Dr. SANJIB BHATTACHARYA
Associate Professor-Deputy Director, UGC-Human Resource Development Centre,
Adjunct Faculty, Department of Physics,
University of North Bengal,
P.O. North Bengal University, Raja Rammohunpur, Dist. Darjeeling, Pin: 734013, WB, India
E-MAIL: ddirhrdc@nbu.ac.in, sanjib_ssp@yahoo.co.in
Mobile-9433144789

AWARDS AND ACHIEVEMENTS:

A) Principal Investigator (PI) of ongoing DST, Govt. of India funded major research project "**Investigations of Electrical and Dielectric Properties of Chalcogenide Glassy Alloys**" [Sanction No. **CRG/ 2018/ 000464**] ; Duration: 2019-2021

B) Principal Investigator (PI) of ongoing major CSIR-funded research project "**Relaxation Dynamics of Lithium Ion Conducting Glass-Ceramics**" [Sanction No. 03(1411)/ 17/ EMRII] ; Duration: 2017-2019

C) Principal Investigator (PI) of completed major CSIR-funded research project "**Study of Electrical Properties of Mixed Phased Glassy Nanomaterials**" [Sanction No. 03(1286)/ 13/ EMRII]; Duration: 2013-2016

D) Recipient of INSA Visiting Scientist Award, 2012 (INSA, Sanction No. SP/VF-6/2012-13/339)

E) Received "**Teacher Award**" due to significant contribution to the teaching-learning process and research from Maulana Abul Kalam Azad University of Technology, West Bengal on 8th September, 2018

F) Received "**Outstanding Paper Award**" in State Science & Technology congress in the year 2018.

G) Received "**Outstanding Paper Award**" in 25th Regional Science & Technology Congress, WB, 2017

H) Received **Elite** Grade in NPTEL Online Certificate Course on "**Solid State Physics**" during July-October, 2018

I) Reviewer of various peer reviewed journals like Mat Sc and Eng B, J. Alloys and Compounds etc.

Academic, Research Activity & Professional Membership

Present Position: ***Associate Professor-Deputy Director, UGC-Human Resource Development Centre, Department of Physics, University of North Bengal, WB***

Past Position: ***Assistant Professor in Physics, Siliguri Institute of Technology, Siliguri, WB (2010-2020)***

Sr. Lecturer in Physics, Institute of Engineering and Management, Kolkata, WB (2009-2010)

Lecturer in Physics, Dream Institute of Technology, Kolkata, WB (2007-2009)

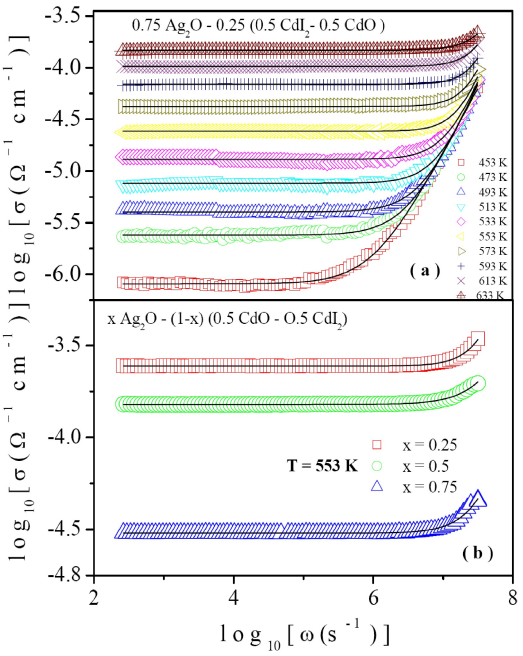
JRF & SRF in the Solid State Physics Department, INDIAN ASSOCIATION FOR THE CULTIVATION OF SCIENCE, Kolkata (2003-2007)

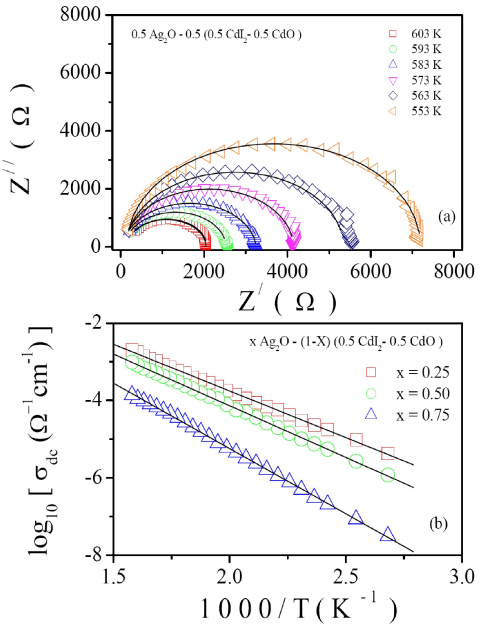
Qualification:	***MSc (Physics) from University of North Bengal, 2002***
Highest Qualification:	***PhD (Science) from INDIAN ASSOCIATION FOR THE CULTIVATION OF SCIENCE AND JADAVPUR UNIVERSITY, WB, 2008***
Past Experiences:	***13 years Teaching Experiences in Engineering Physics, Materials Science and Solid State Devices and 17 years Research Experience.***
Membership of Professional Society	1. ***Life member of NEUTRON SCATTERING SOCIETY OF INDIA*** 2. ***Life member of INDIAN ASSOCIATION FOR THE CULTIVATION OF SCIENCE*** 3. ***Life member of Material Research Society of India***
Total Publication in International Journals	**60**
PhD Produced:	**03**
PhD Continuing:	**05**

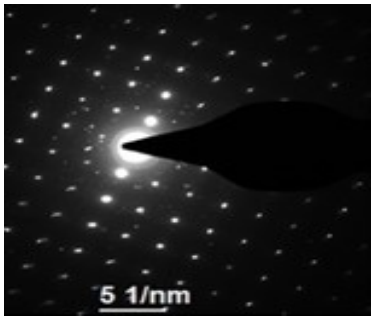
FIELD OF RESEARCH INTEREST

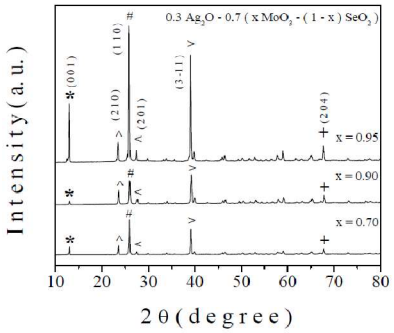
- ☞ **Condensed Matter and Composite-Material**
- ☞ **Dielectric Spectroscopy**
- ☞ **Electrical Transport of Ions and Electrons in Disordered Solids**
- ☞ **Glass and Glass-Nanocomposites**
- ☞ **Chalcogenide Glassy Alloys**
- ☞ **Lithium Ion Conductor**
- ☞ **Structural Studies using XRD, FESEM, HRTEM etc.**
- ☞ **Magnetic Properties of Transition Metal doped Disordered Solids**
- ☞ **Study of Micro-hardness**

SOME PLOTS RELATED TO RECENT WORK









Research Publications:

Refereed Publications in Peer Reviewed Journals

1. **Transport properties of AgI doped silver molybdate superionic glass-nanocomposites**
   S. Bhattacharya and A.Ghosh; J. Phys.: Condens. Matter **17** (2005) 5655–5662
2. **Relaxation of silver ions in fast ion conducting molybdate glasses**
   S. Bhattacharya and A.Ghosh; Solid State Ionics **176** (2005) 1243–1247
3. **Electrical properties of ion conducting molybdate glasses**
   S. Bhattacharya and A.Ghosh; J. Appl. Phys., **100** (2006) 114119-5
4. **Formation of the ZnO nano particles and α-AgI nano crystals embedded in superionic glass-nano composites**
   S. Bhattacharya and A.Ghosh; Appl. Phys. Lett. **88** (2006) 133122-3
5. **Relaxation dynamics of Ag^+ ions in ZnO nanoparticle embedded superionic glass-nano composites**
   S. Bhattacharya and A.Ghosh; Phys. Rev. B **74** (2006) 184308-5 (Also in V. J. Nano Sc. Tech. Vol-**14** (2006) Issue-23).
6. **Silver molybdate nanoparticles, nanowires and nanorods embedded in glass-Nanocomposites**
   S. Bhattacharya and A.Ghosh; Phys. Rev. B **75** (2007) 092103-4
7. **Electrical transport properties of semiconducting lithium molybdate glass**

Nanocomposites

S. Bhattacharya and A.Ghosh; J. Chem. Phys **127** (2007) 194709-6

8. **Conductivity relaxation in iodomolybdate glass-nanocomposites embedded with ZnO nanoparticles and α-AgI nanocrystals**

   S. Bhattacharya and A.Ghosh; J. Nanosci. Nanotechnol. **7** (2007) 3684-3688

9. **Relaxation dynamics in superionic glass-nanocomposites**

   S. Bhattacharya and A.Ghosh; J. Am. Ceram. Soc. **91** (2008) 753-759

10. **Hopping conduction in zinc vanadate semiconducting glasses**

    A. Ghosh, **S. Bhattacharya**, D. P. Bhattacharya and A. Ghosh; J. Appl. Phys., **103** (2008) 083703-5

11. **Dielctric Properties and Phase Transition of Zinc tris (thiourea) sulphate single crystal**

    S. Moitra, **S. Bhattacharya**, T. Kar and A. Ghosh; Physica B, **403** (2008) 3244-3247

12. **Growth of α-AgI Nanocrystals and α-AgI Nanowires in Superionic Selenite Glasses**

    S. Bhattacharya and A.Ghosh; Advanced Science Letters **2** (2009) 55-59

13. **Tunneling of large polarons in semiconducting zinc vanadate glasses**

    A. Ghosh, **S. Bhattacharya** and A. Ghosh; J. Phys.: Condens. Matter. **21** (2009) 145802-5

14. **Optical and Other Structural Properties of Some Zinc Vanadate Semiconducting Glasses**

    A. Ghosh, **S. Bhattacharya** and A. Ghosh; J. Alloys and Compounds, **490** (2010) 480-483

15. **Relaxation Dynamics in Superionic Molybdate Glass Nanocomposites Embedded with α-AgI Nanoparticles**

    S. Bhattacharya and A.Ghosh; J. Phys. Chem. C, **114** (2010) 5745-5750

16. **Dielectric behavior of iodomolybdate glass-nanocomposites**

    Sanjib Bhattacharya, D. Roy, M. P. F. Graca, M. A. Valent and A. K. Bar; Advanced Science Letters **3**(2010)523-526 (http://www.aspbs.com/science/)

17. **Fractal Dimensionality of Ion Conduction in Glass-Nanocomposites**

    S. Bhattacharya, A. K. Bar, D. Roy, M. P. F. Graca and M. A. Valente; Materials Physics and Mechanics, **10** (2010) 56-61

18. **Structural behaviors and optical properties of semiconducting zinc-molybdate glass-nanocomposites**
    Sanjib Bhattacharya, Tanusree Kar, Arun Kr. Bar, Debasish Roy, M. P. F. Graca and M. A. Valente; Sc. Adv. Mat**. 3** (2011) 284-288
19. **Broadband conductivity spectra of fast-ion-conducting silver selenite glasses: Dependence on power law and scaling**
    B. Deb**, S. Bhattacharya** and A. Ghosh; Euro Phys. Lett. **96** (2011) 37005-5
20. **Electrical Conductivity of Zincmolybdate Glass-Nanocomposites**
    Sanjib Bhattacharya, Arun Kr Bar, Debasish Roy, M. P. F. Graca and M. A. Valente; Advanced Science Letters **16** (2012) 399-402
21. **Dielectric Response of Zincmolybdate Glass-Nanocomposites**
    Sanjib Bhattacharya, Arun Kr Bar, Debasish Roy, M. P. F. Graca and M. A. Valente; J. Advt. Phys. **1** (2012) 120-125
22. **Growth of ZnO Nanoparticles and Nanorods Using a Novel Synthesis Route: Explanation with Hit and Stick Model**
    Sanjib Bhattacharya, Tapati Mallik, Tanusree Kar, M. P. F. Graca and M. A. Valente; J. Advt. Phys. **1** (2012) 146-149
23. **Structural Study of Molybdate Glass-Nanocomposites**
    Sanjib Bhattacharya, Arun Kr Bar, and Debasish Roy; J. Advt. Phys. **2** (2013) 241-244
24. **Conductivity of Cu^{+2} ion-conducting glassy-nanocomposites**
    Arun Kr Bar, Debasish Roy, Ranadip Kundu, M. P. F. Graca, M. A. Valente and **Sanjib Bhattacharya**; Mat. Sc. Eng. B**, 189** (2014) 21-26
25. **Relaxation of Cu^{+2} ions in Momybdate glass-nanocomposites**
    Arun Kr. Bar, Debasish Roy and **Sanjib Bhattacharya**; Advt. Sc. Focus, **2** (2014) 155-158
26. **Vickers Micro Hardness Measurement of Glass-Nanocomposites**
    Arun Kumar Bar, Tanusree Kar, **Sanjib Bhattacharya** and Debasish Roy; Journal of Material Science and Mechanical Engineering **1**(2014) 18-22
27. **Conductivity Relaxation of ZnO doped Glassy Nanocomposites**
    Ranadip Kundu, Debasish Roy and **Sanjib Bhattacharya**; J. Advt. Phys **3** (2014) 237-240

28. **Giant Hardness of Heat-treated Glass-nanocomposites**
    Arun Kr. Bar, Ranadip Kundu, Debasish Roy and **Sanjib Bhattacharya**; J. Advt. Phys **3** (2014) 241–243
29. **Polaron Transport of Nano-CdO Embedded Glass-Semiconductor**
    Gopi Chand Mishra, Anindya Sundar Das, Ranadip Kundu, Debasish Roy, Sabyasachi Ror, Arun Kr. Bar and **Sanjib Bhattacharya**; J. Advt. Phys **3** (2014) 254-257
30. **Electrical Transport of Mixed Phased Glassy Nanocomposites**
    Ranadip Kundu, Debasish Roy and **Sanjib Bhattacharya**; Trans. Ind. Cer. Soc. **74** (1) (2015) 35-40
31. **Interpretation of dc and ac conductivity of $Ag_2O–SeO_2–MoO_3$ glass-nanocomposite-semiconductor**
    S. Bhattacharya, R. Kundu, A. S. Das and D. Roy; Mat. Sc. Eng. B **197** (2015)51-57
32. **Structural and Optical Properties of V_2O_5-MoO_3-ZnO Glass-Nanocomposite System**
    Anindya Sundar Das, Madhab Roy, Debasish Roy, Satchidananda Rath & **Sanjib Bhattacharya**; Trans. Ind. Cer. Soc. **75** (2016) 1-6
33. **Electrical relaxation and grain boundary effect in CdI_2 doped glass-nanocomposites**
    Arun Kr. Bar, Koyel Bhattacharya, Ranadip Kundu, Debasish Roy and **Sanjib Bhattacharya;** Journal of Non-Crystalline Solids **452** (2016) 169-175
34. **Microstructure, Electrical Conductivity and Modulus Spectra of CdI_2 doped Nanocomposite-Electrolytes**
    Ranadip Kundu, Debasish Roy and **Sanjib Bhattacharya**; Physica B: Condensed Matter **507** (2017) 107-113
35. **Formation of Nano-Phases and study of Transition Metal Oxide doped Glassy Systems**
    S. Bhattacharya, A. S. Das, M. Roy and D. Roy; Journal of Non-Crystalline Solids **460** (2017) 29-35
36. **DC Electrical Transport Properties and Non–adiabatic Small Polaron Hopping conduction in Semiconducting Vanadate Glasses**
    Anindya Sundar Das, Madhab Roy, Debasish Roy & **Sanjib Bhattacharya**;

International Journal of Latest Technology in Engineering, Management & Applied Science **6** (2017) 11-19

37. **Investigation of DC Conductivity and Non-Adiabatic Small Polaron Hopping in V_2O_5-SeO_2-Zno Glass Nanocomposites**
    Anindya Sundar Das, Madhab Roy, Debasish Roy & **Sanjib Bhattacharya**; International Journal for Research in Applied Science & Engineering Technology **5** (2017) 1940-51
38. **Positron annihilation studies and complementary experimental characterization of xAg_2O-(1-x)(0.3CdO-0.7MoO_3) metal oxide glass Nanocomposites**
    Ranadip Kundu, **Sanjib Bhattacharya**, Debasish Roy and P.M.G. Nambissan; RSC Advance **7** (2017) 8131-8141
39. **Anomalous electrical conductivity in selenite glassy Nanocomposites**
    Arun Kr Bar, Koyel Bhattacharya, Ranadip Kundu, Debasish Roy and **Sanjib Bhattacharya;** Materials Chemistry and Physics **199** (2017) 322
40. **Study of Electrical Transport of Ag_2O – CdO – MoO_3 Glass-Nanocomposite-semiconductor**
    Ranadip Kundu, Debasish Roy and **Sanjib Bhattacharya;** Chemistry Select **2** (2017) 6100-6108
41. **Investigations of Microstructure and Dc Conductivity of V_2O_5-Nd_2O_3 Glass Nanocomposites**
    Anindya Sundar Das, Madhab Roy, Debasish Roy, Tanusree Kar, Satchidananda Rath and **Sanjib Bhattacharya**; Chemistry Select **2** (2017) 112273-112280
42. **Frequency and temperature dependent conductivity spectra of mixed transition metal oxide doped semiconducting glassy system**
    Sanjib Bhattacharya, A. S. Das, M. Roy and D. Roy; Journal of Non-Crystalline Solids **478** (2017) 58
43. **V_2O_5–MoO_3–ZnO Thick Film Resistors as Highly Selective Trace Level Ethanol Gas Sensors**
    Anindya Sundar Das, Madhab Roy, D. R. Patil, Koyel Bhattacharya, Debasish Roy and **Sanjib Bhattacharya;** IEEE Electronics, Materials Engineering and Nano-Technology (IEMENTech), 2017

44. **Identification of defects in the transition metal oxide-doped glass nanocomposite xV2O5–(1-x)(0.05MoO3–0.95ZnO) using positron annihilation spectroscopy and other techniques**
    Anindya Sundar Das, Madhab Roy, Debasish Roy, **Sanjib Bhattacharya** and P.M.G. Nambissan; Journal of Non-Crystalline Solids **482** (2018) 52
45. **Temperature and frequency response of conductivity in Ag_2S doped chalcogenide glassy semiconductor**
    Swarupa Ojha, Anindya Sundar Das, Madhab Roy and **Sanjib Bhattacharya**; Physica B: Condensed Matter **538** (2018) 191-198
46. **Conductivity spectra of silver-phosphate glass nanocomposites: Frequency and temperature dependency**
    Dipankar Biswas, Ranadip Kundu, Anindya Sundar Das, Madhab Roy, Debasish Roy, L.S. Singh and **Sanjib Bhattacharya**; Journal of Non-Crystalline Solids **495** (2018) 47–53
47. **Defects characterization and study of amorphous phase formation in xV_2O_5-(1-x)Nd_2O_3 binary glass nanocomposites using positron annihilation and correlated experimental techniques**
    Anindya Sundar Das, Madhab Roy, Debasish Roy, **Sanjib Bhattacharya** and P. M.G. Nambissan; Journal of Alloys and Compounds **753** (2018) 748-760
48. **AC conductivity of transition metal oxide doped glassy nanocomposite systems: temperature and frequency dependency**
    A. S Das, M Roy, D Biswas, R Kundu, A Acharya, D Roy and **S Bhattacharya**; Materials Research Express **5** (9) (2018) 095201
49. **Conductivity spectra of lithium ion conducting glassy ceramics**
    S. Bhattacharya, A Acharya, D Biswas, AS Das and LS Singh; Physica B: Condensed Matter **546** (2018) 10
50. **Micromechanical hardness study and the effect of reverse indentation size on heat-treated silver doped zinc-molybdate glass Nanocomposites**
    S. Bhattacharya, R Kundu, K Bhattacharya, A Poddar and D Roy; Journal of Alloys and Compounds **770** (2019) 136.
51. **Effect of V_2O_5 concentration on the structural and optical properties and DC**

electrical conductivity of ternary semiconducting glassy nanocomposites

Anindya Sundar Das, Dipankar Biswas, Madhab Roy, Debasish Roy and **Sanjib Bhattacharya;** Journal of Physics and Chemistry of Solids **124** (2019) 44–53

52. **Lithium ion conductivity in Li_2O-P_2O_5-ZnO glass-ceramics**

    Sanjib Bhattacharya, Amartya Acharya, Anindya Sundar Das, Koyel Bhattacharya and Chandan Kumar Ghosh; Journal of Alloys and Compounds **786** (2019) 707-716

53. **DC electrical properties and non–adiabatic small polaron hopping in V_2O_5–CdO–ZnO glass nanocomposites**

    A S. D, M. Roy, D. Roy and **Sanjib Bhattacharya**, Indian Journal of Pure & Applied Physics **57** (2019) 803-811.

54. **An Investigation of S–Se–Te Semiconducting Glassy Alloys: Structural Characterization and Electrical Conductivity**

    Dipankar Biswas, Loitogbam Surajkumar Singh, Anindya Sundar Das and **Sanjib Bhattacharya,** Journal of Non-Crystalline Solids **510** (2019)101–111

55. **AC conductivity and dielectric behavior of Cu-S-Te chalcogenide glassy system**

    Swarupa Ojha, Madhab Roy, Anil Chamuah, Koyel Bhattacharya, **Sanjib Bhattacharya**, Materials Letters **258** (2020) 126792-4

56. **Electrical transport of chalcogenide glassy system: interpretation by Hunt's model and microstructure**

    Swarupa Ojha, Madhab Roy, Anil Chamuah, Koyel Bhattacharya, **Sanjib Bhattacharya**, SN Applied Sciences **2** (2020) 838-7

57. **AC conductivity behaviour and charge carrier concentrations of some vanadate glassy system**

    Sanjib Bhattacharya, Physics Letters A **384** (2020) 126324-4.

58. **Microstructures and charge carrier transport of some Li_2O doped glassy ceramics**

    Amartya Acharya, Koyel Bhattacharya, Chandan Kumar Ghosh, **Sanjib Bhattacharya**, Materials Letters **265** (2020) 127438-4

59. **Charge carrier transport and electrochemical stability of Li_2O doped glassy ceramics**

    Amartya Acharya, Koyel Bhattacharya, Chandan Kumar Ghosh, Achintesh Narayan

	Biswas and **Sanjib Bhattacharya,** Materials Science and Engineering B **260** (2020) 114612-4		
	Refereed Publications in conferences		
1	**Synthesis and Characterisation of $Li[Ni_{1/3}Mn_{1/3}Co_{1/3}]O_2$ cathode materials for lithium ion battery**	A. Dutta, **S. Bhattacharya** and A. Ghosh	**Workshop on Power Source System and Related Aerospace Application, October 06-07, 2006 held at the RCI, Hyderabad, India**
2	**Relaxation Dynamics in Superionic Glass-Nanocomposites**	**S. Bhattacharya** and A. Ghosh	**Proceedings of the National Symposium on Science and Technology of Glass and Glass-Ceramics, p. 56-59, 2008**
3	**Electrical Transport Properties and Dielectric Response of Iodomolybdate Glass-Nanocomposites.**	Arun Kr. Bar, Debasish Roy and **Sanjib Bhattacharya**	**IEMCON 2011 organised by IEM in collaboration with IEEE on 5th & 6th of Jan, 2011.**
4	**An Investigation of New Glass-Nanocomposites: Structural Study.**	Arun Kr. Bar, Debasish Roy, Ranadip Kundu and **Sanjib Bhattachrya**	**National Conference on Recent Advancements in Mechanical Engineering, (NCRAME 2013), held at NERIST, 2013, P. 373-378**
5	**Influence of CuI doping on the dielectric relaxation of glassy nanocomposites**	Arun Kr. Bar, ,Debasish Roy and **Sanjib Bhattacharya**	**Proceedings of 1st International Science and Technology Congress 2014, P. 54-58, ISBN: 9789351072485 (Elsevier Publications 2014)**
6	**Development of Nano-CdO doped glassy semiconductor**	Anindya Sundar Das, Debasish Roy, Gopi Chand Mishra, Arun Kr. Bar and **Sanjib Bhattacharya**	**Proceedings of 1st International Science and Technology Congress 2014, P. 59-63, ISBN: 9789351072485 (Elsevier Publications 2014)**
7	**Electrical Transport of glass-nanocomposite ionic conductor**	Ranadip Kundu, Arun Kr. Bar, Debasish Roy and **Sanjib Bhattacharya**	**Proceedings of 1st International Science and Technology Congress 2014, P. 64-68, ISBN: 9789351072485 (Elsevier Publications 2014)**
8	**Electrical Transport of Ag_2O-**	**Sanjib**	

	SeO_2-MoO_3 glass-nanocomposite-semiconductor	**Bhattacharya**, Ranadip Kundu, Anindya Sundar Das and Debasish Roy	**IEEE CALCON 2014**
9	**CuI doping on the electrical relaxation of Glassy Nanocomposites**	Arun Kr. Bar, Debasish Roy and **Sanjib Bhattacharya**	**IEEE CALCON 2014**
10	**"Electrical and Mechanical Properties of ZnO Doped Silver-Molybdate Glass-Nanocomposite System"**	Ranadip Kundu, Debasish Roy and **Sanjib Bhattacharya**	**International Conference On Condensed Matter & Applied Physics, 2015. Proceeding of: AIP Conference Proceedings 1728** (2016) 020064
11	**"Relaxation of Cu^{+2} in Selenite Glass Nanocomposites"**	Arun Kumar Bar, Ranadip Kundu, Debasish Roy and **Sanjib Bhattacharya**	**International Conference On Condensed Matter & Applied Physics, 2015. Proceeding of: AIP Conference Proceedings 1728** (2016) 020124
12	**"On The Mechanical Properties of Selenite Glass Nanocomposites"**	Arun Kumar Bar, Ranadip Kundu, Debasish Roy and **Sanjib Bhattacharya**	**International Conference On Condensed Matter & Applied Physics, 2015. Proceeding of: AIP Conference Proceedings 1728** (2016) 020396
13	**"Electrical relaxation and grain boundary effect in glass-nanocomposites"**	Arun Kumar Bar, Ranadip Kundu, Debasish Roy and **Sanjib Bhattacharya**	**Conference Proceedings of THE 4TH INTERNATIONAL CONFERENCE ON ADVANCES IN MATERIALS& MATERIALS PROCESSING (ICAMMP-IV), Held at IIT Kharagpur, November 5-7, 2016.**
Participation of Symposium/conferences/ workshop/ Lectures/ Session Chair			
2004			
1	**6th National Conference on Solid State Ionics (5th- 7th Oct. 2004) held on Jadavpur University, Kolkata-700032**		
2005			

2	**DST nano-school (7 - 22 February, 2005) Held on S. N. Bose National Centre for Basic Sciences, Kolkata-700064**		
2006			
3	**Relaxation dynamics in superionic glass-nanocomposites**	A. Ghosh and **S. Bhattacharya**	Proceedings of 10th Asian Conference on Solid State Ionics (KANDY, SRI LANKA, June, 12-16, 2006).
4	**Dynamics of Ag^+ ions in fast ion conducting glass nano-composites**	**S. Bhattacharya** and A. Ghosh	Proceedings of 17th AGM of Materials Research Society of India (LUCKNOW University, February 13 – 15, 2006).
2008			
5	**Relaxation Dynamics in Superionic Glass-Nanocomposites**	**S. Bhattacharya** and A. Ghosh	Proceedings of National Symphosium on Science and Technology of Glass and Glass-Ceramics, 2008
2009			
6	**Delivered a lecture on Young Physicists' Colloquium held on 20th August, 2009 at the Auditorium of Saha Institute of Nuclear Physics**		
7	**Delivered a lecture on Young Scientists' Colloquium held on 30th October, 2009 at the Auditorium of Saha Institute of Nuclear Physics**		
2010			
8	**Dielectric behavior of bi-phasic glass-nanocomposites**	**Sanjib Bhattacharya,** Arun Kr. Bar and Debasish Roy	Proceedings of Condensed Matter Days (Kalyani University, August 25 – 27, 2010)
2011			
9	**Correlation between electrical transport and microstructure of glass-nanocomposites**	**Sanjib Bhattacharya**	Proceedings of one day symposium on "Trends in Electron Microscopy in Frontier Science" (Rabindra-Okakura Bhaban, March 24, 2011)
2012			
10	**Conduction of small polaron in Zinc Molybdate system**	**Sanjib Bhattacharya**, Ar un Kr Bar, and Debasish Roy	Proceedings of 1st International Workshop on Nanomaterials: Engineering Photon and Phonon Transport (Jadavpur University, December 14-15, 2012)
2013			

11	**Transport of small polaron in Zinc Molybdate system**	**Sanjib Bhattacharya**, Ar un Kr Bar, and Debasish Roy	International Conference on Nanoscience and Nanotechnology (Babasaheb Bhimrao Ambedkar University, November 18-20, 2013)
2014			
12	**Delivered a lecture on "Two Days Workshop on Funding Opportunities and Success Stories of Capturing Grant" held at Netaji Subhash Engineering College, Garia on July 11-12, 2014.**		
13	**Preparation and Characterisation of CdO Nanoparticles Doped Zinc-molybdate Amorphous Semiconductor**	Anindya Sundar Das, Ranadip Kundu, Gopi Chand Mishra, Debasish Roy, Arun Kr. Bar and **Sanjib Bhattacharya**	National Conference on Nanoscience and Nanotechnology (CRNN, Calcutta University, September 18-19, 2014)
14	One session chair, Invited Speaker and deliver a lecture on "Study of Ionic Transport in Biphasic Glassy Nanocomposites" in "2nd International Conference on Nanostructured Materials and Nanocomposites (ICNM2014)" held at Mahatma Gandhi university, Kottayam, Kerala during 19-21 December, 2014.		
15	***ISTE Short Term Training Programme on Engineering Physics,*** 2 Week (8-18, December, 2015), ***Sponsoring Agency: IIT Bombay***		
16	Basic Pedagogy Training: Objective and Outcome Based Education System-Transforming Engineering Education to Match Global Needs, 6 Days Workshop, 2016 by EQUATE, New Delhi.		
17	Delivered lecture on "JOURNEY FROM IONIC TO CHALCOGENIDE GLASSY ALLOYS" in RECENT TRENDS IN COMPOSITE MATERIALS, held at Mechanical Engineering Department, Jadavpur University on December, 2016.		
18	Delivered lecture on "Study of Electrical Conductivity of Non-conventional Selenite Glassy Nanocomposites" in 2nd regional Science and Technology Congress, 2017, held at Siliguri College. (07.12.2017 to 08.12.2017)		
19	Delivered lecture on "Study of Electrical Conductivity of Non-conventional Selenite Glassy Nanocomposites" in 25th West Bengal State Science and Technology Congress, 2018, held at Science City Auditorium, Kolkata during 04.03.2018 to 05.03.2018		

Publications in Books/ Book-chapter:

Sl. No.	*Author(s) Name*	*Title of the Book/ Book-chapter*	*Name of the Publisher*	*Year of Publication*	*ISBN NO*
1	**Sanjib Bhattacharya**	Engineering Physics: Vol-I	Books and Allied pvt ltd	2010	*NA*
2	**Sanjib Bhattacharya and**	Physics for Engineers	Aryan Publishing	2011	81-921653-9-6

	Namita Duttagupta		House		
3	**S. Bhattacharya**	Solid state Devices	Kalyani Publishers	2011	978-93-272-1620-9
4	**Sanjib Bhattacharya**	GLASS NANOCOMPOSITES Synthesis, Properties and Applications **(Chapter-8: Electrical Transport Properties of Ion-Conducting Glass Nanocomposites)**	Elsevier (http://www.sciencedirect.com/science/book/9780323393096)	2016	978-0-323-39309-6
5	**Sanjib Bhattacharya (Author & Editor)**	Metal Oxide Glass Nanocomposites	Elsevier (http://www.sciencedirect.com)	2020	978-0-12-817458-6

Details of Seminar/ Conference Organised:

Name of the Programme	*Duration*	*Sponsoring Agency*
Recent Trends in Materials Research, 2015 Invited Speakers: 1. Dr. Sanatan Chatterjee, Calcutta University 2. Dr. Dipankar Chatterjee, Calcutta University 3. Prof. Soumen Mondal, Scientist, CMERI, Durgapur, WB	One Day Seminar (11th September, 2015 at SIT campus)	Siliguri Institute of Technology
Post Celebration of National Science Day, 2016 Invited Speakers: 1. Dr. B. C. Paul, Head, Department of Physics, University of North Bengal 2. Dr. Goutam Biswas, Department of Mathematics, Siliguri College.	One Day Popular Lecture (18th March, 2016 at SIT campus)	Siliguri Institute of Technology
Recent Trends in Materials Research, 2017 Invited Speakers: 1. Dr. P. K. Mandal, Professor, Department of Physics, University of North Bengal 2. Dr. Somnath Chatterjee, Professor, SMIT	One Day Seminar (7th September, 2017 at SIT campus)	Siliguri Institute of Technology

Details of PhD Guidance:

Sl. No.	*Scholar's Name*	*Title of the Thesis/ present work*	*Name of the University (PhD registration)*	*Current Status*
1	Dr Arun Kr Bar	Mechanical and Electrical Properties of Some Disordered Solids and Nanocomposites.	Jadavpur University (Ref No. D-7/E/711/12)	PhD awarded, 2016
2	Dr. Ranadip Kundu	Study of Mechanical , Electrical, and Dielectric Properties of Some Oxide Glass Nanocomposites	Jadavpur University (Ref No. D-7/E/61/15)	PhD awarded, 2018
3	Dr. Anindya Sundar Das	Study of Electrical and Dielectric Properties of Some Semiconducting Glass-nanocomposite Materials.	Jadavpur University	PhD awarded, 2018
4	Swarupa Ojha	Study of Electrical Relaxation of Some Transition Metal Ions Doped Chalcogenide Glass-Nanocomposites	Jadavpur University (Ref No. D-7/E/498/17)	PhD Registered
5	Amartya Acharya	Relaxation Dynamics of Lithium-Ion conducting Glass-Ceramics and Nanocomposites	MAKAUT	PhD Enrolled
6	Aditi Sengupta	Comparison between Electrical Conductivity of Some Ionic Conductors and Their Crystalline Counterparts.	MAKAUT	PhD Enrolled
7	Anil Chamuah	Study of Charge Carrier Transport And Dielectric Response Of Some Chalcogenide Glassy Systems	MAKAUT	PhD Enrolled

8	Annwesha Sengupta	Study on Electrical And Physical Properties Of Some Amorphous Semiconductors	MAKAUT	PhD Enrolled
9	Asmita Poddar	Study of Electrical Transport and Structural Behaviour of Some Non-Conventional Glassy Conductor.	Jadavpur University	Ongoing, Not Enrolled.

Details of Major Research Project:

Name of the sponsoring Agency	***Title of the Project***	***Project Period***	***Status***
Council of Scientific and Industrial Research (CSIR)	Study of Electrical Transport Properties of Mixed Phased Glassy Nanocomposites Sanction No. 03(1286)/13/EMRII	August, 2013 – July, 2016	Completed
Council of Scientific and Industrial Research (CSIR)	Relaxation Dynamics of Lithium Ion Conducting Glass-Ceramics Sanction No. 03(1411)/17/EMRII	August, 2017 – Continue	Ongoing
Department of Science and Technology, Govt. of India	"Investigations of Electrical and Dielectric Properties of Chalcogenide Glassy Alloys" Sanction No. **CRG/ 2018/ 000464**	March, 2019-Continue	Ongoing

Details of Experimental Projects added to the Teaching Lab:

Name of the Programme	***Duration***
BTech Final year project on "Electrical Transport Properties of Some Glass-nanocomposites" of Mr Gopi chand Mishra (student of BTech-Nanotechnology of Bhagwant University, Ajmer)	**Two Months**