



**1ST International e-Conference on
Recent Advances in Physics & Materials Science-2020
(IC-RAPMS-2020)**

July 9 - 10, 2020 (10:00 AM- 02.00 PM, IST)

Organized by

Kurseong College, Darjeeling, West Bengal, India-734203

In collaboration with

St. Joseph's College, Darjeeling, West Bengal, India-734104

Technical partner

Condensed Matter Physics Research Center, Butwal, Nepal-11

List of participants selected for paper presentation

Sl. No.	Title	Name	Department	Institute/University	Title of Abstract
1	Dr.	A Albert Manoharan	Physics	Govt Girls Hr Sec School, Thiruvadanai	Increase of Magnetic Parameters In Sol Gel Prepared CuO:Fe:Nd Co-Doped Nanoparticles
2	Dr.	Abhijit Dutta	Chemistry	North-East Junior College	Density Functional Studies On Structural, Electronic And Magnetic Properties of Rhn (N = 9–20) Clusters
3	Mr.	Abhijit Nath	Department Of Basic Science And Social Science, School Of Technology	North Eastern Hill University	Preparation, Characterization Of Biosynthesized ZnO Based Uv-Shielding Material
4	Ms.	Aditi Sengupta	Electronics And Communication Engineering	Siliguri Institute Of Technology	Electrical Conductivity Study Of Nano-Phased Materials: Frequency And Temperature Dependency
5	Mr.	Aibanjop Pyngrope	Physics	North-Eastern Hill University	Estimation Of Radon And Thoron Equilibrium Factors In Indoor Environment Using Nuclear Track Detectors
6	Ms.	Alisha Budhathoki	Central Department Of Physics	Tribhuvan University	Fermi Surface And Lifshitz Transition In Kagome Metal
7	Dr.	Ambika Pradhan	Department Of Physics	SRM University Sikkim	Precursor Flow In One-Shot Two Dimensional Forced Foam Drainage In Natural Surfactant System
8	Dr.	Amitabha Bhattacharyya	Physics	Sikkim University	The Science Behind the Unsung Indian Musical Drums
9	Dr.	Anirban Das	Physical And	College Of Engineering And	Study Of Deformation Behaviour

			Material Sciences	Management, Kolaghat, WB, India	Of Metallic Nanowires By Using Multi-Scale Computational Modelling
10	Dr.	Anjalu Ramchiary	Physics	Bodoland University	Synthesis And Characterization Of Visible Light Active TiO ₂ /CoTiO ₃ Hybrid Nanostructure And Study Of Its Charge Carrier Transfer Dynamics
11	Mr.	Aunggat Shah	Basic Sciences And Social Sciences	NEHU	Multi Wall Cnt Growth Using Waste Plastic As Carbon Source
12	Mr.	Ayan Banik	Electrical Engineering	Cooch Behar Government Engineering College	High-Performance Thin Film Solar Pv Technology In Context To Indian Energy Sector
13	Mr.	Batngen Rap Kur Lang Lyngdoh Mawphlang	Department Of Physics	North-Eastern Hill University	Buckling Analysis Of Nonuniform Nanobeams Using Nonlocal Elastic Theory And Differential Transformation Method
14	Ms.	Bhawana Thapa	Physics	North Eastern Hill University	Study Of Ground State Properties Of MnTe ₂
15	Mr.	Binay Rai	Physics	North Bengal University	Nustar And Swift Observations Of X-Ray Binary 4u 1901+03
16	Mr.	Biplab Kumar Singha	Physics	University Of North Bengal	The Effect Of Bridging Group On Different Lc Properties Of Fluorinated Liquid Crystals
17	Mr.	Bishnu Karki	Central Department Of Physics	Tribhuvan University	Novel Topological Weyl Semimetallic Phase In Layered Material: Fe ₂ Sn
18	Mr.	Bishnu Prasad Belbase	Central Department Of Physics	Tribhuvan University	Electronic And Magnetic Properties Of Double Perovskites Pb ₂ xOsO ₆ (X=Co, Ni)
19	Dr.	Chandra Shekhar Pati Tripathi	Department Of Physics	Banaras Hindu University	Copper Nanoclusters: A Novel Photoluminescent Probe For Detection Of 2,4,6-Trinitrophenol
20	Mr.	Daya Nidhi Chhatkuli	Central Department Of Physics	Tribhuvan University	A Spectroscopic Study Of The Low Redshift Dwarf Galaxy Sdss J134326.99+431118.7 To Calculate Star Formation Rate
21	Mr.	Debopriyo Ghoshal	Physics	IEST, Shibpur	Bromothymol Blue Dye/ Pva Composite Films: Facile Economic And Flexible Laser Filters
22	Mr.	Dhurba Raj Jaishi	Central Department Physics	Tribhuvan University	Study Of Electronic, Magnetic And Transport Properties Of BaTBo ₃
23	Mr.	Dipangkar Kalita	Physics	North-Eastern Hill University	A Study On The Effects Of Etchant Concentration Variation On Chemical Etching Characteristics Of 11.56 Mev/U ⁵⁸ Ni ¹⁴⁺ Irradiated Makrofol-E Detector
24	Dr.	Dr . Enakshi Guru	Physics	Rishi Bankim Chandra College	Monte Carlo Study Of Phase Transition In Modified Lebwohl Lasher Model
25	Dr.	Dr N Sivasankara	Physics	Presidency University	Electrical Conductivity Studies On Lithium Sulfate Doped

		Reddy			Molybdenum Phosphate Glasses
26	Dr.	Dr. Haripriya Rath	Physics	College Of Engineering And Technology	Effect Of Thermal Annealing On Structural And Micro Structural Property Of Dc Sputtered Tio ₂ Thin Film
27	Dr.	Dr. Kuntal Biswas	Department Of Physics	Dum Dum Motijheel College	Development Of Low Temperature Surface Passivation And Antireflection Coating For Single And Multicrystalline Silicon Solar Cell
28	Dr.	Dr. Pinaki Pal	Department Of Physics	Maharaja Bir Bikram College	Numerical Simulation On Bioconvection Of Nanomaterial In Porous Media Along A Vertical Plate
29	Dr.	Dr. Tapati Jana	Department Of Physics	Sarojini Naidu College For Women	Development Of Low Temperature Surface Passivation And Antireflection Coating For Single And Multicrystalline Silicon Solar Cell
30	Mr.	Gang Bahadur Acharya	Central Department Of Physics	Tribhuvan University	Identification Of Half Metallicity In Co-Doped Rb ₂ Ni ₃ S ₄
31	Dr.	Hrishikesh Talukdar	Physics	Assam Engineering College (AEC)	Polyelectrolyte Complex Nanoparticles As Efficient Material For Protein Sensing
32	Prof.	Indrajit Ghosh	Physical And Material Science	College Of Engineering And Management, Kolaghat	Stellar Scintillations And Occlusions: An Astrophysical Approach To The Guiding Turbulence In Tropical Cyclones
33.	Mr.	Jailani. S	Dept. Of Pharmacy	Annamalai University	Deformulation And Characterization Studies Of Reference Drug Product Containing Etoricoxib
34	Mr.	K Manjunatha	Department Of Physics	Presidency University, Bangalore	Bismuth Doped Cobalt Chromates Nanoparticles: A Detailed Study Of Structural, Microstructural, Electrical And Magnetic Properties
35	Mr.	Karimul Islam	Physics	Saha Institute Of Nuclear Physics	Effect Of Porosity And Non-Lattice Oxygen On Resistive Switching In Nb ₂ O ₅ -Based Thin-Film Devices
36	Ms.	Karishma Bhardwaj	Chemistry	Sikkim University	Tunable Nir-Ii Emitting Silver Chalcogenide Quantum Dots Using Thio/Selenourea Precursors: Preparation Of Mri/Nir-Ii Multimodal Imaging Agent
37	Mr.	Kartick Ch. Dey	Physics	Acharya Prafulla Chandra Roy Government College, Siliguri	Enhancement Of Properties By Means Of Formulation Of Binary Mixture Of Two Antiferroelectric Liquid Crystals
38	Ms.	Kheyali Barman	Physics	Coochbehar Panchanan Barma University	Monitoring Of Geomagnetic Storm Induced Vlf Signal Disturbances From A Low Latitude Station At Cooch Behar, India

39	Mr.	Kunal Labar	Department Of Physics	Cooch Behar Panchanan Barma University	Half-Metallicity In Equiatomic Quaternary Heusler Alloy PtfeCrAl: A First Principle Study
40	Ms.	Labanya Ghosh	Physics	Indian Institute Of Technology (Banaras Hindu University), Varanasi	Consequences Of Ni Doping On Thermoelectric Properties Of Bi ₂ Te ₃
41	Ms.	Laden Sherpa	Physics	Sikkim University	Self-Assembly Of Arsenic Nanoparticles Into Magnetic Nanotubules And Their Sers Activity.
42	Mr.	Leeladhar Chouhan	Physics	Kokrajhar Govt. College, Kokrajhar	Mathematical Models In Fractal Antenna Design: A Review
43	Mr.	Mahesh Ram	Physics	North-Eastern Hill University	Dynamic Properties Of New Half-Metallic Mn ₂ ScZ (Z = Si, Ge And Sn) Heusler Alloys
44	Mr.	Manabindu Das	Physics	Kurseong College	Investigation Of Molecular Properties Of Some Fluorobenzene Derivatives Applying A Number Of Exponential Techniques
45	Mr.	Manish Debbarma	Department Of Physics	Tripura University (A Central University)	Band Gap Engineering Of Hg _x Be _{1-x} (X= S, Se & Te) Ternary Alloys - A Theoretical Initiative Using Dft Based Fp-Lapw Approach.
46	Dr.	Monoj Das	Department Of Physics	Gushkara Mahavidyalaya	Diameter And Atomic Structure Dependent Structural And Electrical Properties Of Zigzag Znte Nanotubes
47	Mr.	Mr. Utpal Sarkar	Physics	Govt. Degree College, Kamalpur	Structural, Electronic And Optical Features Of Bexzn _{1-x} s, Bexzn _{1-x} se And Bexzn _{1-x} te Alloys- A Density Functional Based Fp-Lapw Study
48	Mr.	Mrinmoy Chakraborty	Department Of Physics	Presidency University, Kolkata	Modification Of Transport Properties With Graphene Oxide Reinforcement In Zinc Oxide Thin Films
49	Mr.	Mukesh Pradhan	Physics	Tufanganj Mahavidyalaya	A Comparative Analysis Of All Fiber Optic Sensors For Detection Of Adulteration In Fossil Fuels
50	Mr.	Musa Abubakar Bilya	Physics	Nasarawa State University, Keffi, Nasarawa State Nigeira	Synthesis And Characterization Of Ca And Zr Modified Batio ₃ Ferroelectric Ceramics
51	Mr.	Nakul Chhetri	Dept Of Physics	Raiganj University	Investigation Of Ground State Properties Of Ternary Chalcopyrites, Cuxy ₂ (X=Al, Ga, In; Y=S, Se) Using Dft
52	Mr.	Narinder Kumar	Physics	Babasaheb Bhimrao Ambedkar University Lucknow	Reduced Graphene Oxide Contains A Minimum Of Six Oxygen Atoms For Higher Dipolar Strength: A Dft Study
53	Ms.	Neetu Sharma	Physics	Maharishi Markedeshwar (Deemed To Be University)	Naturally Derived Biocompatible Florescence Carbon Quantum Dots For In Vivo Targetting And

					Imaging Of Tumor Cells
54	Mr.	Nihal Limbu	Physics	North-Eastern Hill University	First Principles Study Of Electronic And Thermoelectric Properties Of Rhodium Doped La Filled Skutterudite
55	Mr.	Nihar Ranjan Mahapatra	Physics	Aditya Birla World Academy	Analysis Of The Effect Of Load Direction On The Stress Distribution In Orthopaedic Implants
56	Ms.	Nileema Sharma	Physics	Central Department of Physics, TU	Flat band and half metallicity in Kagome magnet $Y_{1-x}Ca_xCo_5$
57	Mr.	Nirmal Saud	Central Department Of Physics	Tribhuvan University	Electronic And Magnetic Properties Of Bitei
58	Mr.	Pawan Singh	Physics	Babasaheb Bhimrao Ambedkar University	Optical Properties Of Liquid Crystal Nanocomposite
59	Ms.	Pragya Singh	School Of Materials Science And Technology	Indian Institute Of Technology (Banaras Hindu University)	Pressure Dependent Structural Phase Transition Studies On Bifeo3 Doped Pbtio3 Solid Solution System
60	Mr.	Prashant Singh	Physics,	International Centre For Theoretical Sciences (ICTS-TIFR))	Statistical Properties Of Active Particles
61	Dr.	R. Chandramohan	Physics	Vidhyaa Giri College Of Arts And Science	Increase Of Magnetic Parameters In ZnO:Nd:Co Co-Doped Nanoparticles Prepared By Sol Gel Method
62	Mr.	Raj Kumar Rai	Central Department Of Physics	Tribhuvan University	First-Principle Study Of Electronic Structures Of Complex Transition Metal Oxides: $CaVO_3/SrVO_3$
63	Mr.	Ram Babu Ray	CDP, TU	IOST, TU	Electronic Structure, Magnetic Properties And Strain Effects Of Quaternary Heusler Alloy Zrutiin
64	Mr.	Ranjit Kumar Singh	Physical Science	Sikkim University	Understanding Asymmetry In Electromagnetically Induced Transparency For ^{87}Rb In Strong Transverse Magnetic Field
65	Mr.	Ravinder Gandasiri	Physics	University College, Kakatiya University	Effect Of Precursor Concentration On Structural And Gas Sensing Properties Of Nanostructured V_2O_5 Thin Films.
66	Ms.	Rezwana Sultana	Physics	Saha Institute Of Nuclear Physics	Influence Of Zr Concentration And Release Of Lattice Oxygen On Resistive Switching Of $Zr_{x}Hf_{1-x}O_2$ -Based Metal-Oxide-Semiconductor Devices
67	Dr.	Romyani Goswami	Physics	Surya Sen Mahavidyalaya	Spectroscopic Ellipsometry: A Powerful Tool To Study Si:H Nanocrystals
68	Mr.	Ronal Rai	Physics	Sikkim University	Lda Studies On Bubble Dynamics Of Surfactant Solution
69	Rum	Rumman Zaidi	Applied	Aligarh Muslim University	Study Of The Lead (Ii) Removal

	man Zaidi		Physics		From Aqueous System By Manganese Oxide Nanoparticles
70	Mr.	Samiran Upadhyaya	Physical Sciences Division	Institute Of Advanced Study In Science And Technology (IASST)	Biosynthesis Of Gold Nanoparticles By Using The Aqueous Leaf Extracts Of <i>Elaeocarpus Serratus</i>
71	Mr.	Sandeep Puri	Department Of Physics And Astronomy	University Of Texas Rio Grande Valley	Tunable Non-Hermitian Acoustic Filter
72	Ms.	Sarita Lawaju	Physics	Central Department Of Physics, Trubhuvan University, Nepal	Electronic And Magnetic Properties Of Double Perovskite Tb_2FeCo_6
73	Ms.	Shivani Chaudhary	Physics	Babasaheb Bhimrao Ambedkar University Lucknow	Dft Study Of Liquid Crystal Materials
74	Mr.	Shyam Sundar Sharma	Physics	Patan Multiple Campus	The Study of Structural and Dynamical Properties of Heavy Water (D_2O) Passing Through Carbon Nanotubes
75	Ms.	Smita Rai	Physics	Sikkim University	Structured Water Chains In External Electric Fields
76	Dr.	Srijita Bharti	Chemistry	Cambridge Institute Of Polytechnic-Ranchi, Jharkhand, India	Oat-G-Pam: Synthesis, Characterization & Application As An Adhesive
77	Mr.	Subhabrata Senapati	Basic Sciences And Social Sciences	North Eastern Hill University	Indirect Calculation Of Elastic Modulus Of Cnt Composites
78	Mr.	Subhajit Jana	School Of Materials Science And Technology	Indian Institute Of Technology (Banaras Hindu University)	Elucidation Of Morphological, Structural, Spectral And Electronic Property Of Poly Thiophene Film Formed Over Air-Liquid Interface
79	Mr.	Subhajit Roy	Electrical Engineering	Siliguri Institute Of Technology	Electrical Conductivity Study Of Nano-Phased Materials: Frequency And Temperature Dependency
80	Dr.	Subhrajyoti Biswas	Physics	Rishi Bankim Chandra College	Cosequence Of π - η Mixing In Nuclear Matter
81	Mr.	Sudarsan Karki	Chemistry	Sikkim University	Monte Carlo Simulation Study Of Hydrog.En Storage In Porous Slits Carbon Materials
82	Mr.	Sudeep Jnawali	Central Department Of Physics	Tribhuvan University	Electronic Properties Of Topological Insulator: Bisb
83	Mr.	Sujit Bati	Central Department Of Physics	Tribhuvan University	Study Of Thermoelectric Properties Of Cot_2O_6
84	Mr.	Sunny Nandi	Physics	Tezpur University	A Low-Cost Rechargeable Aqueous Aluminum-Graphite Battery.
85	Ms.	Surakcha Thapa	Department Of Chemistry	Sikkim University	Long-Term Ambient Air-Stable Cubic $CsPbBr_3$ Perovskite Quantum Dots Using Molecular Bromine
86	Mr.	Surinder Singh	Dr. S S Bhatnagar	Panjab University, Chandigarh	Ecofriendly Zirconium Mof And Graphene Based Nanohybrid For

			Uicet, Panjab University, Chandigarh		Degradation Of Pharmaceutical Drug From Wastewater
87	Dr.	Suvankar Chakraborty	Applied Science	Haldia Institute Of Technology	Study Of Dependency Of Initial Conditions And Temperature During Growth Of Tin Oxide On Ag(111)
88	Ms.	Sweta Gurung	Physics	Sikkim University	Green Synthesis Of Strong Luminescent Si Nps Using Actinidia Deliciosa (Ad)
89	Mr.	Varun Dutt Sharma	Physics	Maharishi Markandeshwar University	Recent Advances In Fluorescent Carbon Quantum Dots For White Led Applications
90	Ms.	Vinduja P	Department Of Chemisrty	University Of Calicut	In-Silico Anti-Cancer Studies On Phytochemical, Coumestrol
91	Mr.	Yashas S R	Department Of Water And Health	JSS Academy Of Higher Education And Research	Unraveling The Interface Chemistry Of ZnV2O6/G-C3N4 Composite Applied For Visible-Light-Driven Mineralization Of Antibiotic Residue In Water
92	Mr.	Yumnam Thakur Singh	Physics	North Eastern Hill University	Theoretical Prediction of the Electronic and Mechanical Properties of (6,1) Carbon nanotube from LCAO-DFT approach
93.	Mr.	Sanjeeb Limbu	Nanotechnology	North Eastern Hill University	Structural and Luminescence Studies of Y ₂ O ₃ :Eu ³⁺ Nanophoshors Sensitized with Li ⁺ /Bi ³⁺ ions for WLEDs Application
94.	Dr.	Laishram Robindro Singh	Nanotechnology	North Eastern Hill University	Structural and Optical Studies of Mn-Doped ZrO ₂ Nanocrystals For WLEDs Applications