



BARASAT GOVERNMENT COLLEGE

TEACHER'S PROFILE

DR DHANANJOY ROY, DEPARTMENT OF PHYSICS

- **DESIGNATION** : Associate Professor
- **QUALIFICATION** : M.Sc., Ph.D.
- **DATE OF JOINING THE SERVICE** : Feb 19, 2002
- **DATE OF JOINING THE INSTITUTION** : Dec 2, 2010
- **ADDRESS FOR COMMUNICATION** : BC 46/5, Bichitra Abasan, Salt Lake City, Kolkata - 700064, West Bengal, India
- **PHONE NO** : 9474447411
- **EMAIL ADDRESS** : roydrdhananjoy@gmail.com
- **SPECIALIZATION** : Solid State Physics
- **TEACHING EXPERIENCE** : PG - 11 years; UG - 20 years; B.Tech. - 3 years.
- **COLLEGE SERVED** : (1) Jhargram Raj College; from February, 2002 to July, 2008; (2) Berhampore Govt. College of Engineering and Textile Technology; July, 2008 to November 2010; (3) Barasat Govt. College, December 2010 to Till date.

➤ ACADEMIC AND ADMINISTRATIVE EXPERIENCE	: PG & UG course teaching; Question paper setter and Internal & External Examiner of University; serving as Governing Body (GB) member of Ramakrishna Mission Vivekananda Centenary College, Rahara since 2016.
➤ TOPICS TAUGHT	: Quantum Mechanics, Classical Mechanics, Solid State Physics, Electronics, Heat & Thermodynamics, General Properties of Matter, Acoustics, Optics and Practicals
➤ AREA OF RESEARCH & INTEREST	: Previously I have researched on Superconductivity, Transparent & Conducting materials, Solar Cell grade Microcrystal/ Polycrystals/ Amorphous. Presently my research interest is synthesis and characterisation of NANO Alluminum doped Zinc Oxide materials.
➤ ONGOING PROJECT DETAILS	: No
➤ AWARD RECEIVED	: NONE
➤ PATENT DETAILS	: NONE
➤ EXTRACURRICULAR ACTIVITIES	: NONE
➤ CAREER PROFILE	: <i>Honors Graduate in Physics from Calcutta University in 1986, M.Sc. in Physics from Kalyani University in 1990 & ranked 3rd; Ph.D. on High Temperature superconductivity from Kalyani University in 1998; Post Doctoral work in Kanpur IIT, IACS, Jadavpur and Paris, FRANCE (2000-2002). Attended nearly 10 International Conferences, 10 National Conferences, Reviewer of International Conferences.</i>
➤ ACADEMIC LINK	: NA

PUBLICATION

➤ JOURNAL PUBLICATION :

- (1) Dhananjoy Roy, 'Aluminum doped Nano Zinc Oxide can act as good carrier for Biomedicine.', Springer Nature Singapore Pte Ltd., 44348, ISSN 2195-271X ISSN 2195-2728 (electronic); ISBN 978-981-33-6914-6 ISBN 978-981-33-6915-3 (eBook).
- (2) Dhananjoy Roy, Meghasree Basu and Sourav Paul, 'Synthesis of Al-doped Zinc Oxide nano particle TCO material by simple Sol-Gel method', Jurnal. of Phys.: Conf. Ser. 1579 012007), vol. 1579,, 44034, Online ISSN: 1742-6596
- (3) C. Longeaud, D. Roy and O. Saadane, 'Role of interstitial hydrogen and voids in light-induced metastable defect formation in hydrogenated amorphous silicon: a model', Phys. Rev. B, vol. 65, 085206/1-9, 2002, 1098-0121 (print); 1550-235X (web)
- (4) D. Roy, C. Longeaud, O. Saadane, S. Vignoli, R Butté, R. Meaudre and M. Meaudre, 'Evolution with light-soaking of polymorphous materials prepared at 423K', J. non-crystalline solid, vol. 299-302, part 1, 2002, ISSN: 0022-3093
- (5) C. Longeaud, D. Roy and Z.T. Hangouan, 'Evolution with light-soaking of the conduction band tail of amorphous silicon like materials', Applied Physics Lett. vol. 77, no. 22, American Institute of Physics (United States), 2000, 0003-6951 (print); 1077-3118 (web)
- (6) D. Roy and A. Nag, 'Field and frequency dependence of critical current density J_c of ceramic HTSCs', Indian Journal of Physics A, Springer Science+Business Media on behalf of the Indian Association for the Cultivation of Science, 1999, 0973-1458 (print); 0974-9845 (web)
- (7) D. Roy, B. Ghosh, C. Neogy, S.K. Deb and A. Nag, 'Electrical study of 123 HTSC (77 to 400K) with varying fraction of Y; explanation of the normal state behaviour', phys. Stat. Sol. (b), Germany, 1995, ISSN 0370-1972



BOOK PUBLICATION

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