

Faculty Profile Format



1. Personal Details:

- a. Name of the Faculty: **Abu Jahid Akhtar**
- b. Academic Degrees: **M.Sc, PhD**
- c. Department: **Physics**
- d. Designation: **Assistant Professor**
- e. Email id: **jahid.dhwu@gmail.com**
- f. Courses Taught: **Quantum Mechanics, Statistical Mechanics, Condensed Matter Physics, Advanced Condensed Matter Physics.**
- g. Area of Research Interests: **Experimental Condensed Matter Physics, with special interest in electrochemical and optical properties of different 2-dimensional nanostructures.**
- h. Teaching Experience [substantive post only]: **6 years**
- i. Administrative Experience: **Working as an Assistant Registrar (Acting).**

2. Research Publications [Last 5 Years]:

Serial No.	Title of the Research Paper	Level [international/national/state]	ISBN/ISSN	Name of the Publishing Agency	Year of Publication
1	In-situ fabricated poly (vinylidene fluoride)-Incorporated perovskite nanocrystals with better Schottky performance and enhanced stability	International	0925-3467 (print); 1873-1252 (web)	Optical Materials (Elsevier)	2023
2	An insight into the electrochemical performance of cobalt-doped ZnO quantum dot for supercapacitor applications	International	2044-5326 (print); 1873-1252 (web)	Journal of Materials Research (Springer)	2022
3	Schottky analysis of formamidinium lead halide perovskite nanocrystals' devices with enhanced stability	International	2190-5517 (web)	Applied Nanoscience (Springer)	2022

4	In-situ synthesis of porous ZnO nanosphere/reduced graphene oxide (ZnO@rGO) composite for structural, optical and electrochemical properties	International	2214-7853 (web)	Materials Today: Proceedings (Elsevier)	2022
5	Sn doping enhanced current rectification in MAPbBr ₃ nanocrystal-metal junction for photodetection	International	2214-7853 (web)	Materials Today: Proceedings (Elsevier)	2022
6	Boosting the Supercapacitive performance of ZnO by 3-dimensional conductive wrapping with graphene sheet	International	1574-1443 (print); 1574-1451 (web)	Journal of Inorganic and Organometallic Polymers and Materials (Springer)	2022
7	Room temperature tuning of non volatile magnetoelectric memory in Al doped Sr ₃ Co ₂ Fe ₂₄ O ₄₁	International	0272-8842 (web)	Ceramics International (Elsevier)	2021
8	A roadmap towards stable perovskite solar cells: prospective on substitution of organic (A) & inorganic (B) cations	International	0957-4522 (print); 1573-482X (web)	Journal of Materials Science: Materials in Electronics (Springer)	2021
9	Book chapter-Graphene-Based Materials for Supercapacitor	International	978-1-83968-323-7	Supercapacitors for the Next Generation (intech open)	2021

10	Charge transport mechanism in reduced graphene oxide/polypyrrole based ultrahigh energy density supercapacitor	International	0957-4522 (print); 1573-482X (web)	Journal of Materials Science: Materials in Electronics (Springer	2020
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3. Research papers presented in conferences/seminars [Last 5 years]:

Serial No	Title of the Paper Presented	Title of the seminar/conference	Level [international/national/state]	Name of the organiser	Date

4. Research Projects:

Serial No.	Title of the Research Project(s)	Funding Agency	Date of Award	Duration of the Project	Research Grants Amount	Status of the Project

5. E-learning material, if any:

Course Details	Name of the Institution	Date/year of uploading	Quadrant I, II, III, IV	Link

6. Research Supervision (Ph.D./M.Phil.)

Serial No.	Name of the student	Research Topic	Name of the institution	Date of Registration	Year of Award of the Degree
1.	Arpita Dutta (Swami Vivekananda Merit cum Means Scholarship)	Development of Two Dimensional (2D) Nanomaterials for Energy Harvesting and	Diamond Harbour Women's University	06.12.2021	Ongoing

		Storage Applications			
2.	Karabi Chatterjee (UGC Single Child Fellow)	Doping Effect of Semiconducting Nanomaterials & It's Optoelectronic Applications	Diamond Harbour Women's University	29.06.2022	Ongoing

7. Programmes Conducted / Organised as Convenor / Organising Secretary at DHWU [Last Five Years]

Serial No.	Date	Name of the Programme	Sponsored By
1	31.01.2020 & 01.02.2020	Workshop on "Astrophysics and Astronomy for Women in India" in collaboration with ICARD, North Bengal University	IUCAA, Pune

8. Other Relevant Information, if any:

Serial No.	Achievements / Awards	Assignment Details [Membership of Professional Bodies/Editorial Board/BOS/BORS etc.]
	Nil	Member of BOS & BORS (DHWU)

Date: 13.04.2023