

Dr. Abu Jahid Akhtar

*Assistant Professor
Department of Physics
Diamond Harbour Women's University
South 24 Parganas, West Bengal, 743368
India*



Contact Information

E-mail: jahid.dhwu@gmail.com

Educational Qualifications

*Ph.D –Indian Association for the Cultivation of Science, Department
Of Materials Science (2016).
M.Sc. - Jadavpur University (2010).
B.Sc. – University of Kalyani (2008).*

Career Profile

Assistant Professor *(Jan 2017-Till Date)*
*Department of Physics
Diamond Harbour Women's University*

SERB National Post-doctoral Fellow *(May 2016-December 2016)*
*Department of Physics
Jadavpur University*

Senior Research Fellow *(August 2012-May 2016)*
*Department of Materials Science,
Indian Association for the Cultivation of Science*

Junior Research Fellow *(August 2010-August 2012)*
*Department of Materials Science,
Indian Association for the Cultivation of Science*

Awards, Merit Certificates and Scholarship

- Selected for the post of National Post-doctoral Fellow in 2016 provided by Science and Engineering Research Board (DST, India).
- Qualified the National Eligibility Test (NET) in December, 2010 and awarded Junior Research Fellowship (JRF) in Physical Science under the Council for Scientific & Industrial Research (CSIR) Fellowship Schemes.
- Qualified the Joint National Eligibility Test (NET) in June, 2010 in the Lectureship category under the Council for Scientific & Industrial Research (CSIR) Fellowship Schemes.
- Qualified Graduate Aptitude Test in Engineering (GATE)-2010 in Physics.
- Qualified Joint Entrance Screening Test (JEST)-2010.

Research Interests

Experimental Condensed Matter Physics, with special interest in Electronic, Magnetic and Dielectric properties of different 2 dimensional nanostructures.

Subjects Taught

- Condensed Matter Physics
- Quantum Mechanics
- Statistical Mechanics
- Electrodynamics

List of Publications

- “Ferromagnetism in graphene due to charge transfer from atomic Co to graphene”, Poulami Hota, Abu Jahid Akhtar, Shatabdo Bhattacharya, Milon Miah, Shyamal K Saha, **Applied Physics Letters** 111 , 042402 (2017).
- “Observation of the predicted potential barrier at graphene/transition metal interface”.Abu Jahid Akhtar, Abhisek Gupta, Bikash Kumar Shaw, Shyamal K Saha, **Journal of Physics D: Applied Physics** 49 , 135304 (2016).

- “Trap induced tunable unusual dielectric properties in transition metal doped reduced graphene oxide”. Abu Jahid Akhtar, Abhisek Gupta, and Shyamal K. Saha, **RSC Advances** 5, 9594 (2015).
- “Effect of spin-orbit coupling on spin transport at graphene/ferromagnet interface.” Sumit Mandal, Abu Jahid Akhtar, Bikash Kumar Shaw and Shyamal K. Saha, **Phys. Status Solidi Rapid Res. Lett.** 9, 544 (2015).
- “Unusual dielectric response in cobalt doped reduced graphene oxide”, Abu Jahid Akhtar, Abhisek Gupta, Bikash Kumar Shaw, and Shyamal K. Saha, **Applied Physics Letters** 103, 242902 (2013).
- “Antiferro Quadrupolar Ordering in Fe Intercalated few layers Graphene”, Abu Jahid Akhtar, Abhisek Gupta, Dipankar Chakravorty and Shyamal K Saha, **AIP Advances** 3, 072124 (2013).
- “In-situ growth of P3HT/graphene composites for supercapacitor application” Abhisek Gupta, Abu Jahid Akhtar and Shyamal K Saha, **Materials Chemistry and Physics** 140, 616 (2013).
- “En route to the conductivity bottleneck in p-type $\text{CuCr}_{1-x}\text{M}_x\text{O}_2\text{-yS}_y$ ($M= \text{Li}, \text{Mg}$)”, P Mandal, N Mazumder, Abu Jahid Akhtar, R Roy, KK Chattopadhyay, **AIP Conference Proceedings** 1832 (1), 110054 (2017).
- “Superparamagnetic behaviour in reduced graphene Oxide-cobalt oxide composite” Abu Jahid Akhtar, and Shyamal K. Saha, **ICEMP 2014** (International Conference Proceedings) 90, ISBN: 978-81-928552-1-9, (2014).