

Publications

Published in peer reviewed journals

1. **Boruah, M.J.**, Gogoi, A., and Ahmed, G.A., Laboratory simulation and modeling of size, shape distributed interstellar graphite dust analogues: A comparative study, *Planetary and Space Science*, 125:27-36, 2016.
2. **Boruah, M.J.**, Gogoi, A., Nath, B.C., and Ahmed, G.A., Light scattering studies of randomly oriented polycrystalline fayalite micro particles as interstellar dust analogues, *Journal of Quantitative Spectroscopy and Radiative Transfer*, 196:213-221, 2017.
3. **Boruah, M.J.**, and Ahmed, G.A., Visible light scattering properties of irregularly shaped silica microparticles using laser based laboratory simulations for remote sensing and medical applications, *Laser Physics*, 28(1):015701, 2017.

Paper presented in international conference

1. **Boruah, M.J.**, & Ahmed, G.A., Modeling and experimental light scattering studies of interstellar dust analogue samples using DDA. XXVII IUPAP Conference on Computational Physics (CCP2015), At Indian Institute of Technology Guwahati, Assam, India.
2. **Boruah, M.J.**, & Ahmed, G.A., Modeling of irregular shaped dust particles using DDA with light scattering studies for analogue samples, International Conference on Electronic Devices, Circuits, Applied Electronics and Communication Technology (EDCAECT 2015), at Department of Electronics & Communication Technology Gauhati University, Gauhati, Assam, India.
3. **Boruah, Manash J.**, & Ahmed, Gazi A., Experimental and computational light scattering study of carbonaceous dust analogues (IDMC-2014), 15 – 18 December, 2014, at Tezpur University, Tezpur, Assam.
4. **Boruah, Manash J.**, & Ahmed, Gazi A., DDA based computational light scattering studies of Interstellar silicate dust analogue samples supported by experimental analyses., XL Conference of the Optical Society of India, International Conference on Light and Light based Technologies (ICLLT 2016), At Tezpur University, Napaam, Tezpur, Assam, India.

Publications

Paper presented in national conference

1. **Boruah, M.J.**, and Ahmed, G.A., Light Scattering Computations and Experimental analyses of highly irregular interstellar dust analogue samples, North East Meet of Astronomers II (NEMA – II), at Department of Physics, Tezpur University, Napaam, Tezpur, Assam, India.
2. **Boruah, M.J.**, Kalita, D., Ahmed, G.A., Experimental and computational light scattering study of carbonaceous aerosols and dust, IInd In-house symposium “Contemporary Physics & The Role off IPR” held at the Physics Department, Tezpur University, Tezpur organized by Department of Physics, Tezpur University under the sponsorship of UGC-SAP and TU-IPR Cell, Tezpur, Assam, India, February 7, 2014.

Communicated to referred journals

1. **Boruah, M.J.**, Gogoi, A., and Ahmed, G.A., Modeling and simulation of interstellar dust analogue graphite and fayalite mixture in visible wavelengths aided by laser based experimental characterization, communicated to *Astrophysics and Space Science*.
2. Chetia, L., Kalita, D., **Boruah, M.J.**, Gogoi, A., and Ahmed, G.A., Characteristic observations in Arsenic functionalized diatoms and study of light scattering properties, communicated to *Diatom Research*.