Dr. GOVERDHAN REDDY TURPU

Associate Professor Department of Pure and Applied Physics Guru Ghasidas Vishwavidyalaya (A Central University) Koni, Bilaspur 495009, Chhattisgarh, INDIA. **Mobile**: +91-8963901321 /+91-9340463161 **Email**: <u>dr.tgreddy@gmail.com</u>, tg.reddy@ggu.ac.in ORCID Page: <u>https://orcid.org/0000-0002-1435-4091</u>



07/2023 - Till date 07/2011 - 07/2023 10/2010 - 07/2011 02/2010 - 10/2010 04/2007 - 05/2009 06/2006 - 03/2007

: Associate Professor, GGV, Bilaspur : Assistant Professor, GGV, Bilaspur

- : Research Professor, Sejong University, Seoul, South Korea
- : Postdoctoral Fellow, IIP –UFRN, Natal, Brazil
- : Postdoctoral Fellow, IUCF Indiana University, Bloomington, USA
- : Research Associate, UGC DAE CSR, Indore, India

U.G. & P.G. TEACHING EXPERIENCE

<u> 12 Years +</u>

RESEARCH ACTIVITIES

Total Fund received so far:

89.17 Lakhs (<u>37.02 (Completed) + 52.15 (on going))</u>

Average Impact Factor: 2.51, h - index: 12 and i - 10 index: 15

Ph.D. Guidance		M.Sc.	Research Publications		Projects		Conferences	
Completed	On-going	Projects Guided	Papers (Scopus/WoS)	<u>Book</u> <u>Chapters</u>	Completed	<u>Ongoing</u>	Participated	<u>Organized</u>
01	03	25	44	01	04	02	20	02 (Org. Sec. And Local host)

UNIVERSITY ASSIGNMENTS

- > Assistant Director, Internal Quality Assurance Cell, Guru Ghasidas Vishwavidyalaya, India
- Member, Internal Quality Assurance Cell, Guru Ghasidas Vishwavidyalaya, India for 2021-23
- Member, CBCS Draft Regulation Preparation Committee (2015), Guru Ghasidas Vishwavidyalaya, India
- School Coordinator, NAAC SSR Preparation Committee, Guru Ghasidas Vishwavidyalaya, India (2018)
- School Coordinator, AQAR Preparation and Submission Committee, Guru Ghasidas Vishwavidyalaya, India for 2018-21
- Member, Validation Committee, NIRF Overall, Guru Ghasidas Vishwavidyalaya, India for 2016-21
- Member, Departmental Research Committee, Department of Pure and Applied Physics, Guru Ghasidas Vishwavidyalaya, India for 2021-23
- Member, Board of Studies, Department of Pure and Applied Physics, Guru Ghasidas Vishwavidyalaya, India for 2019-21
- Academic Coordinator Department of Pure and Applied Physics, Guru Ghasidas Vishwavidyalaya, India for 2016-18

CURRENT RESEARCH INTERESTS

Broad Area : Experimental Condensed Matter Physics, Materials Science

Specific Projects : Multiferroics, Topological Insulators and Graphene Oxide Composites

1) <u>Multiferroics</u>: Investigation of type II Multiferroicity in FeVO4 and MnWO4 materials where the ferroelectricity is driven by magnetic interactions. A detailed understanding on the structural phase transitions in FeVO4 due to transition element doping is being done by Mr. Ganesh Bera, ph.d. student in my group. The results recently appeared in <u>Journal Applied Physics (2017) as Featured Article and on the Cover page of the Journal</u>. In continuation, the effect of these structural phase transitions was studied through the magnetic and dielectric studies along with temperature dependent XRD measurements at <u>Indus 2, Synchrotron Facility</u>. These results appeared in <u>Phys.Rev. B. (2019)</u>.

2) <u>Topological Insulators</u>: Investigation of surface states and their modification due to magnetic and non magnetic ion doping into several topological insulators like BiTe and SnTe along with plans to develop new topological insulators with mateials engineering. Single crystal growth, peeling of single crystal layers with thin flakes for device fabrication through lithographic techniques is being implemented by us successfully. Some of the results appeared in <u>Scientfic Reports (2019)</u>, <u>PCCP (2019)</u>, J.App.Phy (2021) recently.

3) <u>Graphene Oxide Composite:</u> Synthesis of graphene oxide and it's semiconducting / functional inorganic oxide composites for practical applications is being done by our group mainly focussing toward photocatalysis and super capacitor applications. Some of our recent reports appeared in <u>J.Phy.Chem.C (ACS) (2018)</u>, J.Alloys and Comp. (2020) and App.Surf. Sci. (2019)

RESEARCH PROJECTS:

1) Funding Age	ency: University Grants Commission, India (# <u>43-407/2014 (SR)</u>)
Title of The	Project: "Fabricaiton and Characterization of Reduced Graphene Oxide Field Effect Transistors
	(RGO-FET) for sensor applications"
Total Grant	: 10.02 Lakhs Duration : 2015-2018
2) Funding Age	ency: UGC DAE CSR, Indore, India (# CSR-IC/CRS-87/2014-15/594)
Title of The	Project: "Study of Lattice Dynamics in Fe doped VO ₂ through Mossbauer Spectroscopy"
Total Grant	: 12.82 Lakhs Duration: 2015-2020
3) Funding Age	ency: LIGC DAE CSR_Mumbi_India (# LIDCSR/MUM/CD/CRS-M-263/2017/55)
Title of The	Project: "Neutron Diffraction studies into structural changes and magnetic interactions in
11110 01 1110	$Fe_{1,x}M_xVO_4$ (M = Cr. In and Al) solid solutions"
Total Grant	: 12.65 Lakhs Duration: 2017-2020
4) Funding Age	ency: IUAC, New Delhi Deline ("Encoded and the line internet of the second s
Title of The	Project: "Energetic Ion Irradiation on Graphene Oxide and Graphene Oxide- Orthovananadte
Dearra	Times 2 Shifts (Leng Engand) Durations 2020
5) Eurodina Aga	Time: 5 Simits (Low Energy) Duration: 2020
J) Fulluling Age	Project, "Evaluring Structure Droperty Polotionship in Polor Magnet For A Mor. W.O. to Tupo
The of The	Froject. Exploring Structure Froperty Relationship in Fold Magnet $Fe_{2-x}A_xWo_{3-y}W_yO_8$ to Tune the Magnetaelastric Counling?
Tatal Crant	u 10 Labla Duration: 2020.22
C) Escuding A	~ 10 Lakiis Duration: 2020-25
6) Funding Ag	gency: DST – SERB, New Deini (# CRG/2021/006934)
Title of The	e Project: "Exploring Multiferroicity in Hollandite type Mn - based Oxide Materials through
	Experimental and Theoretical Studies"
Total Grant:	43.28 Lakhs Duration: 2022-25
ACADEMIC	RECORD:
2000 -2005: Ph	D. [Physics]
Title of thesis:	"Study of Spin and Lattice Polaron dynamics in CMR Manganites"
	Thesis Supervisor: Prof K Rama Reddy, (Ph.D. USA)
1007 1000	University College of Spience Osmania University. India
1997-1999	M Sa Major Dhugias Dassed with First Class
	M.SC. Major. Filysics, Fassed with First Class
<u>1994-1997</u>	M. A. L. D. Govt. College, Gadwal, Telangana (Affiliated to Osmania University, India)
	B.Sc. Major: Physics Passed with First Class
1992-1994	M. A. L. D. Govt. College. Gadwal. Telangana (Board of Intermediate Education, AP)
<u>=</u>	Intermediate Major: M. P. Chem. with First Class
1991-1992	Sri Ravindra High School, Gadwal, Telangana (Board of Secondary Education, AP)
	Class X with First Class
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AWARDS AND FELLOWSHIPS

Oct 2010	Research Professorship at Sejong University, Seoul, South Korea
Feb. 2010	Postdoctoral Fellowship at IIP-UFRN, Natal, Brazil (Mentor: Prof. S K Malik)
April 2007	Postdoctoral Fellowship at IUCF, Indiana University, Bloomington, IN, USA (Mentor: Prof C Y Liu)
Jun 2006	Research Associateship, CSIR, India (All India Competition) (Mentor: Prof. Ajay Gupta)
April 2006	Dr K V Rao Research Award 2006, by Dr K V Rao Scientific Society, India
Apr 2003	Senior Research Fellowship, CSIR, India (All India Competition) (Supervisor: Prof. K. Rama Reddy)
Dec 1999	Scholarship: Junior Research Fellowship, DST Project, Osmania University, Hyderabad (All India Competition) (P.I.: Prof. Yadagiri Reddy and Honorary Professor: Prof. K. Rama Reddy)

AWARDS FOR ALUMNI RESEARCH STUDENTS (During the stay of students)

- ✓ Dr. Ganesh Bera was awarded <u>"MRSI Young Scientist Award 2019"</u> at "Young Scientists Colloquium2019" organized by Material Research Society of India (MRSI), Kolkata Chapter at Saha Institute of Nuclear Physics (SINP), Kolkata, India on 17th September, 2019.
- ✓ Dr. Ganesh Bera was awarded <u>Best Oral Presentation Award</u> at CSR users' research scholar's workshop held at UGC-DAE Consortium for Scientific Research, Indore, India during December, 2017.
- ✓ Dr. Ganesh Bera is being awarded <u>"D. S. Kothari Postdoctoral Fellowship Award"</u> by UGC, New Delhi in 2021
- ✓ Ms. Neha was awarded <u>Best Oral Presentation Award</u> at International Conference on Current Trends in Advanced Materials and their applications for Societal Development, held at Dr H S Gour Vishwavidyalaya (Central University), Sagar, Madhya Pradesh during 8-10 March 2022.

PUBLIATION HIGHLIGHTS

- Invited speaker at Indian Science Congress- Materials Science Section 2023 at RTM Nagpur University, Nagpur, India.
- Featured article in Journal of Applied Physics: Bera et.al, 122 (2017)115101.



- Cover page of Journal of Applied Physics: Issue 11, Vol. 122 (2017)
- <u>Physical Review B in 2019 (Corresponding Author from GGV, Bilaspur)</u>
- Best research Paper Awards for the Year 2019 and 2020 at GGV, Bilaspur in the school
 <u>of Physical Sciences</u>

MEMBERSHIP IN PROFESSIONAL BODIES

- 2016 -17 Member, American Chemical Society
- 2016 Life Member, Indian Society for Particle Accelerators, India
- 2022 Life Member, Indian Science Congress Association, India



DR. GOVERDHAN REDOT TURPU WIMMIII SPEAKER

LIST OF PUBLICATIONS

1.	Comparative Electrochemical, Photocatalytic, and Photoluminescence Studies in SrWO4 and rGO - SrWO4 Nanocomposites Ch. Sridhar, Neba, V.S. Seo, J.Pahani, G.P. Turpu, S. Tiaga, and G. Padmaia					
	Journal of Electronic Materials, 52, 3759 (2023)	I.F. 2.047				
2.	Structural engineering of ruthenium decorated zeolitic imidazole framework nanocomposite for hydrogen evolution reactions and supercapacitors					
	Journal of Energy Storage 62, 106885 (2023)	-Seo I.F. 8.903				
3.	An Additional Simultaneous Magnetic Ordering and Magneto-Capacitive Behavior with Dielectric Relaxation besides Multiferroicity in Fe1– xTexVO4					
	G Bera, A Surampalli, D Prajapat, P Mal, VR Reddy, K Kumar, A Sagdeo, F and G R Turpu,	Pradip Das				
4.	J Phy Cond. Matter 35, 125801 (2023) Disappearance of spiral spin order and field induced spin reorientation transition in $xCrxVO4$ (0.1 $\le x \le 0.3$) multiferroic: 57Fe Mössbauer spectroscopic studies G Bera, M Kuila, P Mal, VR Reddy, P Das, GR Turpu,	I.F. 2.745 Fel–				
	Physica B Cond Matt. 646, 414236 (2022)	I.F. 2.988				
5.	Comparative fermiology study of PbBi2Te4 and SnBi2Te4 3D topological insulators					
	Priyanath Mal, Bipul Das, Ganesh Bera, G.R.Turpu, C.V. Tomy and Pradip Das					
	J. Mat. Sc. Mat. In Electron , 33, 1 (2022)	<i>I.F. 2.779</i>				
6.	Transport evidence of linear Dirac dispersion of non-trivial surface states in Fe-substituted PbBi2Te4 3D topological insulator					
	Priyanath Mal, Bipul Das, Ganesh Bera, P.Rambabu, G.R.Turpu, C.V. Tomy and P.	radip Das				
	Physica E: Low Dimensional Systems and Nanostructures 130, 114672 (2021)	<i>I.F. 3.382</i>				
7.	Structural, magnetic, dielectric and 57Fe Mossbauer spectroscopic studies on Fe1x type-II multiferroic material	CexVO4: a				
	G.Bera, A.Surampally, P.Mal, V.R.Reddy, K.Kumar, A.Sagdeo, P. Rajput, P. Das,	G. R. Turpu				
	J. Mat. Sc. Mat. In Electron 32, 7399–7409 (2021)	I.F. 2.779				
8.	Observation of 2D transport in Sn- and In-doped Bi2-xSbxTe3-ySey topological insu	Observation of 2D transport in Sn- and In-doped Bi2-xSbxTe3-ySey topological insulator				
	Priyanath Mal, Bipul Das, Ganesh Bera, P.Rambabu, G.R.Turpu , C.V. Tomy and P.	radip Das				
	J. App. Phy. 129, 095702 (2021)	I.F. 2.877				
9.	Spin splitted topological surface states in $PbBi_4Te_7$					
	Priyanath Mal, Bipul Das, Ganesh Bera, P.Rambabu, G.R.Turpu , C.V. Tomy and P.	radip Das				
	Journal of Physics D: Applied Physics, 53, 484003(2020)	<i>I.F. 3.169</i>				
10.	Synthesis of Sr1-xBaxBi2B2O7 glass ceramics: A study for structure and characterization using experimental techniques and DFT method					
	G.Padmaja, G.Devarajulu, B.Devaprasad Raju, G.R.Turpu, K.Srishailam, B.Venka G.Pavan Kumar	tram Reddy,				
	Journal of Molecular Structure 1220, 128660 (2020)	I.F. 3.84				
11.	Rapid photodegradation of methylene blue dye by rGO- V2O5 nano composite					
	A.Mishra, A.Panigrahi, P.Mal, S.Penta, G.Padmaja, G.Bera, P.Rambabu, P.Das and Journal of Alloys and Compounds 842, 155746 (2020)	d G.R.Turpu* I.F. 6.37				
12.	Vibrational spectra and optical properties of Fe1-xCrxVO4 solid solutions: With a g analysis	roup theory				
	Ganesh Bera, P Mal, V.R.Reddy, U Deshpande, Pradip Das, G. Padmaja, G. R. Turp	ou,				
	Spectrochimica Acta Part A,227,117668 (2020))	I.F. 4.831				
13.	Methylene blue dye degradation by bulk, nano FeVO4 and rGO-FeVO4					

Ganesh Bera, A Mishra, P Mal, Pradip Das, G. Padmaja, P. Rambabu and G. R. Turpu, AIP Conf. Proceedings 2220,080070 (2020)

- 14. Magneto-Lattice Coupling, Magnetic Frustration and Magneto-Electric Effect in Cr doped FeVO4 Multiferroic Material and their correlation with Structural Phase Transitions G.Bera, A.Surampally, A.Mishra, P.Mal, V.R.Reddy, A. Banerjee, A.Sagdeo, P. Das, G. R. Turpu, *Phy. Rev. B*, 100,014436 (2019) I.F.:4.036
- 15. Comparative electrochemical analysis of rGO-FeVO4 nanocomposite and FeVO4 for supercapacitor application, A.Mishra, G.Bera, P.Mal, P.Sen, B.Chakraborty, P.Das, G.Padmaja and G.R.Turpu, App. Surf. Sci.488, 221, (2019) I.F.:7.392
- 16. Vibrational Spectra of Pb₂Bi₂Te₃, PbBi₂Te₄ and PbBi₄Te₇ Topological Insulators: Temperature Dependent Raman and Theoretical Insight from DFT Simulations

Privanath Mal, G. Bera, G. R.Turpu, S. K. Srivastava, A. Gangan, B. Chakraborty, Bipul Das and Pradip Das,

Phy. Chem. Chem. Phy., 21, 15030-15039 (2019)

17. Unusual Conductance Fluctuations and Quantum Oscillation in Mesoscopic Topological Insulator PbBi 4 Te 7,

P.Mal, B.Das, A.Lakhani, G.Bera, G.R.Turpu, J.C.Wu, C.V.Tomy, P. Das Scientific Reports 9, 7018 (2019)

- 18. Low temperature synthesis of FeVO4 through mechano - milling assisted solid state reaction method G. Bera, V.R.Reddy, P. Rambabu, P. Mal, P. Das, G.Padmaja, and G. R. Turpu: AIP Conf. Proceedings 2115,030110 (2019)
- 19. Multifunctionality of Partially Reduced Graphene Oxide –CrVO₄ Nano-Composite: Electrochemical and Photocatalytic Studies with Theoretical Insight from Density Functional Theory

G. Bera, A. Mishra, P.Mal, A. Sankarakumar, P. Sen, A. Gangan, B. Chakraborty, P.Das and G.R.Turpu,

J. Phy. Chem C. 122, 21140 (2018)

- 20. Synthesis and photocatalytic degradation study of methylene blue dye under visible light irradiation by $Fe_{1-x}Bi_xVO_4$ solid solutions $(0 \le x \ge 1)$ G. Bera, V.R.Reddy, P. Mal, P. Das and G. R. Turpu: AIP Conf. Proceedings 1953, 080026 (2018)
- 21. Synthesis and temperature dependent Raman studies of large crystalline faces topological GeBi₄Te₇ single crystal, P. Mal, G. Bera, G. R. Turpu, S.K.Srivastava and P. Das: AIP Conf. Proceedings 1953,70022 (2018)
- 22. Triclinic – monoclinic – orthorhombic (T-M-O) structural transitions in phase diagram of FeVO₄ -CrVO₄ solid solutions. G.Bera, V.R.Reddy, P. Rambabu, P. Mal, P. Das, N. Mohapatra, G. Padmaja, G. R. Turpu,

Journal of Applied Physics 122, 115101 (2017) I.F. 2.877

- 23. Electronic, magnetic and spectroscopic properties of doped Mn(1-x)AxWO4(A = Co, Cu, Ni andFe) multiferroic: an experimental and DFT study. P. Mal, G Bera, P Rambabu, G R Turpu, B.Chakraborty, L. M Ramaniah, R P Singh, P. Sen, P.Das: J of Physics: Cond. Matter29, 075901 (2017)
- Mg-NHC complex on the surface of nano magnesium oxide for catalytic application. M.Shaikh, 24. M.Sahu, P.K.Gavel, G. R. Turpu, S.Khilari, D.Pradhan, K.V.S. Ranganath: Catalysis Comm.84, 89-92 (2016) I.F.:3.51
- 25. *rGO*–*SnO2* composites for super capacitor applications

I.F.:4.126

I.F.:2.745

I.F.:3.567

I.F.:4.378

P. Rambabu, S.K.Srivastava, P.Das and G.R.Turpu, *IOP Conf. Series: MSE*, 159,012169 (2016)

- Structural characterization of FeVO4 synthesized by co-precipitation method. G.Bera, Sourav Sinha, P. Rambabu, P. Das, A. K. Gupta, G. R. Turpu: AIP Conf Proceedings 1728, 020284 (2016)
- 27. Study of photo catalytic degradation of an industrial dye Ujala Supreme and Methyl Orange using SnO2-rGO composites.

P. Rambabu, S. K. Srivastava, G. R. Turpu AIP Conf Proceedings 1728,020375 (2016)

- 28. Energy band gap and spectroscopic studies in Mn1-xCuxWO4 ($0 \le x \le 0.125$). P. Mal, P.Rambabu, **G. R. Turpu**, A. K. Gupta, B.Chakraborty, P.Sen, P. Das: *AIP Conf Proceedings 1728*, 020323 (2016)
- 29. New Experimental Limit on the Electric Dipole Moment of the Electron ina Paramagnetic Insulator.

Y. J. Kim, C Y Liu, S. K. Lamoreaux, G. Visser, B. Kunkler, A. V. Matlashov, **T.G. Reddy** *Phys. Rev. D* 91,102004 (2015) *I.F.:5.296*

Nanosize effects on the magnetic field induced transitions in La0.67-xEuxCa0.33MnO3 perovskite manganite.
 N. Raju, D. R.Sree, S. S. K. Reddy, Ch. G.Reddy, P. Yadagiri Reddy, K. R. Reddy, V. R.Reddy,

G.R. Turpu: J of Mag. and Mag. Materials, 368, 308 (2014)

- Relaxation in bi-stable resistive states of chemical vapour deposition grown graphene.
 G.R. Turpu, M.W. Iqbal, M.Z. Iqbal, JonghwaEom: Thin Solid Films, 522, 468-472, (2012)
- 32. EPR spectroscopic studies in (30 x) Li2O-xK2O-10CdO-59B2O3-1MnO2 multi-component glass system
 P. Gangapur, Goverdhan Reddy Turpu, K. Puram:.

Chem. Phys.394, 17-20 (2012)

- Effect of anelectric field on superfluid helium scintillation produced by α-particle sources.
 T. M. Ito, S. M. Clayton, J. Ramsey, M. Karcz, C. -Y. Liu, J. C. Long, T. G. Reddy, G. M. Seidel:
 Phys. Rev. A,85, 042718 (2012)
- Experimental search for the electron Electric Dipole Moment using solid state techniques
 Y J Kim, C-Y Liu, S K Lamoreaux, G Reddy.
 J. Phys. Conf. Ser.312,102009 (2011)
- 35. Compositional dependence of optical absorption spectra in mixed alkali borate glasses
 G. Padmaja, Goverdhan Reddy Turpu, P. Kistaiah:
 Phil. Mag. Lett. 91, 97 (2011)
- 36. On the Electron Paramagnetic Resonance Studies in Mixed Alkali Borate Glasses.
 G. Padmaja, T. Goverdhan Reddy, P. Kistaiah:
 AIP Conf. Proc. 1391, 544-546 (2011)
- 37. Nanosize effects in Eu doped La0.67Ca0.33MnO3 perovskite.
 D. RojaSree, S. K.Cholleti, S.G.Fard, Ch. Gopal Reddy, P. Y. Reddy, K R.Reddy, G. R. Turpu: J. App. Phy. 108, 113917 (2010)
- 38. Magnetic field-induced transitions in La0.42Eu0.25Ca0.33MnO3 perovskite manganite.
 Goverdhan Reddy Turpu, Ajay Gupta, K Rama Reddy:
 J. Phys. D: App. Phys.42, 145004 (2009)
- 39. 151Eu Mössbauer studies on la0.46Eu 0.21Ca0.33MnO3 CMR system.

I.F.:2.993

I.F.:2.183

I.F.:2.348

I.F.0.980

	T. Goverdhan Reddy, Ajay Gupta, K. Rama Reddy:		
	Chem Phys Lett 476, 209-212 (2009)	I.F.:2.719	
40.	57Fe Mössbauerstudy of La0.67Ca0.33Mn1 – x Fe x O3 CMR system V. Raghavendra Reddy, R. Rawat, T. G. Reddy , Ajay Gupta, P. Y. Reddy, K. Rama	Reddy:.	
	Hyp. Int.187,109-115 9 (2008))	I.F. 0.329	
41.	 151Eu Mössbauer studies on La0.5Eu0.17Ca0.33MnO3 CMR system, T. Goverdhan Reddy, Ajay Gupta, K. Rama Reddy: Phy Lett A 371,508-511 (2007) 	I.F.:2.707	
42.	On the coexistence of spin and lattice polarons in the La0.67 – xEuxCa0.33MnO3 CMR system. T. Govardhan Reddy , P. Yadagiri Reddy, V. R.Reddy, Ajay Gupta, M. Gupta, K. Rama Reddy: Sol State Comm 133, 77-81 (2005) I.F.:1.934		
43.	 151 EuMössbauer Spectroscopy in La 0.38Eu0.29Ca0.33MnO3. T. Goverdhan Reddy, P. Yadagiri Reddy, V. R. Reddy, Ajay Gupta, K. Rama Reddy Hyp. Int. 16, 253-260 (2005) 	y: I.F. 0.329	
44.	Correlation techniques for the improvement of signal-to-noise ratio in measurements stochastic processes. V.R. Reddy, Ajay Gupta, T. Goverdhan Reddy, P. Y. Reddy, K. R.Reddy	with	
	Nucl. Inst. and Meth. A 501, 559-571 (2003)	I.F.:1.33	

ORGANIZATION OF CONFERENCES / WORKSHOPS /SEMINARS

From 2011 to till now, I contributed to 7 events, workshops and conferences. I acted as a member of local organizing committee member for 6 events and for one of the event I was the organizing secretary in 2018.

2018 Organizing Secretary, XX National Seminar on Ferroelectric and Dielectrics at GGV, Bilaspur National Seminar / ~ 100 / India. NSFD is a national seminar on theme of dielectric and ferroelectrics which is organized every two years and being organized for the last 40 years. The event was organized for 3 days during Dec 14 -16 2018 at GGV

INVITED LECTURES AT CONFERENCES / SEMINARS / WEBINARS / WORKSHOPS

1. <u>Title of the The Talk: Reduced Graphene Oxide based Composites for supercapacitor applications</u>

International E – Workshop on Graphene and Related 2D Materials Processes & Applications (GR2DMPA 2021) Organizaed by ACS College, Maregaon, Amaravati University, on 11 September 2021 (Online)

2. <u>Title of the Talk: Structural phase transitions in FeVO4 – CrVO4 solid</u> solutions and effect on Multiferroicity in FeVO4"

International Conference on Crystallography, Structural Chemistry and Polymer Science Allied Academies and the Editors of Journal of Materials Science and Nanotechnology & Journal of Industrial and Environmental Chemistry by held during August 31, 2020(Webinar)

3. <u>Title of the Talk: Multifunctional properties of reduced graphene oxide composites: A study on photocatalytic and supercapacitor applications</u>

Three-day National level webinar on "Recent Trends in Materials Science (RTMS-2020)" organized by Department of Physics, Science & Humanities, Usha Rama Engineering College, Vijayawada during 19-21, August 2020

4. <u>Title of the Talk: Perspectives of Nanotechnology in Water Treatment: Fundamentals and Applications</u>

National Webinar on Advancement in Materials Science in Present Scenario (AMSPS-2020)" Jointly organized by Department of Chemistry and Physics, Govt. J.M.P. College Takhatpur, Bilaspur(C.G.) during 23.08.2020

5. <u>Title of the Talk: Correlation of Structure, Magnetism and Ferroelectricity in Fe_{1-x}Cr_xVO₄</u>.

International E – Conference on Advanced Functional Materials and Optoelectronic Devices organized by Centre for Renewable Energy, VBS Purvanchal University, Jaunpur during June 13-15, 2020

6. <u>Title of the Talk: Multifunctionality of graphene oxide – orthovanadate composites</u>

National Seminar on Advance Materials for Sustainable Industrial and Social Applications, Organized by Govt. Pt. Shyamacharan Shukla College, Raipur, during 17-18 January 2020.

7. <u>Title of the Talk: Patterning of CVD Graphene F.E.T.Structures</u>

National Level Short Term Training Programme on Recent Trends in Materials Science and Nano-Technology, Organized by National Institute of Technology, Raipur during 3 – 7 October 2017

8. <u>Title of the Talk: SEM: Basic Instrumentation and it's Applications</u>

Skill Development Training on "Materials Characterization Techniques" organized by Skill Development Centre, Guru Ghasidas Vishwavidyalaya, Bilaspur during 16-17 February, 2017

9. Title of the Talk: Surface Analysis Through SEM and SPMs: Introduction and Applications

National Level Short Term Training Programme on Advance in Chemical Analysis, Organized by National Institute of Technology, Raipur during 6 – 10 July, 2015

10. <u>Title of the Talk: SEM: Principles and Applications</u>

National Level Short Term Training Programme on Nano – materials: Characterization and Applications, Organized by National Institute of Technology, Raipur during 1 – 5 Dec., 2014

11. Invited Speaker at Rashtriy Uchatar Siksha Abhiyan (RUSA) Workshop on Youngsters and Opportunities at Govt. K.K.B. College, Sakti, Janjgir-Champa, Chhattisgarh, India,

[GOVERDHAN REDDY TURPU]