

## List of Publications

### *In Journals*

- [1] **Borah, N.** and Karak, N. Tannic acid based bio-based epoxy thermosets: Evaluation of thermal, mechanical, and biodegradable behaviours. *Journal of Applied Polymer Science*, 139(11):51792, 2022.
- [2] **Borah, N.** and Karak, N. Green composites of bio-based epoxy and waste tea fiber as environmentally friendly structural materials. *Journal of Macromolecular Science, Part A*, 60(3):217-229, 2023.
- [3] **Borah, N.** and Karak, N. Cellulose Nanofibers modified with pendant amine groups as potential reinforcement in bioepoxy for a mechanically tough biodegradable anticorrosive nanocomposite coating. *Cellulose*, 2023, (*Under review, revised*).
- [4] **Borah, N.**, Rather M. A., Bhar, B., Mandal, B. B., Mandal, M., and Karak, N. A high-performance epoxy nanocomposite with iron oxide decorated cellulose nanofiber as a sustained drug delivery vehicle for an antibacterial drug. *New Journal of Chemistry*, 47:20010-20025, 2023.

### *Book Chapters*

- [1] Kar, A., **Borah, N.**, and Karak, N. Life cycle assessment approach for mitigating problems of plastic waste management. In Deshmukh, K. and Parameswaranpillai, J., editors, *Plastic Waste Management: Methods and Applications*, Wiley VCH (**In press**).
- [2] **Borah, N.**, Kar, A., and Karak, N. Biocomposites of biopolymers with metals and their derivatives. In Karak, N. editor, *Advances in Biocomposites and their Applications*, Elsevier Inc. (**In press**).

### *Conferences*

- [1] **Borah, N.** and Karak, N. High functioning CNF/epoxy green nanocomposite enriched with urethane linkages: Valorization of waste tea fibers to engineering material, Frontiers in Chemical Sciences (FICS 2022) at Indian Institute of Technology, Guwahati, 2-4 December 2022, India.
- [2] **Borah, N.** and Karak, N. Preparation of bio-epoxy using renewable resource based tannic as potential substitute of Bisphenol A, International Conference on Materials Chemistry and Catalysis (MCC 2021) at Tezpur University, Tezpur, 4-5 March 2021.