# **ICERP 2019**

**Conference Programme** 



#### International Conference and Exhibition on Reinforced Plastics

# Conference Organizing Committee

**Conference Committee Members** 

Dr. Srinivasa Iyer

Dr. Chaitanya Shah

Dr. V. Velpari

Dr. A.Selvam

Mr. Srinivas Alluri

Mr. Anshul Gautampurkar

Mr. A. Ganeshkumar

## Preface

## Composites - Limitless possibilities

As a founder member of FRP Institute I am excited on the growth of this institution in couple of decades and credit goes to all the members and the staff with excellent leaderships.

It gives me great pleasure to welcome all the delegates for the 2019 conference and exhibitions from January 10 – 13, 2019. The conference focuses on FRP especially the development of technology and product development. I appreciate more Industries oriented papers with vast experience in making the commercial products. We also like to bring to the audience and delegates the need for a strong connection between the industries, the designers and end usage to promote FRP products. The traditional concepts are changing to the new ideas so that FRP can make a share of the future areas of applications. The two technologies of making FRP namely the Pultrusion and Filament winding need a major change to capture larger areas of applications.



A combination with traditional materials such as concrete will be a great possibility for the expanded usage of FRP in construction industries especially in a corrosive environment

I take this opportunity to thank the members of the program committee especially Dr. Chaitanya and Dr. Selvam for their whole hearted support and hard work to make this happen

DR. SRINIVASA L. IYER CHAIRMAN CONFERENCE ORGANIZING COMMITTEE ICERP 2019

16:40 - 16:55

## Conference Programme Schedule

#### **ICERP 2019**

#### Thursday ~ January 10<sup>th</sup> (Day 1)

10:00 - 12:00	Inauguration		
13:00 - 13:45	Lunch		
Time		Description of Event	Presenter / Author
	1.1	Welcoming Talk to Delegates and Participants	Dr. Srinivasa Iyer, Chairman, ICERP 2019 Conference
13:45 - 15:05	1.2	Global Composites market-Current trends and Future outlook.	Mr Frederic Reux, JEC Composites
	1.3	Indian Aerospace Composites Market: Growth Potential and Opportunities	Pankaj Chakraborty, STRATVIEW RESEARCH
	1.4	Strategies for Success in Composites Business	Dr. Chaitanya Shah, Mechemco Group
15:05 - 15:20	Tea		
13.03 - 13.20	ICa		
	2.1	Single Wall Graphene Nanotubes For Composites Applications	Vladimir Kravchenko, OCSiAl Ltd., Russia
15:20 - 16:40	2.2	A System Solution With Improved Fire Retardance and NVH Performances For Automotive Engine Hood Assemblies	Dr. Aswini Kumar Mishra, Aniruddha Dhamane, Amit Kumar Das and Omkar Kulkarni, Tata Auto Comp Systems Ltd., India
	2.3	Development & Study of Indigenous Carbon and Glass Tow Prepregs	Dr. Gunjan Gadodia, 3A Associates Incorporated, India
	2.4	Speciality Alumina Hydrate - A versatile material in composites to save life	Dipankar Ghosh, Harish N. Revankar, Ajith Ramachandra, Madan Shingukar and Nageswar Kapuri, Hindalco Innovation Centre, India

Tea

Time		Description of Event	Presenter / Author
16:55 - 17:55	3.1	Flexural Stiffness Of Foam Core Composites As A Function Of Type & Density Of Foam	Vishakha Patil, Karishma Prabhu, Kishore Prabhu, Fine Finish Organics Pvt. Ltd., India
	3.2	Influence Of Speed And Feed Rate On Delamination During Drilling Process In CFRP And GFRP Laminates	Tejas N, Rahul M. Cadambia, Ramaiah University of Applied Sciences, India
	3.3	Effect of water aging on physical and mechanical response of CFRP multi-directional laminates	Alok Behera*, Manjusha M. Thawre, Atul Ballal, Visvesvaraya National Institute of Technology, India
ICERP 2019 Friday - January 1			January 11 <sup>th</sup> (Day 2)
	4.1	XSTRAND™ 3D Printing filaments by Owens Corning: Redefining additive manufacturing performance	Sagar, Vaibhavi and Sangeeta, Owens Corning,
	4.2	What Is The Best Moulding Process Option Available Today To Meet My Production Needs And Make My	Larry Audette, SWORL, Inc., USA

		directional laminates	National Institute of Technology, India
ICERP 20	119	Friday ~	January 11 <sup>th</sup> (Day 2)
10:00 - 11:30	4.1	XSTRAND™ 3D Printing filaments by Owens Corning: Redefining additive manufacturing performance	Sagar, Vaibhavi and Sangeeta, Owens Corning,
	4.2	What Is The Best Moulding Process Option Available Today To Meet My Production Needs And Make My Accounting Department Happy?	Larry Audette, SWORL, Inc., USA
	4.3	Developments In 3-D Weaving Machines For Nearnet Textile Preforms For Composites.	Sharad N. Kale & Dr. Prof. U.J.Patil, KALE TEXNIQUE and DKTE Institute, India
	4.4	Tailoring Of Fiber Volume Fraction Of Vacuum Assisted Resin Infusion Molding Process	Sunilpete M.A. and Rahul M. Cadambi, Ramaiah University of Applied Sciences, India
11:30 - 12:00	Tea		
11.50 12.00	ica		
12:00 - 13:15	5.1	Enhanced Product Properties And Process Efficiency Utilizing Vinyl Toluene/Styrene Monomer Blends In Pultrusion Applications.	Grant Richmond, Deltech Corporation, USA
	5.2	Use Of Polyurethane Resin In GRP Industry.	Mr.Susanta Pramanik, Crest Composites and Plastics Pvt. Ltd., India
	5.3	Multifunctional Epoxy Resins: An Overview, Trends And Their Importance In Composite Industry	Dr. Utkarsh Shukla and Dr. M.Soni, Atul Ltd., Valsad, India
	5.4	High Temperature Matrix Systems Based on Phthalonitrile Resins	Sunil Indurti, M K Sridhar, Ranga Babu, Krishna Reddy, Azista Industries Ltd, India
13:15 - 14:00	Lunch		

Time		Description of Event	Presenter / Author
	6.1	Design and costing consideration for FRP composite systems.	Suhas Kolhatkar, Composite Designs &Technology, India
14:00 - 15:30	6.2	Inspecting Fiber Glass Reinforced Plastic & Best Practices in FRP Manufacturing – Cases on Tanks & Vessels	Ramakrishnan Tumuluru, Maverick Applied Science Inc- Florida, USA
14:00 - 15:30	6.3	Design optimization of wind turbine nacelle cover	Raja Mohamed Hasan A and Team, Suzlon Energy Ltd, India
	6.4	Polymer Matrix Composites (PMCs): Benefiting from Conformity Assessment Practices	Prasad Shankarappa, UL India Pvt Ltd, India
15:30 - 15:45	Tea		

15:45 - 17:15	7.1	An Overview on SMC, BMC / DMC developments worldwide and particularly in India	Dr.Sudhakar, Crest Composites and Plastics Pvt Ltd, India
	7.2	High Flow Sheet Molding Compound (SMC) for Large Vehicular Parts	Dr. Sudhangshu Maity, Shridhar Rao, Suresh Saini, Sajal Kumar Ghosh, Tata AutoComp Systems Limited, India
	7.3	Applications Of Composites In Mass Transport:	Kishore Prabhu, Fine Finish Organics Pvt Ltd, India
	7.4	Composite Rebars For RCC	Goutam Bhattacharya, India

#### ICERP 2019 Saturday - January 12th (Day 3)

	8.1	The effect of Graphene based Epoxy Nanocomposite Adhesive on the Fatigue Strength of Composite Single Lap joint	Rohit R. Ghadge, Shaunak A., Ganorkar, Dattatray J. Late, Kaustubh Garud, CSIR-NCL, India
10:00 - 11:30	8.2	Mechanical And Thermal Response Of MWCNT Filled Glass Fibre Reinforced Polymeric Composites At Various Loading Rates	Kishore Kumar Mahato*, Dinesh Kumar Rathore, Rajesh Kuma Prusty, Krishna Dutta and Bankim Chandra, National Institute of Technology, Rourkela, India
	8.3	Enrichment Of Mechanical Properties Of Carbon Fibre Composite By Electrophoretic Deposition Of Graphene Based Nanofillers	Sagar Yandrapu*, Pavan Kumar Gangineni, Rajesh Kumar Prusty, Bankim Chandra Ray, National Institute of Technology,Rourkela, India

Time		Description of Event	Presenter / Author
10:00 - 11:30	8.4	Characterization Of Nano-Engineered Prepregs in PMC Or Laminated Composites Using different Manufacturing Technique- A Review.	Mahendra Shelar, VJTI, Matunga, India
11:30 - 11:45	Tea		
11:45 - 13:15	9.1	Towards Structural Optimization Of Large Composite Wind Turbine Blade	Vivek Kumar Shrivastav & Mohammed Rabius Sunny, Indian Institute of Technology Kharagpur, India
	9.2	Natural Fiber Reinforced Sustainable Composites for Non-Structural Applications	Ujendra Kumar Komal, Manish Kumar Lila and Inderdeep Singh, Indian Institute of Technology Roorkee, India
	9.3	Modeling Of Delamination Behaviour In Composite Beam Using A Novel Continuum Damage Theory	S. Sai Kumara, N. Muthua, Indian Institute of Technology, Guwahati, India
	9.4	A review on temperature based durability analysis of nanophased FRP composites by various mechanical and thermomechanical characterization techniques	Rajesh Kumar Prusty and Bankim Chandra Ray, National Institute of Technology, Rourkela, India
13:45 - 14:00	Tea		
14:00 - 15:00	10.1	Product Development Based on Natural Fiber Reinforced Plastics	Dr. Inderdeep Singh and Ujendra Kumar Komal, Indian Institute of Technology Roorkee, India
	10.2	Orion Racing India: A Formula Student RaceCar, Engineered with Passion.	Kartik Gandhi, Shreya Rajmane and Ketki Sanghai, K J Somaiya College of Engineering, India
	10.3	Recyclability assessment of bagasse fiber based polyethylene composites	Manish Kumar Lila, Ujendra Kumar Komal and Inderdeep Singh, Indian Institute of Technology Roorkee, India