

# GC-RASM 2022

## 2022 Second Global Conference on Recent Advances in Sustainable Materials

28 - 29, July 2022 | Mangalore, Karnataka, India | [www.gc-rasm.com](http://www.gc-rasm.com)

Call for  
Papers

Second edition

### GC-RASM 2022

The scope of the 2022 Second Global Conference on Recent Advancements in Sustainable Materials (GC-RASM 2022) is to provide a forum for researchers, scientists, academicians, scholars and practitioners around the world to present papers on recent developments in the broad fields of Materials Sciences and Engineering. The GC-RASM 2022 aims to bring together leading academic scientists, researchers and research scholars to exchange innovative and novel ideas, share field trial experiences in sustainability issues and to open a new window on the circumstances of the classical energy sources and their harmful impact on people, society and environment. We invite industrial and academic professionals from across the world in the fields of materials science and engineering to discuss and exchange ideas in the areas of world's great importance such as sustainable materials science and engineering. **The conference will be held in HYBRID MODE.**

### Call for papers

GC-RASM 2022 invites full-length original research articles from research scholars, faculty, scientists and industry professionals from India and across the world. Research articles and review papers not exceeding twelve pages in a single column format shall be submitted. The manuscripts should not have been published or under review in any of the journals or conference proceedings. Further, the manuscript should contain the name, e-mail id of the corresponding author and affiliation of co-authors.

Softcopy of the full length manuscripts (in word or pdf format) shall be submitted to [gc-rasm@ajiet.edu.in](mailto:gc-rasm@ajiet.edu.in)

### Topics (but NOT limited to)

#### Advanced Materials

Innovative and sustainable materials  
Biomaterials  
Composite materials  
Energy storage and conversion materials  
Smart and intelligent materials  
Functional materials  
Nano materials  
Building materials  
Advances in structural materials and engineering  
Materials in marine structures  
Durability and corrosion of materials  
Chemical materials  
3D materials

Cryogenic materials  
Ceramics, shape memory alloys and nanomaterials  
Polymer science  
Hydrogels and Phase Change Materials  
Development of MAX phases and MXenes  
Smart/Intelligent materials/Intelligent systems  
Optical/Electronic/Magnetic materials  
Automation, control and information technology  
Magnetic materials and smart materials for specific applications  
MEMS and structural control  
Active materials in MEMS applications  
Materials property and characterisation  
Thin film technology

#### Manufacturing

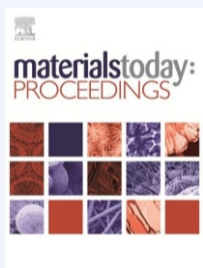
Aerodynamics  
Manufacturing systems and simulation  
Machine design  
Machinery dynamics  
Nanotechnology  
Mechanical dynamics and vibration  
Mechanical design  
Casting technology and equipment  
Welding technology and equipment  
Plastic processing technology  
Cellular manufacturing  
Advanced manufacturing processes  
Laser processing  
Vibration engineering

### Publications

All the accepted papers will be published in the "Elsevier's Materials Today: Proceedings" - a journal specializing in the publication of conference proceedings.

The book of proceedings will be indexed in

SCOPUS | Conference Proceedings Citation Index (Thomson Reuters, Web of Science) | Inspec



### Registration

Registration form for GC-RASM 2022 is available in the Downloads link. Duly filled-in registration form shall be sent to [gc-rasm@ajiet.edu.in](mailto:gc-rasm@ajiet.edu.in) on or before 05, July 2022. Methods of payments have been given in the website. The payment of registration fee shall be made through internet banking, direct money transfer or credit/debit card facilities. Corresponding authors are strictly advised to send the copy of receipt/bill or payment proof with banking payment reference number along with the registration form.

### Important dates

Last date for paper submission	05, June 2022
Last date for acceptance	30, June 2022
Registration commencement	01, April 2022
Registration deadline	05, July 2022
Camera Ready Paper (CRP) submission	05, July 2022
Release of Conference schedule	06, July 2022
Conference date(s)	28 - 29, July 2022

Publication Partner



Proceedings of GC-RASM 2021 (First edition) has been published in **Materials Today Proceedings, Volume 49, Part 5 (2022).**

### Registration fee

	Indian authors (in Rs)	Foreign authors (in USD)
Graduate Students	8000	250
Research Scholars / Academicians	8000	250
Industry and Others	10000	300
Poster	4000	150

### Contact details

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[www.gc-rasm.com](http://www.gc-rasm.com)

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Second Global Conference on  
**Recent Advancements in Sustainable Materials**  
**(GC-RASM 2022)**

28-29, July 2022 | Mangaluru, India | [www.gc-rasm.com](http://www.gc-rasm.com)

**Program Schedule**

Date	Time	Event
28.07.2022	09.30 am to 10.00 am	Inaugural Function
28.07.2022	10.00 am	<b>Keynote 1 : Dr. V.N Mani</b> Scientist-E, Head, High Pure Electronic Materials, Devices & Systems Development Division Centre for Materials for Electronics Technology(C-MET) Department of Electronics & Information Technology, Govt. of India
28.07.2022	10.45 am	<b>Keynote 2 : Dr. Dattatraya Narayan Gaonkar</b> Department of Electrical and Electronics Engineering, National Institute of Technology Karnataka Surathkal (NITK)
28.07.2022	11.30 am to 05.00 pm	Session : RASM 01(Offline)
		Session : CE01(online)
		Session : CE02(online)
		Session: CH01(Online)
		Session : ME01(online)
		Session : ME02(online)
		Session : MSE01(online)
		Session : PH01(online)
		Session : PH02(online)
29.07.2022	09.45 am	<b>Keynote 3 : Syahrin Nizam Md Arshad</b> Faculty of Electrical Engineering Technology, Universiti Malaysia Perlis
29.07.2022	10.15 am	<b>Keynote 4 : Mohamad Nur Khairul Hafizi Rohani</b> Faculty of Electrical Engineering Technology, Universiti Malaysia Perlis
29.07.2022	10.30 am to 04.00 pm	Session : CE03(online)
		Session : CH02(Online)
		Session : ME03(online)
		Session : ME04(online)
		Session : ME05(online)
		Session : PH03(online)

		Session : EC01(online)
		Session : EE01(online)
		Session : MA01(online)
29.07.2022	04.00 pm	Valedictory Function

CH - Applied Chemistry  
 CE-Civil Engineering  
 MA-Applied Mathematics  
 MSE- Materials & Nanotechnology

PH- Applied Physics  
 ME- Mechanical Engineering  
 EC – Electronics Engineering  
 EE – Electrical Engineering

Note:

1. Start time given above indicates Indian Standard Time (IST).
2. Presentation will be conducted using Google Meet.
3. Participants can join their respective sessions by clicking the meet link given
4. Mode of presentation should be powerpoint presentation(ppt or pptx)
5. Duration of presentation: 10 minutes (presentation) + 5 minutes(Queries)
6. Participant using Google Meet will be admitted at any time prior to their scheduled time.
7. Participants are requested to follow the scheduled time; especially regarding the time for your talk.
8. Participants are requested to contact the respective session In-Charges for presentation related queries.
9. If any problem connecting to session, please text to the respective session In-Charges (Or) GC-RASM Whatsapp group during presentation date(s).

**Session: RASM 01 (Physical)**

Date: 28.07.2022

Time: 11.30 am to 04.30 pm

Session In-charge : Dr. Pavithra Shanbhag

Session in-charge Contact Number : +91 9480025089

Time	Paper ID	Paper Title	Authors
11.30 am	22RASM 1071	Topical Delivery of Natural Extract for Accelerated Wound Healing	Nausheen Ahmed, R. Deveswaran, P. Parasuraman, S. Bharath, C. Priyanka, P.S. Santosh
11.50 am	22RASM 2010	Modeling Green Organic field effect transistors from common biodegradable materials	Siva Prasad C P, Abhinav T, P Predeep
12.10 pm	22RASM 2035	Analysing a YSF Precision Locknut with the Tighten Loads of Three Fixed Coppers and Screws	Kuan-Yin Lee, Prasana kumar Samanta, Liao-Neng-Tung
12.30 pm	22RASM 4045	Effect of Doping Copper on K-OMS-2 Over Soot Oxidation Activity	Nithya R, Harshini Dasari, Nethaji S, Sriram S, Vikram A L, M S Murari
02.10 pm	22RASM 4062	Photocatalytic Activity of SF-CuO-NPs Nanocomposite Material	H. Basappa, K. S. Harisha, B Narayana, Y. Sangappa
02.30 pm	22RASM 5033	Peak-Shadow-Distance Method for Solar Energy Mapping of AL Hajar Mountains Using Data Mining Techniques	Prabhu Natarajan, Charles Savarimuthu, Najiba Said Hamed Al-Zadjali, Kanagaraj
02.50 pm	22RASM 5057	Electrochemical Quantification Of Vanillin Using Hydrazine Derivative Modified Pencil Graphite Electrode	Sreelekshmi, Abhishek Wilson, BhamaSajeevan, Gopika M G, AthiraBabu, Sreedhar K M, Beena Saraswathyamma
03.10 pm	22RASM 5058	Poly-5-Amino-1-naphthol modified pencil graphite electrode for the simultaneous electrochemical determination of Pyridoxine and Riboflavin	Bhama Sajeevan, Gopika M G, Sreelekshmi, Abhishek Wilson, Adithya Narayan Pillai, Beena Saraswathyamma
03.30 pm	22RASM 5077	Historical Water body changes using Spatio temporal Indices - A case study of Dakshina Kannada	Saketh T.Shetty, Abhishek Kushwaha, Amba Shetty
03.50 pm	22RASM 1087	Formulation and In-vitro Evaluation of Grape Seed Extract Containing Dentifrice	Aditi Rao, S Ashwini, R Deveswaran

**Session: CE01 (ONLINE)**

Date: 28.07.2022

Time: 11.30 am to 04.40 pm

Session In-charge : Mr. Nithin Shet

Session in-charge Contact Number : +91 9164073394

Google Meet ID/Link : <https://meet.google.com/ihx-mfcc-wzi>

Time	Paper ID	Paper Title	Authors
11.30 am	22RASM 1004	Experiment studies comparing Conventional concrete to Bubble deck concrete	Samantha.Konuri, T.V.S.Vara lakshmi
11.50 am	22RASM 1008	Concrete Using Waste Iron Fillings	Khalid Mohammed Breesem, Thaer Jasim Mohammed, Douread Raheem Hassen, Suad Mohammed Heil
12.10 pm	22RASM 1043	Impact of Recycled Aggregate on Concrete	Pulkit Mathur, Tejas Joshi, Urmil Dave
12.30 pm	22RASM 1055	Geopolymer Concrete and its strength influencing variables	Kamal Kishore
02.00 pm	22RASM 1080	The Influence of Metakaolin, Silica Fume, Glass Fiber, and Polypropylene Fiber on the Strength Characteristics of High Performance	Sachin Patil, H Sudarsana Rao, Vaishali.G.Ghorpade
02.20 pm	22RASM 2017	Study on Properties of Recycled Aggregate Concrete with Zeolite	S.Geetha, M. Selvakumar, S. Muthu Lakshmi, L.Aarathi, S.Deepak, T.Marshall
02.40 pm	22RASM 2018	Studies on Properties of Polymer Modified Aerated Concrete	S. Geetha, M.Selvakumar, S. Muthu Lakshmi, Sree varrun .D, Sathya sudhan .S, V.Muthuraja
03.00 pm	22RASM 2019	Properties of High-Performance Concrete with Automobile Grinding Waste as Replacement of Fine Aggregate	M. Selvakumar, S. Geetha, S. Muthu Lakshmi, Srinivasan .K.B, Srinivasan .D, Santhosh .T
03.20 pm	22RASM 2020	Study on Properties of Foam Concrete with foundry sand and Latex	M. Selvakumar, S. Geetha, S. Muthu Lakshmi, C. Srimathi, Sathya Narayanan, Mukesh.B
03.40 pm	22RASM 2036	Study on Self-curing concrete using Polyethylene Glycol 600 for highway infrastructure project	Makendran C, Karunanidhi S, Shiferaw Garoma, Bekesha Merea
04.00 pm	22RASM 2039	Influence of E-Coli on Workability and Strength Characteristics of Self-Consolidating Geopolymer Concrete Based On GGBFS, Flyash and Alccofine	Nishanth L, Nivedita Kumbar, Sravani Kaveti, Nayana N.Patil, Debasish.Kar
04.20 pm	22RASM 2065	Strength and Workability characteristics of Hybrid Bamboo and Steel Fiber Reinforced Concrete	Yogesh P, Kumaresh Ravi, Karthik R, Bhavana M, Surya Muthukumar, Dhanya Sathyan

**Session: CE02 (ONLINE)**

Date: 28.07.2022

Time: 11.30 am to 04.20 pm

Session In-charge : Mrs. Sahana K.

Session in-charge Contact Number : +91 9448601405

Google Meet ID/Link : <https://meet.google.com/ajo-iepr-smi>

Time	Paper ID	Paper Title	Authors
11.30 am	22RASM 2074	Analysis of Two-Storey Masonry Structure under Blast Loading	Ismail Raza, Saba Shamim, Shakeel Ahmad, Rehan A. Khan
11.50 am	22RASM 3004	Influence of Prosopis Juliflora ash in Mechanical Properties of Concrete	Sridhar Jayaprakash, Vivek Deivasigamani, Gobinath Ravindran
12.10 pm	22RASM 3008	Fresh and hardened state properties of waste tire fiber and steel fiber reinforced concrete	Amaan Mohammad S, Naga Chaitanya Krishna T, Saketh T, Yashwanth Ganesh Y, Dhanya Sathyan
12.30 pm	22RASM 3039	Push-Out Tests of a New Prefabricated Shear Connector Using Normal and Steel Fiber Reinforced Concrete	Jenan N. Almusawi, Haitham Hasan Muteb Aldaami
02.00 pm	22RASM 3060	Monitoring hydration of concrete using EMI of surface bonded smart piezo patches	Adnan Khan, Moinul Haq, Tabassum Naqvia
02.20 pm	22RASM 3078	Investigation of rheological properties in Shear Thickening Fluid for Seismic Dampers	Ruby Freya, Ashish Kumar.G, Bharath Vazhvarasan.T, Richin John Charly, Shanmugam. A
02.40 pm	22RASM 3084	Development of optimum sustainable metakaolin replaced cement concrete based on homogeneity, compressive strength and rapid chloride ion penetration	Venkata Subash Koneru, Sai Nitin Chowdary Kolli, Varun Gopal Vemuri, Kamalesh Gurram, Vaishali G. Ghorpade, Sudarsana Rao Hanchate
03.00 pm	22RASM 4020	Characteristics Strength of M40 Concrete With Partial Replacement of Cement By Mousambi Peel Powder	Hemant Kumar Sain, Anuj Raj Choudhary, Rakshit Shukla, Pranav Harit
03.20 pm	22RASM 4030	Strength Characteristics of Recycled Asphalt Pavement Aggregate based Geopolymer Concrete	J. Preethi, P. Deepak, N. Nikhil, G. Omkar, R. Vidya, P. Bhuvaneshwari
03.40 pm	22RASM 4034	To Study the Strength Assessment of No-Fine Concrete Pavement	Hemant Kumar Sain, Pankaj Singh Jat, Aman Raj Sahariya

**Session: CH01 (ONLINE)**

Date: 28.07.2022

Time: 11.30 am to 05.00 pm

Session In-charge : Ms. Divya

Session in-charge Contact Number : +91 7483460763

Google Meet ID/Link : <https://meet.google.com/fpi-ocxe-vnn>

Time	Paper ID	Paper Title	Authors
11.30 am	22RASM 1027	Sonogashira Cross Coupling and Cyclization Reaction Under Microwave Irradiation supported by Sodium Aluminate (NaAlO <sub>2</sub> ) and catalyzed by Zinc: A Green Alternative Approach For One-Pot Tandem Synthesis of Furo[3,2-h]quinolines	Pritam Saha, Koushik Mukherjee
11.50 am	22RASM 1030	Environmentally Benign Synthesis of 2,3,7-Substituted 1,8- Naphthyridines Devoid of Catalyst	Bhaskar Pittala, Srinivas Reddy Dacheppally, Shashikala Kethireddy, JanardhanEppakayala, Laxminarayana Eppakayala
12.10 pm	22RASM 1046	A simple fabrication of Mn doped SnO <sub>2</sub> nanoparticles towards improved congo red degradation photocatalytic activity	P.Rajeswaran, M.Shanmuganathan, T.Shanmuga Sundari, A.Elavarasan, P.Siva karthik
12.30 pm	22RASM 1066	Parametric studies of Degradation of reactive red 120 by a novel approach of hydrodynamic cavitation	Litesh.V.Malade, Umesh.B.Deshannavar, Abhijeet.D.Patil, Rahul.A.Patil
12.50 pm	22RASM 1079	Hydro-biological assessment of sustainable Desert Rain-Fed Ponds of Western Rajasthan Using Physico-chemical Characteristics and Phytoplanktonic Indices	Abhilasha Choudhary, Sulochana Sharma, Ranveer Singh and Prakash Narayan
02.00 pm	22RASM 1090	ZnO codoped with Si and Mn – Preparation, characterization and photocatalytic reduction of hazardous chromium (VI) by the codoped ZnO	Amal N, Athira Chandran M, Sreekanth K M, Sivasubramanian G, A. Chithra Mohan, Gowri S L, Rishika Narendran and Sreedhar K M
02.20 pm	22RASM 1099	Potential Efficacy of a Fruit Waste - Manila Tamarind Seed Powder for the Adsorption of Hazardous Dyes from Aqueous Solution: Batch Studies	KSNV Prasad, Sridevi Veluru, Sri Himaja Pamu, Venkata Rao Poiba, Husam Talib Hamzah, Meghana Seereeddi
02.40 pm	22RASM 2005	Analysis of Smart Biomaterial containing Umbilical Cord Blood Serum Protein Conjugated with P-(NIPAAM) using Spectroscopy	Manasa Biligowda Latha, Ashmitha Kishan Shetty, Rajamanickam Deveswaran, Ashish Jagannath Rai, Serene Joy, Hadonahalli Munegowda Shashanka, Siddique Sha Muhammad Hussain, Suraksha Shetty

Program Schedule of GC-RASM 2022

03.00 pm	22RASM 2007	1H NMR based study of Cord Blood Platelet Rich Plasma Conjugated with N isopropyl acrylamide-gold nano particles	Suraksha Shetty, Ashmitha Kishan Shetty, Serene Joy, Manasa Biligowda Latha
03.20 pm	22RASM 2059	Eugenol-Based Molecular Imprinted Membrane Synthesis as a Glucose Sensor in Honey	Muhammad Cholid Djunaidi, Nesti Dwi Maharani, Gunawan, Miratul Khasanah
03.40 pm	22RASM 2073	Myristica fragrans assisted Copper Nanoparticles and analyzing the antibacterial activity of Kaempferol	Chandana Thummaneni, S.Monica Nissy, Ramya Golli, Debora Divya Pabbathi, Gumma Jayasri, Meena Vangalapati
04.00 pm	22RASM 2099	Artificial neural networks for predicting potentiodynamic tests of brass 70-30	Monzamodeth, J. F. Flores-Alvaréz, I. Reyes, F. Castillo, B. Campillo, O.Flores
04.20 pm	22RASM 3010	Potentiality of tannery buffing chromium-containing solid waste in making concrete blocks	Murali Pujari, Getahun Demeke, Abebe Worku, Srikanth Komarabathina
04.40 pm	22RASM 3015	Isothermal study on sorption of Lead from synthetic solution using Liagora Viscida	Murali Pujari, Srikanth Komarabathina, Lukas Gelibo Argefa, Surafel Yihune Tamirue

**Session: ME01 (ONLINE)**

Date: 28.07.2022

Time: 11.30 am to 05.00 pm

Session In-charge : Mrs. Sharon C. D'Souza

Session in-charge Contact Number : +91 9886445912

Google Meet ID/Link : <https://meet.google.com/kzw-cfaq-gzc>

Time	Paper ID	Paper Title	Authors
11.30 am	22RASM 1022	Effect of diesel engine modification operated with karanja biodiesel and its blends	G. S. Jatadhara, N. R. Banapurmath, T. K. Chandrashekhar, S. B. Nagesh, P. A. Harari
11.50 am	22RASM 1033	Parametric Study of Abrasive Jet Machining on Zirconia	Nischal Thapa, Guransh Singh, Sidharth Rama, Ashish, Aman Kumar, Basanta Kumar Bhuyan
12.10 pm	22RASM 1037	Data analysis of the corrosion protection behavior of ginger, tea tree and grapefruit essential oil extracts on low carbon steel in	Roland Tolulope Loto, Edith Alagbe, Ayobami Busari
12.30 pm	22RASM 1038	Effect of Thick Film Coating on Scratch Resistance of Aluminium 6082-T6 Alloy Under Varied Loading Conditions	Tippeswamy M S, Arun K V, Shankara Naik
02.00 pm	22RASM 1048	Process Parameter Optimisation of Fused Deposition Method for Augmenting the Strength of Nylon Aramid PMCs	Nagendra J, Srinath. M. K, Bopanna.K.D, Sujeethswamy S, Ravikumar M
02.20 pm	22RASM 1050	Electrochemical data on the corrosion inhibition performance of admixed Citrus paradisi and Zingiber officinale oil extracts in 0.5 M H <sub>2</sub> SO <sub>4</sub> solution	Roland Tolulope Loto
02.40 pm	22RASM 1064	Analysis of Stress Intensity Factor of a finite plate with Centre Crack containing different hole shapes	Amith Anoop Kumar, Arunkumar S, Arutselvan C K and Jenuel John
03.00 pm	22RASM 1069	Experimental Study on Mechanical Properties of Al5083/ZrO <sub>2</sub> /B4C Hybrid Aluminium Metal Matrix Composites	K. Vijayalakshmi, G. Bhanodaya Reddy
03.20 pm	22RASM 1070	Design and Experimental Analysis of Dynamic Vibration Absorber (Dva) to Reduce Vibration in Rails By Using EPDM Material	Lochela Prabhu Kiran, P. Venkataramiah, Seedari Ujwala Rani
03.40 pm	22RASM 1074	Design Optimisation of Heat Sinks to Enhance its Thermal Conductivity Tested Through Computations Simulations	Bopanna.K.D, Srinath M.K, Ravikumar.M, Sujeeth Swami, Nagendra J
04.00 pm	22RASM 1096	Analysis of Mechanical Properties Based on the Nodularity in the Spheroidal Graphite Iron	Hamritha S, M Shilpa, M R Shivakumar, G Karthik Reddy
04.20 pm	22RASM 2003	Effect of Laser Cutting on Mechanical Performance of Woven Glass Fiber Reinforced Plastic Composites	Md Mijanur Rahman, M Muzibur Rahman
04.40 pm	22RASM 2026	Effect of Fuel Flow Analysis on a ECU controlled RCCI Engine with ETBE Blends	DVVS B Reddy Saragada, Vinjamuri SNCh Dattu, Puli Danaiah

**Session: ME02 (ONLINE)**

Date: 28.07.2022

Time: 11.30 am to 05.00 pm

Session In-charge : Mr. Nikhil N.

Session in-charge Contact Number : +91 9591585569

Google Meet ID/Link : <http://meet.google.com/ifd-khwi-jxs>

Time	Paper ID	Paper Title	Authors
11.30 am	22RASM 2027	Development of Mn-Mo-X-Y-Z-O based electrocatalytic materials for making hydrogen fuel from saline water	Jagadeesh Bhattarai
11.50 am	22RASM 2028	Artificial Neural Network and Evolutionary Algorithms Based Optimization of Electrochemical Discharge Micromachining Process during Micro-channel Fabrication on	Krishnendu Mondal, SK Hikmat, Bijan.Mallick, Jayanta Mahato, Pijush Dutta
12.10 pm	22RASM 2030	Numerical Performance Analysis of a Twin Blade Drone Rotor Propeller	Pandiyarajan Rajendran, Agnishwar Jayaprakash
12.30 pm	22RASM 2044	Investigation of Tribological and Corrosion Performance of Duplex Electroless Ni-P/Ni-Cu-P Coatings	Palash Biswas, Suman Kalyan Das, Prasanta Sahoo
02.00 pm	22RASM 2051	Influence of ALR on SMD in 3-D Air-blast Atomization using CFD	Rajneesh Kumar Yadav, Vivek Kumar Patel
02.20 pm	22RASM 2075	Ultra-Fine Grained Commercial Pure Titanium for Load-Bearing Applications	Moumita Ghosh, S. Surekha, M.Anisha, A.Thirugnanam
02.40 pm	22RASM 2076	Prioritization of forging die design criteria based on failure analysis using fuzzy analytic hierarchy process (FAHP)	Abhishek Sharma, V M S Hussain, P. Abhishek Kumar, Manish Pandit
03.00 pm	22RASM 2079	An integrated approach of FEM analysis using DEFORM 3D and experimental investigation of forces developed in Al-Si7Mg	Sridhar, M.S Aezhisai Vallavi and T Mugilan
03.20 pm	22RASM 2080	Experimental investigation on performance, emission and combustion characteristics of neem oil bio diesel using ethanol blend	Mohankumar, P. Indharajith, P. Sabarishankar, V.T. Sanjaykumar, N. Vignesh kumar, N. Udhayakumar
03.40 pm	22RASM 2081	Effect of PCM thickness and nano-additive on the cooling performance of Stearic Acid based Battery Thermal Management	Stino John, Sreyas K, Yedhu Mohan, Anathan D Thampi, Rani S
04.00 pm	22RASM 2083	Stress Analysis of Laminated Graphite Fiber Reinforced Polymer Panel Stiffened Joint with 45° Fiber Orientation	Narendra Kumar Rana, Nabam Teyi, Pranjal Borah
04.20 pm	22RASM 3012	Sound Radiation of a GLARE Panel at Elevated Temperature	Arul Raj Vaiduriyam, Lenin Babu Mailan Chinnapandi

04.40 pm	22RASM 3017	Effect of Cooling Technique and Tool Material on Inconel Alloy	Ganesh Dongre, Avdhoot Rajurkar, Suvarna Patil, Ravi Raut, Naina Joseph, Vaishnavi Mote, HarshRaja, Sumeet Jangam
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**Session: MSE01 (ONLINE)**

Date: 28.07.2022

Time: 11.30 am to 05.00 pm

Session In-charge : Ms. Nikhila

Session in-charge Contact Number : +91 9535620310

Google Meet ID/Link : <https://meet.google.com/odv-irdk-zis>

Time	Paper ID	Paper Title	Authors
11.30 am	22RASM 2021	Synthesis and Electrochemical Characterization of Electrospun Biocompatible Poly (E - caprolactone) and Polyaniline Nanofiber Composite Electrode Materials for Various Biosensing Applications	Sumitha M S, Xavier T S
11.50 am	22RASM 2024	The micromagnetic study of stabilizing parameters for the interfacial skyrmions	Rajnandini Sharma, Shrawan Kumar Mishra
12.10 pm	22RASM 2025	Studies on structural and magnetic properties of Nanoporous Li <sup>+</sup> substituted MgFe <sub>2</sub> O <sub>4</sub> nanomaterials for its application in hydroelectric cell with other areas of Science & Technology	Aniket Manash, Rakesh Kumar Singh, Vivek Kumar, Jyoti Shah, Shashank Bhushan Das, Singh Sonu Kumar, Nishant Kumar and R. K. Kotnala
12.30 pm	22RASM 2054	Process parameters and their effect on structure and morphology of gadolinium doped ceria	Taranveer Kaur, K. Singh, Jayant Kolte
02.00 pm	22RASM 2055	Thickness Dependent Tungsten trioxide Thin Films Deposited Using DC Magnetron Sputtering for Electrochromic Applications	Ashok Reddy G V, Habibuddin Shaik, K Naveen Kumar, R Imran Jafri, Sheik Abdul Sattar, Jyothi Gupta,
02.20 pm	22RASM 3040	Multiphysics Simulation and Analysis of MEMS-based Chevron shaped Electro-Thermal Actuator for Quad-way Switching Application	Amruth S Pawar, Chandrashekar L N, Nithya G, K Naveen Kumar, Madhushankara M b, Shridhar Nayak
02.40 pm	22RASM 3043	Eco-friendly produced superfine Moringa oleifera nanometric food powder and its characteristic effect on its structural, morphological and toxicity for varied applications as new functional nanomaterials	Naman Kumar Naik, Rakesh Kr Singh, Pallavi Singh, Nishant Kumar, Ghufra Ahmed and Shyam Narayan
03.00 pm	22RASM 3054	Study of Tribological Properties of Al6061 Hybrid Nano Composites	T.Anand, C.Dhanesh, L.Ranganathan
03.20 pm	22RASM 4089	Weibull Distribution Optimization for Piping Risk Calculation due to Uniform Corrosion using Monte Carlo Method	Fernanda Hartoyo, Gabriella Pasya Irianti, Jaka Fajar Fatriansyah, Hanna Ovelia, Imam Abdillah Mas'ud, Farhan Rama Digita, Andrian Fauzi, Muhammad Anis

03.40 pm	22RASM 5003	Experimental investigation of composite gypsum board integrated with phase change material for improved thermal energy storage	Nitesh Kumar, Pushpendra Kumar Singh Rathore, Aman Kumar Pal
04.00 pm	22RASM 5006	High capacity H <sub>2</sub> adsorption over Si <sub>4</sub> Lin (n=1-3) binary clusters: A DFT study	Ankita Jaiswal, Sridhar Sahu
04.20 pm	22RASM 5054	Hydrophobicity of Cotton Fabric Treated with Plant Extract, TiO <sub>2</sub> Nanoparticles and Beeswax	Anushi singh, Malti singh, Aditi pandey, A V Ullas, Saurabh Mishra
04.40 pm	22RASM 4036	Simulation of TAZ:Ir(ppy) <sub>3</sub> -BCP/ZnO heterostructure OLED	Ritu, A. M. Quraishi, Sandhya Kattayat, Smitha Josey, P. A. Alvi

**Session: PH01 (ONLINE)**

Date: 28.07.2022

Time: 11.30 am to 05.00 pm

Session In-charge : Mr. Prathiksha Rai

Session in-charge Contact Number : +91 8884935545

Google Meet ID/Link : <https://meet.google.com/khw-yzpp-hmp>

Time	Paper ID	Paper Title	Authors
11.30 am	22RASM 1006	Electrical study of bismuth and zinc codoped yttrium oxide prepared by wet chemical method	G. Bhavani, A. Sutha, K. Senthamil Selvan, R. Senjudarvannan, V. P. Radha
11.50 am	22RASM 1019	Ammonia sensing performance of Ni doped-WO <sub>3</sub> nano particles prepared by simple hydrothermal method at room temperature	H. Lincy, P.C. Jobe Prabaka, S. Joshua Gnanamuthu, I. John David Ebenezar
12.10 pm	22RASM 1020	Green Synthesis of ZnO nanoparticles using Plectranthus Amboinicus leaf extract and Study their Characterization, Antibacterial Activity	G.Kamarajan, D.Benny Anburaj, V.Porkalao, G.Nedunchezian, S. Joshua Gnanamuthu, R.Meenambika
12.30 pm	22RASM 1032	Photocatalytic activity of Hibiscus leaf extract mediated ZnO nanoparticles by hydrothermal method	S.Roselin Mariyal, G.Nedunchezian, D.Benny Anburaj, S.Joshua Gnanamuthu
12.50 pm	22RASM 1062	Characteristics of Brillouin gain coefficient in magnetized piezoelectric semiconductor quantum plasmas	Nishchhal Yadav, P.S.Malviya, Manpreet Kaur Saluja, C.S Sharma
02.00 pm	22RASM 1075	Green Synthesis of Graphene Oxide Extracted from Punica Granatum and Applications	K. Priyadarshini, S. Rathinave, E.Veluman, A.Manikandan
02.20 pm	22RASM 2004	Low temperature synthesis of MoO <sub>3</sub> nanoparticles by hydrothermal method: Investigation on their structural and optical properties	A V Avani, R B Chrisma and E I Anila
02.40 pm	22RASM 2013	The Effect of Alkali Treatment on Thermo-physical Properties of Calotropis Procera (Aak) fibers	Ritika Sharma, G.P. Singh, Akshay Joshi
03.00 pm	22RASM 2014	Effect of pH on the structural and optical properties of cobalt oxide nanoparticles synthesised by hydrothermal method	B Chrisma, A V Avani and E I Anila
03.20 pm	22RASM 2041	Optical properties of polymer blend of polymethyl methacrylate and polyvinyl chloride copolymer	R Y Bakale, Y G Bakale, Y S Tamgadga, R P Ganorkar, S V Khangar, A B Patil
03.40 pm	22RASM 2042	Fabrication of Aloe vera Nanopowder by Highenergy ball mill process	Sabyasachi Mukherjee, Rahul Kanti Nath, Puspendu Chandra Chandra, Sutanu Samanta and Manapuram Muralidhar

04.00 pm	22RASM 2048	Improved Room Temperature Gas Sensing Performances of Pristine WO <sub>3</sub> Nano Particles	H.Lincy, S.Joshua Gnanamuthu, P.C.Job Prabakar, I.John David Ebenezar
04.20 pm	22RASM 2057	Variation of Optical Parameters of Physically Stacked Polyvinylidene Chloride Films with Thickness and Wavelength	Akkamma M. B, Blaise Lobo
04.40 pm	22RASM 2062	Hydrothermal Synthesis of ZnO Nanostructures for room temperature CO Gas Sensing analysis	T.Saranya, S.Sathiya, J.Vijayapriya, D.Benny Anburaj, K.Parasuraman, S.Joshua Gnanamuthu

**Session: PH02 (ONLINE)**

Date: 28.07.2022

Time: 11.30 am to 05.00 pm

Session In-charge : Mr. Ganesh U. G.

Session in-charge Contact Number : +91 9611002215

Google Meet ID/Link : <https://meet.google.com/sfc-cqyh-hxk>

Time	Paper ID	Paper Title	Authors
11.30 am	22RASM 2072	Analysis of Morphological and Electro-optical Properties of Silica Nanoparticles induced Vertically Aligned Liquid Crystal - Effect of Doping and Coating Techniques	Ankit Rai Dogra, Vandna Sharma, Pankaj Kumar
11.50 am	22RASM 2078	Opto-electrical characteristics of Silver Nitrate-doped Polyvinyl Alcohol Films	Shivaji Bhosale
12.10 pm	22RASM 2093	Structural and spectroscopic properties of V <sub>2</sub> O <sub>5</sub> doped zinc bismuth sodium borate glasses	M. Naga Sireeshaa, J. Suresh Krishnab, V. Vinay Krishna, Ch. Linga Raju
12.30 pm	22RASM 3029	Evidence of Non-Debye Behavior of Pb <sub>0.76</sub> Sm <sub>0.24</sub> Ti <sub>0.76</sub> Fe <sub>0.24</sub> O <sub>3</sub> Ceramics by Complex Impedance Spectroscopy	Mehak Aroraa, Vishal Arorab, Shubhpreet Kaura, JasjitKaura, Sunil Kumara, Anupinder Singh
12.50 pm	22RASM 3032	Investigations on optical and photoluminescence properties of Dy <sup>3+</sup> doped zinc tellurite glass	Sukhdev Bairagi, K. S. Bartwal, Ghizal F. Ansari
02.00 pm	22RASM 3044	Growth of cerium oxide Nanorods by hydrothermal method and Electrochromic properties of CeO <sub>2</sub> /WO <sub>3</sub> Hybrid thin films for smart window Applications	Ashok Reddy G V, Habibuddin Shaik, K Naveen Kumar, Hitha D Shetty, R Imran Jafri, Sheik Abdul Sattar, Doreswamy B H
02.20 pm	22RASM 3052	Evaluation of crystal size present in graphene oxide quantum dots using optical and Raman spectroscopy	Prabin Kumar Mahato, Swarat Choudhari, Chandra Kumar, Sumit Roy, and Prashanta Patra
02.40 pm	22RASM 3062	Influence of Temperature on Oxygen Adsorption/Desorption properties of NEG Materials	K. Surendra, A.D.P.Rao, K. Prabhdas
03.00 pm	22RASM 3063	Structural, Magnetic, Dielectric and Magneto-Dielectric response in Pb <sub>0.75</sub> Nd <sub>0.25</sub> TiO <sub>3</sub> -CoFe <sub>2</sub> O <sub>4</sub> composites	Tiku Ram, Kanchan Khanna, Akshay, Sunil K. Dwivedi and Sunil Kumar
03.20 pm	22RASM 3073	Study of physical properties of homologous series of a ferroelectric liquid crystal	Amrita Mukherjee and S.S. Bhattacharyya

03.40 pm	22RASM 3086	Studies on optical and electronic characteristics of ternary zinc-tellurite glasses with varying Zn doping concentration	Sukhdev Bairagi, K. S. Bartwal, S. K. Dhiman, S. K. Mahajan, Ghizal F. Ansari
04.00 pm	22RASM 4015	Sucrose mediated synthesis and XPS analysis of nanocrystalline LaCrO <sub>3</sub> perovskite oxide	Pranav Prasad, Sai Kiran, Meenu M and Arun S. Prasad
04.20 pm	22RASM 4049	Microhardness and Wear Resistance of Alkaline Electroless Ni-P/Ni-P-ZnO Nanocomposite Platings	Kuldeep Kumar, Vakul Bansal, Sulaxna Sharma, Sanjeev Kimothi, Awanish Sharma
04.40 pm	22RASM 4065	Structural And Optical Properties Of Copper Selenide Nanolayered Tiles	Pushpanjali Patel, Prerna Gupta, K M Sujata, and R. G. Solanki

**Session: CE03 (ONLINE)**

Date: 29.07.2022

Time: 10.30 am to 04.00 pm

Session In-charge : Mr. Prasad B G

Session in-charge Contact Number : +91 9740901154

Google Meet ID/Link : <https://meet.google.com/ide-onxu-tnf>

Time	Paper ID	Paper Title	Authors
10.30 am	22RASM 4047	Uniaxial Tensile Properties for Bamboo and Jute Fabric Reinforced Natural Rubber	K Shri harsh, Surbhi Razdan, Deepti Sanjeev Marathe
10.50 am	22RASM 4051	Experimental Studies on Strength Behaviour of Concrete Reinforced with Natural Fibers	Pruthviraj K N, Srishaila Jagalur Mahalingasharma, Sachin Patil,
11.10 am	22RASM 4057	Usage of Non-Metallic Fraction Recycled from Printed Circuit Board in Concrete Paver Blocks and Paver Tiles	Aravinth Kumar V, Divyapprasanth M, Hari Prasad K V, Kadamban C A M, Poornima V
11.30 am	22RASM 4059	Assessment of Embodied Energy of Masonry Building Materials in Hassan, India	Devanand R, Prashanth S, Pinky L Devi, Chethan B A, Amar R, Harsha H N
11.50 am	22RASM 5010	Understanding the Role of Interfacial Transition Zone in Cement Paste and Concrete	Kamal Kishore, RadhaTomar
12.10 pm	22RASM 5016	Compressive Strength and Modulus of Poly (dimethylsiloxane)-Hollow Glass Microballoons Syntactic Foams reinforced with Nanoclay	Alok Upadhyay, A.V.Ullas
12.30 pm	22RASM 5021	Comparative life cycle assessment of recycled soil-stabilized bricks and traditional bricks	Inamdar Ahmed Raza, Navdeep, Rihan Maaze, Gyanendra Kumar Attri, Sandeep Shrivastava
02.00 pm	22RASM 5072	Microstructure Evolution and Strength Development for Pozzolana Blended Cement Mortar	Shivang Jayswal, Mahesh Mungule
02.20 pm	22RASM 5073	The Influence of Water-Gypsum Ratio on the Properties of National Gypsum (Joss) for Various Additives	Essam H. Elaiwi, Ali Kadhim Ibrahim, Saeb F. Al-Chalabi, Ali A. Abbood, Farah M. Hussein, Hussein H. Hussein, Ahmed S. D. AL-Ridha
02.40 pm	22RASM 4002	Influence of Treated Coir Fiber on Durability Properties of Black Cotton Soil	R Sridhar, H C Guruprasad, Naveenkumar D T, Sangeetha D M
03.00 pm	22RASM 5092	Structural Performance of Hybrid Fibres incorporated Re-Cycled Aggregate RC Slab	Vinod Kumar M, Jaideep C, Siddaramaiah Y M, Muthukannan M
03.20 pm	22RASM 5030	Performance Evaluation of one Dimensional Electrokinetic Barrier Subjected to Saltwater Intrusion: A Laboratory Scale Study	Abhishek A. Sutar, Veerabhadra M. Rotte
03.40 pm	22RASM 5055	Effect of Areca Fibers on Early Strength of Hybrid Fiber Reinforced Concrete	Anushree, D. T. Naveenkumar, Vijaya kumara Y M

**Session: CH02 (ONLINE)**

Date: 29.07.2022

Time: 11.30 am to 04.00 pm

Session In-charge : Mr. Prakhyath

Session in-charge Contact Number : +91 9632477677

Google Meet ID/Link : <https://meet.google.com/vqt-itov-zwk>

Time	Paper ID	Paper Title	Authors
10.30 am	22RASM 3047	Experimental investigation on Biosorption of Nickel using Neem Leaves	Satish Kommoji
10.50 am	22RASM 3088	Silver nanoparticles synthesized by Brassica oleracea (Broccoli) acting as antifungal agent against Candida albicans	Ramya Golli, Chandana Thummaneni, Debora Divya Pabbathi, Tejaswini Srungarapu, Gumma Jayasri, Meena Vangalapati
11.10 am	22RASM 4008	Preparation and Characterization of Graphene Oxide Nanoparticles Derived from Wheat Straw	Ban Dawood Saleh, Ghazwan Hasan Abdulwahhab, Safaa Muhammad Rashid
11.30 am	22RASM 4012	Hydrogen adsorption behaviour in Graphene Oxide doped Ni/Pd@f-MWCNTs - A sustainable cleaner energy approach	Madhavi Konni, Manoj Kumar Karnena, Saratchandra Babu Mukkamala
11.50 am	22RASM 4035	Synthesis and characterization of some mixed ligands complexes of $\beta$ -enaminone with some metal ions	Fatimah Abdul-Sattar Mohamed and Ahmed.T. Numan
12.10 pm	22RASM 4041	Designing of Novel Nanoemulsions of Retinol Using Box Behnken Design for Psoriasis	Mukul Sharma, Mukesh Chandra Sharma, Rakhi Khabiya, Akanksha Dwivedi, Alankar Shrivastava, G.P. Choudhary, Shivani Dubey, SanjayJain
12.30 pm	22RASM 4042	Bioactive Expolysacharide From Marine Bacteria Microcoocus sp.MRN-01	Nisha. P, Elizabeth Paul, Bismimol Francis, Hyrunnisa MA, Shahma.R.M, Sona Johnson
12.50 pm	22RASM 4043	Effect of ionic salt on PVA/Ferric nitrate nano fibers	Tirumala Rao Kotni, Aiyush Verma, Abhisek Panda
02.00 pm	22RASM 4063	Preparation of polypropylene co-polymer (PPCP) based composites with improved properties in presence of MWCNT and MAgPP fillers	Kiran Kumar Vuba, Nagabhushan Etakula, Appala Naidu Uttaravalli

02.20 pm	22RASM 4092	Growth of Pyridinecarbothioamides and Single Crystal XRD Studies	C. Revathi, O. Senthilkumar and S. Soundeswaran
02.40 pm	22RASM 5007	Total Dissolved Solids (TDS) removal from sugar industry effluent using low cost adsorbents	Satish Kommoji
03.00 pm	22RASM 5032	Preparation of thiourea derivatives of isoniazid and evaluation of its bacterial activity	Zeyad Najm Abdulla, Maha Salih Hussein
03.20 pm	22RASM 5041	Stereochemical investigation of a diversely significant crystalline material	P. Parthiban, Y. Venkatarao
03.40 pm	22RASM 5048	Methyl Esters of Vitis Vinifera Seed Oil and Al <sub>2</sub> O <sub>3</sub> Nano additives impact on DI Diesel Engine Performance and Emissions	Chandra Sekhar S, Sreenivasulu M, Malinee Sriariyanun, Babu Dharmalingam, Sathiyamoorthy K

**Session: ME03 (ONLINE)**

Date: 29.07.2022

Time: 10.30 am to 04.00 pm

Session In-charge : Mrs.Navya S Rai

Session in-charge Contact Number : +91 9980909648

Google Meet ID/Link : <https://meet.google.com/iti-ugcq-gru>

Time	Paper ID	Paper Title	Authors
10.30 am	22RASM 3018	Synthesis of PVA nano fibers by using Electrospinning	Tirumala Rao Kotni, Sarthak Pandey, Rajeev Ranjan, Parth Sarthi Srivastava, Sathvik Shekhar
10.50 am	22RASM 3022	Hybridization Of $\mu$ -Electrochemical Discharge Machining ( $\mu$ -ECDM) process: A Review	Sahil Grover, Sarbjit Singh, S.K. Mangal
11.10 am	22RASM 3030	Static Structural Investigation of Helical Compression Spring Utilizing Different Materials for an Automobile Suspension System	A.R. Udhaya, B. Rajeswari and T. Mugilan
11.30 am	22RASM 3035	Friction and Heat Treatment Studies on Al7075 Alloy Hybrid Composites	Gangadhar T.G, Adarsh B.C, Shankara D.R
11.50 am	22RASM 3036	Investigation of Mechanical Properties of Al6061 – Silicon Carbide, Red Mud Metal Matrix Composite	Gangadhar T G, V S Nanda, Mohan C, MukeshBava, Vikas
12.10 pm	22RASM 3037	Wear and Heat Treatment Studies on Al7075 Alloy Hybrid Composites	Gangadhar T.G, Shankara D.R, Adarsh B.C
12.30 pm	22RASM 3056	Effect of Various Pattern Stitching on Mechanical Properties of Jute Fibre Reinforced Composite	R Gukendran, M Sambath kumar, T PrakashRaj, S Nalinkumar, B Nivaas, B Sai Pranesh Kumar
02.00 pm	22RASM 3059	Optimisation of Process Parameters for Inconel 718 Spur Gear	Binita Kundu, Sumit Samanta, Debasis Ghosh, Kaushal Saha, Shibsankar Ghosh, Thia Paul
02.20 pm	22RASM 3066	Parametric analysis and optimization of the chassis of a Go kart competition vehicle by means of computational software based on mathematical algorithms	Héctor C. Terán, Oscar Arteaga, Fausto A. Jácome, Jonathan R. Zurita
02.40 pm	22RASM 3068	Experimental Investigation on Thermal Performance of Pulsating Heat Pipe by Using Dowtherm – A	Rudresha S, Babu E R

03.00 pm	22RASM 3074	The electrochemical degradation, wear behavior and machining of metal matrix composites based on 6xxx aluminum alloy with ceramic particulate reinforcements: A Brief Review	Abdullah Yahia Hassan, Abdulaziz Bahkali, Mohammad Yahya Meryahi, Ahmedgamil Alharbi, Haitham Hadidi, Mohammed Tharwan, Rajasekaran Saminathan
03.20 pm	22RASM 3090	Prediction of Single Cylinder Direct Injection Diesel Engine Performance Fuelled with Lemon Peel Oil Biodiesel Using Artificial Neural Network	Sivamani, S., Udayakumar, M., Sellappan, N.
03.40 pm	22RASM 4005	Micro Thermal Behavior of Ti-Mg Composite Processed through Friction Stir Processing	S.Selvakumar, S Aneesh, J.Rabi, N Mohammed Raffic K.Ganesh Babu

**Session: ME04 (ONLINE)**

Date: 29.07.2022

Time: 10.30 am to 04.00 pm

Session In-charge : Mrs. Snitha Shetty

Session in-charge Contact Number : +91 9019188570

Google Meet ID/Link : <https://meet.google.com/xgc-awec-exf>

Time	Paper ID	Paper Title	Authors
10.30 am	22RASM 4006	Tribo-performance of Saw Dust Filled Natural Fiber – Glass Fiber Reinforced Epoxy Composites: Modelling and Optimization	Debrup Sarkar, Pranjali Borah, Sutanu Samanta, Nabam Teyi, Pulakesh Chetia, Roktutpal Borah
10.50 am	22RASM 4011	Investigations of the Combustion of Diesel engine with Anodizing of Piston Crown	Avvaru.Renuka Prasadaand Shree Prakash
11.10 am	22RASM 4014	Experimental investigation on cutting force during end milling of AISI D2 tool steel using AlCrN coated tool	Ravikumar D Patel, Sanket N Bhavsar, Anand K Patel
11.30 am	22RASM 4021	Quality characteristic optimization of Aluminum Bronze in CNC by using Taguchi's approach and ANOVA	Maneesh K, Muhammad Shan, Sejin Xavier, Vinayak M B, Shafeek
11.50 am	22RASM 4024	Influence of process parameters on Material addition rate and hardness of 3D Printer Material	Mekhala Sarkar, Sumit Samanta, Thia Paul
12.10 pm	22RASM 4027	Modelling and Analysis of Heavy Commercial Vehicle Suspension System For Fatigue Life Enhancement	Sohail Shaikh, Deepak Hujare, Shrikant Yadav, Prakhar Swarnakar
12.30 pm	22RASM 4033	A comparative analysis of exergy using dual blends of Biodiesel in a DI engine	Ramakrishna N. Hegde, Gangadhara Rao, Jagadeesh Bantwal and Praveen Shenoy
02.00 pm	22RASM 4037	An Exergy Analysis of Boil-off Gas Recovery Process	Bhalchandra Shingan, Karthikraja Pandiyan, Brahminder Singh, Rachit Gore
02.20 pm	22RASM 4044	Investigation of surface properties for additively manufactured SS316L parts: Effect of post-processing techniques	Pankaj Sahlot, Mohit Suthar, Vishal Ashok Wankhede
02.40 pm	22RASM 4046	Experimental Investigations of Machining Parameters on Polyamide 6 Using Single Point Incremental Forming	Aditya Kharche, Shivprakash Barve
03.00 pm	22RASM 4050	The effect of Mg-Al substitution, particle size reduction, and thickness of BaFe <sub>12-2x</sub> Mg <sub>x</sub> Al <sub>x</sub> O <sub>19</sub> samples on increasing electromagnetic wave absorption	Erlina Yustanti, Vini Hafidzatul Hakimah, Alfian Novianto, Maulana Randa, Maykel T. E. Manawan

03.20 pm	22RASM 4056	Computational Analysis of Erosion Wear in Various Angle Bent Pipes	Latchupatula Ananya, Yatish Kumar Baghel, Vivek Kumar Patel
03.40 pm	22RASM 4060	Investigation on Anti-corrosion properties of TiO <sub>2</sub> -Nanocomposites on Stainless steel	Mai Ahmed Ali AlQaidi, Varghese ManappallilJoy, Nageswara Rao Lakkimsetty, Karunya S, Feroz Shaik

**Session: ME05 (ONLINE)**

Date: 29.07.2022

Time: 10.30 am to 04.00 pm

Session In-charge : Mrs. Divya A

Session in-charge Contact Number : +91 9480671109

Google Meet ID/Link : <http://meet.google.com/mqa-oiuv-ptj>

Time	Paper ID	Paper Title	Authors
10.30 am	22RASM 4068	CFD Simulation of Circumferential Crack in Low Pressure Water Pipelines	Subhanil Manna, Akash Kundu, Koustav Dey, Souvik Roy, Rohit Bhuit, Sandip Ghosh
10.50 am	22RASM 4072	Design and Modal analysis of Screw Agitator and Arm followed by Fabrication and Installation for dry mixing of ingredients to make ready-mix drinks	Ajinkya Bapat, and Shashikant S Goilkar
11.10 am	22RASM 4084	Lithium ion battery thermal management by using heat pipe coupled and liquid cold plate	Umesh Chavan, Omkar Prajapati, Pravin Hujare
11.30 am	22RASM 4095	Mechanism of Droplet Dynamics Formation in Micro-capillaries	Seim Timung, Sanskar Vaishnav, Shantanu Singh, Shubham Agarwal, Soumya Verma
11.50 am	22RASM 5011	Thermal Properties of Epoxy composites with Polyaniline and Graphene nanofiller	Dandapani, Devendra K
12.10 pm	22RASM 5013	Design and Development of Magneto-Rheological Damper for Vibration Attenuation in Household Washing Machine	Sagar Kulkarni, Uday Dabade, Prabhakar Maskar
12.30 pm	22RASM 5018	Effect of Cooling Technique and Tool Material on Ti6Al4v Alloy	Ganesh Dongre, Avdhoot Rajurkar, Suvarna Patil, Ravi Raut, Naina Joseph, Vaishnavi Mote, Harsh Raja, Sumeet Jangam
02.00 pm	22RASM 5019	Optimization of Machining Parameters in EDM of Inconel 625 Using Taguchi Approach	Himanshu Payal, Endale Fekadu, Abhishek Bhattacharya, Saigeeta Priyadarshini, Akanksha Mishra
02.20 pm	22RASM 5023	Evaluation of Emission Characteristics & Performance of a Biogas-Biodiesel Dual Fuel Engine Using Blends of Butanol in Different	Dilsher Khan, Geetesh Goga
02.40 pm	22RASM 5025	Fabrication and Characterization of Epoxy Solar Glass	Saigeeta Priyadarshini, Aman Prakash, Sanya Gupta, Akanksha Mishra, Himanshu Payal

Program Schedule of GC-RASM 2022

03.00 pm	22RASM 5039	Performance Evaluation of Diesel Engine with Electroless Nickel coating on Piston Skirt	Avvaru.Renuka Prasad and Shree Prakash
03.20 pm	22RASM 5060	Innovative Design and Analysis of Plough for Vineyards	Pratik Katkade, Nikhil Joshi, Puskaraj D Sonawwanay
03.40 pm	22RASM 5074	Learning Based Motion Planning of a 6-DOF Manipulator by using a Neural Network	Akanksha Dwivedi, Jitendra Kumar

**Session: PH03 (ONLINE)**

Date: 29.07.2022

Time: 10.30 am to 04.00 pm

Session In-charge : Mrs. Deeksha Anand

Session in-charge Contact Number : +91 9901470397

Google Meet ID/Link : <https://meet.google.com/tqk-zkww-isg>

Time	Paper ID	Paper Title	Authors
10.30 am	22RASM 4073	Theoretical Predictions of Thermophysical Properties of BiSn Liquid Alloys at 600 K	Rajendra Prasad Chaudhary, Rupam Kumaria, Nitu Kumari, Jagdhar Mandal, Indu Shekhar Jha
10.50 am	22RASM 4074	Transition from segregating to ordering in AgSb liquid alloys at 1250 K	Anjani Bhartiam, Rajendra Prasad Chaudhary, Nitu Kumari, Jagdhar Mandal, Indu Shekhar Jha
11.10 am	22RASM 4083	Structural, Optical, Photoluminescence, Magnetic and Electrochemical Supercapacitor Application of Tin oxide nanoparticles	E. Manikandan, J.C. Kannan, V. Devabharathi, S. Pushpa, Nazir Ahmad Mala
11.30 am	22RASM 4087	Protective Coatings On Copper Using As-Deposited Sol-Gel TiO <sub>2</sub> - SiO <sub>2</sub> Films	M. Pratima, A. Subrahmanyam
11.50 am	22RASM 5014	Dielectric relaxation studies in WO <sub>3</sub> mixed lead vanadate glasses	Mohansingh Heerasingh, T. Sankarappa*, Amarkumar Malge, Ashwini Devidas, B. Raghavendra
12.10 pm	22RASM 5020	Enhanced Optical and Dielectric Properties of Polymer Dispersed Liquid Crystal for Display Applications	Santosh Mani, Krishnakant Mishra, Sameer Hadkar and Pradip Sarawade
12.30 pm	22RASM 5022	Effect of Gd <sup>3+</sup> doping on structural, vibrational, dielectric, and ferroelectric properties of Bi <sub>0.5</sub> Na <sub>0.5</sub> TiO <sub>3</sub> ceramic	Bijayalaxmi Kuanar, Hari Sankar Mohanty, Biswajit Dalai, Dhruvananda Behera
02.00 pm	22RASM 5031	Prospect of Near-infrared Quantum Dots in the Development of Tandem Solar Cells: Detail Charge Balance Study	Uday Das
02.20 pm	22RASM 5034	Facile Synthesis and characterization of ZnSe nanoparticles	Prerna Gupta, Pushpanjali Patel, KM Sujata, Praveen Kumar Litoriya, Rekha Garg Solanki

02.40 pm	22RASM 5050	Electronic properties of Ferrocene/Graphene interface on ferromagnetic surface and pyrolytic graphite	Abhishek Kumar, Ashish Kumar and Anwasha
03.00 pm	22RASM 5051	Advances in hybrid junction solar cells	Ashish Kumar, Harsha and Abhishek kumar
03.20 pm	22RASM 5079	Effects of Al <sup>3+</sup> concentration on the structural, dielectric and conductivity properties of Al-doped ZnO	CH. Kalyani, I.V. Subbareddy, P. Raju, P. Swaroop Raj
03.40 pm	22RASM 5086	Characteristics of Ni-P-CNF Electroless Nanocomposite Platings	M. Ram, S. K. Kimothi, S. Sharma, G. Gautam, A. Sharma

**Session: EC 01 (ONLINE)**

Date: 29.07.2022

Time: 10.30 am to 03.40 pm

Session In-charge : Mr. Sudesha Shetty M

Session in-charge Contact Number : +91 8050940728

Google Meet ID/Link : <https://meet.google.com/fbt-iarb-gzb>

Time	Paper ID	Paper Title	Authors
10.30 am	22RASM 1044	Christmas-Tree Shaped Compact Microstrip Textile Antenna for Telemetry, ISM and X-band Applications	S. Salma, Habibulla Khan, B.T.P Madhav, B. Ram Charan, M. Hanumanth Ravi Kiran Reddy, T. Karthik, D. Ram Sandeep
10.50 am	22RASM 2012	Performance Optimization of Electrically Variable Double Gate Junctionless Transistor with HfO <sub>2</sub> Gate Dielectric	Achinta Baidya, Lalchuanawma Ralte, Lalramnunmawia Khawlhing, Zosangzeli, Pritam B Nikam, Niladri Pratap Maity
11.10 am	22RASM 2046	Design of Fabric Antennas for Body Protective Garment Applications and Analysis on their Performance	D.Ramesh Varma, B.Durga Saranya, G.Pavani, M.Subbarao, G.Challaram, D.Girish Kumar
11.30 am	22RASM 2090	Design of Compact and Wideband Circularly Polarized Irregular Octagonal-Shaped Antenna Using Characteristic Mode Analysis	Kshitij Jaiswal, Kamal Singh, Pawan Yadav, Manish Tripathi, Kuldeep Singh, Ankit Sharma
11.50 am	22RASM 3014	Enhanced Scanning Rate for SIW-LWA with continuous beam steering using delay lines	Hanfia Arif, Megha Gupta, Pooja Gupta and Ruchi Agarwal
12.10 pm	22RASM 3041	A Novel Piezoelectric Energy Harvester Configuration for Performance Enhancement	Naveen Tyagi, Anshu Mli Gaur, Aparna N. Mahajan
12.30 pm	22RASM 3053	Compact, Robust and Low-Profile Textile Antennas for Bio-Medical Applications with Upgraded Bandwidth for Integration of Easy Garment	D.Ramesh Varma, M.Murali, M.Vamshi Krishna
02.00 pm	22RASM 3092	On Demand Reconfigurable Notch-Based UWB MIMO Antenna For Wireless Application	Ranjana kumari, Arunsingh Rawat, Pranav Suri, Prabhakar Kaudinya, Kartikey Dwivedi
02.20 pm	22RASM 3098	The impact of plastic during the COVID-19 pandemic: The point of view of the environmental science literature	Fabiula Danielli Bastos de Sousa
02.40 pm	22RASM 4076	Impact of Source and Drain Position on Performance of Dual Gate Organic Thin Film Transistor	Nishi Mishra and Brijesh Kumar

Program Schedule of GC-RASM 2022

03.00 pm	22RASM 4078	Design of UWB Antenna for Wireless Capsule Endoscopy	Thyla B Jaya Soumeyaa P K, Jennifer T, Maharishi S, Thulasi Bai V
03.20 pm	22RASM 5090	Synthesis and intense visible emission of Er <sup>3+</sup> / Yb <sup>3+</sup> ions codoped lithium tellurite glasses under UV and IR excitation	Shivangi Parashar, Kratika Parashar , G.F.Ansari, S. K. Mahajan

**Session: EE 01 (ONLINE)**

Date: 29.07.2022

Time: 10.30 am to 03.00 pm

Session In-charge : Mrs. Vilma D'Souza

Session in-charge Contact Number : +91 9980016473

Google Meet ID/Link : <https://meet.google.com/viq-ikex-uda>

Time	Paper ID	Paper Title	Authors
10.30 am	22RASM 1081	DPVM-SEC based Methodology to Reconfigure PV System and Characterization during PSCs: Experimental study through embedded system based DAS	Isha Kansal, Rupendra Kumar Pachauri
10.50 am	22RASM 1082	Frequency Regulation Analysis for Renewable Bio Generated Autonomous Multi-Microgrid Using Moth Flame Optimized Fractional Order Controller	Sadhan Gope, Galiveeti Hemakumar Reddy, Kshetrimayum Millaner Singh
11.10 am	22RASM 1097	Design optimization of Spoke IPM motor for improving efficiency using PSO and Rao-1 algorithm based FEA	Supriya Naik, Baidyanath Bag, Kandasamy Chandrasekaran
11.30 am	22RASM 2069	Performance study of Amorphous-Si thin-film solar cell for the recent application in photovoltaics	Subhasri Kar, Sumit Banerjee, C K Chanda
11.50 am	22RASM 2089	Assessment of physical and chemical water quality parameters using naive Bayes control algorithm	J. Jeyashanthi, J. Barsana banu, M. Pandi Maharajan, M. Ramuvel
12.10 pm	22RASM 3027	Effect of Core Losses on Thermal Analysis of 3 $\phi$ -Squirrel Cage Induction Motor Using Lumped Parameter Thermal Model	Sachin S., Krishnan Manickavasagam, A. T. Sriram
12.30 pm	22RASM 3079	Stand-alone transformer-less multilevel inverter fed by solar energy for irrigation purposes	Mustafa F. Mohammed, Mohammed A. Qasim, Vladimir I. Velkin
02.00 pm	22RASM 4064	Asymmetrical Interval Type-2 Fuzzy Logic Controller Based MPPT for PV System under Sudden Irradiance Changes	Nirmal Kumar Pandey, Rupendra Kumar Pachauri, S. Choudhury, Raj Kumar Sahu
02.20 pm	22RASM 4066	Design and Fabrication of Miniaturized DC-DC Converter on Silicon Substrate	Shivadharshini A, Snekhya S L, Vignesh V, KR.Santha, M.Sasikala, Sudhakar Bharatan
02.40 pm	22RASM 4090	Effect of transport layer thickness in lead-based perovskite solar cell: a numerical simulation	Sadnan Sakib, Muhammad Yusof Mohd Noor, Mohd Rashidi Salim, Ahmad Sharmi Abdullah, Asrul Izam Azmi, Mohd Hisham Ibrahim and Mohd Haniff Ibrahim

**Session: MA 01 (ONLINE)**

Date: 29.07.2022

Time: 11.30 am to 03.00 pm

Session In-charge : Mrs.Archana S

Session in-charge Contact Number : +91 8123591394

Google Meet ID/Link : <https://meet.google.com/hov-wqvt-mid>

Time	Paper ID	Paper Title	Authors
10.30 am	22RASM 2009	Thermal radiation and Slip flow of viscoelastic-based Micropolar nanofluid with MHD effects on boundary layer	R. Manojkumar,S. Karthikeyan
10.50 am	22RASM 2011	Radial Basis Function Bipolar Fuzzy Neural Network	S.Anita Shanthi, R.Preethi and G. Sathiyapriya
11.10 am	22RASM 2031	Calculate the approximate volume of complex-shape solids	Raad Majd, Nedal Raed, Kiwan Modar, Popov Alexey Yurievich
11.30 am	22RASM 2037	A Bibliometric Analysis on Graphene Nanoplatelet for Sustainable Material	Weng Siew Lam, Pei Fun Lee, Weng Hoe Lam
11.50 am	22RASM 2064	Evaluating the quality factors of leaf plates by fuzzy TOPSIS method	S. Anita Shanthi, T. Umamakeswari
12.10 pm	22RASM 2082	Decision making problem on sustainable building material	S. Anita Shanthi, M. Gayathri
12.30 pm	22RASM 2092	Parametric study of MHD, Heat absorption/generation and diffusion of mass on one dimensional unsteady, chemically reacting flow employing Finite Element method	Ramesh Kune, S. Jagadha, S Hari Shing Naik, N. Kishan, D Gopal
12.50 pm	22RASM 5029	Evaluating the Effects of Microscopes in Bipolar Intuitionistic Fuzzy Soft Expert Environment	N. Nishadevi, M. Saranya, S. Anita Shanthi
02.00 pm	22RASM 2050	Adsorption of Cytosine on Si and Ge doped Graphene: A DFT Study	Shamsan Ali, Baliram Lone
02.20 pm	22RASM 3051	Effects of barrier Chemicals on Flame Retardant Properties of inherently flame retardant fabric	RG Revaiah, TM Kotresh, K Balasubramanian
02.40 pm	22RASM 5088	Study of modeling of cyclohexanol and polystyrenepolymer solution at T=453.15K and T=493.15TK usingUNIFAC-FV	Prithwi Raj Nayakand Binay Prakash Akhourri



# AJ INSTITUTE OF ENGINEERING & TECHNOLOGY

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NAME OF THE EVENT:	<b>Second Global Conference on Recent Advances in Sustainable Materials (GC-RASM 2021)</b>
ORGANISING DEPARTMENT / COMMITTEE :	<b>Department of Civil Engineering, Department of Mechanical Engineering, Department of Basic Sciences and Humanities.</b>
DATE :	<b>28-07-2022 and 29-07-2022</b>
NAME OF THE RESOURCE PERSON :	<p>Keynote 1 – 28-07-2022 <b>Dr. V.N Mani</b> Scientist-E, Head, High Pure Electronic Materials, Devices &amp; Systems Development Division Centre for Materials for Electronics Technology(C-MET) Department of Electronics &amp; Information Technology, Govt. of India</p> <p>Keynote 2 – 28-07-2022 <b>Dr. Dattatraya Narayan Gaonkar</b> Department of Electrical and Electronics Engineering, National Institute of Technology Karnataka Surathkal (NITK)</p> <p>Keynote 3 – 29-07-2022 <b>Mohamad Nur Khairul Hafizi Rohani</b> Senior Lecturer and the Program Chairperson of the Diploma of Electrical Engineering Universiti Malaysia Perlis</p> <p>Keynote 4 – 29-07-2022 <b>Syahrin Nizam Md Arshad</b> Senior Lecturer at Faculty of Electrical Engineering Technology, UniMAP and Head of High Voltage and Transient (HVTrans) Research Group. Universiti Malaysia Perlis</p>
REGISTRATION DETAILS	<p><b>211 participants in Virtual mode &amp; 14 participants in physical mode.</b></p> <p>Total manuscripts received: 594 Total manuscripts accepted: 281 Total papers registered: 225 No. of foreign registrations: 20 Foreign countries in GC-RASM 2022: 12 Bangladesh, Brazil, Ecuador, Indonesia, Iraq, Malaysia, Mexico, Nepal, Nigeria, Oman, Saudi Arabia and Taiwan</p>
Conference publication	

A two day Second Global Conference on Recent Advances in Sustainable Materials (GC-RASM 2021) was inaugurated on 28-07-2022 in Seminar Hall-1 at AJIET Campus. The inaugural function started by 9.35 a.m. and the delegates were escorted to dais by Chief convenor of GC-RDCT 2021 Dr. Kiran Kumar

V.G. and Chief convenor of GC-RASM 2021 Dr. Sangeetha D.M. The Guest of the function was Dr. Mani V.N., Scientist, C-MET, Telangana., Guest of Honor was Dr. Thangaprakash S. Director, Diligentec Solutions, Coimbatore and the function was presided was Dr. Shantharama Rai C., Principal, AJIET, Mangalore. Ms. Tanishka and Aishwarya evoked the blessings of almighty with a prayer song. Dr. Sangeetha D.M. welcomed the gathering and Dr. Kiran Kumar V.G. gave a brief introduction about the chief guest and Guest of honor of the event.

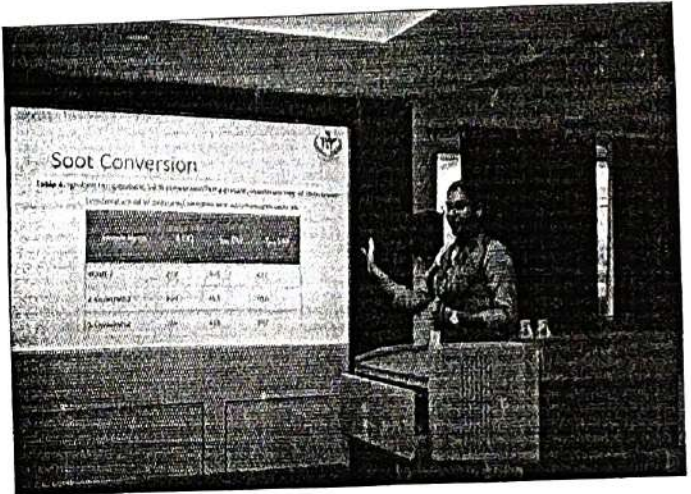
Dr. Thangaprakash S. briefed about the conference followed by the releasing of the conference proceedings by the dignitaries on the dias. Chief Guest of the Program Dr. Mani V N., delivered address to the gathering. Presidential address was delivered by Principal Dr. Shantharama Rai C. Vote of Thanks was delivered by R&D member Prof. John Prakash Veigas.

Day 1 28.7.2022- The program started with Keynote session 1 at 10.30 a.m., followed by keynote session 2 at 11.30 a.m. Altogether around 12 parallel sessions started by 12.15 p.m. out of which 10 sessions were held virtually using Google meet platform and 02 physical sessions. 15 papers were presented physically which included participants from 5 states (Kerala, Tamil Nadu, Karnataka, Gujrat and AndhraPradesh) and 2 countries (Taiwan and Oman).

Day 2- 29.7.2022: Keynote session 3 started by 9.30a.m. followed by Keynote session 4 at 10.00 a.m. Thereafter nine (12) parallel sessions were started simultaneously by 10.30 a.m.

Valedictory: In the evening by 4.00 p.m. valedictory session was held virtually via Google Meet. Dr. Kiran Kumar V G. welcomed the gathering. Principal Dr. Shantharama Rai C., delivered the presidential address. Dr. Thangaprakash S., delivered Valedictory Speech. Few researchers and Session chairs shared their valuable feedbacks. Dr. Thangaprakash S., shared the concluding remarks of the conference followed by Vote of thanks by Dr. Sangeetha D.M. The session concluded by 4.30p.m.





*Sargetha*  
CONVENOR

CC To:

1. President, LMET,
2. Vice President, LMET

*N*  
Principal  
A. J. Institute of Engineering & Technology  
Mangaluru