## LIST OF PUBLICATIONS

- 1. **Ahmed, K.**, Saikia, G., Paul, S., Baruah, S. D., Talukdar, H., Sharma, M., and Islam, N. S. Water-soluble polymer anchored peroxotitanates as environmentally clean and recyclable catalysts for mild and selective oxidation of sulfides with H<sub>2</sub>O<sub>2</sub> in water. *Tetrahedron*, 2019, **75**(44), 130605.
- 2. **Ahmed¹**, **K.**, Boruah¹, J. J., Das, S., Gogoi, S. R., Saikia, G., Sharma, M., and Islam, N. S. Peroxomolybdate supported on water soluble polymers as efficient catalysts for green and selective sulfoxidation in aqueous medium. *J. Mol. Catal. A: Chem.*, 2016, **425**, 21-30. (¹These authors contributed equally to this work).
- 3. **Ahmed, K.**, Saikia, G., Begum, P., Gogoi, S. R., Sharma, M., Talukdar, H., and Islam, N. S. Selective and green sulfoxidation in water using a new chitosan supported Mo(VI) complex as heterogeneous catalyst. *ChemistrySelect*, 2018, 3(44), 12563-12575.
- Saikia, G., Ahmed, K., Rajkhowa, C., Sharma, M., Talukdar, H., and Islam, N.
  Polymer immobilized tantalum (V)-amino acid complexes as selective and recyclable heterogeneous catalysts for oxidation of olefins and sulfides with aqueous H<sub>2</sub>O<sub>2</sub>. New J. Chem., 2019, 43, 17251-17266.
- 5. Saikia, G., Ahmed, K., Gogoi, S. R., Sharma, M., Talukdar, H., and Islam, N. S. A chitosan supported peroxidovanadium (V) complex: Synthesis, characterization and application as an eco-compatible heterogeneous catalyst for selective sulfoxidation in water. *Polyhedron*, 2019, **159**, 192-205.
- Sharma, M., Saikia, G., Ahmed, K., Gogoi, S. R., Puranik, V. G., and Islam, N. S. Vanadium-based polyoxometalate complex as a new and efficient catalyst for phenol hydroxylation under mild conditions. *New J. Chem.*, 2018, 42(7), 5142-5152.
- 7. Gogoi, S. R., Saikia, G., **Ahmed, K**., Duarah, R., and Islam, N. S. Niobium(V) peroxo α-amino acid complexes: Synthesis, stability and kinetics of inhibition of acid phosphatase activity. *Polyhedron*, 2017, **121**, 142-154.
- 8. Gogoi, S. R., Boruah, J. J., Sengupta, G., Saikia, G., **Ahmed, K**., Bania, K. K., and Islam, N. S. Peroxoniobium (V)-catalyzed selective oxidation of sulfides with hydrogen peroxide in water: a sustainable approach. *Catal. Sci. Technol.*, 2015, 5, 595-610.

9. Saikia, G., Gogoi, S. R., Boruah, J. J., Ram, B. M., Begum, P., **Ahmed, K.**, Sharma, M., Ramakrishna, G., Ramasarma, T. and Islam, N. S. Peroxo compounds of vanadium(V) and niobium(V) as potent inhibitors of calcineurin activity towards RII-phosphopeptide. *ChemistrySelect*, 2017, **21**, 5838-5848.

## LIST OF CONFERENCES ATTENDED

- ➤ OrganiX-2018, An International Conference in Chemistry, organized by Department of Chemical Sciences, Tezpur University (**Oral presentation**).
- ➤ International Conference on Emerging Trends in Chemical Sciences, 2018 organized by Department of Chemistry, Dibrugarh University with partial support from UGC (**Presented a Poster**) (**RSC best poster award**).
- ➤ International Conference on Material Science and Technology (ICMST-2018) organized by Indian Institute of Space Science and Technology (IIST), jointly with Materials Research Society of India (MRSI)(Presented a Poster).
- ➤ International Conference on "Sophisticated Instruments in Modern Research-2017, organized by CIF IITGuwahati, CIF IASST, SAIF Gauhati University, SAIF North-Eastern Hill University, SAIC Tezpur University ( **Poster Presentation**).
- ➤ Contemporary Developments in Chemical Sciences 2015, 23<sup>rd</sup> & 24<sup>th</sup> November organized by Department of Chemical Sciences, Tezpur University, Assam ( **Poster Presentation**).