

An orange scroll graphic with a gradient, featuring a vertical strip on the left side and a small tab on the right side. The text is centered on the scroll.

LIST OF PUBLICATIONS

List of publications (included in the thesis):

- [1] **Doley, S.** and Dolui, S.K. Solvent and catalyst free synthesis of sunflower oil based polyurethane through non-isocyanate route and its coatings properties. *European Polymer Journal*, 102:161-168, 2018.
- [2] **Doley, S.**, Agarwal, V., Bora, A., Borah, D., and Dolui, S. K. Development of sunflower oil based non-isocyanate polyurethane/multi walled carbon nanotube composites with improved physico-chemical and microwave absorption properties. *Polymer Composites*, 40(S2):E1120--E1130, 2019.
- [3] **Doley. S.**, Sarmah, A., Sarkar, C., and Dolui, S.K. In situ development of bio-based polyurethane-blend-epoxy hybrid materials and its nanocomposites with modified graphene oxide via non-isocyanate route. *Polymer International*, 67(8):1062-1069, 2018.
- [4] **Doley, S.** and Dolui, S.K. A non-isocyanate approach towards the synthesis of polyurethane with high performance: Blending of cyclic carbonate based on soybean oil and glycerol. (*Communicated*).
- [5] **Doley, S.** and Dolui, S.K. Synthesis of tannic acid based polyurethane through non-isocyanate route and effect of organically modified clay on its physicochemical behavior. (*Communicated*).
- [6] **Doley, S.** and Dolui, S.K. Development of sunflower oil based non-isocyanate polyurethane hybrid. (*Under preparation*).

Other publications:

- [1] Bora, A., Mohan, K., **Doley, S.**, Goswami, P., and Dolui, S. K. Broadening the sunlight response region with carbon dot sensitized TiO₂ as a support for a Pt catalyst in the methanol oxidation reaction. *Catalysis Science & Technology*, 8(16):4180-4192, 2018.
- [2] Bora, A., Mohan, K., **Doley, S.**, and Dolui, S. K. Flexible asymmetric supercapacitor based on functionalized reduced graphene oxide aerogels with wide working potential window. *ACS Applied Materials and Interfaces*, 10(9):7996-8009, 2018.

Papers presented in academic conferences:

- [1] Doley, S. and Dolui, S. K. **Poster presentation** entitled 'In situ development of bio-based polyurethane/epoxy hybrid materials via non-isocyanate route and its coating properties', Fourth International Symposium on Advances in Sustainable Polymers, IIT Guwahati, Assam, 2018.
- [2] Doley, S. and Dolui, S.K. **Poster presentation** entitled 'Development of Non-isocyanate Polyurethane hybrid/Graphene Oxide composites', An International Conference in Chemistry Organix-2018, Tezpur University, Assam, 2018.
- [3] Doley, S. and Dolui, S. K. **Poster presentation** entitled 'Development of CO₂ source monomer Cyclic carbonates Castor oil as a precursor for Synthesis of Polyurethane Networks: a non-isocyanate route', International Conference on Emerging Trends in Chemical Sciences (ETCS-2018), Dibrugarh University, Assam, 2018.
- [4] Doley, S. and Dolui, S. K. **Poster presentation** entitled 'Development of sunflower oil based polyurethane through non-isocyanate routes: An eco-friendly approach', 25th National Conference on Condensed Matter Physics CMDAYS17, Tezpur University, Assam, 2017.
- [5] Doley, S. and Dolui, S. K. **Poster presentation** entitled 'Development of biobased polyurethane through nonisocyanate route', 104th Indian Science Congress, S.V. University, Tirupati, 2017.
- [6] **Participated** in 'Workshop on Arsiron Nilogon: Availability and Handling of Arsiron Nilogon Kit', Department of Chemical Sciences, Tezpur University, Assam, 2016.