

**FACULTY MEMBERS' ACADEMIC PROFILE**

1. **Name of the Faculty member: BIPLAB KUMAR MANDAL**
2. **Designation: Assistant Professor (W.B.E.S.)**
3. **Qualification: M.Sc.**
4. **Specialization: Condensed Matter Physics**
5. **E-mail address: biplab.rana.teacher@gmail.com**
6. **Date of Joining in W.B.E.S.: 24/11/2015**
7. **Date of Joining in this College: 07/12/2020**
8. **Total Teaching experience in College level: 7+**
9. **Research interests:**
10. **Title of thesis (Ph.D.) with year:**
11. **Research guidance:**
12. **Research Projects (Completed and ongoing):**
13. **List of publications:**

**A) Published papers in Journals:**

1. "Green synthesis of NiO nanoparticle using Punica granatum peel extract and its characterization for methyl orange degradation", **B. K. Mandal**, R. Mandal, S. Sikdar, S. Sarma, A. Srinivasan, S. R. Chowdhury, B. Das, R. Das, **Matter. Today. Commun.** 34 (2023) 105302. **I.F-3.662**
2. "Green synthesis of AgCl nanoparticles using Calotropis gigantea: Characterization and their enhanced antibacterial activities", **B. K. Mandal**, R. Mandal, D. Limbu, M.D. Adhikari, P.S. Chauhan, R. Das, Chem. Phys. Lett. 801 (2022), 139699, <https://doi.org/10.1016/j.cplett.2022.139699>. **I.F-2.719**
3. "Elastic properties of green synthesized Al<sub>0.15</sub>Zn<sub>0.85</sub>O nano-discs", S. Barman, R. Das, **B. K. Mandal**, S. Sikdar, A. Biswas, Materials Today: Proceedings, 43 (2021) 3862-3866. <https://doi.org/10.1016/j.matpr.2020.12.1178>. **I.F-1.46**
4. "Structural microanalysis of green synthesized Al<sub>x</sub>Zn<sub>(1-x)</sub>O nanoparticles," S. Barman, S. Sikdar, A. Biswas, **B.K. Mandal**, R. Das, Nano Express 1 (2020), 020003, <https://doi.org/10.1088/2632-959X/ab9f54>.

5. “Cosmological models of the universe with nonlinear dissipative effects”, P. S. Debnath, B. K. Mandal, B. N. Seal Journal of Science, (2017) ISSN-0975-5624. UGC Journal enlistment no-48724.
6. “Partially Polarized Fractional Quantum Hall Effect”, B. K. Mandal, D. Majumder, B. N. Seal Journal of Science, Volume :VIII Issue No-1, (2016)

**B) Conference Proceedings:**

1. “Green synthesis of ZnO nanoparticles and their structural investigations with Williamson-Hall and rietveld refinement method”, S. Barman, S. Sikdar, A. Biswas, **B. K. Mandal**, R. Das, AIP Conf. Proc. 2220. (2020) 020121-1–020121-6. <https://doi.org/10.1063/5.0002025>.
2. “Structural study of iron oxide nanoparticles (INPs) synthesized in aloe vera plant extract”, B. K. Mandal, A. Biswas, S. Barman, R. Das, P. S. Debnath, AIP Conf. Proc. 2220. )2020 020185-1–020185-6.

**14. Membership of Learned Societies/ Editorial Boards, etc.:****15. Patents:****16. Awards:****Other notable activities:****17. A) Participation in Seminars/Symposia/Conferences/Workshops:**

1. **Presented a paper** entitled “*Structural study of iron oxide nanoparticles (INPs) synthesized in aloe vera plant extract*” in the *The 3rd International Conference on Condensed Matter & Applied Physics (ICC 2019)*’, organised by **Govt. Engineering College, Bikaner, Rajasthan during October 14-15, 2019.**

**B) Participation in OP/RC:**

1. Participated in the UGC sponsored **Orientation Programme(Online)** (30<sup>th</sup> OP), organised by HRDC Mizoram University from **28<sup>th</sup> July to 17<sup>th</sup> August, 2020.**
2. Participated in the UGC sponsored Interdisciplinary Refresher Course (Online) on ‘*Foundation of Education*, organised by HRDC Mizoram University from **17<sup>th</sup> August to 30<sup>h</sup> August, 2021.**