FACULTY PROFILE

Name	**Dr. Anupama Chanda**						Date of Birth: 229.005.1976			
Designation	Assistant Professor			Date of holding Present Post			07.06.2013			
Name of the Department and School	Department of Physics						School of Mathematical and Physical Sciences			
Contact Details	Email :anupamamatsc@gmail.com						Mobile:8085387887			
Educational Qualifications (UG onwards)	Ph.D, Post doc									
Research Area/Specialization	Condensed Matter Physics/Materials Science									
Awards/ Honors / Fellowship Conferred (With details thereof)	1. CSIR-NET-2002 (Physical Sciences) 2. CSIR-JRF-2002, (Physical Sciences) 3. GATE-2002 (Physics) (92.39 percentile) 4. Brain Korea (BK21) Postdoctoral fellowship (August 2009—August 2011) 5. National Scholarship (10th)									
Summary of Publications (Number only)	Research Papers	24	Books		Chapter in Books		Seminars/ Conferences Proceedings	13	Projects	01
Best Five Research Publications	• "Observation of Optical Band-Gap Narrowing and Enhanced Magnetic Moment in Co-Doped Sol−Gel-Derived Anatase TiO2 Nanocrystals" J. Phys. Chem. C 2018, 122, 26592−26604.									
	• "Defect mediated mechanism in undoped, Cu and Zn-doped TiO2 nanocrystals for tailoring the band gap and magnetic properties", RSC Advances, 2018, 8, 41994.									
	• "Structural and Magnetic study of undoped and cobalt doped TiO2 nanoparticles" RSC Advances, 8 (2018) 10939.									
	• "Anisotropic super-paramagnetism in cobalt implanted rutile-TiO2 single crystals Journal of Magnetism and Magnetic Materials, 465 (2018) 122-127.									
	• "Study of Structural, Optical and Magnetic Properties of Cobalt Doped ZnO Nanorods**"** RSC Advances, 7 (2017) 50527-50536.									

Research Projects (Completed and Ongoing):

S.No.	*Title*	*Funding Agency*	*Duration*	*Sanction order No. & Date*	*Amount in Rs. Lakh*	*Completed /ongoing*
1.	Transition Metal Doped TiO_2 Thin Films for Spintronics and Photocatalytic Applications	UGC	2 Years	F.30-12/2014 (22 July 2014)	6 Lakhs	Completed

PUBLICATIONS – 2013 onwards **:**	
National Publications(Details of Research Papers) – 2013 onwards:	
2014	• "Effect of Viscous Solution on Highly Conductive PEDOT:PSS Thin Films", **Anupama Chanda**, Shikha Varma, Kwangsoo No, Journal of International Academy of Physical Sciences (2014) Vol. 18 (1) 77-81 (ISSN: 0974-9373).
International Publications(Details of Research Papers) – 2013 onwards:	
2016	• "Optical studies of cobalt implanted rutile TiO2 (110) surfaces", Shalik Ram Joshi , B. Padmanabhan, **Anupama Chanda**, Indrani Mishra, V.K. Malik,N.C. Mishra, D. Kanjilal, Shikha Varma,Applied Surface Science 387 (2016) 938–943. • "Effect of cobalt implantation on structural and optical properties of rutile TiO2(110)", Shalik Ram Joshi, B. Padmanabhan, **Anupama Chanda**, V. K. Malik, N. C. Mishra, D.Kanjilal, Shikha Varma, Applied Physics A, 122 (2016) 713. • "Effect of cobalt doping on structural and optical properties of ZnO nanoparticles", J. Singh, S. Gupta, P. Shukla, V. Chandra and **A. Chanda**, AIP Conference Proceedings 1731, 050091 (2016); doi: 10.1063/1.4947745.
2017	• "Study of Structural, Optical and Magnetic Properties of Cobalt Doped ZnO Nanorods**"** **Anupama Chanda**, Shipra Gupta, M. Vasundhara, Shalik R. Joshi, G. R. Mutta and Jai Singh, RSC Advances 7 (2017) 50527-50536. • "Scaling Studies of Self-affine Nanopatterned TiO2 Surfaces created via Ion Implantation", Shalik Ram Joshi ,**Anupama Chanda**, D. Kanjilal, Shikha Varma,Thin Solid Films, 639, (2017) 145-151. • "Complex damage distribution behaviour in cobalt implanted rutile TiO2 (110) lattice", Shalik Ram Joshi , B. Padmanabhan, **Anupama Chanda**, Sunil Ojha, D. Kanjilal, Shikha Varma, Nuclear Instruments and Methods in Physics Research B, 410 (2017) 114-121. • "Conducting Polymer PEDOT:PSS: An Emerging Material for Flexible and Transparent Electronics" **Anupama Chanda**, Shalik Ram Joshi, Shikha Varma, Kwangsoo No, Sensors & Transducers, 210 (3) (2017) 29-31 (ISSN: 1726-5479).

2018	• "Observation of Optical Band-Gap Narrowing and Enhanced Magnetic Moment in Co-Doped Sol−Gel-Derived Anatase TiO2 Nanocrystals" V. R. Akshay,B. Arun,Guruprasad Mandal,Geeta R. Mutta,Anupama Chanda,and M. Vasundhara, J. Phys. Chem. C 2018, 122, 26592−26604. • "Defect mediated mechanism in undoped, Cu and Zn-doped TiO2 nanocrystals for tailoring the band gap and magnetic properties", V. R. Akshay,B. Arun, Shubhra Dash, Ajit K. Patra, Guruprasad Mandal, Geeta R. Mutta, Anupama Chanda and M. Vasundhara, RSC Adv., 2018, 8, 41994. • "Investigation on structural, morphological and optical properties of Co-doped ZnO thin films" Prashant Shukla, Shristi Tiwari, Shalik Ram Joshi, V.R. Akshay, M. Vasundhara, Shikha Varma, Jai Singh, Anupama Chanda, Physica B: Condensed Matter 550 (2018) 303–310. • "Structural and Magnetic study of undoped and cobalt doped TiO2 nanoparticles" **Anupama Chanda**, Kumarmani Rout, M. Vasundhara, Shalik Ram Joshi, Jai Singh, RSC Advances 8 (2018) 10939. • "Anisotropic super-paramagnetism in cobalt implanted rutile-TiO2 single crystals" S. R. Joshi, B. Padmanabhan, A. Chanda, N. Shukla, V.K. Malik, D. Kanjilal, S. Varma, Journal of Magnetism and Magnetic Materials, 465 (2018) 122-127. • Investigations on optical properties of ZnO decorated graphene oxide (ZnO@GO) and reduced graphene oxide (ZnO@r-GO), P. Kumar, S. Som, M.K. Pandey, A. Chanda, Jai Singh, Journal of Alloys and Compounds, 744 (2018) 64-74.
2019	• "Significant reduction in the optical band-gap and defect assisted magnetic response in Fe-doped anatase TiO2 nanocrystals as dilute magnetic semiconductors" V. R. Akshay, B. Arun, Guruprasad Mandal, Anupama Chanda and M. Vasundhara, New J. Chem.,(2019), 43, 6048 • "Ultra-bright emission from Sr doped TiO2 nanoparticles through r-GO conjugation" Sanhita Mandal, Neha Jain, Mukesh Kumar Pandey, S. S. Sreejakumari, Prashant Shukla, Anupama Chanda, SudiptaSom, Subrata Das and Jai Singh, R. Soc. open sci. 6: 190100 (2019). • "Well-Ordered Ripple-Shaped Microstructures of Mn Thin Films on GaAs Substrates"Anupama Chanda, Joydip Sengupta, and Chacko Jacob, Advanced Science, Engineering and Medicine 11, 1–6, (2019)

International Seminar/Conference/Workshops (Attended) – 2013 onwards	
1	"Preparation of Reduced Graphene Oxide Thin Fils from Bio-Polymer and Evaluation of Its Optical Constants", 3rd International conference on Condensed Matter and Applied Physics (ICC 2019) Oct 14-15, 2019, Bikaner, Rajasthan.
2	"Study of Bio-Polymer Derived Graphene Oxide-ZnO Nano-Composite Thin Films", 3rd International conference on Condensed Matter and Applied Physics (ICC 2019) Oct 14-15, 2019, Bikaner, Rajasthan
3	"Conducting Polymer PEDOT:PSS: An Emerging Material for Flexible and Transparent Electronics" International Conference on Nanostructured Polymeric Materials and Polymer Nanocomposites (ICNPM), 13-15 November, 2015, M.G.University, Kottayam, Kerala, India.
4	"Study of PEDOT:PSS thin films on glass substrates" Internationational Conference on Functional Materials (ICFM), 5-7 February 2014, IIT Kharagpur, West Bengal, India.
International Seminar/Conference/Workshops (Organised) – 2013 onwards	
1	International conference on Recent Trends in Mathematical, Physical and Computational Sciences (ICRTMPCS- 2019), December 12-14, 2019, Dr H.S.Gour University, Sagar, M.P.
2	International conference on Interface of Physical, Chemical and Biological Sciences, January 11-13, 2017, Dr H.S.Gour University, Sagar, M.P.
Research Papers in Proceedings (International Seminar/Conference/Workshops) – 2013 onwards	
1	"Effect of cobalt doping on structural and optical properties of ZnO nanoparticles", AIP Conference Proceedings 1731, 050091 (2016);
Invited Lectures delivered *(Outside University)* with title, date and place – 2013 onwards*:*	
1	"Conducting Polymer PEDOT:PSS: An Emerging Material for Flexible and Transparent Electronics", International Conference on Nanostructured Polymeric Materials and Polymer Nanocomposites (ICNPM), 13-15 November, 2015, M.G.University, Kottayam, Kerala, India.
No. of Foreign Visits :	
1	South Korea (August, 2009- August, 2011), for doing postdoc
2	Singapore (1-6 July 2007) for attending International Conference on Advanced Materials and Technology (ICMAT)-2007
Memberships in Academic Bodies:	
• Life Member, Magnetic Society of India	•
Other Academic Achievements :	
(i) Reviewer of the Journal(s) (With details of the journal(s) and duration)	
• New Journal of Chemistry, ACS Applied Materials and Interfaces, Inorganic Chemistry, Physica B	