

Miss Kashmiri Baruah
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Miss K. Baruah obtained her M. Sc. in Physics from Tezpur University. Currently she is pursuing Ph.D. in experimental Condensed Matter Physics from Physics department of Tezpur University. She has joint as a faculty member of the department of physics since 2022.

Publication profile

1. **Kashmiri Baruah**, Devalina Sarmah, Ashok Kumar, “Ternary hybrid nanocomposites of polypyrrole nanotubes with 2D self-assembled heterostructures of protonated g-C₃N₄-rGO as supercapacitor electrodes”, *Ionics*, 27, 3153–3168, 2021.
2. **Kashmiri Baruah**, Ashok Kumar, Pritam Deb, “Visible light active Au@g-C₃N₄ core-shell plasmonic photocatalyst”, *Materials Today: Proceedings*, 47, 1627-1632, 2021.
3. **Kashmiri Baruah** and Pritam Deb, “Nanocomposites of NiO/Graphene as Efficient Electrocatalyst in Fuel Cell”, *Proceedings of 28th National Conference on Condensed Matter Physics. Springer Proceedings in Physics*, 269, 2021.
4. **Kashmiri Baruah** and Pritam Deb, “Electrochemically active site-rich nanocomposites of two-dimensional materials as anode catalysts for direct oxidation fuel cells: new age beyond grapheme”, *Nanoscale Advances*, 3, 3681, 2021.
5. **Kashmiri Baruah** and Pritam Deb, “Enabling methanol oxidation by an interacting hybrid nanosystem of spinel Co₃O₄ nanoparticle decorated MXenes”, *Dalton Transaction*, 51, 4324, 2022.

Conference/Seminar attended

1. Participated and presented a poster entitled “*Origin of magnetic moment in spin-orbit coupled Phosphorene monolayer*” in the National

Conference on Hard and Soft Condensed Matter Physics (NCHSCMP-2017) organized by the Department of Physics, Tezpur University, Tezpur, Assam during 2nd- 4th March, 2017.

2. Got selected for poster presentation in APS March Meeting 2017. Poster entitled “*Origin of minute magnetic moments in spin-orbit coupled zig-zag Phosphorene monolayer*”.
3. Participated and presented a poster “*Self-assembly of rGO-pgC₃N₄ nanosheets decorated by polypyrrole nanotubes (PPyNTs) for supercapacitor application*” in the International Conference on Advanced Nanomaterial and Nanotechnology (ICANN2019) organized by IIT Guwahati during 18-2thDecember, 2019.
4. Participated and presented an oral presentation “*Two-dimensional material as anode catalyst for direct methanol fuel cell*” in the National Conference on Emerging Trends in Material Science organized by Department of Physics, Tezpur University on 17th May 2022.

Award and other achievements

1. Awardees’ of Anundoram Borooah Award
2. DST Inspire Fellow
3. UGC Scholarship “National Fellowship for Students of Other Backward Classes (OBC)” in the year 2018
4. A recipient of Innovation in Science pursuit for Inspired Research (INSPIRE) Fellowship (period 2012-2017) offered by Department of Science and Technology, Ministry of Science and Technology, India
5. Cleared the State Level Eligibility Test (SLET).