal method, *International Journal of Polymer Analysis and Characterization* **23**, (2018), 509-516.
- [84] INDIRA DEVI M.P., NALLAMUTHU N., RAJINI N., VARADA RAJULU A., HARI RAM N., **SIENGCHIN S.**: Tensile, thermal, and antibacterial characterization of composites of cellulose/modified Pennisetum purpureum natural fibers with in situ generated copper nanoparticles, *International Journal of Polymer Analysis and Characterization* **23**, (2018), 502-508.
- [85] PULIKKALPARAMBILA H., **SIENGCHIN S.**, PARAMESWARANPILLAI J.: Corrosion protective self-healing epoxy resin coatings based on inhibitor and polymeric healing agents encapsulated in organic and inorganic micro and nanocontainers, *Nano-Structures & Nano-Objects* **16**, (2018), 381-395.
- [86] SENTHILKUMAR K., SABA N., CHANDRASEKAR M., JAWAID M., RAJINI N., ALOTHMAN O., **SIENGCHIN S.**: Evaluation of Mechanical and Free Vibration Properties of the Pineapple Leaf Fibre Reinforced Polyester Composites, *Construction & Building Materials* **195**, (2019), 423-431.

- [87] PULIKKALPARAMBILA H., VARGHESE S.A., **SIENGCHIN S.**, PARAMESWARANPILLAI J.: Thermally mendable and improved hydrophilic bioepoxy/PEO-PPO-PEO blends for coating application, *Materials Research Express* **6**, (2019), 025307.
- [88] SANJAY M.R., **SIENGCHIN S.**, PARAMESWARANPILLAI J., JAWAID M., PRUNCU C.I., KHAN A.: A Comprehensive Review of Techniques for Natural Fibers as Sustainable Reinforcement Material in Fiber Reinforced Composites: Preparation, Processing and Characterization, *Carbohydrate Polymers* **207** (2019), 108-121.
- [89] VIJAY R., LENIN SINGARAVELU D., VINOD A., SANJAY M.R., **SIENGCHIN S.**, JAWAID M., PRUNCU C.I., KHAN A., PARAMESWARANPILLAI J.: Characterization of raw and alkali treated new natural cellulosic fibers from Tridax Procumbens, *International Journal of Biological Macromolecules* **125** (2019), 99-108.
- [90] MAYANDI K., RAJINI N., ALAVUDEEN AZEEZ B., **SIENGCHIN S.**, VARADA RAJULU A., AYRILMIS N.: Mechanical property and morphological analysis of polyester composites reinforced with Cyperus Pangorei fibers, *Journal of Bionic Engineering* **16** (2019), 164-174.
- [91] INDIRA DEVI M.P., NALLAMUTHU N., RAJINI N., SENTHIL MUTHU KUMAR T., **SIENGCHIN S.**, VARADA RAJULU A., AYRILMIS N.: Biodegradable Poly (propylene) carbonate using in-situ generated CuNPs coated Tamarindus indica filler for Biomedical Applications, *Materials Today Communications* **19** (2019), 106-113.
- [92] SENTHAMARAIKANNAN P., SARAVANANKUMA S.S., SANJAY M.R., JAWAID M., **SIENGCHIN S.**: Physico-Chemical and Thermal Properties of Untreated and Treated Acacia planifrons Bark Fibers for Composite Reinforcement, *Materials Letters* **240** (2019), 221-224.
- [93] SENTHIL MUTHU KUMAR T., RAJINI N., **SIENGCHIN S.**, VARADA RAJULU A., HARIRAM N., AYRILMIS N.: Influence of silver nanoparticles on the mechanical, thermal and antimicrobial properties of cellulose-based hybrid nanocomposites, *Composite Part B: Engineering* **165** (2019), 516-525.
- [94] SENTHIL MUTHU KUMAR T., YORSENG K., RAJINI N., **SIENGCHIN S.**, AYRILMIS N., VARADA RAJULU A.: Mechanical and thermal properties of Spent coffee bean filler/Poly(3-hydroxybutyrate-co-3-hydroxyvalerate) biocomposites: Effect of recycling, *Process Safety and Environmental Protection* **124** (2019), 187-195.

- [95] PARAMESWARANPILLAI J., SANJAY M.R., VARGHESE S.A., **SIENGCHIN S.**, JOSE S., SALIM N., HAMEED N., MAGUERESSE A.: Toughened PS/LDPE/SEBS/xGnP ternary composites; morphology, mechanical and viscoelastic properties, *International Journal of Lightweight Materials and Manufacture* 2 (2019), 64-71.
- [96] ABHISHEK S., SANJAY M.R., RAJI G., **SIENGCHIN S.**, PARAMESWARANPILLAI J., PRUNCU C.I.: Development of New Hybrid Phoenix Pusilla/Carbon/ Fish Bone Filler Reinforced Polymer Composites, *Journal of the Chinese Advanced Materials Society* 6 (2019), 553-560.
- [97] SENTHIL MUTHU KUMAR T., RAJINI N., TIAN H., VARADA RAJULU A., AYRILMIS N., **SIENGCHIN S.**: Improved mechanical and thermal properties of spent coffee bean particulate reinforced Poly (propylene carbonate) composites, *Particulate Science and Technology* 37 (2019), 639-646.
- [98] TECHAWINYUTHAM L., **SIENGCHIN S.**, DANTUNGEE R., PARAMESWARANPILLAI J.: Antibacterial and Thermo-mechanical Properties of Composites of Polylactic Acid (PLA) Modified with Capsicum Oleoresin (CO) Impregnated Nanoporous Silica, *JOURNAL OF APPLIED POLYMER SCIENCE* 136 (2019), 47825-47835.
- [99] PARAMESWARANPILLAI J., PULIKKALPARAMBILA H., SANJAY M.R., **SIENGCHIN S.**: Polypropylene/high-density polyethylene based blends and nanocomposites with improved Toughness, *Materials Research Express* 6 (2019), 075334.
- [100] PARAMESWARANPILLAI J., ELAMON R., SANJAY M.R., **SIENGCHIN S.**: Synergistic effects of ethylene propylene diene copolymer and carbon nanofiber on the thermo-mechanical properties of polypropylene/high-density polyethylene composites, *Materials Research Express* 6 (2019), 085302.
- [101] SENTHIL MUTHU KUMAR T., RAJINI N., **SIENGCHIN S.**, VARADA RAJULU A., AYRILMIS N.: Influence of Musa acuminate bio-filler on the thermal, mechanical and viscoelastic behavior of Poly(propylene) carbonate biocomposites, *International Journal of Polymer Analysis and Characterization* 24 (2019), 439-446.
- [102] SENTHILKUMAR K., RAJINI N., SABA N., CHANDRASEKAR M., JAWAID M., **SIENGCHIN S.**: Effect of Alkali Treatment on Mechanical and Morphological Properties of Pineapple Leaf Fibre/Polyester Composites, *Journal of Polymers and the Environment* 27, 6, (2019), 1191-1201.
- [103] MANIMARAN P., SARAVANAN S.P., SANJAY M.R., **SIENGCHIN S.**, JAWAID M., KHAN A.: Characterization of New cellulosic fiber: Dracaena reflexa as a reinforcement for polymer composite structures, *Journal of Materials Research and Technology* 8 (2019), 1952-1963.
- [104] **SIENGCHIN S.**, PARAMESWARANPILLAI J.: Self-healing ability of epoxy coating application, *eXPRESS Polymer Letters* 13 (2019), 685.

- [105] SARI N.H., SANJAY M.R., ARPITHA G.R., PRUNCU C.I., **SIENGCHIN S.**: Synthesis and Properties of Pandan wangi Fiber Reinforced Polyethylene Composites: Evaluation of Dicumyl Peroxide (DCP) Effect, *Composites Communications* 15 (2019), 53-57.
- [106] VINOD A., VIJAY R., LENIN SINGARAVELU D., SANJAY M.R., **SIENGCHIN S.**, MOURE-CUADRADO M.M.: Characterization of Untreated and Alkali Treated Natural Fibers extracted from the Stem of Catharanthus roseus, *Materials Research Express* 6 (2019), 085406.
- [107] BHARATH K.N., SANJAY M.R., JAWAID M., HARISHA, BASAVARAJAPPA S., **SIENGCHIN S.**: Effect of stacking sequence on properties of coconut leaf sheath/jute/E-glass reinforced phenol formaldehyde hybrid composites, *Journal of Industrial Textiles* 49 (2019), 3-32.
- [108] MADHU P., SANJAY M.R., PRADEEP S., SUBRAHMANYA BHAT K., YOGESHA B., **SIENGCHIN S.**: Characterization of cellulosic fiber from Phoenix pusilla leaves as potential reinforcement for polymeric composites, *Journal of Materials Research and Technology* 8 (2019), 2597-2604.
- [109] MAHESH KUMARA R., RAJINI N., SENTHIL MUTHU KUMAR T., MAYANDI K., **SIENGCHIN S.**, ISMAIL S.O.: Thermal and structural characterization of Acrylonitrile butadiene styrene (ABS) copolymer blended with Polytetrafluoroethylene (PTFE) particulate composite, *Materials Research Express* 6 (2019), 085330.
- [110] INDIRA DEVI M.P., NALLAMUTHU N., RAJINI N., SENTHIL MUTHU KUMAR T., **SIENGCHIN S.**, VARADA RAJULU A., HARIRAM N.: Antimicrobial properties of Poly(propylene) carbonate/Ag nanoparticle modified tamarind seed polysaccharide with composite films, *Ionics* 25 (2019), 3461-3471.
- [111] SANJAY M.R., **SIENGCHIN S.**: LIGHTWEIGHT NATURAL FIBER COMPOSITES, *Journal of Applied Agricultural Science and Technology* 3 (2019), 1.
- [112] SENTHILKUMAR K., CHANDRASEKAR M., RAJINI N., SENTHIL MUTHU KUMAR T., NAHEED S., MOHAMMAD J., **SIENGCHIN S.**, NADIR A.: Effect of fibre loading and Ca(OH)₂ treatment on thermal, mechanical, and physical properties of pineapple leaf fibre/polyester reinforced composites, *Materials Research Express* 6 (2019), 085545.
- [113] TECHAWINYUTHAM L., **SIENGCHIN S.**, DANTUNGEE R., PARAMESWARANPILLAI J.: Influence of accelerated weathering on the thermo-mechanical, antibacterial, and rheological properties of polylactic acid incorporated with porous silica-containing varying amount of capsicum oleoresin, *Composite Part B: Engineering* 175 (2019), 107108.

- [114] SENTHIL MUTHU KUMAR T., SENTHILKUMAR K., RAJINI N., SIENGCHIN S., AYRILMIS N. VARADA RAJULU A.: A comprehensive review of electrospinning nanocellulosic fibres: Food and packaging perspective, *Composite Part B: Engineering* 175 (2019), 107074.
- [115] MUTHULAKSHMI L., VARADA RAJULU A., KALIARAJ G.S., SIENGCHIN S., PARAMESWARANPILLAI J., SARASWATHI R.: Preparation of cellulose/copper nanoparticles bionanocomposite films using a bioflocculant polymer as reducing agent for antibacterial and anticorrosion applications, *Composite Part B: Engineering* 175 (2019), 107177.
- [116] VIJAY R., MANOHARAN S., VINOD A., LENIN SINGARAVELU D., SANJAY M.R., SIENGCHIN S.: Characterization of raw and benzoyl chloride treated Impomea pes-caprae fibers and its epoxy composites, *Materials Research Express* 6 (2019), 095307.
- [117] SENTHIL MUTHU KUMAR T., SENTHILKUMAR K., CHANDRASEKAR M., RAJINI N., SIENGCHIN S., VARADA RAJULU A.: Characterization, thermal and dynamic mechanical properties of poly(propylene carbonate) lignocellulosic Cocos nucifera shell particulate biocomposites, *Materials Research Express* 6 (2019), 096426.
- [118] SENTHIL MUTHU KUMAR T., SENTHILKUMAR K., SIENGCHIN S.: Challenges of Biodegradable Polymers: An Environmental Perspective, *Applied Science and Engineering Progress* 12 (2019), 149.
- [119] TENGSUTHIWAT J., YORSENG K., SIENGCHIN S., PARAMESWARANPILLAI J.: Thermomechanical, water absorption, ultraviolet resistance and laser assisted electroless plating behavior of Cu₂O and melamine–formaldehyde-coated sisal fibermodified poly(lactic acid) composites, *POLYMER COMPOSITES* 40 (2019), 3264-3274.
- [120] NGAOWTHONG C., BORUVKA M., BEHALEK L., LENFELD P., SVEC M., DANTUNGEE R., SIENGCHIN S., SANJAY M.R., PARAMESWARANPILLAI J.: Recycling of sisal fiber reinforced polypropylene and polylactic acid composites: thermo-mechanical properties, morphology, and water absorption behavior, *Waste Management* 97 (2019), 71–81.
- [121] YORSENG K., SANJAY M.R., TENGSUTHIWAT J., PULIKKALPARAMBILA H., PARAMESWARANPILLAI J., SIENGCHIN S., MOURE M.M.: Information on United States Patents in works related to ‘Natural Fibers’: 2000-2018, *Current Materials Science* 12 (2019), 4-76.
- [122] CHANDRASEKAR M., SHAHROZE R.M., ISHAK M.R., SABA N., JAWAID M., SENTHILKUMAR K., SENTHIL MUTHU KUMAR T., SIENGCHIN S.: Flax and Sugar Palm Reinforced Epoxy Composites: Effect of Hybridization on Physical, Mechanical, Morphological and Dynamic Mechanical Properties, *Materials Research Express* 6 (2019), 105331.

- [123] SENTHIL MUTHU KUMAR T., SENTHILKUMAR K., CHANDRASEKAR M., TENG SUTHIWAT J., RAJINI N., **SIENGCHIN S.**, ISMAIL O.S.: Investigation into mechanical, absorption and swelling behaviour of hemp/sisal fibre reinforced bioepoxy hybrid composites, *International Journal of Biological Macromolecules* 140 (2019) 637–646.
- [124] SENTHILKUMAR K., SENTHIL MUTHU KUMAR T., CHANDRASEKAR M., RAJINI N., SHAHROZE R.M., **SIENGCHIN S.**, ISMAIL O.S., INDIRA DEVI M.P.: Recent advances in thermal properties of hybrid cellulosic fiber reinforced polymer composites, *International Journal of Biological Macromolecules* 141 (2019) 1-13.
- [125] SENTHILKUMAR K., SENTHIL MUTHU KUMAR T., CHANDRASEKAR M., TENG SUTHIWAT J., RAJINI N., **SIENGCHIN S.**, ISMAIL O.S., BRINTHA N.C.: Effects of stacking sequences on static, dynamic mechanical and thermal properties of completely biodegradable green epoxy hybrid composites, *Materials Research Express* 6 (2019), 105351.
- [126] PRABHAKAR M.M, RAJINI N., AYRILMIS N., MAYANDI K., **SIENGCHIN S.**, SENTHILKUMAR K., KARTHIKEYAN S., ISMAIL O.S.: An overview of burst, buckling, durability and corrosion analysis of lightweight FRP composite pipes and their applicability, *Composite Structures* 230 (2019), 111419.
- [127] YASHAS G., SANJAY M.R., PARAMESWARANPILLAI J., **SIENGCHIN S.**: Natural Fibers as Sustainable and Renewable Resource for Development of Eco-friendly Composites: A Comprehensive Review, *Frontiers in Materials* 6 (2019), 226.
- [128] VERMA A., BUDIYAL L., SANJAY M.R., **SIENGCHIN S.**: Processing and Characterization analysis of pyrolyzed oil rubber (from waste tires) – epoxy polymer blend composite for light weight structures and coatings applications, *Polymer Engineering & Science* 59 (2019), 2041-2051.
- [129] MAHESH KUMAR R., RAJINI N., MAYANDI K., **SIENGCHIN S.**: Thermal performance of acrylonitrile butadiene styrene (ABS) copolymer blended with pfe particle/polymer composite, *Materials Science Forum* 969 (2019), 444-450.
- [130] MADHU P., PRADEEP S. SANJAY M.R., **SIENGCHIN S.**: Characterization of raw and alkali treated prosopis juliflora fibers for potential polymer composite reinforcement, *Materials Science and Engineering* 653 (2019), 012016.
- [131] MOHAMMAD J., **SIENGCHIN S.**: Hybrid Composites: A Versatile Materials for Future, *Applied Science and Engineering Progress* 12 (2019), 223.

- [132] YORSENG K., SANJAY M.R., PULIKKALPARAMBILA H., SIENGCHIN S., PARAMESWARANPILLAI J.: Accelerated weathering studies of kenaf/sisal fiber fabric reinforced fully biobased hybrid bioepoxy composites for semi-structural applications: Morphology, thermo-mechanical, water absorption behavior and surface hydrophobicity, *Construction & Building Materials* 235 (2020), 117464.
- [133] PHUTHOHAM M., SIENGCHIN S., ASHOK B., VARADA RAJULU A.: Modification of Egg Shell Powder with In Situ generated Copper and Cupros Oxide Nanoparticles by Hydrothermal Method, *Materials Research Express* 7 (2020) 015010.
- [134] PARAMESWARANPILLAI J., SANJAY M.R., SIENGCHIN S., SIDHARDHAN S.K., JOSE S., SALIM N.V., HAMEED N.: Intermolecular hydrogen bonding in developing nanostructured epoxy shape memory thermosets: Effects on morphology, thermo-mechanical properties and surface wetting, *Polymer Testing* 81 (2020) 106279.
- [135] VERMA A., BAURAI K., SANJAY M.R., SIENGCHIN S.: Mechanical, Microstructural and Thermal characterization insights of pyrolyzed Carbon Black from waste tires reinforced Epoxy Nanocomposites for coating application, *POLYMER COMPOSITES* 41 (2020), 338-349.
- [136] MANIMARAN P., SANJAY M.R., SENTHAMARAIKANNAN P., YOGESHA B., BARILE C., SIENGCHIN S.: A new study on characterization of Pithecellobium dulce fiber as composite reinforcement for lightweight applications, *Journal of Natural Fibers* 17:3 (2020), 359-370.
- [137] DINESH S., MOHANAMURUGAN S., KUMARAN P., VIJAY R., LENIN SINGARAVELU D., VINOD A., SANJAY M.R., SIENGCHIN S.: Influence of wood dust fillers on the mechanical, thermal, water absorption and biodegradation characteristics of jute fiber epoxy composites, *Journal of Polymer Research* 27 (2020), 9.
- [138] KHAN A., VIJAY R., LENIN SINGARAVELU D., ARPITHA G.R., SANJAY M.R., SIENGCHIN S., JAWAID M., ALAMRY K., ASIRI A.M.: Extraction and characterization of Vetiver grass (*Chrysopogon zizanioides*) and Kenaf fiber (*Hibiscus cannabinus*) as reinforcement materials for epoxy based composite structures, *Journal of Materials Research and Technology* 9:1 (2020), 773-778.
- [139] RADOOR S., KARAYIL J., SANJAY M.R., SIENGCHIN S., PARAMESWARANPILLAI J. : A review on the extraction of pineapple, sisal and abaca fibers and their use as reinforcement in polymer matrix, *eXPRESS Polymer Letters* 14:4 (2020), 309-335.
- [140] PULIKKALPARAMBILA H., SANJAY M.R., SENTHILKUMAR K., RADOOR S., HAMEED N., SIENGCHIN S., PARAMESWARANPILLAI J.: Accelerated weathering studies of bioepoxy/ionic liquid blends: influence on physical, thermo-mechanical, morphology and surface properties, *Materials Research Express* 7 (2020), 025302.

- [141] NANDI D., PARAMESWARANPILLAI J., **SIENGCHIN S.**: Mechanistic insight into high response of carbon monoxide gas sensor developed by nickel manganate nanorod decorated reduced graphene oxide, *Colloids and Surfaces A: Physicochemical and Engineering Aspects* 589 (2020), 124449.
- [142] SIAKENG R., JAWAID M., ASIM M., **SIENGCHIN S.**: Accelerated Weathering and Soil Burial Effect on Biodegradability, Colour and Texture of Coir/Pineapple Leaf Fibres/ PLA Biocomposites, *Polymers* 12 (2020), 458.
- [143] NARAYANASAMY P., BALASUNDAR P., SENTHIL S., SANJAY M.R., **SIENGCHIN S.**, KHAN A., ASIRI A.: Characterization of a novel natural cellulosic fiber from *Calotropis gigantea* fruit bunch for ecofriendly polymer composites, *International Journal of Biological Macromolecules* 150 (2020), 793-801.
- [144] MANIMARA P., SARAVANAN S.P., SANJAY M.R., JAWAID M., **SIENGCHIN S.**, FIORE V.: New lignocellulosic *Aristida Adscensionis* fibers as novel reinforcement for composite materials: Extraction, Characterization and Weibull distribution analysis, *Journal of Polymers and the Environment* 28 (2020), 803-811.
- [145] MADHU P., SANJAY M.R., JAWAID M., **SIENGCHIN S.**, KHAN A., PRUNCU C.I.: A New Study on Effect of Various Chemical Treatments on Agave Americana Fiber for Composite Reinforcement: Physico-Chemical, Thermal, Mechanical and Morphological Properties, *Polymer Testing* 85 (2020), 106437.
- [146] NANDI D., PARAMESWARANPILLAI J., **SIENGCHIN S.**, BHOWMICK A.K.: The unique microsphere of ruthenium manganate: Synthesis, structure elucidation, morphology analyses and magnetic property, *Materials Chemistry and Physics* 246 (2020), 122845.
- [147] BASHEER B.V., GEORGE J.J., **SIENGCHIN S.**, PARAMESWARANPILLAI J.: Polymer grafted carbon nanotubes—Synthesis, properties, and applications: A review, *Nano-Structures & Nano-Objects* 22 (2020), 100429.
- [148] SIAKENG R., JAWAID M., PARIDAH MD. TAHIR, **SIENGCHIN S.**, ASIM M.: Improving the Properties of Pineapple Leaf Fibres by Chemical Treatments, In book. Pineapple Leaf Fibers Processing, *Green Energy and Technology* (2020), 55-71.
- [149] VINOD A., SANJAY M.R., **SIENGCHIN S.**, PARAMESWARANPILLAI J.: Renewable and Sustainable Biobased Materials: An Assessment on Biofibers, Biofilms, Biopolymers and Biocomposites, *Journal of Cleaner Production* 258 (2020), 120978.
- [150] ROKBI M., KHALDOUNE A., SANJAY M.R., SENTHAMARA KANNAN A., ATI A., **SIENGCHIN S.**: Effect of processing parameters on tensile properties of recycled polypropylene based composites reinforced with Jute fabrics, *International Journal of Lightweight Materials and Manufacture* 3 (2020), 144-149.

- [151] GEORGE A., SANJAY M.R., SRISUK R., PARAMESWARANPILLAI J., **SIENGCHIN S.**: A Comprehensive Review on Chemical Properties and Applications of Biopolymers and their Composites, *International Journal of Biological Macromolecules* 154 (2020), 329-338.
- [152] VIJAY R., VINOD A., KATHIRAVAN R., **SIENGCHIN S.**, LENIN SINGARAVELU D.: Evaluation of Azadirachta indica seed/spent Camellia sinensis bio-filler based jute fabrics–epoxy composites: Experimental and numerical studies, *Journal of Industrial Textiles* 49 (2020), 1252-1277.
- [153] YORSENG K., **SIENGCHIN S.**, ASHOK B., VARADA RAJULU A.: Nanocomposite Egg Shell Powder with In situ generated Silver Nanoparticles using Inherent Collagen as Reducing Agent, *Journal of Bioresources and Bioproducts*, 5(2) 2020, 101-107.
- [154] BINOJ J.S., EDWIN RAJ R., ABU HASSAN S., MARIATTI M., **SIENGCHIN S.**, SANJAY M.R.: Characterization of discarded fruit waste as substitute for harmful synthetic fiber reinforced polymer composites, *Journal of Materials Science* 55 (2020), 8513–8525.
- [155] MADHUL P., SANJAY M.R., SENTHAMARAIKANNAN P., PRADEE S., **SIENGCHIN S.**, JAWAID M., KATHIRESAN M.: Effect of Various Chemical Treatments of Prosopis juliflora Fibers as Composite Reinforcement: Physicochemical, Thermal, Mechanical, and Morphological Properties, *Journal of Natural Fibers* 17:6 (2020), 833-844.
- [156] SIAKENG R., JAWAID M., ASIM M., SABA N., SANJAY M.R., **SIENGCHIN S.**, FOUH H.: Alkali Treated Coir/Pineapple Leaf Fibres Reinforced PLA Hybrid Composites: Evaluation of Mechanical, Morphological, Thermal and Physical Properties, *eXPRESS Polymer Letters* 14:8 (2020), 717–730.
- [157] TENGSUTHIWAT J., SANJAY M.R., **SIENGCHIN S.**, PRUNCU C.I.: 3D-MID Technology for surface modification of polymer-based composites: a comprehensive review, *Polymers* 12 (2020), 1408.
- [158] VARGHESE S.A., PULIKKALPARAMBILA H., SANJAY M.R., **SIENGCHIN S.**, PARAMESWARANPILLAI J.: Novel biodegradable polymer films based on poly(3-hydroxybutyrate-co-3-hydroxyvalerate) and Ceiba pentandra natural fibers for packaging applications, *Food Packaging and shelf life* 25 (2020), 100538.
- [159] SANJAY M.R., **SIENGCHIN S.**, DHAKAL H.N.: Green-composites: Ecofriendly and Sustainability, *Applied Science and Engineering Progress* 13 (2020), 183-184.

- [160] SENTHIL MUTHU KUMAR T., SENTHILKUMAR K., CHANDRASEKAR M., **SIENGCHIN S.**, RAJINI N.: Influence of filler loading on the tensile properties of poly(propylene carbonate) ligno-cellulosic particulate filler biocomposite films, *SSRN Journal* (2020), 1-6.
- [161] SENTHILKUMAR K., CHANDRASEKAR M., SENTHIL MUTHU KUMAR T., SHAHROZE R.M, ISHAK M.R., **SIENGCHIN S.**: Effect of Hybridization and Water Absorption Properties of Flax and Sugar Palm Fibre Reinforced Polymer Composites: A Review, *SSRN Journal* (2020), 1-5.
- [162] SENTHILKUMAR K., IRULLAPPASAMY S., IRULLAPPASAMY S., CAMPOS AMICO S., **SIENGCHIN S.**: Evaluation of Mechanical and Free Vibrational Analysis of Vegetable Fiber Reinforced Polyester Sandwich Composites with Polyvinyl Chloride Core, *SSRN Journal* (2020), 1-6.
- [163] KUMARAN P., MOHANAMURUGAN S., MADHU S., VIJAY R., LENIN SINGARAVELU D., VINOD A., SANJAY M.R., **SIENGCHIN S.**: Investigation on Thermo-Mechanical Characteristics of Treated/Untreated Portunus Sanguinolentus Shell Powder Based Jute Fabrics Reinforced Epoxy Composites, *Journal of Industrial Textiles* 50 (2020), 427-459.
- [164] RADOOR S., KARAYIL J., PARAMESWARANPILLAI J., **SIENGCHIN S.**: Adsorption study of anionic dye, Eriochrome Black T from aqueous medium using polyvinyl alcohol/starch/ZSM-5 zeolite membrane, *Journal of Polymers and the Environment* 28(10) (2020), 2631-2643.
- [165] SUMRITH N., TECHAWINYUTHAM L., SANJAY M.R., DANGTUNGEE R., **SIENGCHIN S.**: Characterization of Alkaline and Silane treated fibers of 'Water Hyacinth plants' and reinforcement of 'Water Hyacinth fibers' with bioepoxy to develop fully biobased sustainable ecofriendly composites, *Journal of Polymers and the Environment* 28(10) (2020), 2749-2760.
- [166] BHARATH K.N., MADHU P., GOWDA Y., SANJAY M.R., KUSHVAHA V., **SIENGCHIN S.**: Alkaline Effect on Characterization of Discarded Waste of Moringa oleifera Fiber as a Potential Eco-friendly Reinforcement for Biocomposites, *Journal of Polymers and the Environment* 28(11) (2020), 2823-2836.
- [167] ASHOK B., HARIRAM N., **SIENGCHIN S.**, VARADA RAJULU A.: Modification of Tamarind Fruit Shell Powder with In Situ Generated Copper Nanoparticles by Single Step Hydrothermal Method, *Journal of Bioresources and Bioproducts* 5(3) (2020), 180-185.
- [168] CHANDRASEKAR M., SIVA I., SENTHIL MUTHU KUMAR T., SENTHILKUMAR K., **SIENGCHIN S.**, RAJINI N.: Influence of fibre inter-ply orientation on the mechanical and free vibration properties of banana fibre reinforced polyester composite laminates, *Journal of Polymers and the Environment* 28(11) (2020), 2789-2800.
- [169] RADOOR S., KARAYIL J., PARAMESWARANPILLAI J., **SIENGCHIN S.**: Removal of anionic dye Congo red from aqueous environment using polyvinyl alcohol/sodium alginate/ZSM-5 zeolite membrane, *Scientific Reports* 10 (2020), 15452.

- [170] YORSENG K., SANJAY M.R., PARAMESWARANPILLAI J., **SIENGCHIN S.**: Influence of Accelerated Weathering on the Mechanical, Fracture Morphology, Thermal Stability, Contact Angle, and Water Absorption Properties of Natural Fiber Fabric-Based Epoxy Hybrid Composites, *Polymers* 12 (2020), 2254.
- [171] MOHIT H., SANJAY M.R., KUSHVAHA V., DHAKAL H.N., **SIENGCHIN S.**: A Comprehensive Review on Mechanical, Electromagnetic Radiation Shielding, and Thermal Conductivity of Fibers/ Inorganic Fillers Reinforced Hybrid Polymer Composites, *Polymer Composites* 41 (2020), 3940–3965.
- [172] SANGILIMUTHUKUMAR J., SENTHIL MUTHU KUMAR T., SANTULLI C., CHANDRASEKAR M., SENTHILKUMAR K., **SIENGCHIN S.**: The Use of Pineapple Fiber Composites for Automotive Applications: A Short Review, *Journal of Materials Science Research and Reviews* 6(3) (2020), 39-45.
- [173] VARGHESE S.A., **SIENGCHIN S.**, PARAMESWARANPILLAI J.: Essential oil as a potent antimicrobial agent in biopolymer-based food packaging – a comprehensive review, *Food Bioscience* 38 (2020), 100785.
- [174] VIJAY R., LENIN SINGARAVELU D., VINOD A., FRANKLIN PAUL RAJ I.D., SANJAY M.R., **SIENGCHIN S.**: Characterization of novel natural fiber from Saccharum Bengalense grass (Sarkanda), *Journal of Natural Fibers* 17(12) (2020), 1739–1747.
- [175] BHARATH K.N., MADHU P., YASHAS T.G., VERMA A., SANJAY M.R., **SIENGCHIN S.**: A Novel Approach for Development of Printed Circuit Board from Bio-Fiber based Composites, *Polymer Composites* 41(2020), 4550-4558.
- [176] MADHU P., SANJAY M.R., KHAN A., AL-ZAHRANI S.A., OTAIBI A.A., PRADEEP S., MOURE M.M., **SIENGCHIN S.**: Preparation and Characterization of New Hybrid Polymer Composites from Phoenix Pusilla Fibers/E-glass/Carbon Fabrics on Potential Engineering Applications: Effect of Stacking Sequence, *Polymer Composites* 41(2020), 4572-4582.
- [177] ALOTHMANA O.Y., JAWAID M., SENTHILKUMAR K., CHANDRASEKAR M., ALSHAMMARI B.A., FOUAD H., HASHEM M., **SIENGCHIN S.**: Thermal characterization of date palm/epoxy composites with fillers from different parts of the tree, *Journal of Materials Research and Technology* 9(6) (2020), 15537-15546.
- [178] MADHU P., SANJAY M.R., KHAN A., OTAIBI A.A., AL-ZAHRANI S.A., PRADEEP S., GUPTA M.K., BOONYASOPORN P., **SIENGCHIN S.**: Experimental investigation on the mechanical and morphological behaviour of Prosopis juliflora bark fibers/E-glass/carbon fabrics reinforced hybrid polymeric composites for structural applications, *Polymer Composites* 41(2020), 4983–4993.

- [179] SRISUK R., TECHAWINYUTHAM L., SANJAY M.R., **SIENGCHIN S.**, DANGTUNGEE R.: Development of Masterbatch for composites using bamboo charcoal powders in Poly(lactic) acid, *Polymer Composites* 41(2020), 5082–5095.
- [180] MAYANDI K., RAJINI N., AYRIILMIS N., INDIRA DEVIS M.P., **SIENGCHIN S.**, MOHAMMAD F., AL-LOHEDAN H.A.: An overview of endurance and ageing performance under various environmental conditions of Hybrid Polymer Composites, *Journal of Materials Research and Technology* 9(6) (2020), 15962-15988.
- [181] RADOOR S., KARAYIL J., PARAMESWARANPILLAI J., **SIENGCHIN S.**: Adsorption of methylene blue dye from aqueous solution by a novel PVA/CMC/halloysite nanoclay bio composite: Characterization, kinetics, isotherm and antibacterial properties, *Journal of Environmental Health Science and Engineering* 18(2) (2020), 1311-1327.
- [182] PRABHU L., KRISHNARAJ V., SATHISH S., GOKULKUMAR S., SANJAY M.R., **SIENGCHIN S.**: Mechanical and acoustic properties of alkali-treated Sansevieria ehrenbergii/Camellia sinensis fiber–reinforced hybrid epoxy composites: Incorporation of glass fiber hybridization, *Applied Composite Materials* 27(6) (2020), 915-933.
- [183] VIJAY R., VINOD A., LENIN SINGARAVELU D., SANJAY M.R., **SIENGCHIN S.**: Characterization of Chemical Treated and Untreated natural fibers from Pennisetum orientale grass- A potential reinforcement for lightweight polymeric applications, *International Journal of Lightweight Materials and Manufacture* 4 (2021), 43-49.
- [184] WANI I., KUMAR H., SANJAY M.R., PENG L., **SIENGCHIN S.**, KUSHVAHA V.: Multiple Regression Model for Predicting Cracks in Soil Amended with Pig Manure Biochar and Wood Biochar, *Journal of Hazardous, Toxic, and Radioactive Waste* 25(1) (2021), 04020007.
- [185] VIJAY R., LENIN SINGARAVELU D., VINOD A., SANJAY M.R., **SIENGCHIN S.**: Characterization of alkali-treated and untreated natural fibers from the stem of Parthenium hysterophorus, *Journal of Natural Fibers* 18(1) (2021), 80-90.
- [186] SENTHIL MUTHU KUMAR T., RAJINI N., ALAVUDEEN A., **SIENGCHIN S.**, VARADA RAJULU A., AYRIILMIS N.: Development and analysis of completely biodegradable cellulose/banana peel powder composite films, *Journal of Natural Fibers* 18(1) (2021), 151-160.
- [187] JAMIL M, ZHAO W., HE N., KUMAR GUPTA M., SARIKAYA M., KHAN A.M., SANJAY M.R., **SIENGCHIN S.**, PIMENOV D.Y.: Sustainable milling of Ti-6Al-4V: A trade-off between energy efficiency, carbon emissions and machining characteristics under MQL and cryogenic environment, *Journal of Cleaner Production* 281 (2021), 125374.

- [188] SANJAY M.R., PARAMESWARANPILLAI J., YORSENG K., PULIKKALPARAMBILA H., **SIENGCHIN S.**: Toughened bioepoxy blends and composites based on poly(ethylene glycol)-blockpoly(propylene glycol)-block-poly(ethylene glycol) triblock copolymer and sisal fiber fabrics: A new approach, *Construction and Building Materials* 271 (2021), 121843.
- [189] SANJAY M.R., **SIENGCHIN S.**: Exploring the applicability of natural fibers for the development of Biocomposites, *eXPRESS Polymer Letters* 15(3) (2021), 193.
- [190] RAJINI N., MAYANDI K., PRABHAKAR M., **SIENGCHIN S.**, AYRILMIS N., BENNET C., ISMAIL S.O.: Tribological properties of Cyperus pangorei fibre reinforced polyester composites, *Journal of Natural Fibers* 18(2) (2021), 261-273.
- [191] RADOOR S., KARAYIL J., JAYAKUMAR A., PARAMESWARANPILLAI J., **SIENGCHIN S.**: Efficient removal of methyl orange from aqueous solution using mesoporous ZSM-5 zeolite: Synthesis, Kinetics and isotherm studies, *Colloids and Surfaces A: Physicochemical and Engineering Aspects* 611 (2021), 125852.
- [192] NANDI D., PARAMESWARANPILLAI J., **SIENGCHIN S.**: Synthesis of graphene nanostructure from chicken feather and its unusual dimensional crossover in electronic conductivity, *Nano-Structures & Nano-Objects* 25 (2021) 100665.
- [193] MARICHELVAM M.K., MANIMARAN P., VERMA A., SANJAY M.R., **SIENGCHIN S.**, KANDSKODEESWARAN K., GEETHA M.: A Novel palm sheath and sugarcane bagasse fiber based hybrid composites for automotive applications: An Experimental approach, *Polymer Composites* 42(2021), 512–521.
- [194] THOMAS S.K., SABURA BEGUM P.M., MIDHUN DOMINIC C.D., SALIM N.V., HAMEED N., SANJAY M.R., **SIENGCHIN S.**, PARAMESWARANPILLAI J.: Isolation and characterization of cellulose nanowhiskers from Acacia caesia plant, *JOURNAL OF APPLIED POLYMER SCIENCE* 138(2021), 50213.
- [195] VIGNESH V., BALAJI A.N., NAGAPRASAD N., SANJAY M.R., KHAN A., ASIRI A.M., ASHRAF G.M., **SIENGCHIN S.**: Indian Mallow Fiber Reinforced Polyester Composites: Mechanical and thermal Properties, *Journal of Materials Research and Technology* 11(2021), 274-284.
- [196] KUMAR V., GOUD G., SANJAY M.R., **SIENGCHIN S.**: Raw and chemically treated Bio-Waste Filled (Limonia Acidissima shell powder) Vinyl Ester Composites: Physical, mechanical, moisture absorption properties and microstructure analysis, *Journal of Vinyl and Additive Technology* 27(2021), 97-107.
- [197] SANJAY M.R., **SIENGCHIN S.**: Exploring the applicability of natural fibers for the development of biocomposites, *eXPRESS Polymer Letters*, 3(2021), 193.

- [198] MUTHULAKSHMI L., ANNARAJ J., RAMAKRISHNA S., RANJAN S., DASGUPTA N., SANJAY M.R., **SIENGCHIN S.**: A sustainable solution for enhanced food packaging via a science-based composite blend of nature-sourced chitosan and microbial extracellular polymeric substances (EPS), *Journal of Food Processing and Preservation* 45(2021), 15031.
- [199] JAYAKUMAR A., RADOOR S., NAIR I.C., **SIENGCHIN S.**, PARAMESWARANPILLAI J., RADAKRISHNAN E.K.: Lipopeptide and zinc oxide nanoparticles blended polyvinyl alcohol-based nanocomposite films as antimicrobial coating for biomedical applications, *Process Biochemistry* 102 (2021) 220–228.
- [200] MANIMARAN P., SENTHAMARAIKANNAN P., SANJAY M.R., SARAVANAKUMAR S.S., **SIENGCHIN S.**, PITCHAYYAPILAI G., KHAN A.: Physico-chemical properties of fiber extracted from flower of Celosia Argentea plant, *Journal of Natural Fibers* 18(3) (2021), 464-473.
- [201] SIVARANJANA P., NAGARAJAN E.R., RAJINI N., AYRILMIS N., VARADA RAJULU A., **SIENGCHIN S.**: Preparation and characterization studies of modified cellulosic textile fabric composite with in situ generated AgNPs coating, *Journal of Industrial Textiles* 50(7) (2021), 1111-1126.
- [202] SENTHILKUMAR K., UNGTRAKUL T., CHANDRASEKAR M., SENTHIL MUTHU KUMAR T., RAJINI N., **SIENGCHIN S.**, PULIKKALPARAMBIL H., PARAMESWARANPILLAI J.: Performance of sisal/hemp bio-based epoxy composites under accelerated weathering, *Journal of Polymers and the Environment* 29(2) (2021), 624-636.
- [203] RADOOR S., KARAYIL J., JAYAKUMAR A., PARAMESWARANPILLAI J., **SIENGCHIN S.**: A low cost and eco-friendly membrane from polyvinyl alcohol, chitosan and honey: Synthesis, characterization and antibacterial property, *Journal of Polymer Research* 28(82) (2021), 1-15.
- [204] SETHU R.P., MAYANDI K., RAJINI N., ABDUL MUNAF A.K.S., RAJESH K.K., SIKIRU O.I., **SIENGCHIN S.**, MOHAMMAD F., AL-LOHEDAN H.A.: An experimental investigation and statistical analysis of additively manufactured onyx-carbon fiber reinforced composites, *JOURNAL OF APPLIED POLYMER SCIENCE* 138 (2021), e50338.
- [205] VINOD A., YASHAS T.G., VIJAY R., SANJAY M.R., GUPTA M.K., JAMIL M., KUSHVAHA V., **SIENGCHIN S.**: Novel Muntingia Calabura bark fiber reinforced green-epoxy composite: A sustainable and green material for cleaner production, *Journal of Cleaner Production* 294 (2021), 126337.
- [206] SENTHILKUMAR K., SABA N., CHANDRASEKAR M., JAWAID M., RAJINI N., **SIENGCHIN S.**, AYRILMIS N.: Compressive, dynamic and thermo-mechanical properties of

- cellulosic pineapple leaf fibre/polyester composites: Influence of alkali treatment on adhesion, *International of Adhesion and Adhesives* 106 (2021), 102823.
- [207] LOYPETCH N., TROELTZSCH J., NESTLER D., KROLL L., **SIENGCHIN S.**: Thermoplastic foam injection moulding of sandwich structures with short fibre-reinforced skin layers, *Journal of Sandwich Structures and Materials* 23(1) (2021), 301–321.
- [208] BHARATH K.N., MADHU P., GOWDA Y., YASHAS T.G., VERMA A., SANJAY M.R., **SIENGCHIN S.**: Mechanical and Chemical Properties Evaluation of Sheep Wool Fiber reinforced Vinylester Composites, , *Materials Performance and Characterization* 10(1) (2021), 99-109.
- [209] HADDAR N., GHORBEL N., OMRI M.A., SANJAY M.R., **SIENGCHIN S.**, KALLEL A.: Dielectric, Vibrational and Thermal properties of sisal fibersreinforced poly (lactic acid), *Polymer Composites* 42 (2021), 1267–1278.
- [210] ASHA BHANU A.V., VIJAYAN P., THOMAS S., PARAMESWARANPILLAI J., PUGLIA D., **SIENGCHIN S.**, ARYAKRISHNA L., MANOHA A.: Fabrication of water-resistant epoxy nanocomposite with improved dynamic mechanical properties and balanced thermal and dimensional stability: Study on dual role of graphene oxide nanosheets and barium oxide microparticles, *Colloids and Surfaces A: Physicochemical and Engineering Aspects* 617 (2021), 126405.
- [211] SHAHROZE R.M., CHANDRASEKAR M., SENTHILKUMAR K., SENTHIL MUTHU KUMAR T., ISHAK M.R., RAJINI N., **SIENGCHIN S.**, ISMAIL S.O.: Mechanical, interfacial and thermal properties of the silica aerogel-infused flax/epoxy composites, *International Polymer Processing* 36(1) (2021), 53-59.
- [212] ASHOK B., HARIRAM N., UMAMAHESH M., **SIENGCHIN S.**, VARADA RAJULU A.: Modification of Waste Leather Trimming with In Situ Generated Silver Nanoparticles by One Step Method, *Applied Science and Engineering Progress* 14(2) (2021), 236-246.
- [213] POORNIMA VIJAYAN P., ASHA BHANU A.V., ARCHANA S.R., BABU A., **SIENGCHIN S.**, PARAMESWARANPILLAI J.: Development of chicken feather fiber filled epoxy protective coating for metals, *Materials Today: Proceedings* 41 (2021), 468-472.
- [214] VINAY S.S., SANJAY M.R., **SIENGCHIN S.**, VENKATESH C.V: Effect of Al₂O₃ nanofillers in basalt/epoxy composites: Mechanical and tribological properties, *Polymer Composites* 42 (2021), 1727-1740.
- [215] SATHISHKUMAR T.P., MURALIDHARAN S., RAMAKRISHNAN S., SANJAY M.R., **SIENGCHIN S.**: Mechanical Strength Retention and Service Life of Kevlar Fiber Woven Mat Reinforced Epoxy Laminated Composites for Structural Applications, *Polymer Composites* 42 (2021), 1855-1866.

- [216] NAGARAJAN K.J., RAMANUJAM N.R., SANJAY M.R., **SIENGCHIN S.**, SURYA RAJAN B., SATHICK BASHA K., MADHU P., RAGHAV G.R.: A comprehensive review on cellulose nanocrystals and cellulose nanofibers: Pretreatment, preparation and characterization, *Polymer Composites* (2021), 1588–1630.
- [217] YASHAS T.G., VINOD A., MADHU P., KUSHVAHA V., SANJAY M.R., **SIENGCHIN S.**: A New Study on Flax-Basalt-Carbon Fiber Reinforced Epoxy/Bio-Epoxy Hybrid Composites, *Polymer Composites* 42 (2021); 1891–1900.
- [218] RAJESHKUMAR G., HARIHARAN V., INDRAN S., SANJAY M.R., **SIENGCHIN S.**, PRAKASH MARAN J., AL-DHABI N.A., KARUPPIAH P.: Influence of sodium hydroxide (NaOH) treatment on mechanical properties and morphological behaviour of Phoenix sp. fiber/epoxy composites, *Journal of Polymers and the Environment* 29(3) (2021), 765-774.
- [219] SENTHIL MUTHU KUMAR T., SENTHILKUMAR K., RATANIT M., RAJINI N., CHANUNPANICH N., HARIRAM N., PORNWONGTHONG P., **SIENGCHIN S.**: Influence of Titanium Dioxide particles on the filtration of 1,4-Dioxane and antibacterial properties of Electrospun Cellulose Acetate and Polyvinylidene Fluoride nanofibrous membranes, *Journal of Polymers and the Environment* 29(3) (2021), 775-784.
- [220] MUTHULAKSHMI L., MATHANGI J.B., SURYASANKAR R.P., PADMANABAN V.C., KALAVATHY H., SANJAY M.R., **SIENGCHIN S.**: Extraction of Polymeric Biocollocant from Enterobacter sp. and Adsorptive Kinetic Studies on Industrial Dye Removal Applications, *Journal of Polymers and the Environment* 29(4) (2021), 1040-1049.
- [221] SENTHIL MUTHU KUMAR T., CHANDRASEKAR M., SENTHILKUMAR K., IYAS R.A., SAPUAND S.M., HARIRAM N., VARADA RAJULU A., RAJINI N., **SIENGCHIN S.**: Characterization, thermal and antimicrobial properties of hybrid cellulose nanocomposite films with in-situ generated copper nanoparticles in Tamarindus indica nut powder, *Journal of Polymers and the Environment* 29(4) (2021), 1134-1142.
- [222] SALARI M.A., MUGLU G.M., REZAEI M., SARAVANA K., PULIKKALPARAMBILA H., **SIENGCHIN S.**: In-situ synthesis of TiN and TiB₂ compounds during reactive spark plasma sintering of BN–Ti composites, *Synthesis and Sintering* 1 (2021), 48-53.
- [223] ARSHAD M.N., MOHIT H., SANJAY M.R., **SIENGCHIN S.**, KHAN A., ALOTABI M.M., ASIRI A.M., RUB M.A.: Effect of Coir Fiber and TiC nanoparticles on Basalt fiber Reinforced Epoxy Hybrid Composites: Physico-Mechanical Characteristics, *Cellulose* 28(6) (2021), 3451-3471.
- [224] VINOD A., SINGARAVELU D.L., SANJAY M.R., **SIENGCHIN S.**, YAGNARAJ Y., KHAN S.: Extraction and Characterization of Natural Fiber from Stem of Cardiospermum Halicababum, *Journal of Natural Fibers* 18(6) (2021), 898-908.

- [225] PREMALATHA N., SARAVANAKUMAR S.S., SANJAY M.R., **SIENGCHIN S.**, KHAN A.: Structural and Thermal Properties of Chemically Modified Luffa cylindrical Fibers, *Journal of Natural Fibers* 18(7) (2021), 1037–1043.
- [226] GANAPATHY T., SATHISKUMAR R., SANJAY M.R., SENTHAMARA KANNAN P., SARAVANAKUMAR S.S., PARAMESWARANPILLAI J., **SIENGCHIN S.**: Effect of Graphene powder on Banyan aerial root fibers reinforced epoxy composites, *Journal of Natural Fibers* 18(7) (2021), 1029–1036.
- [227] RAJESHKUMAR G., SESHADRI S.A., DEVNANI G.L., SANJAY M.R., **SIENGCHIN S.**, MARAN J.P., AI-DHABI N.A., PONMURUGAN K., MARIADHAS V.A., SIVARAJASEKAR N., ANUF A.R.: Environment Friendly, Renewable and Sustainable Poly Lactic Acid (PLA) based Natural Fibers reinforced Composites – A Comprehensive Review, *Journal of Cleaner Production* 310 (2021), 127483.
- [228] RADOOR S., KARAYIL J., JAYAKUMAR A., PARAMESWARANPILLAI J., **SIENGCHIN S.**: Release of toxic methylene blue from water by mesoporous silicalite-1: Characterization, kinetics and isotherm studies, *Applied Water Science* 11 (2021), 110.
- [229] RAJESHKUMAR G., DEVNANI G.L., MARAN J.P., SANJAY M.R., **SIENGCHIN S.**, AI-DHABI N.A., PONMURUGAN K.: Characterization of Novel Natural Cellulosic Fiber from Purple Bauhinia as Potential Reinforcement in Polymer Composites, *Cellulose* 28 (2021), 5373–5385.
- [230] THOMAS S.K., PARAMESWARANPILLAI J., SENTHILKUMAR K., SABURA BEGUM P.M., NANDI D., **SIENGCHIN S.**, GEORGE J.J., HAMEED N., SALIM N.V., SIENKIEWICZ N.: A comprehensive review on cellulose, chitin, and starch as fillers in natural rubber biocomposites, *Carbohydrate Polymer Technologies and Applications* 2 (2021) 100095.
- [231] RADOOR S., KARAYIL J., JAYAKUMAR A., PARAMESWARANPILLAI J., **SIENGCHIN S.**: An efficient removal of malachite green dye from aqueous environment using ZSM-5 zeolite/polyvinyl alcohol/carboxymethyl cellulose/sodium alginate bio composite, *Journal of Polymers and the Environment* 29(7)(2021), 2126-2139.
- [232] JESSY MICHLA J.R., RAJINI N., SENTHILKUMAR K., **SIENGCHIN S.**, ISMAIL S.O., PRABHU T.R.: Conventional and Additively Manufactured Stainless Steels: A Review, *Transactions of the Indian Institute of Metals* 74(6) (2021), 1261-1278.
- [233] VINOD A., VIJAY R., LENIN SINGARAVELU D., SANJAY M.R., **SIENGCHIN S.**, YAGNARAJ Y., KHAN S.: Extraction and Characterization of Natural Fiber from Stem of *Cardiospermum Halicababum*, *Journal of Natural Fibers* 18(6) (2021), 898-908.

- [234] MOHIT H., SANJAY M.R., **SIENGCHIN S.**, KHAN A., MARWANI H.M., DZUDZEVIC-CANCAR H., ASIRI A.M.: Effect of TiC Nanoparticles Reinforcement in Coir Fiber based Bio/Synthetic Epoxy Hybrid Composites: Mechanical and Thermal Characteristics, *Journal of Polymers and the Environment* 29 (2021), 2609-2627.
- [235] MIDHUN DOMINIC C.D., JOSEPH R., SABURA BEGUM P.M., KUMAR A.S., JEEMOL P.A., JOSE T., PADMANABHAN D., FORMELA K., **SIENGCHIN S.**, PARAMESWARANPILLAI J., SAEB M.R.: Cellulosic Bionanocomposites Based on Acrylonitrile Butadiene Rubber and *Cuscuta reflexa*: Adjusting Structure-Properties Balance for Higher Performance, *Cellulose* 28(11) (2021), 7053-7073.
- [236] KAVYA H.M., BAVAN S., YOGESHA B., SANJAY M.R., **SIENGCHIN S.**, GORBATYUK S.: Effect of Coir Fiber and Inorganic Filler on Physical and Mechanical Properties of Epoxy Based Hybrid Composites, *Polymer Composites* 42 (2021), 3911–3921.
- [237] RAJESHKUMAR G., SESHADRI S.A., RAMAKRISHNAN S., GOPINATH R., BILLIGRAHAM P., SATHISHKUMAR T.P., SANJAY M.R., **SIENGCHIN S.**, NARAJA K.C.: A Comprehensive Review on Natural Fiber/Nano-Clay Reinforced Hybrid Polymeric Composites: Materials and Technologies, *Polymer Composites* 42 (2021), 3687–3701.
- [238] SARAVANA KUMAR M., VASUMATHI M., BEGUM S.R., PULIKKALPARAMBILA H., **SIENGCHIN S.**, PRUNCU C.I.: Medium-term absorption kinetics and thermal stability analysis of Hybrid Fiber Metal Laminate and experimental investigations on its Physical and Tensile Properties, *Polymer Composites* 42 (2021), 4155–4165.
- [239] RAJESHKUMAR G., DEVNANI G.L., HARIHARAN V., MARAN J.P., SANJAY M.R., **SIENGCHIN S.**, AI-DHABI N.A., PONMURUGAN K.: Cellulose Fiber from Date Palm Petioles as Potential Reinforcement for Polymer Composites: Physicochemical and Structural Properties, *Polymer Composites* 42 (2021), 3943–3953.
- [240] VINOD A., SANJAY M.R., **SIENGCHIN S.**, FISCHER S.: Fully Bio-based Agro-Waste Soy Stem Fiber Reinforced Bio-Epoxy Composites for lightweight structural applications: Influence of Surface Modification Techniques, *Construction and Building Materials* 303 (2021), 124509.
- [241] RADOOR S., KARAYIL J., JAYAKUMAR A., PARAMESWARANPILLAI J., **SIENGCHIN S.**: Fabrication of PVA/agar/modified ZSM-5 zeolite membrane for removal of anionic dye from aqueous solution, *International Journal of Environmental Science and Technology* 18 (2021), 2571–2586.
- [242] RAJINI N., SUBRAMANIAN K., SUBRAMANIAN S.S., SENTHILKUMAR K., **SIENGCHIN S.**, SUKUMARAN J., ISMAIL S.O., MOHAMMAD F., AI-LOHEDAN H.A.: A novel signal processing method for friction and sliding wear, *Journal of Tribology* 144 (2022), 051702.

- [243] MATYKIEWICZ D., BARCZEWSKI M., MOUSA M.S., SANJAY M.R., **SIENGCHIN S.**: Impact Strength of Hybrid Epoxy–Basalt Composites Modified with Mineral and Natural Fillers, *ChemEngineering* 5 (56) (2021), 1-13.
- [244] NANDI D., GHOSH S.K., GHOSH A., **SIENGCHIN S.**, ROY A., GUPTA K., PARAMESWARANPILLAI J., BHOWMICK A.K., GHOSH U.C.: Arsenic removal from water by graphene nanoplatelets prepared from nail waste: a physicochemical study of adsorption based on process optimization, kinetics, isotherm and thermodynamics, *Environmental Nanotechnology, Monitoring & Management* 16 (2021), 100564.
- [245] RADOOR S., KARAYIL J., JAYAKUMAR A., PARAMESWARANPILLAI J., **SIENGCHIN S.**: Removal of methylene blue dye from aqueous solution using PDADMAC modified ZSM-5 zeolite as a novel adsorbent, *Journal of Polymers and the Environment* 29 (2021), 3185–3198.
- [246] PULIKKALPARAMBILA H., PARAMESWARANPILLAI J., **SIENGCHIN S.**, PIONTECK J.: UV light triggered self-healing of green epoxy coatings, *Construction and Building Materials* 305 (2021), 124725.
- [247] KHAN A., VIJAY R., LENIN SINGGARAVELU D., SANJAY M.R., **SIENGCHIN S.**, VERPOORT F., ALMRY K.A., ASIRI A.M.: Extraction and characterization of natural fiber from Eleusine indica grass as reinforcement of sustainable fiber reinforced polymer composites, *Journal of Natural Fibers* 18(11) (2021), 1742-1750.
- [248] KHAN A., VIJAY R., LENIN SINGGARAVELU D., SANJAY M.R., **SIENGCHIN S.**, VERPOORT F., ALMRY K., ASIRI A.: Characterization of natural fibers from Cortaderia selloana grass (Pampas) as reinforcement material for the production of the composites, *Journal of Natural Fibers* 18(11) (2021), 1893-1901.
- [249] MAHARDIKA M., ASROFI M., AMELIA D., SYAFRI E., SANJAY M.R., **SIENGCHIN S.**, VERPOORT F., ALMRY K., ASIRI A.: Tensile Strength and Moisture Resistance Properties of Biocomposite Films Based on Polyvinyl Alcohol (PVA) with Cellulose as Reinforcement from Durian Peel Fibers, *E3S Web of Conferences* 302 (2021), 02001.
- [250] RAJKUMAR I., RAJINI N., **SIENGCHIN S.**, ISMAIL S.O., MOHAMMAD F., AI-LOHEDAN H.A., TAWFEEK A.M., ISSA Z.A.: Effect of sand and gating architecture on the performance of foot valve lever casting components used in pump industries, *Journal of Materials Research and Technology* 15 (2021), 1653-1666.
- [251] INDRAN S., DIVYA D., SANJAY M.R., **SIENGCHIN S.**, CHRISTY P.M., GOPINATH L.R.: Perspectives of anaerobic decomposition of biomass for sustainable biogas production: A Review, *E3S Web of Conferences* 302 (2021), 01015.
- [252] JAGADEESH P., NINGAPPA V.S.H., MADHU P., YASHAS T.G., SANJAY M.R., KHAN M.R., KHAN I., **SIENGCHIN S.**: Pongamia pinnata shell powder filled sisal/kevlar hybrid composites: Physicomechanical and morphological characteristics, *Polymer Composites* 42 (2021), 4434–4447.

- [253] TECHAWINYUTHAM L., SUMRITH N., SRISUK R., TECHAWINYUTHAM W., **SIENGCHIN S.**, SANJAY M.R.: Thermo-Mechanical, Rheological and Morphology Properties of Polypropylene (PP) Composites: Residual CaCO₃ as a sustainable by-product, *Polymer Composites* 42 (2021), 4643–4659.
- [254] MOHIT H., TENGSUTHIWAT J., SANJAY M.R., **SIENGCHIN S.**, KHAN A., MARWANI H.M., DZUDZEVIC-CANCAR H., ASIRI A.M.: Effect of TiC Nanoparticles on Accelerated Weathering of Coir fiber filler and Basalt Fabric reinforced Bio/Synthetic Epoxy Hybrid Composites: Physico-mechanical and Thermal Characteristics, *Polymer Composites* 42 (2021), 4897–4910.
- [255] SETSWALO K., MOLALETSA N., OLADIJO O.P., AKINLABI E.T., SANJAY M.R., **SIENGCHIN S.**: The Influence of Fiber Processing and Alkaline Treatment on the Properties of Natural Fiber-reinforced Composites: A Review, *Applied Science and Engineering Progress* 14(4) (2021), 632-650.
- [256] TECHAWINYUTHAM L., TENGSUTHIWAT J., SRISUK R., TECHAWINYUTHAM W., SANJAY M.R., **SIENGCHIN S.**: Recycled LDPE/PETG blends and HDPE/PETG blends: Mechanical, Thermal, and Rheological Properties, *Journal of Materials Research and Technology* 15 (2021), 2445-2458.
- [257] MOHIT H., SRISUK R., SANJAY M.R., **SIENGCHIN S.**, KHAN A., MARWANI H.M., DZUDZEVIC-CANCAR H., ASIRI A.M.: Nanoparticles addition in Coir/ Basalt / Innegra fibers Reinforced Bio/Synthetic Epoxy Composites, *Journal of Polymers and the Environment* 29 (2021), 3561–3573.
- [258] KAVYA H.M., BAVAN S., YOGESHA B., SANJAY M.R., **SIENGCHIN S.**, GORBATYUK S.: Effect of coir fiber and inorganic filler hybridization on Innegra fiber reinforced epoxy polymer composites: Physical and Mechanical Properties, *Cellulose* 28 (2021), 9803–9820.
- [259] MANSINGH B.B, BINOJ J.S., SAI N.P., HASSAN S.A., **SIENGCHIN S.**, SANJAY M.R., LIU Y.C.: Sustainable development in utilization of Tamarindus indica L. and its by-products in industries: A Review, *Current Research in Green and Sustainable Chemistry* 4 (2021), 100207.
- [260] VINOD A., SANJAY M.R., **SIENGCHIN S.**: Fatigue and thermo-mechanical properties of chemically treated Morinda Citrifolia fiber reinforced bio-epoxy composite: A sustainable green material for cleaner production, *Journal of Cleaner Production* 326 (2021), 129411.
- [261] SINGH S.P., JAWAID M., CHANDRASEKAR M., SENTHILKUMAR K., YADAV B., SABA N., **SIENGCHIN S.**: Sugarcane wastes into commercial products: Processing methods, production optimization and challenges, *Journal of Cleaner Production* 328 (2021), 129453.

- [262] JAYAKUMAR A., RADOOR S., NAIR I.C., **SIENGCHIN S.**, PARAMESWARANPILLAI J., RADHAKRISHNAN E.K.: Polyvinyl alcohol -nanocomposite films incorporated with clay nanoparticles and lipopeptides as active food wraps against food spoilage microbes, *Food Packaging and Shelf Life* 30 (2021), 100727.
- [263] JAGADEESH P., MADHU P., SANJAY M.R., **SIENGCHIN S.**: Influence of nanofillers on biodegradable composites: A comprehensive review, *Polymer Composites* 42 (2021), 5691–5711.
- [264] ARPITHA G.R., VERMA A., SANJAY M.R., **SIENGCHIN S.**: Preparation and experimental investigation on mechanical and tribological performance of hemp-glass fiber reinforced laminated composites for lightweight applications, *Advances in Civil Engineering Materials* 10(1) (2021), 427-439.
- [265] KARIMAH A., RIDHO M.R., MUNAWAR S.S., ISMADI I., AMIN Y., DAMAYANTI R., LUBIS M.A.R., WULANDRI A.P., NURINDAH N., ISWANTO A.H., FUDHOLI A., ASROFI M., SAEDAH E., SARI N.H., PRATAMA B.R., FATRIASARI W., NAWAWI D.S., SANJAY M.R., **SIENGCHIN S.**: A Comprehensive Review on Potential Natural Fibers: Technological and Socio-Economical Aspects, *Polymers* 13 (2021), 4280.
- [266] AYYANAR C.B., PRADEEP MOHAN S.K., BHARATHIRAJ C., SANJAY M.R., **SIENGCHIN S.**: Characterization of Syzygium Cumini Particulates Filled E-Glass Fiber Reinforced Epoxy Composites, *Polymer Composites* 42 (2021), 6298–6309.
- [267] BRAILSON MANSINGHA B., BINOJ J.S., ABU HASSAN S., MARIATTI M., **SIENGCHIN S.**, SANJAY M.R., LIU Y.C., RAVEENDRAN P.S.: Characterization of chemically treated new natural cellulosic fibers from peduncle of Cocos nucifera L. Var typica, *Polymer Composites* 42 (2021), 6403–6416.
- [268] JAGADEESH P., MADHU P., SANJAY M.R., **SIENGCHIN S.**: A Review on Extraction, Chemical Treatment, Characterization of Natural Fibers and Its Composites for Potential Applications, *Polymer Composites* 42 (2021), 6239–6264.
- [269] MURALIDHARAN M., SATHISHKUMAR T.P., RAJINI N., NAVANEETHAKRISHNAN P., KUMAR S.A., ISMAIL S.O., KRISHNASAMY K., **SIENGCHIN S.**: Evaluation of tensile strength retention and service life prediction of hydrothermal aged balanced orthotropic carbon/glass and Kevlar/glass fabric reinforced polymer hybrid composites, *Journal of Applied Polymer Science* 139(6) (2022), 51602.
- [270] VINOD A., TENGSUTHIWAT J., YASHAS T.G., VIJAY R., SANJAY M.R., **SIENGCHIN S.**, DHAKAL H.N.: Jute/Hemp bio-epoxy hybrid bio-composites: Influence of stacking sequence on adhesion of fiber-matrix, *International Journal of Adhesion and Adhesives* 113 (2022), 103050.

- [271] TECHAWINYUTHAM L., PRASARNSRI A., **SIENGCHIN S.**, DANGTUNGEE R., SANJAY M.R.: Anti-gnawing, Thermo-mechanical and Rheological Properties of Polyvinyl Chloride: Effect of Capsicum Oleoresin and Denatonium Benzoate, *Journal of Composites Science* 6(8) (2022), 1-19.
- [272] JAGADEESH P., MADHU P., YASHAS T.G., SANJAY M.R., **SIENGCHIN S.**: Carbon Fiber Reinforced Areca/ Sisal Hybrid Composites for Railway Interior Applications: Mechanical and Morphological Properties, *Polymer Composites* 43 (2022), 160–172.
- [273] SELVAN M.G.A., BINOJ J.S., MOSES J.J., SAI N.P., **SIENGCHIN S.**, SANJAY M.R., LIU Y.C.: Extraction and characterization of natural cellulosic fiber from fragrant screw pine prop roots as potential reinforcement for polymer composites, *Polymer Composites* 43 (2022), 320-329.
- [274] MOHIT H., SANJAY M.R., **SIENGCHIN S.**, GORBATYUK S., MANIMARAN P., KUMARI A.C., KHAN A., DODDAMANI M.: A Comprehensive Review on Performance and Machinability of Plant Fiber Polymer Composites, *Polymer Composites* 43 (2022), 608–623.
- [275] SANJAY M.R., PARAMESWARANPILLAI J., **SIENGCHIN S.**, JAWAID M., OZBAKKALOGLU T.: Bioepoxy based Hybrid Composites from Nano-fillers of Chicken feather and lignocellulose Ceiba Pentandra, *Scientific Reports* 12 (2022), 397.
- [276] JAIWAL D., DEVNANI G.L., RAJESHKUMAR G., SANJAY M.R., **SIENGCHIN S.**: Review on Extraction, Characterization, Surface treatment and Thermal Degradation Analysis of New Cellulosic Fibers as Sustainable Reinforcement in Polymer Composites, *Current Research in Green and Sustainable Chemistry* 5 (2022), 100271.
- [277] KHAN A., VIJAY R., LENIN SINGARAVELU D., SANJAY M.R., **SIENGCHIN S.**, JAWAID M., KHALID A., ASIRI A., ASIRI A.M.: Extraction and Characterization of natural fibers from Citrullus lanatus climber, *Journal of Natural Fibers* 19 (2) (2022), 621-629.
- [278] RAJKUMAR I., PRABHU T.R., RAJINI N., ISMAIL S.O., **SIENGCHIN S.**, MOHAMMAD F., AI-LOHEDAN H.A.: Applicability of angular orientations of gating designs to quality of sandcasting components using two-cavity mould set-up, *Transactions of the Indian Institute of Metals* 75(2) (2022), 513–524.
- [279] SANJAY M.R., **SIENGCHIN S.**, PARAMESWARANPILLAI J., JAWAID M., OZBAKKALOGLU T.: Lignocellulosic Fiber Reinforced Composites: Progress, Performance, Properties, Applications and Future Perspectives, *Polymer Composites* 43 (2022), 645–691.
- [280] GAPASARI F., PURNOWIDODO A., SETYARINI P.H., HIDAYATULLAH S., SUTEJA S., IZZUDDIN H., SUBAGYO R., SANJAY M.R., **SIENGCHIN S.**: Properties of Organic and Inorganic Filler Hybridization on Timoho Fiber-Reinforced Polyester Polymer Composites, *Polymer Composites* 43 (2022), 1147–1156.

- [281] SANJAY M.R., **SIENGCHIN S.**, FISCHER S.: Sustainable Natural Fibers for Environmental-friendly Materials, *Applied Science and Engineering Progress* 15 (4) (2022), 5802.
- [282] JAGADEESH P., MADHU P., SANJAY M.R., **SIENGCHIN S.**: Role of Polymer Composites in Railway Sector: An Overview, *Applied Science and Engineering Progress* 15 (2) (2022), 5745.
- [283] KUSHVAHA V., SANJAY M.R., **SIENGCHIN S.**: Applications of Hybrid Composites in Railway, *Applied Science and Engineering Progress* 15 (2) (2022), 5768.
- [284] SANJAY M.R., **SIENGCHIN S.**: Moving towards biofiber-based composites: knowledge gaps and insights, *Express Polymer Letters* 16 (5) (2022), 451-452.
- [285] MARICHELVAM M.K., MANIMARAN P., SANJAY M.R., **SIENGCHIN S.**, GEETHA M., KANDAKODEESWARAN K., BOONYASOPON P., GORBATYUK S.: Extraction and Development of Starch-Based Bioplastics from Prosopis Juliflora Plant: Eco-friendly and sustainability aspects, *Current Research in Green and Sustainable Chemistry* 5 (2022), 100296.
- [286] JAGADEESH P., MADHU P., OLADIJO O.P., LAI C.W., GORBATYUK S., MATYKIEWICZ D., SANJAY M.R., **SIENGCHIN S.**: A comprehensive review on polymer composites in railway applications, *Polymer Composites* 43 (2022), 1238–1251.
- [287] SARI N.H., SETYAWAN P.D., SENTHIL MUTHU KUMAR T., SUTEJA S., TAMIMI R., SANJAY M.R., **SIENGCHIN S.**: Evaluation of mechanical, thermal and morphological properties of corn husk modified pumice powder reinforced polyester composites, *Polymer Composites* 43 (2022), 1763–1771.
- [288] RAJAN S., MARIMUTHU K., AYYANAR C.B., KHAN A., **SIENGCHIN S.**, SANJAY M.R.: In-vitro Cytotoxicity of Zinc oxide, Graphene oxide, and Calcium carbonate nano particulates reinforced High-density polyethylene composite, *Journal of Materials Research and Technology* 18 (2022), 921-930.
- [289] TENG SUTHIWAT J., VINOD A., SRISUK R., TECHAWINYUTHAM L., SANJAY M.R., **SIENGCHIN S.**: Thermo-mechanical characterization of new natural cellulose fiber from *Zmiodulus Zamiifolia*, *Journal of Polymers and the Environment* 30 (2022), 1391–1406.
- [290] SATHISHKUMAR T.P., NAVANEETHAKRISHNAN P., SANJAY M.R., **SIENGCHIN S.**, KARHI S.: Optimization of geometric parameters for mode-I fracture analyse on glass fiber woven mat thermoplastic laminated composites, *Materials Today: Proceedings* 52 (5) (2022), 2474-2478.

- [291] RAJESHKUMAR G., SANJAY M.R., **SIENGCHIN S.**, HARIHARAN V.: Influence of sodium bicarbonate treatment on the free vibration characteristics of Phoenix sp. fiber loaded polyester composites, *Materials Today: Proceedings* 52 (5) (2022), 2400-2403.
- [292] VINAY S.S., SANJAY M.R., **SIENGCHIN S.**, VENKATESH C.V.: Basalt fiber reinforced polymer composites filled with nano fillers: A short review, *Materials Today: Proceedings* 52 (5) (2022), 2460-2466.
- [293] OLADIJO O.P., SANJAY M.R., COLLIEUS L.L., **SIENGCHIN S.**, MOLOISANE L., OLADIJO S.S.: Effects of deposition time and RF power on the film characteristics of magnetron sputtered silicon carbide thin films, *Materials Today: Proceedings* 52 (5) (2022), 2432-2438.
- [294] AMELIA D., KARAMAH E.F., MAHARDIKA M., SYAFRI E., SANJAY M.R., **SIENGCHIN S.**, ASROFI M.: Effect of advanced oxidation process for chemical structure changes of polyethylene microplastics, *Materials Today: Proceedings* 52 (5) (2022), 2501-2504.
- [295] KATARIA A., VERMA A., SANJAY M.R., **SIENGCHIN S.**: Molecular modeling of 2D graphene grain boundaries: Mechanical and fracture aspects, *Materials Today: Proceedings* 52 (5) (2022), 2404-2408.
- [296] BHARATH K.N., ROOPA D., INDRAN S., BASAVARAJAPPA S., SANJAY M.R., **SIENGCHIN S.**: Influence of the stacking sequence and coconut husk micro fillers on the drilling parameters of coconut leaf sheath/glass/jute fiber hybrid phenol formaldehyde composites, *Materials Today: Proceedings* 52 (5) (2022), 2427-2431.
- [297] NAGARAJASETTY V.S., GOUD G., SANJAY M.R., **SIENGCHIN S.**: Limonia Acidissima (Wood-apple) shell: Micro and Nanoparticles Preparation and Chemical Treatment, *Materials Today: Proceedings* 52 (5) (2022), 2543-2547.
- [298] KHAN A., PUTTEGOWDA M., JAGADEESH P., MARWANI H.M., ASIRI A.M., MANIKANDAN A., PARWAZ KHAN A.A., ASHRAF G.M., SANJAY M.R., **SIENGCHIN S.**: Review on Nitride compounds and its polymer composites: A multifunctional material, *Journal of Materials Research and Technology* 18 (2022), 2175-2193.
- [299] SATISH KUMAR D., SATHISH T., SANJAY M.R., BOONYASOPON P., **SIENGCHIN S.**: Mechanical property analysis of nanocarbon particles/glass fiber reinforced hybrid epoxy composites using RSM, *Composites Communications* 32 (2022), 101147.
- [300] DAVID GNANARAJ J., MOTHILAL S., VIGNESH V., KARTHICK T., ISMAIL S.O., RAJINI N., RAJA MOHMED RABI B., **SIENGCHIN S.**, MOHAMMAD F.: Investigation into Mechanical, Thermal and Water Absorption Behaviors of Cocos nucifera Shell Filler Reinforced Vinyl Ester Polymeric Composites, *Journal of Polymers and the Environment* 30 (2022), 2142–2154.

- [301] THEIVASANTHI T., ILYAS R.A., NORRAHIM M.N.F., SENTHIL MUTHU KUMAR T., **SIENGCHIN S.**, MISENAN M.S.M, FARID M.A.A., NURAZZI N.M., ASYRAF M.R.M., ZAKARIA S.Z.S., RAZMAN M.R.: Emerging Developments on Nanocellulose as Liquid Crystals: A Biomimetic Approach, *Polymers* 14 (2022), 1546.
- [302] BHARATH K.N., MADHU P., SANJAY M.R., BASAVARAJAPPA S., **SIENGCHIN S.**, ALEXEY K., GORBATYUK S.: Waste Coconut Leaf Sheath as Reinforcement Composite Material with Phenol Formaldehyde Matrix, *Polymer Composites* 43 (2022), 1985–1995.
- [303] BALAJI AYYANAR C., MARIMUTHU K., GAYATHRI B., BHARATHIRAJ C., PRADEEP MOHAN S.K., SANJAY M.R., KHAN A., **SIENGCHIN S.**: Development and Characterization of Hevea Brasiliensis Particulates Filled Polyethylene Composites, *Polymer Composites* 43 (2022), 2047–2054.
- [304] MOHIT H., SANJAY M.R., **SIENGCHIN S.**: A Comprehensive Review on Metal Matrix Composites for Railway Applications, *Applied Science and Engineering Progress* 15 (2) (2022), 5790.
- [305] BRAILSON MANSINGH B., BINOJ J.S., ANBAZHAGAN V.N., HASSAN S.A., GOH K.L., **SIENGCHIN S.**, SANJAY M.R., JAAFAR M.M., LIU Y.C.: Characterization of Cocos nucifera L peduncle fiber reinforced polymer composites for lightweight sustainable applications, *Journal of Applied Polymer Science* 139 (22) (2022),52245.
- [306] PRABHU L., KRISHNARAJ V., GOKULKUMAR S., SATHISH S., SANJAY M.R., **SIENGCHIN S.**: Mechanical, Chemical and Sound Absorption Properties of Glass/Kenaf/Waste Tea Leaf Fiber–Reinforced Hybrid Epoxy Composites, *Journal of Industrial Textiles* 51 (10) (2022),1674-1700.
- [307] SARI N.H., SUTEJA S., FUDHOLI A., SUTARYONO Y.A., MASKUR M., SRISUK R., SANJAY M.R., **SIENGCHIN S.**: Evaluation of impact, thermo-physical properties and morphology of cornhusk fiber reinforced Polyester Composites, *Polymer Composites* 43 (2022), 2771–2778.
- [308] SOMASUNDARAM R., RAJESH R., INDRAN S., DIVYA D., SANJAY M.R., **SIENGCHIN S.**: Utilization of discarded cymbopogon flexuosus root waste as a novel lignocellulosic fiber for lightweight polymer composite application, *Polymer Composites* 43 (2022), 2838–2853.
- [309] JAGADEESH P., PUTTEGOWDA M., BOONYASOPON P., SANJAY M.R., KHAN A., **SIENGCHIN S.**: Recent developments and challenges in natural fiber composites: A review, *Polymer Composites* 43 (2022), 2545–2561.

- [310] CHANDRASEKAR M., SHAHROZE R.M., SENTHIL MUTHU KUMAR T., SENTHILKUMAR K., ISHAK M.R., RAJINI N., **SIENGCHIN S.**, MOHAMMAD F.: Influence of silica aerogel filler on the mechanical, thermal, and physical properties of flax/epoxy composite, *Mechanics of Composite Materials* 58 (2) (2022), 271-282.
- [311] MARAN M., KUMAR R., SENTHAMARA KANNAN P., SARAVANNAKUMAR S.S., NAGARAJAN S., SANJAY M.R., **SIENGCHIN S.**: Suitability evaluation of Sida mysorensis plant fiber as reinforcement in polymer composite, *Journal of Natural Fibers* 19 (5) (2022), 1659–1669.
- [312] KHAN A., VIJAY R., LENIN SINGGARAVELU D., SANJAY M.R., **SIENGCHIN S.**, JAWAID M., ALAMRY K.A., ASIRI A.M.: Extraction and characterization of cellulose fibers from the stem of Momordica charantia, *Journal of Natural Fibers* 19 (6) (2022), 2232-3342.
- [313] YORSENG K., SANJAY M.R., PARAMESWARANPILLAI J., **SIENGCHIN S.**: Towards green composites: Bioepoxy composites reinforced with Bamboo/Basalt/Carbon fabrics, *Journal of Cleaner Production* 363 (2022), 132314.
- [314] JAYAKUMAR A., RADOOR S., TAE KIM J., WHAN RHIM J., NANDI, D., PULIKKALPARAMBILA H., PARAMESWARANPILLAI J., **SIENGCHIN S.**: Recent innovations in bionanocomposites-based food packaging films - a comprehensive review, *Food Packaging and Shelf Life* 33 (2022), 100877.
- [315] ELIZABETH RANIL G., MURUGESWARIL R., **SIENGCHIN S.**, RAJINI N., ARUL KUMAR M.: Quantitative assessment of particle dispersion in polymeric composites and its effect on mechanical properties, *Journal of Materials Research and Technology* 19 (2022), 1836-1845.
- [316] MUKESH S.K., NUTHAN B., JAGADEESH P., YASHAS T.G., MADHU P., SANJAY M.R., **SIENGCHIN S.**, GORBATYUK S.: Influence of Stacking Sequence on Flax/Kevlar Hybrid Epoxy Composites: Mechanical and Morphological Studies, *Polymer Composites* 43 (2022), 3782–3793.
- [317] JEYAGURU S., SENTHIL MUTHU KUMAR T., RAJKUMAR A.G., SANJAY M.R., **SIENGCHIN S.**: Solid Particle Erosion, Water Absorption and Thickness Swelling Behavior of Intraply Kevlar/PALF Fiber Epoxy Hybrid Composites, *Polymer Composites* 43 (2022), 3929–3943.
- [318] JEYAGURU S., SENTHIL MUTHU KUMAR T., PULIKKALPARAMBILA H., **SIENGCHIN S.**, SUBRAMANIAM J., SANJAY M.R., CHANDRASEKAR M., SENTHILKUMAR K.: Mechanical Acoustic and Vibration performance of Intra-Ply Kevlar/PALF Epoxy Hybrid Composites: Effects of different weaving patterns, *Polymer Composites* 43 (2022), 3902–3914.

- [319] RAMALINGAM R., MOHIT H., SANJAY M.R., **SIENGCHIN S.**, DURAI P.S.: Aging effects on free vibration and damping characteristics of polymer-based biocomposites: A review, *Polymer Composites* 43 (2022), 3890–3901.
- [320] PULIKKALPARAMBILA H., NANDI, D., SANJAY M.R., PRASANTH S., **SIENGCHIN S.**, DURAI P.S.: Polymer Composites from Natural Fibers and Recycled Waste Surgical Masks during Covid-19 Pandemic, *Polymer Composites* 43 (2022), 3944–3950.
- [321] JAGADEESH P., MADHU P., SANJAY M.R., ALEXEY K., GORBATYUK S., KHAN A., DODDAMANI M., **SIENGCHIN S.**: A Comprehensive review on 3D Printing Advancements in Polymer Composites: Technologies, Materials and Applications, *International Journal of Advanced Manufacturing Technology* 121 (2022), 127–169.
- [322] SINGH M.K., ZAFAR S., SANJAY M.R., **SIENGCHIN S.**: Influence of microwave power and HDPE blend ratio on thermal and mechanical properties of kenaf reinforced PLLA/HDPE blended composites, *Journal of Polymer Research* 29 (7) (2022), 268.
- [323] PRAVEENKUMARA J., MADHU P., YASHAS T.G., SANJAY M.R., **SIENGCHIN S.**: A comprehensive review on the effect of synthetic filler materials on fiber reinforced hybrid polymer composites, *The Journal of the Textile Institute* 13 (7) (2022), 1231- 1239.
- [324] GAPSARI F., DJAKFAR L., HANDAJANI R.P., YUSRAN Y.A., HIDAYATULLAH S., SUTEJA, SANJAY M.R., **SIENGCHIN S.**: The Application of Timoho Fiber Coating to Improve the Composite Performance, *Results in Engineering* 15 (2022), 100499.
- [325] ARUNRAMNATH R., SANJAY M.R., KUSHVAHA V., KHAN A., **SIENGCHIN S.**, DHAKAL H.N.: Modification of Fibres and Matrices in Natural Fibre Reinforced Polymer Composites: Techniques, Morphological Structures and Properties: A Comprehensive Review, *Macromolecular Rapid Communications* 2100862 (2022), 1-38.
- [326] VINOTH BABU N., VENKATESHWARAN N., RAJINI N., OLUWAROTIMI ISMAIL S., MOHAMMAND F., AL-LOHEDAN H.A., **SIENGCHIN S.**: Influence of slicing parameters on surface quality and mechanical properties of 3D-printed CF/PLA composites fabricated by FDM technique, *Materials Technology: Advanced Performance Materials* 37 (9) (2022), 1008- 1025.
- [327] PRABHAKARAN S., SHARMA S., VERMA A., SANJAY M.R., **SIENGCHIN S.**: Mechanical, Thermal and Acoustical studies on Natural Alternative Material for Partition Walls: A Novel Experimental Investigation, *Polymer Composites* 43 (2022), 4711–4720.
- [328] GAPSARI F., SULAIMAN A.M., PUTRI T.M., JULIANO H., DJAKFAR L., HANDAJANI R.P., BUDIO S.P., JUWONO P.T., JAGADEESH P., SANJAY M.R., **SIENGCHIN S.**: Influence of Calcium Carbonate Fillers on Pine Fiber Reinforced Polyester Composites, *Polymer Composites* 43 (2022), 4306–4317.

- [329] DIVYA D., INDRAN S., SANJAY M.R., PRASANTH S., **SIENGCHIN S.**: Suitability examination of novel cellulosic plant fiber from *Furcraea selloa* K. Koch peduncle for a potential polymeric composite reinforcement, *Polymer Composites* 43 (2022), 4223–4243.
- [330] SATHISH T., JAGADEESH P., SANJAY M.R., **SIENGCHIN S.**: Studies on Mechanical and Thermal properties of cellulosic fiber fillers reinforced epoxy composites, *Polymer Composites* 43 (2022), 4297–4305.
- [331] YASHAS T.G., MADHU P., KUSHVAHA V., SANJAY M.R., **SIENGCHIN S.**: Comparison Evaluation of Areca/Carbon/Basalt Fiber Reinforced Epoxy/Bioepoxy based Hybrid Composites, *Polymer Composites* 43 (2022), 4179–4190.
- [332] SATHISH T., JAGADEESH P., SANJAY M.R., **SIENGCHIN S.**: Mechanical and Thermal analysis of coir fiber reinforced jute/bamboo hybrid epoxy composites, *Polymer Composites* 43 (2022), 4700–4710.
- [333] KUMAR S., RAMESH M.R., DODDAMANI M., SANJAY M.R., **SIENGCHIN S.**: Mechanical characterization of 3D printed MWCNTs/HDPE Nanocomposites, *Polymer Testing* 114 (2022), 107703.
- [334] MICHLA J.R.J., RAVIKUMAR B., PRABHU T.R., **SIENGCHIN S.**, ARUL KUMAR M., RAJINI N.: Effect of nitriding on mechanical and microstructural properties of Direct Metal Laser Sintered 17-4PH stainless, *Journal of Materials Research and Technology* 19 (2022), 2810-2821.
- [335] SHARMA T., MUKHOPADHYAY T., SANJAY M.R., **SIENGCHIN S.**, KUSHVAHA V.: Advances in computational intelligence of polymer composite materials: Machine learning assisted modeling, analysis and design, *Archives of Computational Methods in Engineering* 29 (2022), 3341–3385.
- [336] RADOOR S., KARAYIL J., JAYAKUMAR A., NANDI D., PARAMESWARANPILLAI J., LEE J., SHIVANNA J.M., NITHYA R., **SIENGCHIN S.**: Adsorption of cationic dye onto ZSM-5 zeolite-based bio membrane: Characterizations, kinetics and adsorption isotherm, *Journal of Polymers and the Environment* 30 (2022), 3279–3292.
- [337] KHAN A., PARWAZ KHAN A.A., MARWANI H.M., ALOTAIBI M.M., ASIRI A.M., MANIKANDAN A., **SIENGCHIN S.**, SANJAY M.R.: Sensitive non-enzymatic glucose electrochemical sensor based on electrochemically synthesized PANI/Bimetallic oxide composite, *Polymers* 14 (2022), 3047.
- [338] JENISH I., CHINNASAMY V., BASAVARAJAPPA S., SUYAMBULINGAM I., DIVYA D., LIU Y., SANJAY M.R., **SIENGCHIN S.**: Tribo-Mechanical characterization of carbonized coconut shell micro particle reinforced with *Cissus quadrangularis* stem fiber/epoxy novel composite for structural application, *Journal of Natural Fibers* 19 (8) (2022), 2963-2979.

- [339] AYYANAR C.B., DHARSHINI M.D., MARIMUTHU K., AKHIL S., MUGILAN T., BHARATHIRAJ C., SANJAY M.R., KHAN A., **SIENGCHIN S.**: Design, Fabrication, and Characterization of Natural Fillers loaded HDPE Composites for Domestic Applications, *Polymer Composites* 43 (2022), 5168–5178.
- [340] JEYAGURU S., SENTHIL MUTHU KUMAR T., PULIKKALPARAMBILA H., **SIENGCHIN S.**, SENTHILKUMAR K., RAJKUMAR A.G., MUTHUKUMAR C., SANJAY M.R.: Effects of different weaving patterns on thermomechanical and dynamic mechanical properties of Kevlar/PALF hybrid composites, *Polymer Composites* 43 (2022), 4979–4997.
- [341] NAGARAJAN K.J., SANJAY M.R., BASHA K.S., RAGHAV G.R., ASOK KUMAR R., **SIENGCHIN S.**, RAJAN B.S., NATH P.S., KHAN A.: Extraction of cellulose nanocrystals from red banana peduncle agro-waste and application in environmentally friendly biocomposite film, *Polymer Composites* 43 (2022), 4942–4958.
- [342] YASHAS T.G., VINOD A., MADHU P., SANJAY M.R., **SIENGCHIN S.**, JAWAID M.: Areca/synthetic fibers reinforced based epoxy hybrid composites for semi-structural applications, *Polymer Composites* 43 (2022), 5222–5234.
- [343] RAJA S., VERMA A., SANJAY M.R., **SIENGCHIN S.**: Development and Experimental Analysis of Polymer Based Composite Bipolar Plate using Aquila Taguchi Optimization: Design of Experiments, *Polymer Composites* 43 (2022), 5522–5533.
- [344] YASHAS T.G., VINOD A., MADHU P., SANJAY M.R., **SIENGCHIN S.**, JAWAID M.: Mechanical and thermal properties of flax /carbon/kevlar based epoxy hybrid composites, *Polymer Composites* 43 (2022), 5649–5662.
- [345] MANIVANNAN J., RAJESH S., MAYANDI K., ABUTHAKEER S.S., RAVICHANDRAN M., SENTHIL MUTHU KUMAR T., SANJAY M.R., **SIENGCHIN S.**: A Novel and Prediction Approach of Sheep Wool Reinforced Polyester Composites: Surface Qualities and Hybrid Modelling, *Polymer Composites* 43 (2022), 5274–5290.
- [346] RADOOR S., KARAYIL J., JAYAKUMAR A., LEE J., NANDI D., PARAMESWARANPILLAI J., PANT B., **SIENGCHIN S.**: Efficient removal of organic dye from aqueous solution using hierarchical zeolite-based bio membrane: Isotherm, kinetics, thermodynamics and recycling studies, *Catalysts* 12 (2022), 886.
- [347] RAJAK D.K., WAGH P.H., KUMAR A., SANJAY M.R., **SIENGCHIN S.**, KHAN A., ASIRI A.M., NARESH K., VELMURUGAN R., GUPTA N.K.: Impact of Fiber Reinforced Polymer Composites on Structural Joints of Tubular Sections: A Review, *Thin-Walled Structures* 180 (2022), 109967.

- [348] SUNESH N., INDRAN S., DIVYA, D., SIENGCHIN S., JAWAID M.: Isolation and characterization of novel agrowaste based cellulosic micro fillers from *Borassus flabellifer* flower for polymer composite reinforcement, *Polymer Composites* 43 (2022), 6476–6488.
- [349] JAGADEESH P., SANJAY M.R., SIENGCHIN S., PUTTEGOWDA M., SENTHIL MUTHU KUMAR T., RAJESHKUMAR G., MOIT H., OLADIJO O.P., FIORE V., CUADRADO M.M.M.: Sustainable Recycling Technologies for Thermoplastic Polymers and Their Composites: A Review of the State of the Art, *Polymer Composites* 43 (2022), 5831-5862.
- [350] MADHU P., SANJAY M.R., KHAN A., OTAIBI A.A., AL-ZAHRANI S.A., PRADEEP S., YOGESHA B., BOONYASOPORN P., SIENGCHIN S.: Hybrid effect of PJFs/E-glass/Carbon Fabric Reinforced Hybrid Epoxy Composites for Structural Applications, *Journal of Natural Fibers* 19 (10) (2022), 3724- 3752.
- [351] GAURAVKUMAR R., SANJAY M.R., SIENGCHIN S., ZAFAR S.: A review of recent advancements in drilling of fiber-reinforced polymer composites, *Composites Part C* 9 (2022), 100312.
- [352] RAVIKUMAR P., RAJESHKUMAR G., MANIMEGALAI P., SUMESH K.R., SANJAY M.R., SIENGCHIN S.: Delamination and surface roughness analysis of jute/polyester composites using response surface methodology: Consequence of sodium bicarbonate treatment, *Journal of Industrial Textiles* 51 (1) (2022), 360S–377S.
- [353] SENTHILKUMAR K., SUBRAMANIAM S., UNGTRAKUL T., SENTHIL MUTHU KUMAR T., CHANDRASEKAR M., RAJINI N., SIENGCHIN S., PARAMESWARANPILLAI J.: Dual cantilever creep and recovery behavior of sisal/hemp fibre reinforced hybrid biocomposites: Effects of layering sequence, accelerated weathering and temperature, *Journal of Industrial Textiles* 51 (2) (2022), 2372S-2390S.
- [354] VINOD A., VIJAY R., LENIN SINGARAVELU D., KHAN A., SANJAY M.R., SIENGCHIN S., FRANCIS V., KHALID A.A, ASIRI A.M.: Effect of alkali treatment on performance characterization of *Ziziphus Mauritiana* fiber and its epoxy composites, *Journal of Industrial Textiles* 51 (2) (2022), 2444S-2466S.
- [355] RAMESH M., DEEPA C., RAJESHKUMAR L., SANJAY M.R., SIENGCHIN S.: Life-cycle and Environmental Impact Assessments on Processing of Plant Fibres and its Bio-composites: A Critical Review, *Journal of Industrial Textiles* 51 (4) (2022), 5518S-5542S.
- [356] STALIN A., MOTHILAL S., VIGNESH V., SANJAY M.R., SIENGCHIN S.: Mechanical Properties of hybrid Vetiver / Banana fiber mat reinforced Vinyl ester Composites, *Journal of Industrial Textiles* 51 (4) (2022), 5869S-5886S.

- [357] JHA K., TAMRAKAR P., KUMAR R., SHARMA S., SINGH J., IYAS R.A., SANJAY M.R., **SIENGCHIN S.**: Effect of hybridization on Physio-mechanical behavior of Vetiver and Jute Fibers reinforced Epoxy composites for Structural applications: Studies on fabrication, Physicomechanical, water-absorption, and Morphological properties, *Journal of Industrial Textiles* 51 (2) (2022), 2642S-2664S .
- [358] **SIENGCHIN S.**, BOONYASOPON P., SADANAND V., VARADA RAJULU A.: Nanocomposite Cellulose Fabrics with in situ generated Silver Nanoparticles by Bioreduction Method, *Journal of Industrial Textiles* 51 (4) (2022), 6258S-6275S.
- [359] GAPSARI F., PURNOWIDO A., SETYARINT P.H., SUTEJA, ABIDIN Z., SANJAY M.R., **SIENGCHIN S.**: Flammability and Mechanical Properties of Timoho Fiber-Reinforced Polyester Composite Combined with Iron Powder Filler, *Journal of Materials Research and Technology* 21 (2022), 212-219.
- [360] JAGADEESH P., YASHAS T.G., MADHU P., SANJAY M.R., **SIENGCHIN S.**: Effect of natural filler materials on fiber reinforced hybrid polymer composites: An Overview, *Journal of Natural Fibers* 19 (11) (2022), 4132–4147.
- [361] NAGARAJA SETTY V.K.S., GOUD G., CHIKKEGOWDA S.P., SANJAY M.R., **SIENGCHIN S.**: Characterization of Chemically Treated Limonia Acidissima (Wood Apple) Shell Powder: Physicochemical, Thermal, and Morphological Properties, *Journal of Natural Fibers* 19 (11) (2022), 4093–4104.
- [362] SATHISHKUMAR T.P., SATHEESHKUMAR S., SANJAY M.R., BHUVANESHKUMAR K., **SIENGCHIN S.**: Crashworthiness Characterization of Jute Fiber Woven Mat Reinforced Epoxy Composite Tube for Structural Application Using Taguchi’s Method, *International Journal of Crashworthiness* 27 (5) (2022), 1351–1367.
- [363] BINOJ J.S., MANIKANDAN N., MANSINGH B.B., ANBAZHAGAN V.N., BHARATHIRAJA G., SANJAY M.R., **SIENGCHIN S.**, INDRAN S.: Taguchi’s optimization of areca fruit husk fiber mechanical properties for polymer composite applications, *Fibers and Polymers* (2022), DOI 10.1007/s12221-022-0365-2.
- [364] HUANG KONG E.D., CHAU J.H.F., LAI C.W., KHE C.S., SHARMA G., KUMAR A., **SIENGCHIN S.**, SANJAY M.R.: GO/TiO₂ related nanocomposites as photocatalyst for various pollutants removal in wastewater treatment, *Nanomaterials* (12) 2022, 3536.
- [365] ARAVIND D., SENTHILKUMAR K., RAJINI N., SENTHIL MUTHU KUMAR T., CHANDRASEKAR M., ISMAIL S.O., YEETSORN R., PARAMESWARANPILLAI J., **SIENGCHIN S.**, INDIRA DEVI M.P.: Feasibility of elastomeric composites as alternative materials for marine applications –A compendious review on their properties and opportunities, *Journal of Engineering for the Maritime Environment* 236 (4) (2022), 839-855.

- [366] SHIVEGOWDA M.D., BOONYASOPON P., SANJAY M.R., **SIENGCHIN S.**: A review on Computer-aided Design and Manufacturing Process in Design and Architecture, *Archives of Computational Methods in Engineering* 29 (6) (2022), 3973-3980.
- [367] ARAVIND D., SENTHILKUMAR K., CHANDRASEKAR M., SENTHIL MUTHU KUMAR T., GANESAN C., PARAMESWARANPILLAI J., RAJINI N., **SIENGCHIN S.**, VARAGUNAPANDIYAN N.: A compendious review on fatigue properties of the bio-nanocomposites, *Polymer Composites* 43 (2022), 6803–6816.
- [368] JAYAKUMAR A., RADOOR S., TAE KIM J., WHAN RHIM J., PARAMESWARANPILLAI J., NANDI, D., SRISUK R., **SIENGCHIN S.**: Titanium dioxide nanoparticles and elderberry extract incorporated starch based polyvinyl alcohol films as active and intelligent food packaging wraps, *Food Packaging and Shelf Life* 34 (2022), 100967.
- [369] SENTHIL MUTHU KUMAR T., PULIKKALPARAMBIL H., **SIENGCHIN S.**, IYAS R.A., SENTHILKUMAR K., CHANDRASEKAR M., RADZI A.M., SANJAY M.R.: Mechanical, absorption and swelling properties of Jute/Kenaf/Banana reinforced epoxy hybrid composites: Influence of various stacking sequences, *Polymer Composites* 43 (2022), 8297–8307.
- [370] RAMASAMY S., AMUTHA K., JAYARAJ J.J., INDRAN S., DIVYA, D., **SIENGCHIN S.**, FISCHER S.: Comprehensive characterization of novel Robusta (AAA) banana bracts fibers reinforced polylactic acid (PLA) based biocomposites for lightweight applications, *Polymer Composites* 43 (2022), 8569–8580.
- [371] ABHISHA V.S., SISANTH K.S., PARAMESWARANPILLAI J., PULIKKALPARAMBIL H., **SIENGCHIN S.**, THOMAS S., STEPHEN R.: Comprehensive experimental investigations and theoretical predictions on the physical properties of natural rubber composites, *Journal of Applied Polymer Science* 139 (2022), e53197.
- [372] KEERTHI GOWDA B.S., NARESH K., ILANGO VAN S., SANJAY M.R., **SIENGCHIN S.**: Effect of Fiber Volume Fraction on Mechanical and Fire resistance properties of Basalt/Polyester and Pineapple/Polyester composites, *Journal of Natural Fibers* 19 (13) (2022), 6074-6088.
- [373] MADHU P., SANJAY M.R., KHAN A., AL-ZAHRANI S.A., OTAIBI A.A., PRADEEP S., LIU Y., **SIENGCHIN S.**: Effect of Layering Sequence on Impact Properties of Alkali Treated Phoenix Pusilla Fibers-Glass-Carbon Fabrics Reinforced Hybrid Composite Laminates, *Journal of Natural Fibers* 19 (13) (2022), 6878-6888.
- [374] GOPINATH R., BILLIGRAHAM P., SATHISHKUMAR T.P., SANJAY M.R., **SIENGCHIN S.**: Characterization of Sida acuta fiber and its polymer composites with effect of fly ash, *Journal of Natural Fibers* 19 (14) (2022), 8811-8829.

- [375] BRIGHT B.M., BINOJ J.S., HASSAN S.A., JAAFAR M., SIENGCHIN S., SANJAY M.R., NAGARAJ B.K.: Characterization of Natural Cellulosic Fiber from Cocos Nucifera Peduncle for Sustainable Biocomposites, *Journal of Natural Fibers* 19 (14) (2022), 9373- 9383.
- [376] KALACSKA A., RAJINI N., TOTTH L.F., BAETS P.D., SUBRA-MANIAN K., SIENGCHIN S., KALACSKA G.: Surface Damage Analysis on the Application of Abrasion and Slurry Erosion in Targeted Steels Using an Erosion Test Rig, *Lubricants* 10 (2022), 316.
- [377] PRIYADHARSHINI M., BALAJI D., BHUVANESWARI V., RAJESHKUMAR L., SANJAY M.R., SIENGCHIN S.: Fiber Reinforced Composite Manufacturing with The AID of Artificial Intelligence – A State of The Art Review, *Archives of Computational Methods in Engineering* 29 (2022), 5511-5524.
- [378] ARPITHA G.R., VERMA A., SANJAY M.R., GORBATYUK S., KHAN A., SOBAHI T., ASIRI A., SIENGCHIN S.: Bio-composite film from corn starch based vetiver cellulose, *Journal of Natural Fibers* 19 (16) (2022), 14634–14644.
- [379] LIU Y., JIA W., YANG Q., MA Y., TONG J., SHI A., SANJAY M.R., SIENGCHIN S.: Physical, Mechanical and Environmental Properties of Corn Stalk Fiber Reinforced Braking Composites Prepared by Wet Granulation, *Journal of Natural Fibers* 19 (16) (2022), 14515–14524.
- [380] SYAFRI E., JAMALUDAIN, HARMAILIS, UMAR S., MAHARDIKA M., AMELIA D., MAYERNI R., SANJAY M.R., SIENGCHIN S., SOBAHI T.R., KHAN A., ASIRI A.M.: Isolation and Characterization of New Cellulose Microfibers from Pandan Duri (*Pandanus tectorius*) for Sustainable Environment, *Journal of Natural Fibers* 19 (16) (2022), 12924–12934.
- [381] SINGH M., ZAFAR S., SANJAY M.R., SIENGCHIN S.: Mechanical performance study of kenaf/HDPE composite for structural applications under wet or outdoor environments, *Journal of Natural Fibers* 19 (16) (2022), 14115–14130.
- [382] RADOOR S., KARAYIL J., JAYAKUMAR A., PARAMESWARANPILLAI J., LEE J., SIENGCHIN S.: Ecofriendly and low-cost bio adsorbent for efficient removal of methylene blue from aqueous solution, *Scientific Reports* 12 (2022), 20580.
- [383] MOHAN S.J., DEVASAHAYAM P.S.S., SUYAMBULINGAM I., SIENGCHIN S.: Suitability characterization of novel cellulosic plant fiber from Ficus benjamina L. aerial root for a potential polymeric composite reinforcement, *Polymer Composites* 43 (2022), 9012–9026.
- [384] SETWALO K., OLADIJO O.P., NAMOSHE M., AKINLABI E.T., SANJAY M.R., SIENGCHIN S., SRISUK R.: The Water Absorption and Thermal Properties of Green Pterocarpus Angolensis (Mukwa)-Polylactide Composites, *Journal of Natural Fibers* 20 (1) (2023), 12–29.

- [385] JESSY MICHLA J.R., RAJINI N., ISMALI S.O., PRABHU T.R., MOHAMMAD F., **SIENGCHIN S.**, INDRA DEVI M.P.: Effects of nitriding on salt spray corrosion resistance of additively manufactured 17-4 PH steels, *Materials Letters* 330 (2023), 133258.
- [386] MANSINGH B.B., BINOJ J.S., **SIENGCHIN S.**, SANJAY M.R.: Influence of surface treatment on properties of Cocos nucifera L. Var typica fiber reinforced polymer composites, *Journal of Applied Polymer Science* 140 (2023), e53345.
- [387] BHARATH K.N., PUTTEGOWDA M., SANJAY M.R., **SIENGCHIN S.**, KHAN A., GORBATYUK S.: Study of Treatment Effect on the Cocos Nucifera lignocellulosic fibers as alternative for polymer composites, *Journal of Natural Fibers* 20 (1) (2023), 2134257.
- [388] SINGH M.K., TEWARI R., ZAFAR S., SANJAY M.R., **SIENGCHIN S.**: A comprehensive review of various factors for application feasibility of natural fiber-reinforced polymer composites, *Results in Materials* 17 (2023), 100355.
- [389] GAPSARI F., PUTRI T.M., RUKMANA W., JULIANO H., SULAIMAN A.M., DEWI F.G.U., ZULIANTONI, SANJAY M.R., **SIENGCHIN S.**: Isolation and Characterization of Muntingia calabura Cellulose Nanofibers, *Journal of Natural Fibers* 20 (1) (2023), 2056018.
- [390] VINOD A., SANJAY M.R., **SIENGCHIN S.**: Recently Explored Natural Cellulosic Plant Fibers 2018-2022: A Potential Raw Material Resource for Lightweight Composites, *Industrial Crops & Products* 192 (2023), 11609.
- [391] VINOD A., SANJAY M.R., SRISUK R., TENGSUTHIWAT J., RAMNATH A. **SIENGCHIN S.**: Agro-waste Capsicum Annum stem: An alternative raw material for lightweight composites, *Industrial Crops & Products* 193 (2023), 116141.
- [392] ANDOKO A., GAPSARI F., DIHARJO K., SANJAY M.R., **SIENGCHIN S.**: Isolation of Microcellulose from Timoho Fiber using the Process of Delignification and Maceration: evaluation of physical, chemical, structural, and thermal properties, *International Journal of Biological Macromolecules* 224 (2023), 48-54.
- [393] RANI G.E., MURUGESWARI R., VAIRAMUTHU S., RAJINI N., MOHAMMAD F., **SIENGCHIN S.**, ISMAIL S.O., SENTHIKUMAR K.: An automated software development for analysis of the morphological-tensile property relationship in egg shell bio-based particulate composites using machine learning algorithms, *Composites Part C* 10 (2023), 100343.
- [394] CHUTTURI M., GILLELAR S., YADAV S.M., WIBOWO E.S., SIHAG K., SANJAY M.R., BHUYAR P., **SIENGCHIN S.**, ANTOV P., KRISTAK L., SINHA A.: A comprehensive review of the synthesis strategies, properties, and applications of transparent wood as a renewable and sustainable resource, *Science of the Total Environment* 864 (2023), 161067.

- [395] RAMATH R.A., MURUGAN S., SANJAY M.R., VINOD A., INDRAN S., ELNAGGAR A.Y., FALLATAH A.M., **SIENGCHIN S.**: Characterization of novel natural cellulosic fibers from *Abutilon Indicum* for potential reinforcement in polymer composites, *Polymer Composites* 44 (2023), 340–355.
- [396] SATHISHKUMAR T.P., DE PRADO GIL J., MATINEZ GARCIA R., RAJESHKUMAR L., RAJESHKUMAR G., SANJAY M.R., **SIENGCHIN S.**, ALOSAIMI A.M., HUSSEIN M.A.: Redeemable environmental damage by recycling of industrial discarded and virgin glass fiber mats in hybrid composites – An exploratory investigation, *Polymer Composites* 44 (2023), 318–329.
- [397] SARI N.H., SUTEJA S., SANJAY M.R., **SIENGCHIN S.**: A review on cellulose fibers from *Eichornia Crassipes*: Synthesis, modification, properties and their composites, *Journal of Natural Fibers* 20 (1) (2023), 2162179.
- [398] INDRAN S., DIVYA D., RAJA S., SANJAY M.R., **SIENGCHIN S.**: Physico-chemical, mechanical and morphological characterization of *Furcraea Selloa* K.Koch plant leaf fibers-An exploratory investigation, *Journal of Natural Fibers* 20 (1) (2023), 2146829.
- [399] NANDI, D., JAYAKUMAR A., RADOOR S., SRISUK R., **SIENGCHIN S.**: High-rate electrochemical performance and structure elucidation of hydrothermally synthesized nickel zincate nanorods, *Journal of Solid State Electrochemistry* 27 (2023), 195–206.
- [400] SIAKENG R., JAWAID M., ASIM M., FOUAD H., AWAD S., SABA N., **SIENGCHIN S.**: Flexural and Dynamic Mechanical Properties of Alkali-Treated Coir/Pineapple Leaf Fibres Reinforced Polylactic Acid Hybrid Biocomposites, *Journal of Bionic Engineering* 18 (2021), 1430–1438.
- [401] JEYAGURU S., SENTHIL MUTHU KUMAR T., SANJAY M.R., **SIENGCHIN S.**: Experimental studies on the absorption, swelling and erosion performance of hybrid woven kevlar/hemp reinforced epoxy composites, *Express Polymer Letters* 17 (4) (2023), 353-372.
- [402] RAO H.J., SINGH S., PULIKKALPARAMBIL H., RAMULU P.J., SANJAY M.R., **SIENGCHIN S.**: Extraction of cellulosic filler from *Artocarpus heterophyllus* (Jackfruit) as a reinforcement material for polymer composites, *Journal of Polymers and the Environment* 31 (2023), 479–487.
- [403] NANDI, D., PULIKKALPARAMBILA H., RADOOR S., JAYAKUMAR A., KIATISEREEKUL N., **SIENGCHIN S.**: Solvothermal synthesis of nickel titanate nanosphere: crystal structure determination and high-rate supercapacitor performance, *Chemical Papers* 77 (2023), 385-397.
- [404] VARGHESE S.A., PULIKKALPARAMBIL H., SANJAY M.R., PARAMESWARANPILLAI J., **SIENGCHIN S.**: Antimicrobial active packaging based on PVA/Starch films incorporating basil leaf extracts, *Materials Today: Proceedings* 72 (6) (2023), 3056-3062.

- [405] RAO Y.S., SHIVAMURTHY B., MOHAN N.S., SHETTY N., SANJAY M.R., **SIENGCHIN S.**: Investigation of tensile properties, hardness and morphology of h-BN and MoS₂ filler modified carbon fabric/epoxy composites, *Cogent Engineering* 10 (2023), 2178129.
- [406] SHARMA S., SUDHAKARA P., SINGH J., SANJAY M.R., **SIENGCHIN S.**: Fabrication of Novel Polymer Composites from Leather Waste Fibers and Recycled Poly(Ethylene-Vinyl-Acetate) for Value-Added Products, *Sustainability*, 15 (2023), 4333.
- [407] THANIKODI S., MILANO J., SEBAYANG A.H., SHAMSUDDIN A.H., SANJAY M.R., **SIENGCHIN S.**, SILITONGA A.S., BAHAR A.H., IBRAHIM H., BENU S.M.: Enhancing the engine performance using multi fruits peel (exocarp) ash with nanoparticles in biodiesel production, *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects* 45 (1) (2023), 2122–2143.
- [408] MOHIT H., SANJAY M.R., GAPSARI F., **SIENGCHIN S.**, MARWANI H.M., KHAN A., ASIRI A.M.: Effect of bio-fibers and inorganic fillers reinforcement on mechanical and thermal characteristics on Carbon-Kevlar-Basalt-Innegra fiber bio/ synthetic epoxy hybrid composites, *Journal of Materials Research and Technology* 23 (2023), 5440- 5458.
- [409] PULIKKALPARAMBIL H., BABU A., THILAK A., VIGNESH N.P., SANJAY M.R., **SIENGCHIN S.**: A review on Sliding wear properties of sustainable biocomposites: classifications, fabrication and discussions, *Heliyon* 9 (2023), e14381.
- [410] JAGADEESH P., SANJAY M.R., SUYAMBULINGAM I., **SIENGCHIN S.**, PUTTEGOWDA M., BINOJ J.S., GORBATYUK S., KHAN A., DODDAMANI M., FIORE V., CUADRADO M.M.M.: Drilling characteristics and properties of fiber reinforced polymer composites: A comprehensive review, *Heliyon* 9 (2023), e14428.
- [411] RAMALINGAM K., SENTHIL MUTHU KUMAR T., PULIKKALPARAMBIL H., CHANDRASEKAR M., SENTHILKUMAR K., **SIENGCHIN S.**, ALOSAIMI A.M., HUSSEIN M.A., SANJAY M.R.: Novel cellulosic natural fibers from *Abelmoschus ficulneus* weed: Extraction and characterization for potential application in polymer composites, *Journal of Polymers and the Environment* 31 (2023), 1323–1334.
- [412] FIORE V., BADAGLIACCO D., SANFILIPPO C., PURONE R., **SIENGCHIN S.**, SANJAY M.R., BOTTA L.: Lemongrass plant as potential sources of reinforcement for bio-composites: a preliminary experimental comparison between leaf and culm fibers, *Journal of Polymers and the Environment* 30 (2022), 4726–4737.
- [413] SINGH B., KUMAR R., CHOHAN J., SHARMA S., SINGH J., IYAS R.A., SANJAY M.R., **SIENGCHIN S.**, NARESH K., RAGHU S., JAMES R.: Investigation of copper reinforced Acrylonitrile butadiene styrene and Nylon 6 based-thermoplastic polymer nanocomposite filaments for 3D Printing of Electronic Components, *High Performance Polymers* 35 (2) (2023), 115-125.

- [414] DEVARAJAN B., RAJESHKUMAR L., BHUVANESWARI V., JEYAGURU S., SANJAY M.R., **SIENGCHIN S.**: Additive Manufacturing of Jute Fiber Reinforced Polymer Composites – A Concise Review of Material Forms and Methods, *Polymer Composites* 43 (10) (2022), 6735-6748.
- [415] THANKAIAN, R.D., MUTHUKRISHNAN M., THIAGAMANI S.M.K., **SIENGCHIN S.**, SANJAY M.R.: Impact of metal doping and codoping on the electrical and optical behavior of tin oxide nano particles, *Nanomaterials and Energy* 11 (3-4) (2022), 1-8.
- [416] SETSWALO K., OLADIJO O.P., NAMOSHE M., **SIENGCHIN S.**, SANJAY M.R.: Insights into the effects of alkaline treatment and soaking duration on the properties of pterocarpus angolensis (mukwa) wood fibers, *Materials Today: Proceedings* 77 (4) (2023), 1132-1136.
- [417] JAYAKUMAR A., MATHEW S., RADOOR S., KIM J.T., RHIM J.W., **SIENGCHIN S.**: Recent advances in two-dimensional nanomaterials: Properties, antimicrobial and drug delivery application of nanocomposites, *Materials Today Chemistry* 30 (2023) 101492.
- [418] JAYAKUMAR A., RADOOR S., **SIENGCHIN S.**, SHIN G.H., KIM J.T.: Recent progress of bioplastics in their properties, standards, certifications and regulations: A review, *Science of the Total Environment* 878 (2023), 163156.
- [419] SANTOS T., SANTOS C., AQUINO M., SANJAY M.R., **SIENGCHIN S.**, NASCIMENTO J.H.O., MEDEIROS I.: Effects of UV sensitivity and accelerated photo-aging on stab resistance of ρ -aramid fabrics impregnated with shear thickening fluids (STFs), *Helvion* 9 (2023), e15020.
- [420] NG C.L., CHOW W.S., DIN A.T.M., LEH C.P., **SIENGCHIN S.**: Crosslinked polymer nanocomposites for wastewater heavy metal adsorption: A review, *Express Polymer Letters* 17 (6) (2023), 580–595.
- [421] VINOD A., PULIKKALPARAMBIL H., JAGADEESH P., SANJAY M.R., **SIENGCHIN S.**: Recent advancements in lignocellulose biomass-based carbon fiber: Synthesis, Properties, and Applications, *Helvion* 9 (2023), e13614.
- [422] JAGADEESAN R., SUYAMBULINGAM I., SOMASUNDARAM R., DIVAKARAN D., **SIENGCHIN S.**: Isolation and characterization of novel micro cellulose from Sesamum indicum agro-industrial residual waste oil cake: conversion of biowaste to wealth approach, *Biomass Conversion and Biorefinery* 13 (2023), 4427-4441.
- [423] JAGADEESAN R., SUYAMBULINGAM I., DIVAKARAN D., **SIENGCHIN S.**: Novel Sesame oil cake biomass waste derived cellulose micro fillers reinforced with Basalt/Banana fiber-based hybrid polymeric composite for lightweight applications, *Biomass Conversion and Biorefinery* 13 (2023), 4443-4458.

- [424] RANTHEESH J., INDRAN S., RAJA S., **SIENGCHIN S**: Isolation and characterization of novel micro cellulose from *Azadirachta indica* A. Juss agro-industrial residual waste oil cake for futuristic applications, *Biomass Conversion and Biorefinery* 13 (2023), 4393-4411.
- [425] SUYAMBULINGAM I., SANJAY M.R., **SIENGCHIN S**: Advanced Materials and Technologies for Engineering Applications, *Applied Science and Engineering Progress* 16 (3) (2023), 6760.
- [426] MOHIT H., SANJAY M.R., YORSENG K., **SIENGCHIN S**, MARWANI H.M., KHAN A., ASIRI A.M.: Discarded water hyacinth/pineapple fibers and Carbon/ Innegra fabrics and TiC nanoparticles reinforced UV Resistant Polyester Composites, *Journal of Materials Research and Technology* 24 (2023), 5059-5081.
- [427] GANAPATHY T., SATHISKUMAR R., SANJAY M.R., SENTHAMARAIKANNAN P., SARAVANAKUMAR S.S., PARAMESWARANPILLAI J., **SIENGCHIN S**: Effect of Graphene Powder on Banyan Aerial Root Fibers Reinforced Epoxy Composites, *Journal of Natural Fibers* 18 (7) (2021), 1029–1036.
- [428] SRISUK R., TECHAWINYUTHAM L., VINOD A., SANJAY M.R., **SIENGCHIN S**: Agro-waste from *Bambusa Flexuosa* stem fibers: A sustainable and green material for lightweight polymer composites, *Journal of Building Engineering* 73 (2023), 106674.
- [429] JAGADEESH P., PUTTEGOWDA M., GIRIJAPPA Y.G.T., SHIVANNA P., SANJAY M.R., **SIENGCHIN S**: Investigations on Physical, Mechanical, Morphological and Water absorption properties of Ramie/Hemp/Kevlar reinforced Vinyl ester hybrid composites, *Journal of Vinyl & Additive Technology* 29 (2023), 555–567.
- [430] HIREMATH A., AMBEKAR A.M., THIPPERUDRAPPA S., SANJAY M.R., **SIENGCHIN S**, BHARATH K.N.: Understanding the interfacial interaction of TiO₂ nanoparticles filled glass fiber/epoxy composites through dynamic mechanical analysis, *Composite Interfaces* 30 (7) (2023), 787–802.
- [431] GAPSARI F., DARMADI D.B., JULIANO H., HIDAYATULLAH S., SUTEJA, SANJAY M.R., **SIENGCHIN S**, BHARATH K.N.: Modification of Palm Fiber with Chitosan-AESO Blend Coating, *International Journal of Biological Macromolecules* 242 (2023), 125099.
- [432] MOHIT H., SANJAY M.R., TECHAWINYUTHAM L., **SIENGCHIN S**, AIROMAIZAN A.N., HUSSAIN M.A., KHAN A., ASIRI A.M.: Banana/ Coir Biofibers and Carbon/ Innegra Fabrics and BN/MWCNT nanoparticles reinforced UV Resistant Polyester Hybrid Composites, *Construction and Building* 392 (2023), 132014.
- [433] PULIKKALPARAMIL H., PARAMESWARANPILLAI J., PIONTECK J., NANDI D., **SIENGCHIN S**: Autonomous self-healing in green epoxy thermosets for flexible functional coatings, *Construction and Building* 393 (2023), 132090.

- [434] JESSY MICHLA J.R., NAGARAJAN R., ISMAIL S.O., RAMPRABHU T., **SIENGCHIN S**, INDRADEVI M.P., MOHAMMAD F.: Corrosion behaviours of additively manufactured nitrided 17-4 PH steels in different environments, *Transactions of the Indian Institute of Metals* 76(7) (2023), 1863–1873.
- [435] ARAVIND D., KRISHNASAMY S., RAJINI N., **SIENGCHIN S**, YORSENG K., SENTHIL MUTHU KUMAR T., CHANDRASEKAR M., MOHAMMAD F., AL-LOHEDAN H.A.: Flexural, impact and dynamic mechanical analysis of glass fibre/ABS and glass fibre/carbon fibre/ABS composites, *Journal of Applied Polymer Science* 140 (2023), e54007.
- [436] GOWDA Y.T.G., NAGARAJU S.B., PUTTEGOWDA M., VERMA A., SANJAY M.R., **SIENGCHIN S**: Biopolymer-based Composites: An Eco-Friendly Alternative from Agricultural Waste Biomass, *Journal of Composites Science* 7 (2023), 242.
- [437] SANGILIMUTHUKUMAR J., SENTHIL MUTHU KUMAR T., **SIENGCHIN S**, CHANDRASEKAR M., RAMESH C., KRISHNASAMY S., SANJAY M.R.: Quasi-static indentation behavior of Kevlar-Hemp and Kevlar-PALF composites: Influence of weaving architecture and intra-ply hybridization, *Applied Composite Materials* 30 (2023), 937–953.
- [438] SANGILI MUTHU KUMAR J., SENTHIL MUTHU KUMAR T., CHANDRASEKAR M., GANESAN C., SENTHILKUMAR K., **SIENGCHIN S**: A review on free vibration characteristics of natural fiber reinforced polymer composites, *AIP Conference Proceedings* 2492 (1) (2023), 040023.
- [439] **SIENGCHIN S**: A review on lightweight materials for defence applications: Present and future developments, *Defence Technology* 24 (2023), 1-17.
- [440] SARAVANAKUMAR B.A., RAJESHKUMAR L., SATIHIKUMAR P., ROSS N.S., ARULMOZHIVARMAN J., SANJAY M.R., **SIENGCHIN S**: Machinability analysis of Typha angustifolia natural fiber reinforced composites through experimental modeling – Influence of fiber orientation, *Polymer Composites* 44 (2023), 3808–3823.
- [441] PERIYASAMY R., HERMANTHKUMAR M., SANJAY M.R., **SIENGCHIN S**: A comprehensive review on Natural fillers Reinforced Polymer Composites using Fused Deposition Modelling, *Polymer Composites* 44 (2023), 3715–3747.
- [442] SIVARAM N., THAIGAMANI S.M.K., SIVAKUMAR P., SRINIVASAN M., NARAYANA B.Y.S., KHALJIRI H.E., MEENA M., SANJAY M.R., **SIENGCHIN S**: Isolation and characterization of agro-waste biomass sapodilla seeds as reinforcement in potential polymer composite applications, *Heliyon* 9 (2023), e17760.
- [443] OLADELE I.O., ONUH L.N., **SIENGCHIN S**, SANJAY M.R., ADELANI S.O.: Modern Applications of Polymer Composites in Structural Industries: A Review of Philosophies, Product

Development, and Graphical Applications, *Applied Science and Engineering Progress* 17(1) (2024), 6884.

- [444] SUYAMBULINGAM I., GANGADHAR L., SANA S.S., DIVAKARAN D., **SIENGCHIN S.**, KURUP L.A., IYYADURAI J., ALBERT BERNAD NOBLE K.E.: Chitosan Biopolymer and Its Nanocomposites: Emerging Material as Adsorbent in Wastewater Treatment, *Advances in Materials Science and Engineering* ID 9387016 (2023), 20.
- [445] THEIVASANTHI T., SENTHIL MUTHU KUMAR T., **SIENGCHIN S.**: Synthesis and characterization of graphene derived from biomass for optical sensing of milk proteins, *Biomass Conversion and Biorefinery* 13 (2023) 13, 9715–9720.
- [446] SANTOS T.F., SANTOS C.M., ZILIO L., DIAS M., JAGADEESH P., SANJAY M.R., **SIENGCHIN S.**, FONSECA R., AMARAL A., AQUINO M., MEDEIROS I.: Impact of yarn compositions, loop length, and float stitches on the mechanical behavior of knitted fabrics via full factorial design and RSM, *Heliyon* 9 (2023), e13614.
- [447] SANTOS T.F., SANTOS C.M., SANJAY M.R., **SIENGCHIN S.**, NASCIMENTO J.H.O.: Statistical approach on the inter-yarn friction behavior of the dual-phase STF/ ρ -Aramid impregnated fabrics via factorial design and 3D-RSM, *Heliyon* 9 (2023), e18805.
- [448] ARUCHAMY K., MYLSAMY B., PALANIAPPAN S.K., SUBRAMANI S.P., VELAYUTHAM T., SANJAY M.R., **SIENGCHIN S.**: Influence of weave arrangements on mechanical characteristics of cotton and bamboo woven fabric reinforced composite laminates, *Journal of Reinforced Plastics and Composites* 42(15-16) (2023), 776–789.
- [449] RADOOR S., KARAYIL J., JAYAKUMAR A., NANDI, D., PARAMESWARANPILLAI J., LEE J., **SIENGCHIN S.**: Polyvinyl alcohol/guar gum-based bio adsorbent for the removal of cationic and anionic dyes from aqueous solution, *Polymer Bulletin* 80 (2023), 10165–10191.
- [450] AYYANAR C.B., HELAILI S., VINOD A., PULIKKALPARAMBIL H., JAGADEESH P., SANJAY M.R., BOONYASOPON P., **SIENGCHIN S.**: Attempt to identify antimicrobial *Tridax Procumbens* (TP) mechanical properties using experimental work coupled with FEM model for Biomedical Applications, *Journal of the Mechanical Behavior of Biomedical Materials* 146 (2023), 106086.
- [451] THANGA KASI RAJAN S., NARAJAN K.J., BALASUBRAMANI V., SATHICKBASHA K., SANJAY M.R., **SIENGCHIN S.**, BALAJI A.N.: Investigation of mechanical and thermo-mechanical characteristics of silane-treated cellulosic natural fibers from agricultural waste reinforced epoxy adhesive composites, *Journal of Adhesion and Adhesives* 126 (2023), 103492.

- [452] PALANISAMY S., MAYANDI K., DHARMALINGAM S., ALAVUDEEN A., NARAJAN R., ISMAIL S.O., **SIENGCHIN S.**, MOHAMMAD F., AL-LOHEDAN H.A.: Effects of Fiber Loadings and Lengths on Mechanical Properties of Sansevieria cylindrica Fiber Reinforced Natural Rubber Biocomposites, *Materials Research Express* 10 (2023), 085503.
- [453] RADOOR S., KARAYIL J., JAYAKUMAR A., KANDEL D.R., KIM J.T., **SIENGCHIN S.**, LEE J.: Recent advances in cellulose- and alginate-based hydrogels for water and wastewater treatment: A review, *Carbohydrate Polymers* 323 (2024), 121339.
- [454] SHARMA S., VERMA A., SANJAY M.R., **SIENGCHIN S.**, OGATA S.: Recent progressive developments in conductive-fillers based polymer nanocomposites (CFPNC's) and conducting polymeric nanocomposites (CPNC's) for multifaceted sensing applications, *Journal of Materials Research and Technology* 26 (2023), 5931-5974.
- [455] MOHIT, H., SANJAY M.R., SRISUK R., **SIENGCHIN S.**, ALTHOMALI R.H., ALZHRANI K.A., ASIRI A.M., KHAN A.: Effect of MWCNT/ Al₂O₃/ Boron Nitride fillers based Natural/Carbon/ Innegra Fabrics/ SS-WM/ Iron-WM Reinforced UV Resistant Polyester Composites, *Materials Chemistry and Physics* 309 (2023), 128383.
- [456] SAHAYARAJ A.F., DHAMOTHARAN S., SANDEEP D., RAMACHANDRAN P., JENISH I., DIVAKARAN D., SUYAMBULINGAM I., SANJAY M.R., **SIENGCHIN S.**: Sustainable Smart Polymer Composite Materials: A Comprehensive Review, *E3S Web of Conferences* 428 (2023), 02014.
- [457] MANIRAJ J., AROCKIASAMY F.S., RAMKUMAR C., ASHOKKUMAR D., JENISH I., SUYAMBULINGAM I., SANJAY M.R., **SIENGCHIN S.**: Machine Learning Techniques for the Design and Optimization of Polymer Composites: A Review, *E3S Web of Conferences* 428 (2023), 02013.
- [458] AYYANAR B., MARIMUTHU K., SRIDHAR N., MUGILAN T., ALQARNI S.A., KATOWAH D.F., SANJAY M.R., **SIENGCHIN S.**: Mechanical and Materialistic Characterization of Poly Lactic Acid/ Zeolite/Hydroxyapatite Composites, *Journal of Inorganic and Organometallic Polymers and Materials* 33(9) (2023),2743–2751.
- [459] JOE M.S., SUDHERSON D.P.S., SUYAMBULINGAM I., **SIENGCHIN S.**, RAJESHKUMAR G.: Characterization of novel cellulosic plant fiber reinforced polymeric composite from Ficus benamina L. stem for lightweight applications, *Biomass Conversion and Biorefinery* 13 (2023), 14267–14280.
- [460] JAGADEESH P., SANJAY M.R., PUTTEGOWDA M., SUYAMBULINGAM I., **SIENGCHIN S.**: Thermal analysis of sustainable and micro-filler Basalt reinforced polymer biocomposites for lightweight applications, *Journal of Building Engineering* 79 (2023), 107869.

- [461] RAJESHKUMAR L., SATIHISHKUMAR P., RAMESH M., SANJAY M.R., **SIENGCHIN S.**: Assessment of biodegradation of lignocellulosic fiber-based composites – A systematic Review, *International Journal of Biological Macromolecules* 253 (2023), 127237.
- [462] JOE M.S., SUDHERSON D.P.S., SUYAMBULINGAM I., **SIENGCHIN S.**: Extraction and characterization of novel biomass based cellulosic plant fiber from *Ficus benjamina* L. stem for a potential polymeric composite reinforcement, *Biomass Conversion and Biorefinery* 13 (2023), 14225–14239.
- [463] HERMANTH M., SANJAY M.R., **SIENGCHIN S.**, RAMALINGAM R., MARWANI H.M., KHAN A., ASIRI A.M.: Physico-mechanical, and thermal properties of sisal/hemp/Kevlar fibers, fly ash and Titanium Carbide nanoparticles reinforced bioepoxy composites, *Polymer Composites* 44 (10) (2023), 7117–7155.
- [464] RADOOR S., JAYAKUMAR A., KARAYIL J., KIM J.T., **SIENGCHIN S.**: Biodegradable polymeric green adsorbent for the highly efficient removal of crystal violet dye from aqueous solution, *Chemical Engineering Research and Design* 199 (2023), 473–485.
- [465] MOHIT H., SANJAY M.R., **SIENGCHIN S.**, KANAAN B., VAKKAR A., ALARIFI I.M., TAREK M.A.A., EL-BAGORY: Predicting physico-mechanical and thermal properties of loofa cylindrica fibers and Al₂O₃/Al-SiC reinforced polymer hybrid composites using artificial neural network techniques, *Construction and Building Materials* 409 (2023), 133901.
- [466] AROCKIASAMY F.S., SUYAMBULINGAM I., JENISH I., DIVAKARAN D., SANJAY M.R., **SIENGCHIN S.**: A Comprehensive Review of Real-time Monitoring and Predictive Maintenance Techniques: Revolutionizing Natural Fibre Composite Materials Maintenance with IoT, *Pertanika Journal of Science & Technology* 31 (2023), 87 – 110.
- [467] SUDARSAN S., TROFIMOV E., FRANKLIN D.S., VENTHAN S.M., GUHANATHAN S., SANJAY M.R., **SIENGCHIN S.**: Thermal, morphology and bacterial analysis of pH-responsive sodium carboxyl methylcellulose/ fumaric acid/ acrylamide nanocomposite hydrogels: Synthesis and characterization, *Heliyon* 9 (2023), e20939.
- [468] BALACHANDRAN G.B., NARAYANASAMY P., ALEXANDER A.B., DAVID P.W., MARIAPPAN K., RAMACHANDRAN M.E., SUYAMBULINGAM I., SANJAY M.R., **SIENGCHIN S.**: Multi-Analytical Investigation of the Physical, Chemical, Morphological, Tensile, and Structural Properties of Indian Mulberry (*Morinda tinctoria*) Bark Fibers, *Heliyon* 9 (2023), e21239.
- [469] JAGADEESH P., PUTTEGOWDA M., SANJAY M.R., **SIENGCHIN S.**: Accelerated weathering of sustainable and micro-filler Basalt reinforced polymer biocomposites: Physical, mechanical, thermal, wettability, and water absorption studies, *Journal of Building Engineering* 80 (2023), 108040.

- [470] THANIKODI S., SANJAY M.R., SEBAYANG A.H., **SIENGCHIN S.**: Performance comparison of CNT and MnO nano-biofuels, chicken waste biofuel, and diesel fuel for Internal Combustion (IC) Engines, *Automotive Experiences* 6(2) (2023), 395-406.
- [471] DIVAKARAN D., SUYAMBULINGAM I., SANJAY M.R., RAGHUNATHAN V., AYYAPPAN V., **SIENGCHIN S.**: Isolation and characterization of microcrystalline cellulose from an agro-waste Tamarind (*Tamarindus indica*) seeds and its suitability investigation for biofilm formulation, *International Journal of Biological* 254 (2024), 127687.
- [472] JEYAGURU S., SENTHIL MUTHU KUMAR T., **SIENGCHIN S.**, SUBRAMANIAN J., KHALJIRI H.E., SANJAY M.R., KHAN A., ABUTHAKEER S., RAJESH S.: Effect of various weaving architectures on Mechanical, Vibration and Acoustic behavior of Kevlar-Hemp intra-ply hybrid composites, *Composites Part A* 176 (2024), 107845.
- [473] SYAFRI E., AYYAPPAN V., RAGHUNATHAN V., SANJAY M.R., **SIENGCHIN S.**: Green Materials - The Advancements and Applications of Natural Fibers, *Journal of Fibers and Polymer Composites* 2 (2) (2023), 168-173.
- [474] DIVAKARAN D., SRIARIYANUN M., SUYAMBULINGAM I., SANJAY M.R., **SIENGCHIN S.**: Exfoliation and Physico-Chemical Characterization of Novel Bioplasticizers from *Nelumbo nucifera* Leaf for Biofilm Application, *Heliyon* 9 (2023), e22550.
- [475] IYYADURAI J., AROCKIASAMY F.S., MANICKAM T.S., SUYAMBULINGAM I., **SIENGCHIN S.**, APPADURAI M., RAJ E.F.I: Revolutionizing Polymer Composites: Boosting Mechanical Strength, Thermal Stability, Water Resistance, and Sound Absorption of *Cissus Quadrangularis* Stem Fibers with Nano Silica, *Silicon* 15 (2023), 6407–6419.
- [476] ANDOKO A., GAPSARI F., WIJATMIKO I., DIHARJO K., SANJAY M.R., **SIENGCHIN S.**: Performance of Carbon fiber (CF)/Ceiba petandra fiber (CPF) reinforced hybrid polymer composites for lightweight high-performance applications, *Journal of Materials Research and Technology* 27 (2023), 7636–7644.
- [477] PHIRI R., SANJAY M.R., **SIENGCHIN S.**: Agro-waste for renewable and sustainable green production: A Review, *Journal of Cleaner Production* 434 (2024), 139989.
- [478] PERUMAL S.N., SUYAMBULINGAM I., DIVAKARAN D., **SIENGCHIN S.**: Extraction and Physico-Mechanical and Thermal characterization of a novel green bio-plasticizer from *Petalium murex* plant biomass for biofilm application, *Journal of Polymers and the Environment* 31 (2023), 4353–4368.
- [479] GANESH S., SARASWATHY J.L., RAGHUNATHAN V., AYYAPPAN V., DHARMAKRISHNAN S., SANJAY M.R., **SIENGCHIN S.**: Friction composite formulation from *Lycium ferocissimum* fibers as natural reinforcement for braking applications, *Express Polymer Letters* 18 (2) (2024), 144–159.

- [480] JAYAKUMAR A., RADOOR S., SHIN G.H., **SIENGCHIN S.**, KIM J.T.: Active and intelligent packaging films based on PVA/Chitosan/Zinc oxide nanoparticles/Sweet purple potato extract as pH sensing and antibacterial wraps, *Food Bioscience* 56 (2023), 103432.
- [481] BOOMINATHAN S., SUYAMBULINGAM I., NARAYANAPERUMAL S., DIVAKARAN D., SENTHAMARANKANNAN P., **SIENGCHIN S.**: Comprehensive characterization of novel bioplasticizer from Pandanus tectorius leaves: a sustainable biomaterial for biofilm applications, *Macromolecular Research* 31 (2023), 1061–1075.
- [482] PHIRI R., SANJAY M.R., **SIENGCHIN S.**, OLADIJO O.P., DHAKAL H.N.: Development of sustainable biopolymer-based composites for lightweight applications from agricultural waste biomass: A Review, *Advanced Industrial and Engineering Polymer Research* 6 (2023), 436-450.
- [483] TECHAWINYUTHAM L., TECHAWINYUTHAM W., SANJAY M.R., **SIENGCHIN S.**: Lignocellulose based biofiller reinforced biopolymer composites from fruit peel wastes as natural pigment, *International Journal of Biological Macromolecules* 257 (2) (2024), 128767.
- [484] VISHNOI Y., TRIVEDI A.K., GUPTA M.K., SINGH H., SANJAY M.R., **SIENGCHIN S.**: Extraction of Nano-crystalline Cellulose for Development of Aerogel: Structural, Morphological and Antibacterial Analysis, *Helvion* 10 (2024), e23846.
- [485] GOKULKUMAR S., SUYAMBULINGAM I., DIVAKARAN D., PRIYADHARSHIM G.S., ARAVINDH M., IYYADURAI J., EDWARDS M.S., **SIENGCHIN S.**: Facile exfoliation and physicochemical characterization of biomass-based cellulose derived from Lantana aculeata leaves for sustainable environment, *Macromolecular Research* 31 (2023), 1163–1178.
- [486] ARAVIND D., KRISHNASAMY S., RAJINI N., **SIENGCHIN S.**, SENTHIL MUTHU KUMAR T., CHANDRASEKAR M., YORSENG K.: Thermal and tensile properties of 3D printed ABS-glass fibre, ABS-glass fibre-carbon fibre hybrid composites made by novel hybrid manufacturing technique, *Journal of Thermoplastic Composite Materials* 37(1) (2024), 206–225.
- [487] MOHIT H., SANJAY M.R., **SIENGCHIN S.**, KANAAN B., ALI V., ALARIFI I.M., EL-BAGORY TAREK M.A.A.: Machine Learning-Based Prediction of Mechanical and Thermal Properties of Nickel/ Cobalt/ Ferrous and Dried Leaves Fiber Reinforced Polymer Hybrid Composites, *Polymer Composites* 45 (2024), 489–506.
- [488] PRIYADHARSHINI S., SUYAMBULINGAM I., SANJAY M.R., SIVANANTHAM G., DIVAKARAN D., SENTHAMARA KANNAN P., MURUGAN A., **SIENGCHIN S.**: Physicochemical characterization of novel biomass based microcrystalline cellulose derived from agro-industrial residues of Rosa indica petals, *Physiologia Plantarum* 176 (2024), e14152.

- [489] NAGARAJA K.C., RAJESHKUMAR G., SANJAY M.R., **SIENGCHIN S.**: Influence of stacking sequence and halloysite addition on the fracture toughness and low-velocity impact strength of carbon/glass fiber reinforced hybrid composites, *Polymer Composites* 45(1) (2024), 328–337.
- [490] KOCAR O., ANAC N., PALANIAPPAN S.K., DOGAN M., **SIENGCHIN S.**: Effect of Process Parameters on The Mechanical Behavior of Additively Manufactured and FSW Joined PLA Wood Sheets, *Polymer Composites* 45 (2024), 1568–1584.
- [491] SATHISHKUMAR T.P., SHAH M.A., PANCHAL H., SHARMA K., GOPINATH R., SANJAY M.R., **SIENGCHIN S.**, RAJESH KUMAR L., RAMPRADHEEP G.S.: Characterization of new cellulose fiber extracted from second generation Bitter Albizia tree, *Scientific Reports* 14 (2024), 1693.
- [492] CHANDRAN, A.J., SANJAY M.R., SUYAMBULINGAM I., **SIENGCHIN S.**: Waste chicken feather biofiller reinforced bioepoxy resin based biocomposites — A waste to wealth experimental approach, *International Journal of Biological Macromolecules* 261 (2024), 129708.
- [493] JENIX RINO J., SUYAMBULINGAM I., DIVAKARAN D., PERUMAL N., SUNESH, SINGH M.K., VISHNUVARTHANAN M., SANJAY M.R., **SIENGCHIN S.**: Facile exfoliation and physicochemical characterization of Thespesia populnea plant leaves based bioplasticizers macromolecules reinforced with Polylactic acid biofilms for packaging applications, *International Journal of Biological Macromolecules* 261 (2024), 129771.
- [494] RAJA S., MEENA S., PREMKUMAR A., SUYAMBULINGAM I., **SIENGCHIN S.**: Enhancing Properties and Sustainability: Surface Modified Cymbopogon flexuosus Stem Fiber for Green Composite Materials, *Polymer Composites* 45 (2024), 2809–2824.
- [495] NANDI, D., PULIKKALPARAMBILA H., PARAMESWARANPILLAI J., **SIENGCHIN S.**: Application of a bio-waste of fish (*Labeo rohita*) scale for the removal of methyl orange from aqueous solutions: optimization of sorption conditions by response surface method and analysis of adsorption mechanism, *Biomass Conversion and Biorefinery* 14 (2024), 3523–3534.
- [496] JAGADEESH P., SANJAY M.R., **SIENGCHIN S.**: Advanced characterisation techniques for nanostructured materials in biomedical applications, *Advanced Industrial and Engineering Polymer Research* 7 (1) (2024), 122-143.
- [497] SINGH N., SALUJA R.K., RAO H.J., KAUSHAL R., GAHLOT N.K., SUYAMBULINGAM I., SANJAY M.R., DIVAKARAN D., **SIENGCHIN S.**: Progress and facts on biodiesel generations, production methods, influencing factors, and reactors: A comprehensive review from 2000 to 2023, *Energy Conversion and Management* 302 (2024), 118157.
- [498] RADOOR S., KARAYIL J., JAYAKUMAR A., **SIENGCHIN S.**: Efficient removal of dyes, heavy metal and oil-water from wastewater using electrospun nanofiber membranes: A review, *Journal of Water Process Engineering* 59 (2024), 104983.

- [499] SANTOS T.F., SANTOS C.M., AQUINO M.S., SUYAMBULINGAM I., HUSSEIN E.K., VERMA A., SANJAY M.R., **SIENGCHIN S.**, NASCIMENTO J.H.O.: Towards Sustainable and Ecofriendly Polymer Composite Materials from Bast Fibers: A Systematic Review, *Engineering Research Express* 6 (2024), 012501.
- [500] YORSENG K., SANJAY M.R., AYYAPPAN V., SRISUK R., **SIENGCHIN S.**: Bioepoxy based Advanced Lightweight Hybrid Composites from Hemp fibers: Towards Greener Production, *Journal of Building Engineering* 86 (2024), 108808.
- [501] RAO H.J., SINGH S., RAMULU P.J., SANTOS T.F., SANTOS C.M., SANJAY M.R., SUYAMBULINGAM I., **SIENGCHIN S.**: Effect of chemical treatment on physio-mechanical properties of lignocellulose natural fiber extracted from the bark of Careya arborea Tree, *Heliyon* 10 (2024), e26706.
- [502] JAGADEESH P., SANJAY M.R., **SIENGCHIN S.**: Friction and wear analysis of basalt micro-filler loaded various epoxies and esters based thermoset polymer composites, *Journal of Building Engineering* 86 (2024), 108927.
- [503] EDAYADULLA N., DIVAKARAN D., CHANDRARAJ S.S., SUYAMBULINGAM I., JAYAMANI E., SANJAY M.R., **SIENGCHIN S.**: Isolation and characterization of novel bioplasticizers from Rose (*Rosa damascena* Mill.) petals and its suitability investigation for Poly (butylene adipate-co-terephthalate) biofilm applications, *3 Biotech*, in press. *3 Biotech* 110 (14) (2024), 1-19.
- [504] RAGHUNATHAN V., AYYAPPAN V., SANJAY M.R., **SIENGCHIN S.**: Development of Fiber-Reinforced Polylactic Acid Filaments Using Untreated/Silane-Treated Trichosanthes Cucumerina Fibers for Additive Manufacturing, *Journal of Elastomers and Plastics* 56(3) (2024), 277–292.
- [505] MANSIGH B.B., BHARATHIRAJAZ G., BINOJ J.S., SURYANTO H., **SIENGCHIN S.**, SANJAY M.R.: Influence of optimal alkali treated Areca catechu L. peduncle fiber for light weight polymer composites applications, *Journal of Applied Polymer Science* 141 (2024), e55268.
- [506] NANDI D., RADOOR S., JAYAKUMAR A., DEVI C., **SIENGCHIN S.**: Hexagonal nanoplatelets of Ni–Mn oxide implanted reduced graphene oxide for high response in humidity sensing, *Chemical Papers* 78 (2024), 3099–3110.
- [507] SUNESH N.P., SUYAMBULINGAM I., DIVAKARAN D., **SIENGCHIN S.**: Isolation of Microcrystalline Cellulose from Valoniopsis pachynema Green Macroalgae: Physicochemical, Thermal, Morphological, and Mechanical Characterization for Biofilm Applications, *Waste and Biomass Valorization* 15 (2024), 1247–1266.

- [508] KRISHNASAMY S., UNGTRAKUL T., CHANDRASEKAR M., SENTHIL MUTHU KUMAR T., PARAMESWARANOILILLAI J., MOHIT H., ARAVIND D., RAJINI N., **SIENGCHIN S.**, NATARAJAN V.: Analysis of the thermal properties in short sansevieria cylindrica fibre/PLA composites processed by twin screw extruder followed by hot press molding technique, *Materials Research Express* 11 (2024), 035506.
- [509] SELVARAJ V.K., SUBRAMANIAN J., SUYAMBULINGAM I., VISWANATH S., JAYAMANI E., **SIENGCHIN S.**: Influence of bio-based kenaf polymer composites on mechanical and acoustic properties for futuristic applications: An Initiative towards net-zero carbon emissions, *Polymer Testing* 134 (2024), 108409.
- [510] DIHARJO K., GAPSARI F., ANDOKO A., WIJAYA M.N., SANJAY M.R., **SIENGCHIN S.**: Flammability and thermal resistance of Ceiba petandra fiber- reinforced composite with snail powder filler, *Polymer Composites* 45 (2024), 4947–4960.
- [511] AYYAPPAN V., SANJAY M.R., TENGSUTHIWAT J., FIORE V., **SIENGCHIN S.**: Investigation of thermo-mechanical and viscoelastic properties of 3D-printed Morinda Citrifolia particle reinforced Poly (lactic acid) composites, *Polymer Composites* 45 (2024), 5372–5385.
- [512] SARIN.H., SUTEJA, SYAFRIE., SANJAY M.R., FUDHOLI A., FATRIASARI W., KARIMAH A., **SIENGCHIN S.**: A Novel Micro Fiber Cellulose from Paederia Foetida Stems: Characterization of Physical, Morphology, Thermal and Chemical Properties, *Materials Performance and Characterization* 13 (1) (2024), 146-160.
- [513] VARMA M., CHANDRAN S., VIJAY KUMAR V., SUYAMBULINGAM I., **SIENGCHIN S.**: A comprehensive review on the machining and joining characteristics of Natural fiber-reinforced polymeric composites, *Polymer Composites* 45 (6), 4850–4875.
- [514] SANTOS C.M., SANTOS T.F., AQUINO M.S., SANJAY M.R., **SIENGCHIN S.**, SUYAMBULINGAM I.: Era of bast fibers-based polymer composites for replacement of man-made fibers, *Heliyon* 10 (2024), e29761.
- [515] TENGSUTHIWAT J., AYYAPPAN V., YASHAS G.T., SANJAY M.R., **SIENGCHIN S.**: Characterization of Novel Natural Cellulose Fiber from Ficus Macrocarpa Bark for Lightweight Structural Composite Application and Its Effect on Chemical Treatment, *Heliyon* 10 (2024), e30442.
- [516] MURALIDHARAN K., VIGNES V., VAIRA VIGNESH R., GOVINDARAJU M., BAGHAD A., NARASSIMA M.S., SUYAMBULINGAM I., **SIENGCHIN S.**: Comprehensive Overview of Nano, Micro, and Macro Tribometers in Practice, *Journal of Bio- and Tribo-Corrosion* 10 (2024), 44.
- [517] RAJESHKUMAR L., SATHI KUMAR P., BOONYASOPON P., SANJAY M.R., **SIENGCHIN S.**: Flame retardance behaviour and degradation of plant-based natural fiber composites – A comprehensive review, *Construction and Building Materials* 432 (2024), 136552.

- [518] SUNESH N.P., SUYAMBULINGAM I., DIVAKARAN D., PULIKKALPARAMBIL H., SANJAY M.R., **SIENGCHIN S**: Pedalium murex plant-based bioplasticizer reinforced polylactic acid films: A promising approach for biodegradable fruit packaging applications, *International Journal of Biological Macromolecules* 270 (2024), 132392.
- [519] RAGHUNATHAN V., SATHYAMOORTHY G., AYYAPPAN V., SINGARAVELU D.L., SANJAY M.R., **SIENGCHIN S**: Effective utilization of surface-processed/untreated *Cardiospermum halicababum* agro-waste fiber for automobile brake pads and its tribological performance, *Tribology International* 197 (2024), 109776.
- [520] SENTHILKUMAR M.S., RAJESHKUMAR L., SANJAY M.R., **SIENGCHIN S**: Mechanical behaviour analysis for banana/coir natural fiber hybrid epoxy composites through experimental modelling, *Journal of Polymer Research* 31 (2024), 163.
- [521] JAGADEESH P., SANJAY M.R., **SIENGCHIN S**: Basalt fibers: An environmentally acceptable and sustainable green material for polymer composites, *Construction and Building Materials* 436 (2024), 136834.
- [522] MADHU P., SANJAY M.R., KHAN A., OTAIBI A.A., AL-ZAHRANI S.A., OTAIBI A.A., PRADEEP S., LIU Y., **SIENGCHIN S**: Effect of Layering Sequence on Impact Properties of Alkali Treated Phoenix Posilla Fibers-Glass-Carbon Fabrics Reinforced Hybrid Composite Laminates, *Journal of Natural Fibers* 19 (13) (2022), 6878-6888.
- [523] HERMATH M., SANJAY M.R., DURAI P.S., RAMESH P., **SIENGCHIN S**, AL-ROMAIZAN A.N., HUSSAIN M.A., KHAN A., ASIRI A.M., ALTHOMALI R.H.: Effect of ferrous, nickel, and tungsten fillers reinforcement on glass fiber reinforced vinyl ester/ polyester composites, *Polymer Composites* 45 (9) (2024), 8436-8455.
- [524] AYYAPPAN V., TENGSUTHIWAT J., VIJAY R., SANJAY M.R., **SIENGCHIN S**: Advancing Additive Manufacturing: 3D-Printing of Hybrid Natural Fiber Sandwich (Nona/Soy – PLA) Composites through Filament Extrusion and Its Effect on Thermo-Mechanical Properties, *Polymer Composites* 45 (9) (2024), 7767–7789.
- [525] RADOOR S., JAYAKUMAR A., KARAYIL J., KIM J.T., **SIENGCHIN S**: Nelumbo nucifera flower extract incorporated alginate/polyvinyl alcohol films as a sustainable pH indicator for active food packaging applications, *International Journal of Biological Macromolecules* 273 (2024), 133170.
- [526] DAS I.J., KASHYAP S., JENA K., SINHA A., CHINNAPPAN B.A., SANJAY M.R., **SIENGCHIN S**, CHAKROBORTY S., BAL T.: Evaluation of microwave irradiated Polyacrylamide grafted *Opuntia* leaf mucilage graft copolymer (OPM-g-PAM) as effective controlled release polymer for release of Rosuvastatin as model drug, *International Journal of Biological Macromolecules*, in press.

- [527] JAGADEESH P., PUTTEGOWDA M., SUYAMBULINGAM I., GUPTA M.K., SANJAY M.R., **SIENGCHIN S.**: Analysis of friction and wear performance of eco-friendly basalt filler reinforced polylactic acid composite using the Taguchi approach, *Journal of Thermoplastic Composite Materials* 37(7) (2024), 2479–2504.
- [528] CHANDRARAJ S.S., SUYAMBULINGAM I., EDAYADULLA N., DIVAKARAN D., SINGH M.K., SANJAY M.R., **SIENGCHIN S.**: Characterization of Calotropis gigantea plant leaves biomass-based bioplasticizers for biofilm applications, *Heliyon* 10 (2024), e33641.
- [529] NAGARAJU S.B., PUTTEGOWDA M., GIRIJAPPA Y.G.T., RAWAT N.K., VERMA A., SANJAY M.R., **SIENGCHIN S.**: Mechanical Characterization and Water Absorption Behavior of Waste Coconut Leaf Stalk Fiber Reinforced Hybrid Polymer Composite: Impact of Chemical Treatment, *Applied Science and Engineering Progress* 17 (3) (2024), 7371.

Peer-Reviewed, International Journals

- [530] JAYAKUMAR A., PARAMESWARANPILLAI J., RADOOR S., **SIENGCHIN S.**: Chitosan based nanocomposites and their applications in food packaging, *Biopolymer Science and Technology* in press.
- [531] OKAFOR C.E., KEBODI L.C., IHUEZE C.C., SANJAY M.R., **SIENGCHIN S.**, OKONKWO U.C.: Development of Dioscorea alata stem fibers as eco-friendly reinforcement for composite materials, *Journal of King Saud University - Engineering Sciences*, in press.
- [532] PRADEEP M., SHANMUGAVEL M., UTHAYAKUMAR M., MUTHULAKSHMI L., KHAN M.A., SENTHIL MUTHU KUMAR T., SANJAY M.R., **SIENGCHIN S.**: Experimental studies on biomachining process using novel Thiobacillus novellus microorganism — a comparative study, *Biomass Conversion and Biorefinery*, in press.
- [533] MURALIDHARAN M., SATHISHKUMAR T.P., RAJINI N., NAVANEETHAKRISHAN P., ISMALI S.O., SENTHILKUMAR K., **SIENGCHIN S.**, MOHAMMAD F., AL-LOHEDAN H.A.: Ply-stacking effects on mechanical properties of Kevlar-29/banana woven mats reinforced epoxy hybrid composites, *Journal of Industrial Textiles*, in press.
- [534] AYYANAR C.B., MARIMUTHU K., GAYATHRI B., BHARATHIRAJ C., PRADEEP MOHAN S.K., JAGADEESH P., SANJAY M.R., KHAN A., **SIENGCHIN S.**: Development of biocomposites from Samanea Saman Fillers reinforced with PLA, *Biomass Conversion and Biorefinery*, in press.
- [535] MUTHUSAMY A.R., SENTHIL MUTHU KUMAR T., SENTHILKUMAR K., CHANDRASEKAR M., SANJAY M.R., **SIENGCHIN S.**: Lignocellulosic microfibrils from Phaseolus Lunatus and Vigna Radiata biomass: Characterization and Properties Biomass Conversion and Biorefinery, *Biomass Conversion and Biorefinery*, in press.

- [536] PRADEEP M., RAJESH S., UTHAYAKUMAR M., SIVARANJANA P., ABUTHAKEER S.S., RAVICHANDRAN M., SENTHIL MUTHU KUMAR T., SANJAY M.R., **SIENGCHIN S**: Investigations on the combined effects of Thiobacillus Novellus Microorganism and process parameters on the bio-machining of NiTi, *Biomass Conversion and Biorefinery*, in press.
- [537] SUNDARAKANNAN R., ARUMUGAPRABU V., SATHISH T., SANJAY M.R., **SIENGCHIN S**: Mechanical and Erosion Performance of sugar Biochar reinforced Polymer Composites, *Biomass Conversion and Biorefinery*, in press.
- [538] MISHIRA S.K., DAHIYA S., GANGIL B., RANAKOTI L., SINGH T., SHARMA S., BOONYASOPON P., SANJAY M.R., **SIENGCHIN S**: Mechanical, Morphological, and Tribological Characterization of novel Walnut Shell reinforced Polylactic acid-based biocomposites and prediction based on Artificial Neural Network, *Biomass Conversion and Biorefinery*, in press.
- [539] GAPSARI F., ANDOKO A., DIHARJO K., SANJAY M.R., **SIENGCHIN S**: The effectiveness of isolation and characterization nanocelullose from Timoho Fiber for sustainable materials, *Biomass Conversion and Biorefinery*, in press.
- [540] SATHEES KUMAR S., VIGNESH V., PRASAD V.V.S.H., SUNIL B.D.Y., SRINIVIVAS R., SANJAY M.R., **SIENGCHIN S**: Static and dynamic mechanical analysis of hybrid natural fibre composites for engineering applications, *Biomass Conversion and Biorefinery*, in press.
- [541] PULIKKALPARAMBIL H., KUMAR M.S., BABU A., AYYAPPAN V., TENGSUTHIWAT J., SANJAY M.R., **SIENGCHIN S**: Effect of graphite fillers on Woven bamboo fiber reinforced epoxy hybrid composites for semi-structural applications: Fabrication and characterization, *Biomass Conversion and Biorefinery*, in press.
- [542] POKHRIYAL M., RAKESH P.K.SANJAY M.R., **SIENGCHIN S**: Effect of alkali treatment on novel natural fiber extracted from Himalayacalamus falconeri culms for polymer composite applications, *Biomass Conversion and Biorefinery*, in press.
- [543] IYYADURAI J., AROCKIASAMY F.S., MANICKAM T., RAJARAM S., SUYAMBULINGAM I., **SIENGCHIN S**: Experimental Investigation on Mechanical, Thermal, Viscoelastic, Water Absorption, and Biodegradability Behavior of Sansevieria Ehrenbergii Fiber Reinforced Novel Polymeric Composite with the Addition of Coconut Shell Ash Powder, *Journal of Inorganic and Organometallic Polymers and Materials*, in press.
- [544] AYYANAR C.B., MARIMUTHU K., MUGILAN T., GAYATHRI B., SANJAY M.R., KHAN A., **SIENGCHIN S**: Novel Polyalthia Longifolia Seeds Fillers Loaded and E-Glass Fiber Reinforced Sandwich Epoxy Composites, *Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering*, in press.

- [545] KAMTCHI T., SARAVANAN R., SANJAY M.R., **SIENGCHIN S**: Effect of Filler content and size on the Mechanical Properties of Graphene filled Natural fiber-based Nanocomposites, *Biomass Conversion and Biorefinery*, in press.
- [546] BHARATH K.N., BINOJ J.S., MARISINGH B.B., MANJUNSAth G.B., RAGHU G.V., **SIENGCHIN S**, SANJAY M.R.: Effect of stacking sequence and interfacial analysis of biomass sheep wool/glass fiber reinforced epoxy biocomposites, *Biomass Conversion and Biorefinery*, in press.
- [547] PRATHEESH K., NARAYANASAMY P., PRITHIVIRAJAN R., RAMKUMAR T., BALASUNDAR P., SUYAMBULINGAM I., SANJAY M.R., **SIENGCHIN S**: Cenosphere filled epoxy composites: Structural, mechanical, and dynamic mechanical studies, *Biomass Conversion and Biorefinery*, in press.
- [548] SUNESH N., SUYAMBULINGAM I., DIVAKARAN D., **SIENGCHIN S**: Comprehensive characterization of novel Borassus flabellifer flower biomass based microcrystalline cellulose reinforced with polylactic acid (PLA) biofilm for futuristic applications, *Biomass Conversion and Biorefinery*, in press.
- [549] GOPAL P.M., PRIYADHARSHINI S., SUYAMBULINGAM I., DIVAKARAN D., KAVIMAMI V., SANJAY M.R., **SIENGCHIN S**: Exfoliation and physicochemical characterization of novel biomass based microcrystalline cellulose derived from Millettia pinnata leaf, *Biomass Conversion and Biorefinery*, in press.
- [550] TECHAWINYUTHAM L., TECHAWINYUTHAM W., LAOHAPANICH C., INSAWANG K., SANJAY M.R., **SIENGCHIN S**: Possibility of infrared (IR) thermography camera to investigate properties of injected plastic product and optimization injection process parameter using a design of experiment, *Advances in Materials and Processing Technologies*, in press.
- [551] SARI N.H., SUTEJA, SUJITA, IYAS R.A., SARI E., SANJAY M.R., **SIENGCHIN S**: Fabrication of bio-fiber based Eichhornia crassipes/Al₂O₃ particles hybrid biocomposites and investigation of important properties, *Journal of Process Mechanical Engineering*, in press.
- [552] BELAADI A., LEKRINE A., BOUMAAZA M., ALSHAHRANI H., BOURCHAK M., JUHANY K.A., DAMIRI F., SUYAMBULINGAM I., **SIENGCHIN S**: Water Uptake of HDPE Reinforced with Washingtonia Fibre Biocomposites: Mathematical Modelling using Artificial Neural Network, Response Surface Methodology and Genetic Algorithm, *Advances in Materials and Processing Technologies*, in press.
- [553] EDAYADULLA D., DIVAKARAN D., CHANDRARAJ S.S., SRIARIYANUN M., SUYAMBULINGAM I., SANJAY M.R., **SIENGCHIN S**: Suitability study of novel Bioplasticizer from Agave sisalana leaf for biofilm applications: A biomass to biomaterial approach, *Biomass Conversion and Biorefinery*, in press.

- [554] KAVIMANI V., DIVAKARAN D., SRIARIYANUN M., PRIYADHARSHINI G.S., GOPAL P.M., SUYAMBULINGAM I., SANJAY M.R., **SIENGCHIN S**: Facile Exfoliation and physicochemical characterization of biomass-based Cellulose derived from Pandanus tectorius leaves for Sustainable Environment, *Biomass Conversion and Biorefinery*, in press.
- [555] DURAI P.N., VISWALINGAM K., SENTHILKUMAR B., DIVAKARAN D., **SIENGCHIN S**: Effect of alkalization on physical, chemical, thermal, tensile, and surface morphological properties of Musa acuminata peduncles fiber, *Biomass Conversion and Biorefinery*, in press.
- [556] MANJULAIAH H., DHANRAJ S., BASAVEGOWDA Y., LAMANI L.N., PUTTEGOWDA M., SANJAY M.R., **SIENGCHIN S**: A novel study on the development of sisal-jute fiber epoxy filler-based composites for brake pad application , *Biomass Conversion and Biorefinery*, in press.
- [557] RAGHUNATHAN V., AYYAPPAN V., DHILIP J.D.J., SUNDARRAJAN D., SANJAY M.R., **SIENGCHIN S**: Influence of alkali-treated and raw Zanthoxylum acanthopodium fibers on the mechanical, water resistance, and morphological behavior of polymeric composites for lightweight applications, *Biomass Conversion and Biorefinery*, in press.
- [558] BHARATH K.N., PUTTEGOWDA M., GOWDA T.G., ARPITHA G.R., PRADEEP S., SANJAY M.R., **SIENGCHIN S**: Development of banana fabric incorporated polymer composites for printed circuit board application, *Biomass Conversion and Biorefinery*, in press.
- [559] PRIYADHARSHINI G.S., VELMURUGAN T., SUYAMBULINGAM I., SANJAY M.R., **SIENGCHIN S**, VISHNU R.: Characterization of cellulosic plant fiber extracted from Waltheria indica Linn. Stem, *Biomass Conversion and Biorefinery*, in press.
- [560] GANAPATHY T., RAMASAMY K., SUYAMBULINGAM I., **SIENGCHIN S**: Synergetic effect of graphene particles on novel biomass-based Ficus benghalensis aerial root/flax fiber reinforced hybrid epoxy composites for structural application, *Biomass Conversion and Biorefinery*, in press.
- [561] DIVAKARAN D., SRIARIYANUN M., BASHA S.A., SUYAMBULINGAM I., SANJAY M.R., **SIENGCHIN S**: Physico-chemical, thermal and morphological characterization of biomass based novel microcrystalline cellulose from Nelumbo nucifera leaf: A biomass to biomaterial approach, *Biomass Conversion and Biorefinery*, in press.
- [562] DIVAKARAN D., SRIARIYANUN M., JAGADEESAN R., SUYAMBULINGAM I., SANJAY M.R., **SIENGCHIN S**: Isolation and characterization of an agro-industrial waste based novel cellulosic micro fillers from Mustard (Brassica juncea) seed oil cake: A waste to wealth approach, *Biomass Conversion and Biorefinery*, in press.
- [563] RATHINAVELU R., PARAMATHMA B.S., DIVAKARAN D., **SIENGCHIN S**: Physicochemical, thermal, and morphological properties of microcrystalline cellulose extracted from Calotropis gigantea leaf, *Biomass Conversion and Biorefinery*, in press.

- [564] BALAVIRAVAN B., SARAVANAKUMAR S.S., SENTHAMARAIKANNAN P., SUYAMBULINGAM I., **SIENGCHIN S.**: Evaluation of physiochemical, mechanical, thermal, UV barrier, and biodegradation properties of PVA/corn (*Zea mays*) cob powder biofilms, *Biomass Conversion and Biorefinery*, in press.
- [565] SANTOS C.M., SANTOS T.F., SANJAY M.R., MACEDO M., AQUINO M., ALVES S.M., **SIENGCHIN S.**: Physical & mechanical and chemical properties on papaya tree bast fibers from different portions, *Biomass Conversion and Biorefinery*, in press.
- [566] DIHARJO K., GAPSARI F., ANDOKO A., SEPTIARI R., SANJAY M.R., **SIENGCHIN S.**: Optimization of nano cellulose extraction from timoho fiber using response surface methodology (RSM), *Biomass Conversion and Biorefinery*, in press.
- [567] RAO H.J., SINGH S., RAMULU P.J., SUYAMBULINGAM I., SANJAY M.R., **SIENGCHIN S.**: Isolation and characterization of a novel lignocellulosic fiber from *Butea monosperma* as a sustainable material for light weight polymer composite application, *Biomass Conversion and Biorefinery*, in press.
- [568] RADOOR S., JAYAKUMAR A., SHIVANNA J.M., KARAYIL J., KIM J.T., **SIENGCHIN S.**: Adsorptive removal of crystal violet from aqueous solution by bioadsorbent, *Biomass Conversion and Biorefinery*, in press.
- [569] PHIRI R., SANJAY M.R., **SIENGCHIN S.**, MARINKOVIC D.: Agro-waste natural fiber sample preparation techniques for bio-composites development: Methodological insights, *Facta Universitatis series Mechanical Engineering*, in press.
- [570] ANDOKO A., GAPSARI F., PRASETYA R., SULAIMAN A.M., SANJAY M.R., **SIENGCHIN S.**: Walikukun Fiber as Lightweight Polymer Reinforcement: Physical, Chemical, Mechanical, Thermal and Morphological properties, *Biomass Conversion and Biorefinery*, in press.
- [571] JAGADEESH P., SANJAY M.R., **SIENGCHIN S.**: Tribological performance analysis of sustainable basalt micro-filler loaded bio-based polypropylene and high density polyethylene composites, *Journal of Thermoplastic Composite Materials*, in press.
- [572] BRITTO J.J., VASANTHANATHAN A., SENTHILKUMAR K., SANJAY M.R., **SIENGCHIN S.**: A correlation study on piezo-embedded carbon fibre reinforced polylactic acid composite: Experimental and numerical modelling, *Journal of Thermoplastic Composite Materials*, in press.
- [573] OLADELE I.O., ONUH L.N., **SIENGCHIN S.**, ADELANI S.O.: Modern Applications of Polymer Composites in Structural Industries: A Review of Philosophies, Product Development, and Graphical Applications, *Applied Science and Engineering Progress*, in press.

- [574] PALANIAPPAN S.K., SINGH M.K., SANJAY M.R., **SIENGCHIN S.**: Eco-friendly Biocomposites: A Step Towards Achieving Sustainable Development Goals, *Applied Science and Engineering Progress*, in press.
- [575] MOORTHY M.K.M., GURUSAMY S., PANDIARAJAN B., BALASUBRAMANIAN B., PANDIARAJAN N., SUYAMBULINGAM I., SANJAY M.R., **SIENGCHIN S.**: Effect of Alkali-treated Putranjiva roxburghii seed shell filler on Physico-chemical, Thermal, Mechanical and Barrier properties of polyvinyl alcohol-based biofilms, *Journal of Vinly & Additive Technology*, in press.
- [576] SHARATH B.N., GOWDA T.G.Y., MADHU P., PRADEEPKUMAR C.B., JAIN N., VERMA A., SANJAY M.R., **SIENGCHIN S.**: Fabrication of raw and chemically treated biodegradable Luffa Aegyptica Fruit fiber based hybrid epoxy composite: A mechanical and morphological investigation, *Biomass Conversion and Biorefinery*, in press.
- [577] KUMAR V.V., DHANALAKSHMI S., RAGHUNATHAN V., AYYAPPAN V., SANJAY M.R., **SIENGCHIN S.**: Characterization of Allium sativum stalk-based biomass for automotive brake pad applications, *Biomass Conversion and Biorefinery*, in press.
- [578] TECHAWINYUTHAM L., TECHAWINYUTHAM W., WONGMANEE S., SANJAY M.R., **SIENGCHIN S.**: Optimisation of injection process parameters to minimise mould deflection: design of experiment, *Advances in Materials and Processing Technologies*, in press.
- [579] CHANDRAN A.J., SANJAY M.R., SUYAMBULINGAM I., **SIENGCHIN S.**: Micro/Nano Fillers for Value-added Polymer Composites - A Comprehensive Review, *Journal of Vinly & Additive Technology*, in press.
- [580] RAGHUNATHAN V., SATHYAMOORTHY G., AYYAPPAN V., SINGARAVELU D.L., SANJAY M.R., **SIENGCHIN S.**: Sustainable characterization of brake pads using raw/silane-treated Mimosa pudica fibers for automobile applications, *Polymer Composites*, in press.
- [581] SUBRAMANIAN K., KRISHNASAMY K., SUYAMBULINGAM I., **SIENGCHIN S.**: Synthesis and characterization of biomass-based microcrystalline cellulose extracted from Cyperus Rotundus plant leaves, *Biomass Conversion and Biorefinery*, in press.
- [582] MALLAMPATI S.C., GUJJALA R., MANNE A.A., NIRANJANKUMAR M.S.R., SUYAMBULINGAM I., **SIENGCHIN S.**, BANDARU A.K.: Influence of various environments on the mechanical properties of nanoclay reinforced S-glass/Sisal hybrid polyester composites, *Polymer Composites*, in press.

- [583] BALARAM T.S., MURALIDHARAN K., AKHILESH U.G.S., PRANAV N., AKASH P., VIGNESH A.V., SENTHILKUMAR R., SALYATHBRAHIM A., SUYAMBULINGAM I., **SIENGCHIN S.**: Influence of surface activated nanophase Pr6O11 particles on the physio-chemical and tribological characteristics of SAE20W40 automotive lubricant, *Proceedings of the Institution of Mechanical Engineers Part D Journal of Automobile Engineering*, in press.
- [584] BALARAM T.S., MURALIDHARAN K., AKHILESH U.G.S., PRANAV N., AKASH P., VIGNESH A.V., SENTHILKUMAR R., SALYATHBRAHIM A., SUYAMBULINGAM I., **SIENGCHIN S.**: Effect of inorganic fillers reinforcement in flexible polyvinylidene fluoride (PVDF) films acoustic characteristics: An experimental and statistical investigation, *Journal of Inorganic and Organometallic Polymers and Materials*, in press.

Conference and Symposium Proceedings

- [1] FRICK A., **SIENGCHIN S.**: Beschreibung des Warmformverhaltens von Kunststoffhalbzeugen aus PP mit Hilfe TF-Simulation, 47. Internationales Wissenschaftliches Kolloquium, 23-26 September 2002, TU Ilmenau, **Germany**.
- [2] **SIENGCHIN S.**, KARGER-KOCSIS J.: Structure-Property Relationships of Polystyrene/layered silicate Nanocomposites as a Function of their Preparation, TNT 2006 „Trends in Nanotechnology“ Conference, 04-08 September, 2006, Grenoble , **France**.
- [3] **SIENGCHIN S.**, KARGER-KOCSIS J.: Micro- and Nanocomposites of Polystyrene/Nanofillers Produced by Latex Route and their Characterization, DFG GRK 814 Workshop, 13 October 2006, TU Kaiserslautern, **Germany**.
- [4] **SIENGCHIN S.**, KARGER-KOCSIS J.: Polystyrene-Based Micro- and nanocomposites: Production (Latex Compounding) and Characterization, IVW-Kolloquium, 14-15 November, 2006, TU Kaiserslautern, **Germany**.
- [5] **SIENGCHIN S.**, KARGER-KOCSIS J.: Structure-Property Relationships in POM/PU/Nanofiller Ternary Composites Produced via the Latex Route, 12. Probemseminar “Gefüllte und verstärkte Polymerblends Nanoblends , 28-29 March, 2007, Bad Lauchstädt, **Germany**.
- [6] **SIENGCHIN S.**, KARGER-KOCSIS J.: Creep and Thermo- Mechanical Behavior of Toughened and “Nanoreinforced” Polyamides Produced via Latex Route: Effect of the Nanofiller, Materials 2007, 1-4 April, 2007, Porto, **Portugal**.
- [7] **SIENGCHIN S.**, KARGER-KOCSIS J.: Structure-Property Relationships in Toughened and “Nanoreinforced” Polyamides Produced via Latex Route: Effect of the Nanofiller, Eurofillers 2007, 26-30 August, 2007, Zalakaros, **Hungary**.
- [8] **SIENGCHIN S.**, KARGER-KOCSIS J.: Structure and Creep Behavior of Nanoreinforced Thermoplastics Produced via Latex Compounding, DFG GRK 814 Workshop, 18-19 October 2007, Potzberg, **Germany**.

- [9] SCHLARB A.K., **SIENGCHIN S.**, KNÖR N., KARGER-KOCSIS J.: Creep Behavior of Thermoplastics Containing Nano-scale Reinforcements, COMAT 2007, proceedings, 9-12 December 2007, Rio De Janeiro, **Brazil**.
- [10] **SIENGCHIN S.**, KARGER-KOCSIS J.: Polystyrene-based Micro- and Nanocomposites: Structure-mechanical Relaxation Relationship, MCM 2008, 28-30 May, 2008, Riga, **Latvia**.
- [11] **SIENGCHIN S.**, KARGER-KOCSIS J.: Nanoreinforced and Toughened Polyoxymethylene Produced by Water-Mediated Continuous Melt Blending, IVW-Kolloquium, 16-17 September, 2008, TU Kaiserslautern, **Germany**.
- [12] KARGER-KOCSIS J., **SIENGCHIN S.**: Water-Mediated Production of Nanofilled and Toughened Thermoplastics, Polymerwerkstoffe P2008, 24-26 September, 2008, Halle (Saale), **Germany**.
- [13] ABRAHAM T.N., **SIENGCHIN S.**, KARGER-KOCSIS J.: All-PP Composites based on β and α Polymorphic Forms: Mechanical Properties, International Conference on Advances in Polymer Technology-APT, 25-27 September, 2008, CUSAT, Kochi, **India**.
- [14] **SIENGCHIN S.**, KARGER-KOCSIS J.: POM/PU/Alumina Ternary Composites Produced Continuous Manufacturing: Water-Mediated Production, VMS 2008, 30 September – 3 October, 2008, Kyiv, **Ukraine**.
- [15] GOODSSELL J.E., **SIENGCHIN S.**, PIPES R.B.: The Off-Axis Tensile Test Revisited, ASC/CAC SMA 2009, proceedings, 25-27 September, 2009, Delaware, **USA**.
- [16] **SIENGCHIN S.**, KARAHALIOU P.K., GEORGA S.N., KRONTIRAS C.A., KARGER-KOCSIS J., PSARRAS G.C.: Relaxation Phenomena and Dynamics in Polyoxymethylene/Polyurethane/Alumina Hybrid Nanocomposites, 14th European Conference on Composite Materials (ECCM 14), 7-10 June, 2010, Budapest, **Hungary**.
- [17] **SIENGCHIN S.**, KARGER-KOCSIS J.: Structure-Property Relationships in Polystyrene/Magnesium Carbonate Nanocomposites Produced by Melt Compounding, PROCESSING & FABRICATION OF ADVANCED MATERIALS (PFAM XIX -2011), 14 -17 January, 2011, Auckland, **New Zealand**.
- [18] PINISATTAWONG K., DANGTUNGEE R., **SIENGCHIN S.**: Polylactic acid-based Bagasse Composites: Fabrication and Mechanical Characterization, PROCESSING & FABRICATION OF ADVANCED MATERIALS (PFAM XIX -2011), 14 -17 January, 2011, Auckland, **New Zealand**.
- [19] **SIENGCHIN S.**, POHL T., MEDINA L., MITSCHANG P.: Structure and Mechanical Behavior of Flax/Polylacticacid (PLA) Composites: Effect of Reinforcing Structures, POLYCHAR 20 World Forum on Advanced Materials, 26-30 March 2012, Dubrovnik, **Croatia**.

- [20] PINIJSATTAWONG K., SIENGCHIN S., DANGTUNGEE R.: Polyacitic Acid/Polybutylene Adipate CO-Terephthalate-based Bagasses: Fabrication and Mechanical Characterization, Pure and Applied Chemistry International Conference (PACCON 2012), 11-13 January 2012, Chiang Mai, **THAILAND**.
- [21] SRISUK R., SIENGCHIN S., DANGTUNGEE R.: Antifungal, Bacterial and Mechanical Properties of Natural Rubber Filled with Silver and Copper Nanoparticles: Fabrication and Mechanical Characterization, Pure and Applied Chemistry International Conference (PACCON 2012), 11-13 January 2012, Chiang Mai, **THAILAND**.
- [22] DANTUNGEE R., SOMCHUA S., SIENGCHIN S.: Recycling Glass Fiber/Epoxy Resin of Waste Print Circuit Board: Method and Morphology, TIChE International Conference, 25 - 26 October 2012, Nakornratchasima, **THAILAND**.
- [23] SEEDASOM C., SIENGCHIN S.: Injection Molding Simulation of Filling Unbalanced Runners Flow for X Branch Balanced Runners, ME-NETT Conference, 24-27 October 2012, Chiang Rai, **THAILAND**.
- [24] NAKPUN N., SIENGCHIN S.: Cooling Optimization Simulation with Finite Element Method Used for Manufacturing of Polycarbonate Lens, ME-NETT Conference, 24-27 October 2012, Chiang Rai, **THAILAND**.
- [25] KERASIDOU A., PSARRAS G.C., SIENGCHIN S., KARAHALIOU P.K., XANTHOPOULOS N., GEORGA S.N., KRONTIRAS C.A., KARGER-KOCSIS J.,: The influence of preparation techniques on the dielectric response of Polyoxymethylene /Polyurethane/Layered Silicate nanocomposites, XVIII Panhellenic Conference on Solid State Physics and Materials Science, 23-26 September 2012, University of Patras, **GREECE**.
- [26] KERASIDOU A., PSARRAS G.C., SIENGCHIN S., KARAHALIOU P.K., XANTHOPOULOS N., GEORGA S.N., KRONTIRAS C.A., KARGER-KOCSIS J.,: Polyoxymethylene (POM) based nanocomposites: Morphology, dielectric response and energy storage efficiency, XVIII Panhellenic Conference on Solid State Physics and Materials Science, 23-26 September 2012, University of Patras, **GREECE**.
- [27] SIENGCHIN S.: Natural Fiber for Use in Thermoplastic-Reinforced Composites, Taishan Academic Forum-Polymer Chemistry and Physics, 14-16 November 2013, Qingdao, **China**.
- [28] PHONGAM N., SIENGCHIN S., DANTUNGEE R.: Mechanical properties of woven flax fiber biocomposites based on poly(butylene adipate-co-terephthalate) (PBAT), The 1st International Conference on Engineering Science and Innovative Technology 8-10 April 2014, Krabi, **Thailand**.

- [29] TENGSUTHIWAT J., DANTUNGEE R., **SIENGCHIN S.**: Poly-Hydroxybutyrate-co-b-Hydroxy valerate (PHBV) reinforced sisal fiber composites: Morphology and Mechanical Properties, The 1st International Conference on Engineering Science and Innovative Technology 8-10 April 2014, Krabi, **Thailand**.
- [30] CHUAPING S., MANN T., DANTUNGEE R., **SIENGCHIN S.**: Effect of Weld Line Formation on Morphology and Mechanical Properties for 3D-MID Technology, The 8th International Conference on Materials Science and Technology (MSAT-8) 15-16 December 2014, Bangkok, **Thailand**.
- [31] SRISUK R., CHUAPING S., MANN T., DANTUNGEE R., **SIENGCHIN S.**: Polyphthalamide (PPA)/ Glass Fiber Composites for 3D-MID technology: Electrical and Mechanical Properties, NANOFIBERS, APPLICATIONS AND RELATED TECHNOLOGIES - NART 2015, 31 August - 02 September 2015, Liberec, **Czech Republic**.
- [32] TENGSUTHIWAT J., SRISUK R., DANTUNGEE R., **SIENGCHIN S.**: PHBV/Sisal fiber/Nano Clay composites Produced by Casting technique, NANOFIBERS, APPLICATIONS AND RELATED TECHNOLOGIES - NART 2015, 31 August - 02 September 2015, Liberec, **Czech Republic**.
- [33] TENGSUTHIWAT J., DANTUNGEE R., **SIENGCHIN S.**, KROLL L.: Casting technique for bio-based polymer reinforced sisal fiber composites, International MERGE Technologies Conference for Lightweight Structures, 1 - 2 October 2015, Chemnitz, **Germany**.
- [34] WONGMANEE S., **SIENGCHIN S.**: Woven Fiber Reinforced Poly(hydroxybutyrate-co-b-hydroxyvalerate)-Base Composites: Effect of Processing Techniques, International MERGE Technologies Conference for Lightweight Structures, 1 - 2 October 2015, Chemnitz, **Germany**.
- [35] NGAOWTHONG C., PINMANEE S., RUNGSARDTHONG V., **SIENGCHIN S.**, KROLL L.: Polypropylene/Hemp Woody Core Fiber Composites: Effect of aspect ratio and modification, International MERGE Technologies Conference for Lightweight Structures, 1 - 2 October 2015, Chemnitz, **Germany**.
- [36] LOYPETCH N., TROELTZSCH J., **SIENGCHIN S.**, KROLL L.: Processing and Mechanical Properties of Short Glass Fiber Reinforced Polypropylene Films, International MERGE Technologies Conference for Lightweight Structures, 1 - 2 October 2015, Chemnitz, **Germany**.
- [37] TECHAWINYUTHAM L., FRICK A., **SIENGCHIN S.**: Reinforced Coconut Fiber/Homopolymer Polypropylene (Homo PP) Composites with Maleic Anhydride

Grafted Polypropylene (MAGPP): Morphology, Thermal and Mechanical Properties, 10th International Conference on the Physical Properties and Application of Advanced Materials (ICPMAT2015), 17-21 November 2015, Chiang Mai, **Thailand**.

- [38] PHANYAWONG S., JOOTHAMONGKHON J., **SIENGCHIN S.**, ASAWAPIROM U.: Melamine Microcapsules Containing Sappan Dye: Encapsulation and Thermal Property, Pure and Applied Chemistry International Conference (PACCON 2016), 9-11 February 2016, Bangkok, **THAILAND**.
- [39] **SIENGCHIN S.**, BOONYASOPON P., SRISUK R., LOYPETCH N.: NON- AND WOVEN FLAX FIBER FOR USE IN REINFORCED POLY(BUTYLENE ADIPATE-CO-TEREPHTHALATE) BIO-COMPOSITES, 2nd Edition Smart Materials & Surfaces Conference - SMS KOREA 2016, 23 - 25 March 2016, Incheon, **Korea**.
- [40] YORSENG K., TENGSUTHIWAT J., **SIENGCHIN S.**: Melamine Formaldehyde Coated Sisal Fiber/ Polylactic acid (PLA) Composites: Morphology and Properties, The International Polymer Conference of Thailand (PCT-7), 01-02 June 2017, Amari Watergate Hotel, Bangkok, **THAILAND**.
- [41] FRICK A., KAOUD N., **SIENGCHIN S.**: Investigating the Effect of Different Processing Conditions on the Thermo-Mechanical Properties of FKM, The 3rd International Conference on Engineering Science and Innovative Technology (ESIT2018), April 19 - 22, 2018, Phang-Nga, **Thailand**.
- [42] SENTHILKUMAR K., RAJINI N., KARTHIKEYAN S., **SIENGCHIN S.**, YORSENG K., BALAMAMNIKANDAN K., HARIKRISHNAN M., PONSIVARAMAN S.P.: Wear behaviour of the PLA and Cu₂O composite under different temperature, Second International Conference on Polymer Composites (ICPC-2018), December 15-16, 2018, Mangalore, Karnataka, **India**. Volume 2057, 11 January 2019, Article number 020027.
- [43] VERMA A., PARASHAR A., SANJAY M.R., **SIENGCHIN S.**: Anomalous characteristics of functionalized grain boundaries in Graphene: A Nano-mechanics study, 2nd International Conference on Nanomaterials, Materials and Manufacturing Engineering (ICNMM 2019), May 17-19, 2019, Bangkok, **Thailand**.
- [44] TENGSUTHIWAT J., YORSENG K., **SIENGCHIN S.**, PARAMESWARANPILLAI J.: Thermomechanical, water absorption, ultraviolet resistance and laser assisted electroless plating behavior of Cu₂O and melamine-formaldehyde-coated sisal fiber-modified poly(lactic acid) composites, International Conference on Materials Research and Nanotechnology, June 10-12, 2019, Rome, **Italy**.
- [45] PULIKKALPARAMBILA H., **SIENGCHIN S.**, PARAMESWARANPILLAI J.: Self-healing epoxy coatings and composites for potential applications, The World Congress on Smart Materials and Structures, November 21-22, 2019, **Singapore**.

- [46] PULIKKALPARAMBILA H., **SIENGCHIN S.**, PARAMESWARANPILLAI J.: Ionic liquid modified epoxy blends, their environmental degradation, and autonomous self-healing, 11th International Conference on Advancements in Polymeric Materials, February 13 - 15, 2020, Bengaluru, **India**.
- [47] SABARISH R., **SIENGCHIN S.**, UNNIKRISHNAN G.: Preparation and characteristics of PVA/PDADMAC/ZSM-5 zeolite hybrid matrix membranes and their applications for hazardous dye adsorption and recyclability, 11th International Conference on Advancements in Polymeric Materials, February 13 - 15, 2020, Bengaluru, **India**.
- [48] SABARISH R., JASILA K., **SIENGCHIN S.**: Adsorption of methylene blue dye from aqueous solution by a novel PVA/CMC/halloysite nanoclay membrane: Characterization, kinetics, isotherm and antibacterial properties, Changing Trends in Polymer Science and Technology (CTPST2021), The Online National Conference 20th and 21st January 2021, National Institute of Technology Calicut, **India**.
- [49] SABARISH R., JASILA K., **SIENGCHIN S.**: Design, Development and Dye Removal Application of Zeolite Based Membranes, the International Symposium on Environment and Chemical Engineering 2021 (ISECE 2021), online event on 25th and 26th November 2021, Curtin University, **Malaysia**.
- [50] JAGADEESH P., SANJAY M.R., **SIENGCHIN S.**: Baslt Powder as Reinforcement in Thermoset and Thermoplastic based polymer Composites for Lightweight Applications, INTERNATIONAL CONFERENCE ON ADVANCED ENGINEERING MATERIALS AND COMPOSITES 2024 (ICAEMC 2024) 20 – 21 May 2024, Universiti Putra Malaysia, **Malaysia**.
- [51] CHANDRAN A.J., SANJAY M.R., SUYAMBULINGAM I., **SIENGCHIN S.**: Marine Waste as a Resource: Developing Bio-Epoxy Composites for a Sustainable Future, INTERNATIONAL CONFERENCE ON ADVANCED ENGINEERING MATERIALS AND COMPOSITES 2024 (ICAEMC 2024) 20 – 21 May 2024, Universiti Putra Malaysia, **Malaysia**.

Report

- [1] FRICK A., **SIENCGHIN S.**, ROCHMAN A.: Praktische Simulation des Warmformverhaltens von Kunststoffhalbzeugen aus PP, Abschlussbericht Oktober 2003 aFuE-Programm des BMBF.

Patent

- [1] ระพีพันธ์ แดงตันกี, สุชาติ เชื้อยงจิน, ชัยศิริ กิจเกาศงศ์, พีภรณ์ ศรีสุข **The Title of “อสังกัลดเรซินอิพ็อกซีจากซากแผ่นวงจรอิเล็กทรอนิกส์ขนาดย่อมภายใต้สภาวะอุณหภูมิและความดัน”** (Ref. No./Application No. 1403000781, Patent No. 10897)
- [2] อุดม อัสวาภิรมย์, จารุวรรณ จูทะมงคล, จิตาภา สำราญจิตต์, วรล อินทะสันตา, สุพิชชา ปัญญาวงศ์, สุชาติ เชื้อยงจิน **เรื่อง The Title of “กรรมวิธีการปรับปรุงคุณสมบัติความคงทนต่อความร้อนของสีสกัดจากธรรมชาติกลุ่มละลายน้ำได้”** (Ref. No./Application No. 1601003776, Patent No. 162165)
- [3] ระพีพันธ์ แดงตันกี, สุชาติ เชื้อยงจิน, ชัยศิริ กิจเกาศงศ์, รพีภรณ์ ศรีสุข **เรื่อง The Title of วิธีการสกัดเรซินอิพ็อกซีจากซากแผ่นวงจรอิเล็กทรอนิกส์ด้วยการใช้ตัวทำละลายร้อนและตัวเร่งปฏิกิริยา และการขึ้นรูป** (Ref. No./Application No. 1603000824, Patent No. 14226)
- [4] สุชาติ เชื้อยงจิน และคณะ **เรื่อง The Title of สูตรส่วนผสมวัสดุเชิงประกอบ พอลิแลคติกเอซิด (Polylactic acid, PLA) และกรรมวิธีการผลิต** (Patent No. 16666)
- [5] สุชาติ เชื้อยงจิน และคณะ **เรื่อง The Title of สูตรสารเคมีในกระบวนการชุบโลหะทองแดงแบบไม่ใช้ไฟฟ้า (Electroless copper plating) กับวัสดุเชิงประกอบ พอลิแลคติกเอซิด (Polylactic acid, PLA) และกรรมวิธีการผลิต** (Ref. No./Application No. 1803001448, Patent No. 17240)
- [6] สุชาติ เชื้อยงจิน และคณะ **เรื่อง The Title of กรรมวิธีการผลิตผงเปลือกไข่เคลือบอนุภาคเงินนาโนเมตรสำหรับผลิตภัณฑ์ทำความสะอาดยับยั้งเชื้อแบคทีเรียในครัวเรือน** (Ref. No./Application No. 1903001589, Patent No. 17909)
- [7] Patent, India, **The Title of Design and Development of micro ball on flat wear testing machine**, (Ref. No./Application No. 202041039508, Patent No. 374797)
- [8] ยื่นขออนุสิทธิบัตร **The Title of สูตรผ้าฝ้ายเคลือบผงขมิ้นต้านแบคทีเรียและกรรมวิธีการผลิต** (Ref. No./Application No.1803001275)
- [9] ยื่นขออนุสิทธิบัตร **The Title of สูตรส่วนผสมของวัสดุเชิงประกอบและกรรมวิธีการผลิตสำหรับแผงข้างประตูรถยนต์** (Ref. No./Application No. 1903000880)
- [10] ยื่นขออนุสิทธิบัตร **The Title of กรรมวิธีการผลิตผงเปลือกไข่เคลือบอนุภาคทองแดงนาโนเมตรสำหรับผลิตภัณฑ์ทำความสะอาดยับยั้งเชื้อแบคทีเรียในครัวเรือน** (Ref. No./Application No.1903001590)
- [11] Patent, Mr. H. Mohit, Dr. G. Hemath Kumar, Mr. H. Babu Vishwanath, Dr. Sanjay Mavinkere Rangappa, Dr. ing. Habil. Suchart Siengchin, and Dr. Arpita G R, **The Title of Development of car bumper material utilizing sugarcane nanocellulose, dry leaves fiber, glass fiber and Al-SiCNP reinforced hybrid polymer composites** (India, Ref. No./Application No. 201941027153)
- [12] Patent, Dr. H. Mohit, Dr. G. Hemath Kumar, Dr. V. Arul Mozhi Selvan, Dr. Sanjay Mavinkere Rangappa, Dr.-ing. habil. Suchart Siengchin, and Dr. P. Madhu, **The Title of Development of tool box material from hybrid composites reinforced with NC, NDL, NK, GF and NP-MMC** (India, Ref. No./Application No. 201941045139)

- [13] Patent, Mr. Madhu P, Dr. Sanjay M R, Dr. Pradeep S, Dr. H Mohit, Dr. Yogesha B, and Dr.-Ing. habil. Suchart Siengchin, ***The Title of DEVELOPMENT OF HYBRID POLYMER COMPOSITES REINFORCED WITH PROSOPIS JULIFLORA BARK FIBERS, PHOENIX PUSILLA LEAF FIBERS, GLASS FABRICS AND CARBON FABRICS*** (India, Ref. No./Application No. 202041000392)
- [14] Patent, ***The Title of Formulation and methodology of hybrid bio-based composites for interior car door panel Design***, (India, Ref. No./Application No. 1903000880, filed on 09.04.2019).

Design

- [1] India ***The Title of Mobile stand***, Application No. 331078-001, Status Examination Report has been Generated, Case is waiting for examination report reply, Design nr.: 331094-001, The Patent Office Journal No. 07/2021.
- [2] ***The Title of Advertising Board***, Application No. 338338-001, Status Examination Report has been Generated, Case is waiting for examination report reply (FER generated on 30.01.2021).