Name of the Faculty member: DR. EKRAMUL KABIR

Designation: Assistant Professor in Physics (W.B.E.S.)

Qualification: M.Sc., Ph.D.

Contact Details:

- E-mail id: ekramulphysics@gmail.com
- Contact No.: 9851518862/ 8240247827
- Office Address: Department of Physics, Darjeeling Govt. College, Lebong-Cart Road, Darjeeling-734101

Vidwan ID: 522352

Teaching Experience: 5 Years 11 Months

Date of Joining in W.B.E.S.: 28.06.2018

Date of Joining in this College: 28.06.2018

Courses Taught: Mathematical Physics, Special Theory of Relativity, Classical Mechanics, Statistical Mechanics etc.

Research interests: Soft condensed matter physics, Characterization of Organic Ferroelectrics, PVDF and its co-polymers, X-ray Diffraction (XRD), Differential Scanning Calorimetry (DSC), Investigation of Dielectric Properties, Hysteresis loop measurement etc.

List of publications:

A) Published papers in Journals:

- "External magnetic field dependent tricritical points of uniaxial to biaxial nematic transition", L. Nasrin, Ekramul Kabir and M. Rahman, Phase Transitions, 2015, 89, 193-201. DOI: 10.1080/01411594.2015.1063630
- "Pure β-phase formation in polyvinylidene fluoride(PVDF)-carbon nanotube composites", Ekramul Kabir, M. Khatun, L. Nasrin, M. J. Raihan and M. Rahman, J. Phys. D Appl. Phys. 2017, 50, 163002. DOI: 10.1088/1361-6463/aa5f85
- "AC electrical conductivity and dielectric properties of doping induced in molecular ferroelectric diisopropylammonium bromide", Ekramul Kabir, M. Khatun, M. J. Raihan, K. Singh, M. Rahman, Mater. Res. Express. 2019, 6, 096306(1-8). DOI: 10.1088/2053-1591/ab2c79



 "Dielectric, impedance, modulus spectroscopy and AC conductivity studies on novel organic ferroelectric diisopropylammonium chloride (dipaCl)", M. Khatun and Ekramul Kabir, J. Adv. Dielectrics. 2021,11, 2150015(1-9). DOI: 10.1142/S2010135X21500156

B) Conference Proceedings:

- "Salts of Diisopropylammonium-A non-toxic alternate to Perovskite Ferroelectrics", Ekramul Kabir, M. Khatun, T. Ghosh, M. J. Raihan and M. Rahman, Proceedings of the '62nd DAE Solid State Physics Symposium 2017', AIP Conf. Proc., 2018, 040006(1-4). DOI: 10.1063/1.5028615
- "Complex Impedance Studies of Organic Ferroelectric Diisopropylammonium Iodide (DIPAI)", Ekramul Kabir, M. Khatun, M. J. Raihan and M. Rahman, Proceedings of the 'ICABS 2019', AIP Conf. Proc., 2019, 040011(1–4). DOI: 10.1063/1.5122348
- "A Review on Polymer and Organic Ferroelectrics for Flexible High Energy Storage Material", M. Khatun, Ekramul Kabir and M. Rahman, Proceedings of the 'ICABS 2019', AIP Conf. Proc., 2019, 040014 (1–4). DOI: 10.1063/1.5122351

Participation in Seminars/Symposia/Conferences/Workshops:

- 1. **Participated** in the 'Seven Day Faculty Development Programme' organized by Department of Management and Business Administration, Aliah University, Kolkata on 12th -20th July, 2016.
- 2. **Participated** in the two day workshop on 'Virtual Instrumentation in LabVIEW platform (WVIL-2016)' organized by Department of Electrical Engineering, IIEST, Shibpur on 9th -10th september, 2016.
- 3. **Participated** in the 'Introductory Workshop on Astrophysics and Cosmology' organized by Department of Physics, Aliah University, Kolkata on 27th -28th September, 2016.
- 4. **Participated** in the training course on 'Local Ground Water related issuses & participatory ground water management' organized by Srikrishna College, Bagula, Nadia on 11th -12th November, 2016.
- 5. **Presented a paper** entitled "Study of ferroelectric dielectric behavior and phase transition of novel molecular ferroelectrics" in the second International Conference on Material Science, organized by Department of Physics, Tripura University from 16th 18th February, 2017.
- 6. **Participated** in the 'International School on Fundamental Crystallography & Workshop on Structural Phase Transitions(ISFCWSPT-2017)' organized by Department of Physics and Astronomy, NIT Rourkela on 30th August to 4th September, 2017.
- 7. **Presented a paper** entitled "Structural and electrical properties of disopropylammonium-cation based molecular crystals" in the National Conference on

'Recent Trends in Condensed Matter Physics)', organized by Bose Institute, Kolkata on 31st October to 3rd November, 2017.

- 8. **Presented a paper** entitled "Salts of Diisopropylammonium-A non-toxic alternate to Perovskite Ferroelectrics" in the '62nd DAE- Solid State Physics Symposium', organized by BARC, Mumbai on 26th -30th December, 2017.
- 9. **Presented a paper** entitled "Complex Impedance Studies of Organic Ferroelectric Diisopropylammonium Iodide (DIPAI)" in the 'International Conference on Advances in Basic Sciences (ICABS19)', organized by GDC Memorial College, Haryana on 7th -9th February, 2019.

ORCID ID: 0000-0001-5079-3529

Participation in OP/RC:

- Participated in the UGC sponsored Orientation Course (online) organized by the UGC-HRDC, Mizoram University from 28th July to 17th August, 2020.
- Participated in the UGC sponsored II online subject Refresher Course organized by the UGC-HRDC, Aligarh Muslim University, Aligarh from 21st August to 4th September, 2021.