



तेजपुर विश्वविद्यालय

(केंद्रीय विश्वविद्यालय)

नपाम, तेजपुर - 784 028, असम, भारत

TEZPUR UNIVERSITY


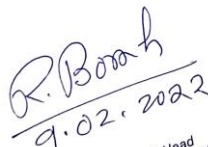
( A Central University)

Napam, Tezpur - 784 028, Assam, India

Department of Chemical Sciences

DST-Indo-Bulgaria Collaborative Research project

1. Name of the Collaborative Activity: DST Collaborative research project
2. Nature of Activity: R&D
3. Name of the Collaborating Agency/ Individual with affiliation, and contact details: Prof. Yuri Kalvachev, Institute of Catalysis, Bulgarian Academy of Sciences, Sofia, Bulgaria
4. Summary of collaboration: A green and environmentally sustainable methodology has been developed for hydration of aromatic nitriles to amides utilising 30% H<sub>2</sub>O<sub>2</sub> in agro-waste based extract 'water extract of banana peel ash' (WEB). WEB is used as reaction medium as well as a source of base for the current protocol. The pure products are isolated simply by filtration and no chromatographic purification is required. This methodology is applicable to a variety of aromatic nitriles.  
Moreover nano-catalyst also prepared using agro waste and applied for different organic transformation.
5. List of year-wise activities under the collaboration:  
Activity 2019-20  
Development of alternative green solvents for organic transformation  
Activity 2020-21  
Development of nano-catalyst for organic transformation reaction.

Signature of Faculty	Signature and Seal of Head of Department/ Centre/ Cell
 Dr. Utpal Bora Associate Professor Department of Chemical Sciences Tezpur University, Napaam Dist - Sonitpur, Assam 784028  Name: Dr Utpal Bora Designation: Associate Professor	 Prof. & Head Department of Chemical Sciences TEZPUR UNIVERSITY  Name: Professor Ruli Borah Designation: Professor & Head