Dr. Rajesh Mukherjee

M.Sc, Ph.D Assistant Professor Department of Physics Ramananda College, Bishnupur, Bankura, West Bengal, India

E-mail:-rajeshxrd@gmail.com

AREAS OF INTEREST/SPECIALISATION

- Synthesis and Characterization of Rare earth Double perovskite oxides
- Synthesis and Characterization of nano particle
- Synthesis and Characterization of graphene and graphene quantum dot

ACADEMIC ACHIEVEMENTS

Received national scholarship for talented children (rural areas-class VIII) sponsored by the Government of West Bengal, INDIA, 1991.

B.Sc (1st Class) and **M.Sc** (1st Class) in Physics from the University of Burdwan in 1999 and 2001.

Qualified **GATE** with 94.17 percentile (All India rank 85) in Physics in 2001.

Qualified in **Joint CSIR-UGC NET (National Eligibility Test)** for Junior Research Fellowship in Physical Sciences in July 2001 and Dec 2001.

RESEARCH EXPERIENCE

From	То	Name and Address of Company / Organization	Position held
18.02.14	18.05.16	Bose institute, Kolkata	Teacher Fellow (UGC-FDP)
05.04.02	08.11.02	E.R.U, IACS, Kolkata	JRF(CSIR)

ACADEMIC EXPERIENCE

Assistant Professor in Physics Department of Physics, Ramananda College, Bankura from 20.01.2007 to till date.

Assistant Teacher in Physics, Dakshinpara R. S. P. C Vidyapith, Nadia from 09.11.2002 to 19.01.2007

ADMINISTRATIVE EXPERIENCE

Governing Body Teacher member in Ramananda College Joint Coordinator and operator of Teacher welfare co-operative fund. Co-ordinator of UGC-sponsored Remedial Coaching Course in Ramananda College.

PUBLICATIONS

(Journals/Proceedings/Chapter in Books)

2020

R Mukherjee, "Quantum dots: Properties, Synthesis and Applications", Research & Reviews: Journal of Physics, 9(1) (2020)1

S. Das, Md. S. Sheikh, **R Mukherjee**, A. Dutta, T. P. Sinha, "Size-dependent structural, optical and vibrational properties of ZnTe Nanoparicle", **International journal of Nano** science, 19(5) (2020) 1950038

2019

R Mukherjee, Md. S. Sheikh, T. P. Sinha, "Sintering temperature dependent optical and vibrational properties of Sm2NiMnO6 nanoparticle", Journal of Nano and Electronic Physics, 11(6) (2019) 06010.

H. S. Tripathi, R. Mukherjee, M. Rudra, R. Sutradhar, R. A. Kumar, T. P. Sinha, "Insulator to semiconductor transition in graphene quantum dots" AIP conference proceeding 2162 (2019) 020088.

2018

R Mukherjee, A Dutta, T. P. Sinha, "Octahedral distortion-driven electrical and vibrational properties of A_2ErTaO_6 (A = Sr and Ca)", Journal of Advanced Dielectrics 8, (4) (2018) 1850025-32.

R Mukherjee, T. P. Sinha, "Comparative study of A2ErNb06 (A=Ba2+,Sr2+, Ca2+) double perovskite oxides: An electric modulus approach" Wesleyan journal of Research 11(2018) 69-75.

2017

S. Halder, **R. Mukherjee**, A. Dutta & T. P. Sinha "Exploring the electronic structure and optical properties of double perovskite Ba_2RESbO_6 (RE = Ho, Er) from first-principles calculations", **Ferroelectrics**, **518** (2017) **163-170**.

2016

R. Mukherjee, A. Dutta, T. P. Sinha, "Dielectric relaxation of rare earth ordered double perovskite oxide Ba₂ErTaO₆", Journal of Electronic Materials, 45[1] (2016) 846-852.

2015

- **R. Mukherjee**, A. Dutta, T. P. Sinha, "Collective vibrational modes and dielectric relaxation of Ca₂ErNbO₆", Materials Science in semiconductor Processing, 39 (2015) 67-73.
- **R.** Mukherjee, S. Saha, A. Dutta, T. P. Sinha, "Dielectric and Raman spectroscopic studies of A_2ErSbO_6 (A=Ba, Sr, Ca)", Journal of Alloys and Compounds, 651 (2015) 222-229.

2014

R. Mukherjee, B. Ghosh, S. Saha, C. Bharti and T. P. Sinha "Structural and electrical transport properties of a rare earth double perovskite oxide: Ba2ErNbO6", Journal of Rare Earths, 32(4) (2014) 334-342.

2013

R. Mukherjee, Sadhan Chanda, Chandrahas Bharti, P.Sahu, T. P. Sinha, "Micro-structure, optical properties and ac conductivity of rare earth double perovskite oxides: Sr2ErNbO6" Physica B, 422(2013)78–82.

2011

R. Mukherjee, T.Sahu, S. Sen and P.Sahu, "Structural and microstructural evolution due to increasing Co substitution in Ni1- xCoxFe2O4: An X-ray diffraction study using the Rietveld method" Materials Chemistry & Physics 128 (2011) 365-370

2010

R. Mukherjee, C. Bharti, and T. P. Sinha, "Dielectric Relaxation of A2ErNbO6 (A = Ba2 + and Sr2 +)" Solid State Physics, Proceedings of the 55th DAE Solid State Physics Symposium 2010.

PRESENTATION

2020

Presented paper in NCFMSP-2020 at SKBU, Purulia 05-06 March 2020

2019

Presented paper in CMDAYS19 at Vidyasagar University 28-30 Sep2019

2018

Presented paper in National Seminar at Ramananda college, Bishnupur, Bankura on 28th March, 2018

2017

Presented paper in International Science Seminar at Burdwan Raj College, Burdwan on 10th Oct, 2017.

Presented paper in National conference on Recent Trends in Condensed Mater Physics at Bose institute, Kolkata during 31st Oct – 03rd Nov, 2017.

2016

Presented paper in UGC Sponsored National Conference on the central role of light in science and the importance of optical technologies at St. Paul's Cathedral Mission College (Kolkata, West Bengal) during 15-16 December 2016.

2015

Presented paper in Condensed Matter Days (CM Days-2015) at *Visva-bharati (Santiniketan, West Bengal)* during 27-29 August 2015.

Presented paper in UGC Sponsored National Workshop on Material Science and Technology at Maulana Azad College (Kolkata, West Bengal) during 10-12 December 2015.

2014

Presented paper in Condensed Matter Days (CM Days-2014) at Centre for Research in Nanoscience and Nanotechnology, University of Calcutta (Kolkata, West Bengal) during 27-29 August 2014.

Presented paper in National Seminar on Ferroelectrics & Dielectrics (NSFD-XVIII) at Manipur University (Imphal, Manipur) during 3-5 Novmber 2014.

2010

Presented paper in the 55th DAE-SSPS from Dec 26-30th, 2010 at Manipal University, Manipal.

PARTICIPATION

Participated in the State Level Seminar on "Some Approaches in Mathematical Discipline", held on 19th March, 2012, Organized by the Department of Mathematics, Ramananda College, Bishnupur, Bankura, in collaboration with the Department of Mathematics, the University of Burdwan, and Sponsored by University Grants Commission.

Participated in the One Day Seminar on "Protection of Hypertension and Stroke", held on 9 th February, 2012, Organized by the Department of Physiology & the Department of Nutrition, Ramananda College, Bishnupur, Bankura, to celebrate 150th Birth Anniversary of Swami Vivekananda and his scientific thoughts.

Participated in the Lecture Workshop on "Interdisciplinary Physics: Some Basic Aspects", held on 6-7 th January, 2011, Organized by the Department of Physics, Ramananda College, Bishnupur, Bankura, and Sponsored by Joint Science Education Programme of Indian Academy of Sciences (Bangalore), Indian National Science Academy (New Delhi) and The National Academy of Sciences, India (Allahabad).

Worked as Joint Organizing Secretary in the State Level Seminar on "Nanomaterials: Synthesis and Applications", held on 8 th September, 2010, Organized by the Department of Physics, Ramananda College, Bishnupur, Bankura, Sponsored by University Grants Commission.

Participated in 1st State Level Seminar on "Recent Advances in Materials Science" (SSRMS - 1), held on 27-28th March, 2008, Organized by the Department of Physics, Ramananda College, Bishnupur, Bankura, Sponsored by University Grants Commission.

Participated in the One Day Seminar on "Biodiversity and the Need for Its Conservation", held on 1 st February, 2008, Organized by Ramananda College, Bishnupur, Bankura,

Sponsored by West Bengal Biodiversity Board (WBBB), Dept. of Environment, Govt. of West Bengal.

PERSONAL DETAILS IN BRIEF

Date of Birth : 07.01.1978

Marital Status : Married

Nationality : Indian

Current Status : Assistant Professor

Address : Sankattala

Bishnupur, Bankura

Pin-722122