November 26 -30, 2024

#### **Technical Sessions (Oral Presentation)**

#### **Presentation Schedule by Day**

	Day 1 (Tuesday, 26 New 2024)				
S.No	Time (IST) hh:mm	Paper ID	(Tuesday, 26 Nov 2024)  Day 1: Parallel Session 1 (15:00 – 16:20)		
1.	15:00 - 15:10	16	Erbium-Doped CuS Nanostructures: Effects on Structural, Optical and Magnetic Behaviour Presenting Author: Babbilapati Sree Sesha Sudha Gayatri, VIT-AP University, India		
2.	15:10 - 15:20	61	Structural and Magnetic Properties of Europium Substituted Zinc Ferrite Nanoparticles Prepared Via Co-precipitation Method, Presenting Author: B. Uday Kumar, Palamuru University, India		
3.	15:20 - 15:30	52	Nickel Ferrite: Advances in the Synthesis Methods and Their Impact on Structural and Magnetic Properties Presenting Author: Jayashree Patra, VIT-AP University, India		
4.	15:30 - 15:40	32	Investigation of Structural, Morphology, Thermal, And Magnetic Properties of Ni0.90Cu0.10Te2 Single Crystal Presenting Author: Rajkumar Sokkalingam, Bharathidasan University, Tiruchirappalli, India		
5.	15:40 - 15:50	49	Structural and Magnetic Properties of La0.7Ce0.3-xCaxMnO3 (x = 0.0 and 0.15)  Presenting Author: Mahavir Prasad Sharma, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.), India		
6.	15:50 - 16:00	15	Ferrimagnetic Behavior and Low-temperature Anomalies in Nickel Chromate spinel Presenting Author: Arijit Datta, IIT Guwahati, India		
7.	16:00 - 16:10	41	Unravelling the Nature of Magnetism in Ni5 $\pm x$ Al3 $\mp x$ / NiO Core / Shell Nanoparticle System Presenting Author: Pavan Venu Prakash Madduri, IIITD, Kurnool, AP		
S.No	Time (IST) hh:mm	Paper ID	Day 1: Parallel Session 2 (15:00 – 16:20)		
8.	15:00 - 15:10	51	Structural, Optical, and Magnetic Properties of Mn-doped, Cudoped, and (Mn, Cu)-codoped ZnS Nanoparticles and its Applications Presenting Author: Pujarani Parida, VIT-AP University, India		
9.	15:10 - 15:20	55	Coercivity Enhancement in Al3+ Substituted Barium Hexaferrite Nanoparticles Presenting Author: Shalini MG, Vellore Institute of Technology, Chennai campus		
10.	15:20 - 15:30	24	Erbium-Doped β-Ga <sub>2</sub> O <sub>3</sub> : Synthesis, Structural Characterization, and the Role of Doping in Magnetic and Optical Properties Presenting Author: ANJU BABU, VIT-AP University, India		
11.	15:30 - 15:40	56	C-TAB and magnetic field assisted hydrothermal synthesis of cobalt ferrite for the mid-range 5G frequency band applications		





	and Magnetic Materials 2024 (IREAG MAGMA24)				
			Presenting Author: Sitarama raju, CVR College of Engineering, Hyderabad, Telangana, India		
12.	15:40 - 15:50	78	Magnetic Study of Co3O4-Go and Co3O4 Nanoparticles Synthesized By Polymer Combustion Method Presenting Author: Surekha S Jogdand, Pratibha College of Commerce and Computer studies, Chinchwad, Pune		
13.	15:50 - 16:00	81	Structural, Optical, and Magnetic Characterizations of Ni Doped ZnSe Nanoparticles Presenting Author: KANNAPPAN P, Sacred Heart College, Tirupattur, India		
14.	16:00 – 16:10	54	Coercivity Enhancement On Sm-Fe-N Using Novel Low Melting Zn Based Eutectic Alloy Presenting Author: Vijayaragavan Ganesan, IIT, Madras, Chennai		
S.No	Time (IST) hh:mm	Paper ID	Day 1: Parallel Session 3 (15:00 – 16:20)		
15.	15:00 - 15:10	91	Optimization of Spin-coated Manganese Doped Cobalt Ferrite Coatings.  Presenting Author: Ketankumar R Gayakvad, K.J.Somaiya College of Science and Commerce (Autonomous), Mumbai, 400077		
16.	15:10 - 15:20	33	Structural and Magnetic Properties of Fe100-Xtix Alloys Prepared By Planetary Ball Milling Process Presenting Author: Harekrushna Behera, Indian Institute of Technology Guwahati, Guwahati, India		
17.	15:20 - 15:30	26	Comprehensive Analysis of the Structural, Optical, and Magnetic Properties of Cr-Doped SnS2 Nanoparticles Synthesized via Hydrothermal Method Presenting Author: Anjali Bhattacharyya, VIT AP University, AP, India		
18.	15:30 - 15:40	98	Enhancement of Magnetic Properties In Cu-Doped Mn-Mg Nanoparticles Synthesized By Hydrothermal Method Presenting Author: Pavan Kumar Malladi, National Institute of Technology Warangal, Telangana, India		
19.	15:40 - 15:50	48	Approaching Ferrite-Based Exchange-Coupled (Ba0.5Sr0.5Fe12O19)1-X/(Ni0.3Co0.7Fe2O4)X Synthesised Via One Pot Sol Gel Auto Combustion Method For Permanent Magnet Applications. Presenting Author: ABARNA S T, Vellore Institute of Technology, 632014, Tamil Nadu, India.		
20.	15:50 - 16:00	109	Effect of Microwave Sintering on Phase Evolution and Magnetic behavior of Barium hexaferrite Presenting Author: Y. Kalyanalakshmi, University College of Science, Osmania University, Hyderabad, Telangana, India		
21.	16:00 - 16:10	79	Powder X-Ray Diffraction Study & Rietveld Refinement On Prussian Blue, Iron(III) Hexacyanoferrate(II) (Fe4[Fe(CN)6]3.14H2O) Presenting Author: ELANKUMARAN Kannan, Marudhar Kesari Jain College, Vaniyambadi		





	Day 2				
S.No	Time (IST) hh:mm	Paper ID	(Wednesday, 27 November 2024)  Day 2: Parallel Session 1 (15:00 – 16:20)		
22.	15:00 - 15:10	10	Hierarchical Free Energy model in Investigating the Cluster Spin- Glass behavior in Frustrated Spinel Oxides Presenting Author: Mouli Roy Chowdhury, IIT Guwahati, India		
23.	15:10 - 15:20	20	Investigation of Crystal Structure, Magnetism and Magnetocaloric Effect of Tb0.33Ho0.33Er0.33Cu2 Compound Presenting Author: Dame La-ai Wankhar Sutnga, Indian Institute of Technology Madras, Chennai, India		
24.	15:20 - 15:30	27	Magnetocaloric Effect in Rare-earth Intermetallic Compound Er3Al2 Presenting Author: Jeebanjyoti Sahoo, Indian Institute of Technology Madras, Chennai, India		
25.	15:30 - 15:40	100	Magnetic Properties of Co35Cr5Fe10Ni30Ti5Al7.5Mn7.5 High Entropy Alloy Presenting Author: Priyanka Kumari, Central University of South Bihar, India		
26.	15:40 - 15:50	31	Dynamic pressure effect on robust critical temperature (Tc) of MgB2 superconductor  Presenting Author: Rajkumar Sokkalingam, Bharathidasan University, Tiruchirappalli, India		
27.	15:50 - 16:00	60	Large magnetocaloric effect in TbGd(MoO4)3 polycrystalline compound Presenting Author: Athira P, NIT Andhra Pradesh		
28.	16:00 - 16:10	62	Magnetocaloric Properties of Ferrimagnetic Mn5-xCoxSn3 (X=0.1&0.2) Alloys Exhibiting Spin Glass Transition Presenting Author: Mani Barathi A, National Institute of Technology Tiruchirappalli		
S.No	Time (IST) hh:mm	Paper ID	Day 2: Parallel Session 2 (15:00 – 16:20)		
29.	15:00 - 15:10	47	Studies on the Structural, Morphological, Magnetic, and Magnetic Hyperthermia properties of Fe3O4 Nanocomposites with CNT, GO and rGO  Presenting Author: REKHA K, VELLORE INSTITUTE OF TECHNOLOGY		
30.	15:10 - 15:20	50	Insights of The Physical Properties of Multiferroic Bi4Ti3O12 - BiFeO3 Composite Thin Film Fabricated By Pulsed Laser Deposition Technique For Memristor Devices Presenting Author: Priyanka Mitra, Birla Institute of Technology & Science-Pilani, Hyderabad Campus		
31.	15:20 - 15:30	40	Studies on Magneto Electric Behavior of (1-X) BaTiO3 - xMgFe2O4 Magnetoelectric Composites Presenting Author: Padmapriya Durairaj, National Institute of Technology, Tiruchirappalli, India		
32.	15:30 - 15:40	68	Magneto-structural studies of MgFe2O4 synthesized by Combustion method for Magnetic Fluid Hyperthermia (MFH) Presenting Author: Dhanashri S. Kolte, Rajaram College, Kolhapur, India		
33.	15:40 - 15:50	97	Influence of Fe3+ and Co2+ Co-doping on the Electrical, Magnetodielectric, and Multiferroic Properties of Lead-Free Ba0.7Sr0.3TiO3 Ceramics		





	and Wagnetic Waterials 2024 (IREAU WAGWAZ4)				
			Presenting Author: ARBAZ REYAZ KHAN, Chandigarh University		
34.	15:50 - 16:00	89	Effects of Magnetic Field and Temperature on the DC and AC Electrical Properties of Piezo-magnetic Ni <sub>0.5</sub> Co <sub>0.5</sub> Fe <sub>2</sub> O <sub>4</sub> Nanoparticles Presenting Author: TANMOY MAJUMDER, Vellore Institute of Technology Chennai		
35.	16:00 - 16:10	111	Microwave-Assisted Synthesis and Magnetocaloric Properties of Zn <sub>1-x</sub> Gd <sub>x</sub> Fe <sub>2</sub> O <sub>4</sub> Nanoferrites Presenting Author: JANJANAM BHARANI LAKSHMI, VIT-AP University, Andhra Pradesh		
S.No	Time (IST) hh:mm	Paper ID	Day 2: Parallel Session 3 (15:00 – 16:20)		
36.	15:00 - 15:10	92	YFeO3 Single Crystals: Metamagnetic Transitions and Spin-Glass Behaviour for Advanced Applications Presenting Author: SRIMATHY B, Seethalakshmi Ramaswami College, Tiruchirappalli		
37.	15:10 - 15:20	99	Synthesis, characterizations and magnetic properties of different temperatures annealed Co35Fe10Mn5Ni30Ti20 HEA Presenting Author: Dr Rohit Ranjan Shahi, Central University of South Bihar, India		
38.	15:20 - 15:30	29	Study of the Structural, Surface Morphology, and Magnetic Properties of Europium-doped SrFeO3 Nanomaterials Presenting Author: Dipak Nath, St Joseph University		
39.	15:30 - 15:40	104	Structural stability and Magnetic properties in hexagonal Lu1- $xHoxFeO3$ ( $x = 0 - 0.3$ ) Presenting Author: SURESH PITTALA, Dayananda Sagar University		
40.	15:40 - 15:50	35	An optical shutter derived from hydrogen bond liquid crystal Presenting Author: K. Siva Parvathi, Vignan University		
41.	15:50 - 16:00	3	Innovative Synthesis of Fe3O4 Nanoparticles-Loaded Activated Charcoal for Advanced Industrial Wastewater Treatment Presenting Author: Komal Verma, IIT Guwahati		





	Day 3 (Thursday, 28 November 2024)					
S.No	Time (IST) hh:mm	Paper ID	Day 3: Parallel Session 1 (15:00 – 16:20)			
42.	15:00 - 15:10	7	Calcium Induced ferromagnetic behavior in HoCoO3 Perovskite Presenting Author: Amarjit Das, IIT Guwahati			
43.	15:10 - 15:20	11	Dynamics of Reentrant Spin-Glass in Mixed Spinel Mn1-xTixCo2- yFeyO4 Presenting Author: ARPITA DEB SINGHA, Indian Institute of Technology Guwahati			
44.	15:20 - 15:30	14	Detecting Nature of Magnetic Phase Transitions In Ba Doped La0.67Ca0.33MnO3 With Magnetocaloric Effect AS A Tool Presenting Author: VISHNUBHARATHI J, Vellore Institute of Technology, Vellore			
45.	15:30 - 15:40	44	A Comparative Study on Arc-melted and Solid-State Synthesized Mn2FeSi Heusler Alloy Presenting Author: R Jayashire, University of Madras, Chennai			
46.	15:40 - 15:50	5	Emergence of Field-Induced Metamagnetic Transitions in (La)A and (Mn)B cosubstituted NdCoO3 Perovskite  Presenting Author: Priyanka Tiwari, Indian Institute of Technology Guwahati			
47.	15:50 - 16:00	77	Optimized Design of Medium-Scale HTS Coil for Power Stability Enhancement Using Multi-Objective Exact Enumeration Presenting Author: Garkki B, National Institute of Technology Puducherry			
48.	16:00 - 16:10	112	Magnetic and Magnetocaloric Properties of Bulk and Nanostructured MnP: A Dimensionality Study Presenting Author: Kuraganti Ramesh Babu, VIT-AP University, Amaravati, Andhra Pradesh, India			
S.No	Time (IST) hh:mm	Paper ID	Day 3: Parallel Session 2 (15:00 – 16:20)			
49.	15:00 - 15:10	46	Electronic Structure and Magnetic Properties of $S = 1/2$ Alternating Spin Chain system KCuGa(PO4)2  Presenting Author: Vaibhav K Singh, Indian institute of Technology Tirupati			
50.	15:10 - 15:20	57	HYbO2: A Jeff = ½ Spatially Anisotropic Triangular Lattice Presenting Author: Vikas Kumar Sahu, Indian institute of Technology Tirupati			
51.	15:20 - 15:30	58	Observation of Inhomogeneous Magnetic Behaviour and Griffith- Like Phase in La2-xSrxNiMnO6 ( $X = 0.1, 0.25, 0.4, 0.5$ ) Presenting Author: Debasmita Bala, NIT, Andhra Pradesh			
52.	15:30 - 15:40	67	Soliton Solution for Quantum Ferromagnetic Spin Chain with Impurities Presenting Author: NEJA PRINSA N, Vellore Institute Of Technology, Chennai			
53.	15:40 - 15:50	73	Nucleation of Skyrmions in Hm (Pd, Rh, Or Nb)/Fe Bilayer Presenting Author: Tamali Mukherjee, Birla Institute of Technology & Science, Pilani, Hyderabad Campus			
54.	15:50 - 16:00	110	Signature of spin glass effect in physical properties of GdNiAl <sub>3</sub> Presenting Author: Vimaljith A R, VIT-AP University, Amaravati, AP			





S.No	Time (IST)	Paper	Day 3: Parallel Session 3 (15:00 – 16:20)
5.110	hh:mm	ID	
55.	15:00 - 15:10	59	Dynamics of Magnetization Reversal and Enhanced Magnetic properties in FeTaC/SiO2 Multilayer Thin Films Presenting Author: Camelia Das, ICFAI University Tripura
56.	15:10 - 15:20	22	Synthesis of Pulsed Laser Deposited (La0.375 Pr0.325 Ca0.3 MnO3 Thin films Presenting Author: Sahana C S, VIT, Vellore
57.	15:20 - 15:30	103	Spin disorder state in a site-depleted coupled trillium lattice compound Pb1.5Fe2(PO4)3 Presenting Author: BOYA KRISHNAMRAJU, Government Polytechnic Satyavedu
58.	15:30 - 15:40	82	Preparation and Characterization of PVDF/ CoFe2O4/g-C3N4 Nanocomposite Films for electromagnetic shielding applications Presenting Author: Nirmal R Kumar, National Institute of Technology, Tiruchirappalli
59.	15:40 - 15:50	88	Magnetic and Thermal Modulation of DC-AC Electrical Properties in Zn <sub>0.3</sub> Ni <sub>0.7</sub> Fe <sub>2</sub> O <sub>4</sub> Nanoparticles Presenting Author: TANMOY MAJUMDER, Vellore Institute of Technology Chennai
60.	15:50 - 16:00	108	Single Step Synthesis and Structural Investigations of Nanocrystalline Magnetic Ferrites MFe2O4 (M=Ni, Co and Mn) Presenting Author: T Shanmugavel, Mahendra Engineering College Mallasamudram Namakkal
61.	16:00 - 16:10	9	Influence of Microwave Sintering on Erbium Iron Garnet: Structural, Magnetic, and Dielectric Studies Presenting Author: Deepannita Chakraborty, PSG Institute of Technology and Applied Research, Coimbatore





	Day 4 (Friday, 29 November 2024)				
S.No	Time (IST) hh:mm	Paper ID	Day 4: Parallel Session 1 (15:00 – 16:20)		
62.	15:00 - 15:10	34	Tuning the Properties of MnAl Alloys for Rare Earth Free Magnet Applications Presenting Author: Sourav Mandal, Indian Institute of Technology Guwahati		
63.	15:10 - 15:20	18	Study of impedance spectroscopic and magnetic properties of LiMn2O4 and LiMn1.98(SmFe)0.02O4 ceramic materials for energy storage applications  Presenting Author: Thirmal Chnithakuntla, VNRVJIET, Hyderabad		
64.	15:20 - 15:30	63	Impact of Chemical Etching on Magneto-Impedance Response of As-Quenched Amorphous Microwires Presenting Author: Somnath Das, CSIR- National Metallurgical Laboratory, Jamshedpur		
65.	15:30 - 15:40	21	Structural, Magnetic, and Dielectric properties of bulk CoFe2O4 synthesized by Microwave sintering and Solid-state reaction Presenting Author: ARYA ROSE THOMAS, Vellore Institute of Technology, Vellore		
66.	15:40 - 15:50	96	A High magnetic Permeability Metamaterial Superstrate as a Gradient Index Lens for 2.4 GHz Patch Antenna Gain Enhancement Presenting Author: Bharath reddy Gudibandi, VIT AP university		
67.	15:50 - 16:00	28	Preparation and Characterization of NiCo <sub>2</sub> O <sub>4</sub> /RGO/Fe <sub>3</sub> O <sub>4</sub> Hybrid Electrode Materials for High-Performance Supercapacitor Applications  Presenting Author: Kavinkumar Thangavel, Karpagam Academy of Higher Education, Coimbatore		
S.No	Time (IST) hh:mm	Paper ID	Day 4: Parallel Session 2 (15:00 – 16:20)		
68.	15:00 - 15:10	2	Sm Doped Cu-Ni Spinel Ferrite Nanoparticles for Hyperthermia Application Presenting Author: Mritunjoy Prasad Ghosh, Institute of Advanced Study in Science and Technology Guwahati		
69.	15:10 - 15:20	36	Magnetic hyperthermia Studies of CoS/Fe3O4 and ZnS/ Fe3O4 Composites Presenting Author: Savitha Pillai S, University of Kerala		
70.	15:20 - 15:30	37	Magnetic Fluid Hyperthermia Properties of Polyethylene Glycol- Coated Cobalt Ferrite Nanoparticles Presenting Author: Fouzia Khan, Indira Gandhi Centre for Atomic Research, Kalpakkam		
71.	15:30 - 15:40	38	pH-Responsive Magnetic Hyperthermia in Chitosan-Coated MnFe <sub>2</sub> O <sub>4</sub> Nanoparticles: Experimental and Finite Element Analyses Presenting Author: Srujana Mahendravada, Homi Babha National Institute		
72.	15:40 - 15:50	19	Fe3O4 Mesocrystals: A Multifunctional Platform for Magnetic Hyperthermia and pH-Responsive Drug Delivery in Cancer Treatment Presenting Author: Akash M, SRM IST		
73.	15:50 - 16:00	69	Structural, Magnetic, Electrical and Dielectric properties of Iron Oxide (Magnetite Phase) and Hyperthermia Presenting Author: AMRUTHA K, VIT Vellore		





	and Magnetic Materials 2024 (IREAU MAGMA24)					
74.	16:00 - 16:10	23	Characterization and Induction Heating Response of Co-Cu Nanoparticles Presenting Author: Ramakrishna Rao Akurati, Vignan's Foundation for Science Technology and Research, Guntur, Andhra Pradesh			
S.No	Time (IST) hh:mm	Paper ID	Day 4: Parallel Session 3 (15:00 – 16:20)			
75.	15:00 - 15:10	94	Color Center Induced Defects Impacting Magnetic, Optical, and Catalytic Activity of Zinc Ferrites Presenting Author: Priyadharsini N, Dr.N.G.P Institute of Technology			
76.	15:10 - 15:20	102	Investigating the Magnetic Properties of Magnetite Containing Stones Found at Palakkad Gap, India for Advanced Industrial Applications Presenting Author: Nithyananda S, VIT-AP University, Amaravati, India			
77.	15:20 - 15:30	80	Selenium-Doped Manganese Ferrite Nanoparticles: Structural Analysis And Applications In Environmental Remediation Presenting Author: Aparna Unnikrishnan, PSGR Krishnammal College For Women			
78.	15:30 - 15:40	25	Synthesis of Biomass-Derived Carbon Support Embedded With Magnetite For Waste Water Treatment Presenting Author: Aswathy C T, PSGR Krishnammal College for Women			
79.	15:40 - 15:50	83	Photocatalytic Activity of Green Synthesised Canted Ferromagnetic Hematite Iron Oxide Nanoparticles for Methyl Orange Removal in Wastewater Remediation Presenting Author: Rahul Das, The University of Burdwan			





	Day 5 (Saturday, 30 November 2024)				
S.No	Time (IST) hh:mm	Paper ID	Day 5: Parallel Session 1 (11:50 – 13:00)		
80.	11:50 - 12:00	17	Comprehensive Analysis of CoFeMnZ (Z=Sb, In) Quaternary Heusler Alloys: Structural, Thermoelectric and Magnetic Properties Using Experimental and Ab-Initio Method Presenting Author: Shabeer Ali Pc, CSIR NIIST		
81.	12:00 - 12:10	43	Effects of Superconductivity and Non-Linear Electron-Phonon Interaction on Impurity Bound States In BCS Superconductor Presenting Author: Narasimha Raju Chebrolu, Central University of Karnataka		
82.	12:10 - 12:20	53	Quantum Correlations in Nickel-Radical Molecular Complex (Et3NH)[Ni(hfac)2L] Presenting Author: Muthuganesan R, SRM Institute of Science and Technology, Kattankkulathur, Tamil Nadu		
83.	12:20 - 12:30	70	Tuning The Piezoelectric Polaron Properties Of Asymmetric Gaussian GaAs, CuCl And RbCl Quantum Wells: A Study Of Weak, Intermediate And Strong Coupling Strength Effects Presenting Author: Swapna Vemula, National Institute of Technology Warangal		
84.	12:30 - 12:40	72	Magnetocaloric Effect of 2D and 3D Ising Model for Honeycomb, Square, and Hexagonal Lattices: A Monte-Carlo Study Presenting Author: Basit Iqbal, VIT-AP University Amravati		
S.No	Time (IST) hh:mm	Paper ID	Day 5: Parallel Session 2 (11:50 – 13:00)		
85.	11:50 - 12:00	93	Theory of Spin Transport for Two Terminal Rashba-Zeeman Tunnel Junction Presenting Author: Kingshuk Sarkar, VIT-AP University, India		
86.	12:00 - 12:10	71	The Impact Of The External Magnetic Field On D_2^+ Ion Ground State Properties In A Gaussian GaAs Quantum Dot Presenting Author: Siddartha Gone, National Institute of Technology Warangal		
87.	12:10 - 12:20	74	Theory of Thermoelectric Transport in Magnetic Graphene Presenting Author: PURNENDU RAY, VIT-AP University, India		
88.	12:20 - 12:30	76	Structural, Electronic, and Magnetic Properties of Co2HfZ (Z = Al, Sn) Heusler Alloys for Spintronic Applications  Presenting Author: Karumuri Venkanna, National Institute of Technology, Andhra Pradesh-534101 and SGA Govt. Degree College, AP		
89.	12:30 - 12:40	84	Characterization and Deconvolution of Soft and Hard Magnetic Phases in Pulsed Electrodeposited Cobalt-Nickel Films.  Presenting Author: Anand Raj M, Rajalakshmi Engineering College, Chennai		



