



2nd International Conference on "Emerging Research in Civil, Aeronautical & Mechanical Engineering" (ERCAM 2019) **July 25-26, 2019**

Conference Schedule

25 July 2019				
		Time	Location	
Registration	08:30 am to 09:30 am		PGDM Block	
Inauguration	00.20 4- 11.25		Sammilana Auditorium,	
	09:30 am to 11:35 am		First floor PGDM block	
High Tea	11:45	am to 12:15 pm	In Front of Auditorium	
Key Note Address	12:00	pm to 12:30 pm	Sammilana Auditorium	
			First floor PGDM block	
Poster Presentation	12:30	pm to 01:00 pm	First Floor PGDM	
(P1-Civil)			block	
Lunch Break	1:00	pm to 2:00 pm	Food court, 3 rd floor	
		1 3 5 1 1 1 2 5	PGDM block	
		Mechanical (M		
		N/ 1 : 1/N/	Floor (Room No. 301) 2) IoT lab 2 nd Floor	
	02:00 PM to	Mechanical (M	,	
Oral Presentations and	5:00 PM		(Room No. 303)	
Invited Talk	3.00 PM	Aero (A1)	Jnana Mantapa, Ground floor,(Room No.103)	
		Civil (C1)	Sankirana, First floor,	
		Civil (C1)	(Room No.203)	
	High Tea: 3:00 PM to 3:15 PM			
Banquet Dinne			3 rd floor PGDM block	
Bunquet Binne	· •	July 2019	3 11001 1 3D 11 610 CR	
		Time	Location	
		Machanical (M2)	Product Design lab 2 nd	
		Mechanical (M3)	Floor (Room No. 301)	
	9:00 AM	Mechanical (M4)	IoT lab 2 nd Floor	
Oral Presentations and	to 1:00	Wiechanicai (Wi4)	(Room No. 303)	
Invited Talk	PM Civil (C2) Sammilana Auditorium		Sammilana Auditorium,	
Invited Talk		CIVII (C2)	First floor PGDM block	
	Civil (C3)		Sankirana, First floor,	
			(Room No.203)	
	High Tea: 10:30 AM to 10:45 AM (In Front of Auditorium)			
Lunch Break	01:00 PM to 02:00 PM 3 rd floor PGDM			
Poster Presentation	2.00 DM 45 2.00 DM Elect Elect DCDM 11 1			
(P2- Mechanical and Aeronautical)	2:00 PM to 3:00 PM First Floor PGDM block			
Valedictory Function	Sammilana Auditorium,			
valeuletory runction	3:00 PM to 4:30 PM First floor PGDM block			
High Tea	4·30 PM	M to 5:00 PM	In Front of Auditorium	
ingii i ca	1.50 1 141 to 5.00 1 141 III I Tollt of Auditoffulli			





2nd International Conference on "Emerging Research in Civil, Aeronautical & Mechanical Engineering" (ERCAM 2019) **July 25-26, 2019**

M1 Oral Presentation-25 July 2019

Session	M1
Venue	Product Design lab 2 nd Floor,(Room No. 301)
Time	2:00 PM to 5:00 PM
Session chair and invited talk	Prof. Erwin Konrad Reichel, Researcher, Johannes Kepler University, Linz Institute of Technology Linz Austria
Co- chair	Prof. Seetharamu, Mechanical Department, NMIT
Co-Chair	Prof. Shekhar Majumdhar, Mechanical Department NMIT
Session in-charge	Mr. Kotresh and Mr. Shivpratap Singh Yadav

ID	Title	Authors
ME1	Dynamic Performance of Laminated Composite Plates with a Circular Hole Vinayak Kallani	
ME2	Material Characterization of Pin-Core Latex Polymer Foam Under Static and Dynamic Loads K Venkatarama	
ME3	Metaheuristic Optimal Design of Adaptive Composite Beams	M.A.R. Loja
ME4	Flexural behavior of 2D Cellular Lattice Structures Manufactured by Fused Deposition Modelling Syed Masod	
ME5	Study and Estimation of Static Stiffness of Machine Tool Spindle	BHARGAV
ME6	A Bayesian Approach to Predict the Structural Responses of FGM Plates with Uncertain Parameters M.A.R. Loja	
ME7	Stress Distribution in an Infinite Plate with Circular Hole by Modified Body Force Method Shrikrishna Badig	
ME8	Finite Element Formulation of Conjugate Heat Transfer in Porous Annulus	Maughal Ahmed Ali Baig
ME9	Finite Flement Formulation of Conjugate Double Diffusion in Porous Maughal Ahmed A	





2nd International Conference on "Emerging Research in Civil, Aeronautical & Mechanical Engineering" (ERCAM 2019) **July 25-26, 2019**

M2 Oral Presentation-25 July 2019

Session	M2
Venue	IoT lab 2 nd Floor (Room No. 303)
Time	2:00 PM to 5:00 PM
Session chair and invited	Prof. T. Ram Prabhu, Assistant Director, DRDO,
talk	Bangalore
Co- chair	Prof. Muralidhar, Mechanical Department, NMIT
Co-Chair	Prof. Kiran Aithal, Mechanical Department NMIT
Session in-charge	Mr. Arunkumar G L and Mr. Ganesh K

ID	Title	Authors
ME10	Design and manufacturing of hand injection mold for flip badge; Analysis of alternate AIR venting patterns	Vijaykumar Alwa
ME11	MWD Technique to Estimate the Uniaxial Compressive Strength of Rocks	Lakshmi Narayana
ME12	The Screening Efficiency of Linear Vibrating Screen - An Experimental Investigation Bharath Kumar S	
ME13	Hygrothermal Response Analysis of Magneto-Electro-Elastic Beam Embedded in Adaptive Wood through Finite Element Method Hemanth R	
ME14	Optimization of Neem Biodiesel Blend and Injection Pressure	Srinidhi Campli
ME15	Slurry Erosive Study and Optimization of Material and Process Parameters of Single and Hybrid Matrix Flexible Composites using Taguchi Approach Vishwas Mahesi	
ME16	Cerium Oxide and Silicon Carbide Reinforced Al6063 Metal Matrix Composites Comparative Evaluation for Mechanical Properties and Fractography studies Abdul Nazeer	
ME17	Development & Characterisation of Composite Coatings on A-36 steel Using HVOF Technique Anoushka Chaturvedi	
ME18	SEM Characterization of 3D Printed ABS Tensile Specimens Developed Kaushik V	
	by Fused Deposition Modelling Prasad	





2nd International Conference on "Emerging Research in Civil, Aeronautical & Mechanical Engineering" (ERCAM 2019) **July 25-26, 2019**

A1 Oral Presentation-25 July 2019

Session	A1
Venue	Jnana Mantapa, Ground floor,(Room No.103
Time	2:00 PM to 5:00 PM
Session chair and	Mr. Arunakar Mishra, MD and CEO Genser
invited talk	
Co- chair	Dr. Dharmendra Narayan, Scientist Engineer-G, Aeronautical
	development agency Bengaluru
Co-Chair	Prof. P K Dash, Aeronautical Engineering, NMIT
Session in-charge	Mr. Siddalingappa P K and Mr. Suthan R

ID	Title	Authors	
AE01	Simulation of Backward Facing Step Flow Using Openfoam®	Aravind S	
AE02	Studies on Blasting Effects of Shock Waves from A Small – Scale Shock Tube Aravind S		
AE03	Feasibility Study of Detonation Wave Initiation by Multiple Structured Blockages in A Plain Tube	rikrichnan I	
AE04	Comprehensive Characterization of Carbon Fiber Reinforced Epoxy Bino Prince Ra Composite for Aerospace Applications		
AE05	Study on Effect of Semi-Circular Dimple on Aerodynamic Characteristics of NACA 2412 Airfoil Sowmyashree Y		
AE06	Design and Analysis of Composite Panel with Curved Stiffeners for Aditya A Aditya A		
AE07	Identification of Nozzle Parameters In 3S Device Using Artificial Intelligence and Meta-Heuristic Optimization Scheme	Gangadhar Venkata	
AE08	Flow Characteristics of a Rectangular Open Shallow Cavity with Single Bump in A Confined Supersonic Flow Prasar		





2nd International Conference on "Emerging Research in Civil, Aeronautical & Mechanical Engineering" (ERCAM 2019) **July 25-26, 2019**

C1 Oral Presentation-25 July 2019

Session	C1
Venue	Sankirana, First floor (Room No. 203), PGDM Block
Time	2:00 PM to 5:00 PM
Session chair and	Mr. M N Ramesh, MD, Talrak Construction Ltd.
invited talk	
Co- Chair	Dr Raghava G, Professor, Civil Department, NMIT
Session in-charge	Mrs. Pratima G and Mr. Prashanth

ID	Title	Authors
CV01	Experimental Investigations of SCC with Indigenously Developed Geopolymer Aggregates and Performing Regression Analysis using MATLAB	Naveena M P
CV02	Experimental Investigation on Axially Loaded Alkali Activated Slag Concrete (AASC) and Traditionally Vibrated Concrete (TVC) Square Columns	Surapuraju Srinivasulu,
CV03	Effect of Surface Corrosion of Steel Reinforcement on Bond Strength Characteristics of Concrete Vineet Kotha	
CV04	Evaluation of Strength Properties of High Volume Flyash Concrete Incorporating Nanomaterials	Shashikumar C S
CV05	Analysis of Rotation Capacity of RC Beams over Formation of Plastic Hinges	Prabhakara R
CV06	Effect of Thickness and Modulus of Masonry on the Width of Equivalent Diagonal Strut of Masonry Infill	Lakshmikantha B A
CV07	Assessment of the Shear Strength of Fly Ash Based Geo-Polymer Concrete	S Kumar
CV08	An experimental study on finding rheological properties of fresh concrete mixes using concrete shear box	Ajay N





2nd International Conference on "Emerging Research in Civil, Aeronautical & Mechanical Engineering" (ERCAM 2019) **July 25-26, 2019**

M3 Oral Presentation-26 July 2019

Session	M3
Venue	Product Design lab 2 nd Floor (Room No. 301)
Time	09:00 AM to 01:00 PM
Session chair and	Prof. D. S. Adiga, Professor, Department of Mechanical
invited talk	Engineering, Indian Institute of Science, Bengaluru.
Co- Chair and invited	Mr. Punit Srivastava, Principal Aero Thermal Engineer, S &
talk	SSD, Rolls-Royce
Co-Chair	Prof. Desai Gowda, Mechanical Department NMIT
Session in-charge	Ms.Preethi and Ms. Lavanya

ID	Title	Authors
ME19	Influence of Ti coated tools on process parameters in turning process of MDN431	Pradeep V Badiger
ME20	Effect of Solar Optical Properties of Building Envelope on Time Lag, Decrement Factor, and Energy Saving of Buildings Debasish Mahapatra	
ME21	The Study of Microstructure and Wear Behaviour of Titanium Nitride Reinforced Aluminium Composites Mahesh L	
ME22	Design and Simulation of Single Axis MEMS Accelerometer for Low Acceleration Applications Rudresh K	
ME23	Prediction of Specific Energy Using Dominant Frequency of Acoustics Produced During Diamond Core Drilling Operations Ch. Vijaya Kur	
ME24	Investigation of Iron Ores Based on the Bond Grindability Test Harish H	
ME25	Effect of Cast Thickness on Properties of Al-Si Cast Obtained Different by Using Vertical Centrifugal Casting Smruti	
ME26	Design and Optimization of Foot Locus Trajectory of Theo Jansen Mechanism	Prashanth N





2nd International Conference on "Emerging Research in Civil, Aeronautical & Mechanical Engineering" (ERCAM 2019) **July 25-26, 2019**

M4 Oral Presentation-26 July 2019

Session	M4
Venue	IoT lab 2 nd Floor (Room No. 303)
Time	09:00 AM to 01:00 PM
Session chair and	Prof. Vasudev, Retd, Additional Director, CPRI.
invited talk	
Co- Chair	Prof. P. B. Shetty, Mechanical Department, NMIT
Co-Chair	Prof. P G Mukund, Mechanical Department, NMIT
Session in-charge	Mr. Chethan K S and Mr. Anand

ID	Title	Authors
ME27	The Effect of Extrusion on Microstructure, Mechanical and Tribological Properties of A7005 Hybrid Mmcs	Praveen Kumar S
ME28	Power Generation Using Parabolic Dish Csp Technology	Rabi Pathak
ME29	Influence of Metallurgical Parameters on Wear and Impact Characteristics in High Chromium Manganese Irons	T Pramod
ME30	Simulation of High Temperature Solid Particle Erosion of HVOF Sprayed Nicrbsife and WC-Co/Nicrbsife Coated Wall Using CFD	Raghavendra Naik
ME31	Optimization of Friction Stir Welding Parameters Using Taguchi Method for Aerospace Applications	Santhosh N
ME32	The Wear Properties of Ceramic B4C /Al Matrix Composite at Elevated Temperature Under Dry Sliding	Rajesh G. L
ME33	Evolutionary Optimisation for Optimising Process Parameters in Vacuum Carburising	Shivaprasad C G
ME34	The Effect of Planetary Milling Conditions on Tungsten-Carbide (WC) Particle Size Reduction and Sintered Properties	Kiran Aithal S





2nd International Conference on "Emerging Research in Civil, Aeronautical & Mechanical Engineering" (ERCAM 2019) **July 25-26, 2019**

C2 Oral Presentation-26 July 2019

Session	C2
Venue	Sammilana Auditorium, First floor PGDM block
Time	09:00 AM to 01:00 PM
Session chair and	Dr. R Prabhakar, Retd. Emeritus Prof. VTU, MSRIT (Chair)
invited talk	
Co- Chair	Prof Raghavan G, Professor, Civil Department, NMIT
Session in-charge	Dr. Jairaj and Ms. Shruthi

ID	Title	Authors
CV09	Spectral Density at Roof of Setback Tall Building Due to Time Variant	Amlan Kumar
	Wind Load	Bairagi
CV10		Amlan Kumar
	Distribution of Wind Pressure Around Different Shape Tall Building	Bairagi
CV11	Static Analysis of Point Supported Delaminated Composite Conoidal	
	Shell	Kamalika Das
CV12	Wind Excitation Study of Corner Modified Square Tall Structure	Arghyadip Das
CV13	Effect of Aerodynamic Modifications on a tall building with horizontal	Shanku Mandal
	irregularity	Shanku Wandar
CV14	Power Spectral Density on Principal Building Due to Setback Interfering	Soumya
	Building	Mukherjpee
CV15	Wind Load Analysis of a Tall Structure with Sharp and Corner Cut Edges	Abhipsita Rej
CV16	Performance Evaluation of Concentric and Eccentric Buckling Restrained	
	Braces on The Dynamic Behaviour of RC Structural Engineering	Sunil Lamsal





2nd International Conference on "Emerging Research in Civil, Aeronautical & Mechanical Engineering" (ERCAM 2019) **July 25-26, 2019**

C3 Oral Presentation-26 July 2019

Session	C3		
Venue	Sankirana, First floor, (Room No.203), PGDM Block		
Time	11:00 AM to 01:00 PM		
Session chair and	Prof. Basil Gnanappa, Director Higher Education,		
invited talk	Kalasalingam University		
Co- Chair and Invited	Dr V Ramachandra, Functional Head, Ultra Tech Cement,		
talk	Mumbai (Co- Chair)		
Session in-charge	Mrs. Shwetha and Ms. Sushmitha		

ID	Title	Authors	
CV17	Experimental Studies and Numerical Validation on Bearing Capacity of	Arekal Vijay	
	Skirted Footings on c-Φ Soils		
CV18	Physico Chemical Analysis of Intrusions in Bellandur Lake	Monesh M	
CV19	Feasibility Study for Optimal Cropping Pattern for Available Water in	Ganesh Kumar B	
C V 19	The Distributary of An Irrigation System		
CV20	Precipitation Overflow Demonstration and Rainfall-Runoff Modeling By	Surendra H J	
C V 20	Regression Analysis: A Case Study	Suichula II J	
CV21	Rural Development Studies Under Unnath Bharath Abhiyan - A Case	Veerappadevaru	
CVZI	Study of Chikkapalnahalli And Tannenahalli Village	G	
CV22	M. Estimation of Design Flood at A Reservoir (Outlet) By Cwc Based	Varma D.M	
	Hydrometeorological Approach	Kavya B M	
CV23	Assessment of Groundwater Quality by Integration of Water Quality	Nandeesha	
C V 23	Index and GIS Techniques		





2nd International Conference on "Emerging Research in Civil, Aeronautical & Mechanical Engineering" (ERCAM 2019) **July 25-26, 2019**

P1 Poster Presentation-25 July 2019

Session	P1
Venue	First Floor, PGDM Block
Time	12:30 PM to 01:00 PM
Session chair	Mr. M N Ramesh, MD, Talrak Construction Ltd.
Co- Chair	Dr. Raghava G, Department of Civil Engineering, NMIT
Session in-charge	Mr. Umashankar and Mr. Kiran

ID	Title	Authors
CV24	A Study on Index Properties of Kaolinite and Bentonite Sand Mixtures	Jyothi Devanur
CV25	Study on Soil-Structure Interaction of Raft Foundation for a Vertically Irregular Structure	Hemish Parmar
CV26	Analysis of Stabilisation Period of Two Lentic Lake with Marble Powder	Shreyas B V
CV27	Comparison Between Artificial Neural Network and SPSS To Predict Vehicle Emission	Ramprasanna S R
CV28	A. Experimental Study on Bamboo as A Reinforcing Material in Concrete	Sutharsan R
CV29	Influence of Flyash And Cowdung Ash in The Mix Design of Self Compacting Concrete: - An Experimental Study	Meyyappan Pl
CV30	Stagewise Performance Evaluation of Common Effluent Treatment Plant at Koparkairane, Navi Mumbai	Shanthi Selvam
CV31	Feasibility Study on Augment Drinking water Supply and Improve Ground Water Table By 3rd Stage Lift Irrigation Scheme for Honakere, Karnataka	Mahalingegowda H R
CV32	"Analysis of Silo and Comparing Silo with Different End Condition"	Gagan Krishna R R
CV33	Feasibility Study on Strength and Flexural Behaviour of RC Beams with Foundry Fine Aggregate	Shashi Kumar A
CV34	A Case Study on Project Performance of Railway Underpass Construction Project in Jaipur, India	Avinash Ojha
CV35	Analytical Study on The Seismic Behavior Of Two Adjacent Buildings Connected by Viscous Dampers	Shadab Khan
CV36	Analysis of Flexible Pavement with Steel Slag as Coarse Aggregate	Muralidhara R
CV37	Evaluation of Level of Service at Few Signalized Intersections Using Indian Highway Capacity Manual (Indo-HCM,2018)	Savitha B G
CV38	Issues on Planning of Solid Waste Management Scheme Through Evaluation in Integrated Data Information System	Kumar R Rao
CV39	Experimental Studies to Demonstrate the Influence of Fibres on Shear Strength of GPC Adopting Push-Off Specimens	Harish Kumar N R
CV40	Analysis of Water Quality Parameters of Groundwater Near Ranebennur Industrial Area, Haveri District, Karnataka, India	Vijay Kumar H





2nd International Conference on "Emerging Research in Civil, Aeronautical & Mechanical Engineering" (ERCAM 2019) **July 25-26, 2019**





2nd International Conference on "Emerging Research in Civil, Aeronautical & Mechanical Engineering" (ERCAM 2019) **July 25-26, 2019**

P2 Poster Presentation-26 July 2019

	taran da antara da a
Session	P-2
Venue	Open space, First Floor, PGDM Block
Time	2:00 PM to 3:00 PM
Session chair	Mr. Sridhar R, General Manager, India Technical Center, Federal Mogul
	Goetze India
Co- Chair	Prof. Virupaxi Auradi, Mechanical Department, Siddaganga Institute of
	Technology, Tumkur
Co-Chair	Prof. Gurudatt, Mechanical Department NMIT
Session in-charge	Mr. Puneeth and Mr. Vikram

ID	Title	Authors
ME35	Numerical Investigation of Laminar Flow in Micro-Channel Heat Sinks for Electronic Cooling Applications	Manjunath H N
ME36	Implementation of Taguchi Method and ANOVA For Optimization of Process Parameter in Improving the Surface Roughness in Injection Moulding Operation	Shiv Prathap Singh Yadav
ME37	Design, Fabrication & Analysis of Pen Mold For Injection Molding Machine	Shiv Prathap Singh Yadav
ME38	Impact of Sized Abrader and Normal Load On Deformation Morphology of En 24 Steel Subjected to Abrasion	Hemaraju Raju
ME39	Influence of Erodent Size, Impingement Angle and Fillers on Solid Particle Erosion Wear Behaviour of Carbon Fiber Reinforced Epoxy Composite	Prashanth N
ME40	Influence of Machining Cutting Speed on Cutting Force, Tool Flank Wear on PVD Inserts by Turning of Ti-6Al-4V Alloy	Raghavendra M J
ME41	Effect of Friction Stir Processing on The Dry Sliding Wear Behavior Of AZ31 Mg Alloy	Siddramesh S D
ME42	Finite Element Analysis of Bonded Patch Repair of a Panel with Multiple Cracks	R Srilakshm
ME43	Effect Of PP/MWCNT-COOH Nanocomposites on Mechanical Properties	Poornima
ME44	Optimized Process Parameters Using TOPSIS Method During Wire Electro Discharge Machining of Tinico Shape Memory Alloy	Hargovind Soni
ME45	Optimization of The Surface Quality in Milling Machine Using PVC Composite Plate	Hargovind Soni
ME46	Optimisation of Machining Parameters for End Milling of Maraging Steel MDN 250 Using TiAlSiN And TiSiN Coated WC-Co Inserts	Vinay V
AE09	An Experimental Investigation of Grit Size Effect Over A Smooth Circular Cylinder	Somashekar V
AE10	CFD Simulation of Turbulent Flow Around Multi-Element Airfoil	Sonali Gupta
AE11	Aerodynamic Design and Optimization of Supersonic Inlets for External Compression	Shashi Kumar V
AE12	Static Aero-Elastic Analysis of Wind Tunnel Test Model in Transonic Flow	Siddalingappa P K
AE13	Study on Effect of Surface Modification on Aerodynamic Characteristics of Eppler 387 Air foil	Srikanth H V