



## **Dr. SANJAY CHATTOPADHYAY**

**Designation:** W. B. E. S. / Assistant Professor of Physics

### **About Me:**

Sanjay Chattopadhyay qualified secondary examination conducted by WBBSE and higher secondary examination conducted by WBCHSE from Konnagar High School in 1991 and 1993 respectively with National Scholarship. Then he completed his graduation with Physics Honours from Serampore college in 1996 and post graduate study with specialization in electronics from erstwhile Presidency college in 1998 both under University of Calcutta.

### **Experience / Expertise:**

Sanjay Chattopadhyay joined West Bengal Educational Service (W.B.E.S.) as Lecturer in Physics at Taki Government College, Taki-743429 on 26.05.2006. After almost five years he was transferred to Maulana Azad College (Govt.), Kolkata-13 and promoted as Assistant Professor of Physics. During his service period he did one UGC sponsored Orientation Program in 2009, one Refresher Courses in 2011 and two Short Term Courses in 2018 all organized by HRDC, University of Calcutta. In 2013, Dr. Chattopadhyay already successfully completed One UGC funded minor project of total amount Rs. 1,26,000/- entitled 'A study on nanosized CMR manganites'.

### **Qualifications:**

Sanjay Chattopadhyay was admitted to Ph. D. (Science) degree from Jadavpur University on 21.08.2008 under supervision of Prof. B. K. Chowdhury, Department of Solid State Physics, Indian Association for the Cultivation of Science (IACS), Jadavpur, Kolkata-700032. The title of the thesis was '*Study of ion beam irradiation effects and defects on different CMR manganites*'.

### **Specialisation & Area of Interests:**

Sanjay Chattopadhyay started his doctoral research work as CSIR Junior Research Fellow firstly in the Department of Physics, University of Calcutta, under supervision of Prof D. Banerjee and then in the Solid State Physics Division of IACS, Jadavpur under the guidance of Prof B. K. Chowdhury. During his Ph.D. course in Calcutta University, he came in contact with renowned experimental physicist Prof. Rangalal Bhattacharyya, ex-HOD, Instrumentation Division, SINP, Kolkata. That time he was an active part of a research group and involved in various experimental research works such as preparation of polycrystalline samples mainly CMR manganites, HTSCs, doped semiconducting oxides, spinel oxides etc using programmable furnace and other accessories, Fe based alloys mainly invar, nanophase materials by ball-milling technique. He also performed resistivity measurements at low temperature ( $\sim 30\text{K}$ ) using He cryogenerator. He operated series of experiments on various systems using Nuclear Solid State Techniques like Positron annihilation spectroscopy and Mössbauer spectroscopy (PAS & MS) with relevant data analysis. He was a part of some magnetic measurements on CMR manganite materials at NCL, Pune. He participated in five beam time experiments at pelletron accelerator at Inter University Accelerator Centre, New Delhi, India. A part of the outcome of experimental research conducted at IUAC, Delhi was presented by him at the 21st International Conference on Atomic Collisions in Solids (ICACS 21), during July 4-9, 2004, Genova, Italy. As a post doctoral fellow at Department of Physics, University of Trento, Italy, he set up positron beam facility lab under supervision of Prof. Antonio Zecca of the said department and performed a series of experiments on positron annihilation cross section measurement and corresponding data analysis on different system such as argon, Dihydropyran etc.

### **Current Teaching:**

Sanjay Chattopadhyay first served Taki Government College and is now posted at Maulana Azad College and taught a large part of the Physics Honours and General

syllabus under Calcutta University and West Bengal State University. Presently he is teaching Classical Mechanics, Electronics and Solid State Physics.

**Research Interests:**

Sanjay Chattopadhyay's prime research interest is in the preparation of semiconducting oxide and manganites materials, tailoring defects to induce changes in material properties in the direction of its usage in practical application and characterization of those properties. Some pedagogic experimental project works with undergraduate students are also organized under DBT scheme.

**Selected Publications:**

<b>Book Chapters</b>	01 (One)
<b>Papers</b>	36 (Thirty six)
<b>Posters</b>	17 (Seventeen)
<b>Other</b> ( <i>Undergraduate Project/Thesis/Poster</i> )	04 (Four)

**Contact Details:**

Email:	sanjay.chattopadhyay@gmail.com
Telephone number(s)	9830355085
Postal Address	Flat # GA, Debarghya Appartment, 172,
DumDum Park,	Kolkata-700055, West
Bengal, India	

**Professional Memberships and Activities:**

Life member of Indian Physical Society

**Related Links:**

<https://www.sciencedirect.com>, <https://www.aps.org>, <https://www.aip.org>,  
[www.caluniv.ac.in](http://www.caluniv.ac.in), [www.iuac.res.in](http://www.iuac.res.in), <https://www.unitn.it/en>