



Futuristic Advancements in Materials, Manufacturing and Thermal Sciences (ICFAMMT2022), January 20–22, 2022







Jointly organised by

Department of Mechanical & Aero-Space Engineering, IITRAM Ahmedabad, Gujarat, India & Space Society of Mechanical Engineers (SSME), Space Applications Centre, ISRO, Ahmedabad

# Certificate of Presentation

Paper Title: Cavitation Erosion Analysis of High Velocity Oxy Fuel (HVOF) sprayed VC + 25%CuNi-Cr Coating Developed on SS316 Steel Under Different Impingement Conditions.

Author(s) name: Vikrant Singh, Anuj Bansal, Anil Kumar Singla, Deepak Kumar Goyal, Rampal and Navneet Khanna

This is to certify that Dr./Mr./Ms. Vikrant Singh has presented the above mentioned paper in ICFAMMT-2022 held during 20<sup>th</sup> - 22<sup>nd</sup> January at IITRAM Ahmedabad, Gujarat, India.

Prof. Shiva Prasad

(Director General, IITRAM)





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## Certificate of Presentation

Paper Title: Influence of High Velocity Oxy Fuel (HVOF) sprayed TiC + 25%CuNi-Cr Coating on Cavitation Erosion Behavior of Hydro-Machinery SS316 Steel.

Author(s) name: Rampal, Anuj Bansal, Anil Kumar Singla, Deepak Kumar Goyal, Jonny Singla, Vikrant Singh and Navneet Khanna

This is to certify that Dr./Mr./Ms. Rampal has presented the above mentioned paper in ICFAMMT-2022 held during 20<sup>th</sup> - 22<sup>nd</sup> January at IITRAM Ahmedabad, Gujarat, India.

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## Certificate of Presentation

Paper Title: Chemically Stable Metal Oxide Nano-composite based External Filters for Gas Purification from Petrol Automobile Exhaust.

Author(s) name: P. Allen Welwin, Mithilesh Hubli, Prajwal Patil, Sangeetha R, Rahul Pillai, Sounak Roy, Shamsundar Hegde, Prashant. S. Hatti and Chaitanya Lekshmi Indira

This is to certify that Dr./Mr./Ms. P. Allen Welwin has presented the above mentioned paper in ICFAMMT-2022 held during 20<sup>th</sup> - 22<sup>nd</sup> January at IITRAM Ahmedabad, Gujarat, India.

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## Certificate of Presentation

Paper Title: Study of the Reinforcement Mechanism of h-BNNS on the Mechanical Properties of Crosslinked Epoxy LY-556 Nanocomposite.

Author(s) name: Akshat Verma, Neetu Chaudhary and Mithilesh K. Dikshit

This is to certify that Dr./Mr./Ms. Akshat Verma has presented the above mentioned paper in ICFAMMT-2022 held during 20<sup>th</sup> - 22<sup>nd</sup> January at IITRAM Ahmedabad, Gujarat, India.

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## Certificate of Presentation

Paper Title: Effect of ZrO2 on the Heterogenous distribution of Hardness in Upsetting Tests of Al%ZrO2 using Experimental and Finite Element Investigations.

Author(s) name: Hari Krishna Chirala, Nagaraju Cherukuri, Sai Saran K and Davidson Mj

This is to certify that Dr./Mr./Ms. Hari Krishna Chirala has presented the above mentioned paper in ICFAMMT-2022 held during 20<sup>th</sup> - 22<sup>nd</sup> January at IITRAM Ahmedabad, Gujarat, India.

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## Certificate of Presentation

Paper Title: Numerical Investigation of Catalytic Converter Performance with TES for multiple PCM.

Author(s) name: Gargee Pise, Milankumar Nandgaonkar and Sanket Keer

This is to certify that Dr./Mr./Ms. Gargee Pise has presented the above mentioned paper in ICFAMMT-2022 held during 20<sup>th</sup> - 22<sup>nd</sup> January at IITRAM Ahmedabad, Gujarat, India.

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## Certificate of Presentation

Paper Title: Brush plating on Aluminum for High-reliable Use.

Author(s) name: Dr. Vaishali Umrania, Vimal M Shah and Sharad Shukla

This is to certify that Dr. Vaishali Umrania has presented the above mentioned paper in ICFAMMT-2022 held during 20<sup>th</sup> - 22<sup>nd</sup> January at IITRAM Ahmedabad, Gujarat, India.

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### Certificate of Presentation

Paper Title: Influence of Carboxyl Functionalised Graphene Nanoplatelets on the Thermomechanical and Morphological behaviour of Smart Polymer Nanocomposites.

Author(s) name: Nilesh Tiwari and A. A. Shaikh

This is to certify that Dr./Mr./Ms. Nilesh Tiwari has presented the above mentioned paper in ICFAMMT-2022 held during 20<sup>th</sup> - 22<sup>nd</sup> January at IITRAM Ahmedabad, Gujarat, India.

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### Certificate of Presentation

Paper Title: A Review on Experimental Investigation of Paraffin Based Phase Change Material for Thermal Management of Li-Ion Battery.

Author(s) name: Durgesh Kumar Mishra, Sumit Bhowmik and Krishna Murari Pandey

This is to certify that Dr./Mr./Ms. Durgesh Kumar Mishra has presented the above mentioned paper in ICFAMMT-2022 held during 20<sup>th</sup> - 22<sup>nd</sup> January at IITRAM Ahmedabad, Gujarat, India.

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### Certificate of Presentation

Paper Title: Processing Techniques of Magnesium Matrix Composites and its Heat Treatment - A Review.

Author(s) name: Manan Shah, Ayush Pandya and Pramod Bhingole

This is to certify that Dr./Mr./Ms. Manan Shah has presented the above mentioned paper in ICFAMMT-2022 held during 20th - 22nd January at IITRAM Ahmedabad, Gujarat, India.

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#### Certificate of Presentation

Paper Title: A Review on Heat Treatment of Magnesium Alloys and its Effect on Various Properties.

Author(s) name: Ayush Pandya, Manan Shah and Pramod Bhingole

This is to certify that Dr./Mr./Ms. Ayush Pandya has presented the above mentioned paper in ICFAMMT-2022 held during 20th - 22nd January at IITRAM Ahmedabad, Gujarat, India.

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### Certificate of Presentation

Paper Title: Synthesis, Characterization and Application of Hydroxy-apatite Grafted over Pristine Charcoal /Activated Char-coal for removal of pb2+ ions from Aqueous solution.

Author(s) name: Sandeep Kumar Singh, Sudipta Halder and Thingujam Jackson Singh

This is to certify that Dr./Mr./Ms. Sandeep Kumar Singh has presented the above mentioned paper in ICFAMMT-2022 held during 20th - 22nd January at IITRAM Ahmedabad, Gujarat, India.

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### Certificate of Presentation

Paper Title: Prediction of Thermo-Mechanical Behavior of Hemp Fibre Polymer Composites.

Author(s) name: Sivasankara Raju R, Sathish Kumar Adapa, Jagadish Jagadish, C J Rao and Sagar Yanda

This is to certify that Dr./Mr./Ms. Sivasankara Raju R has presented the above mentioned paper in ICFAMMT-2022 held during 20<sup>th</sup> - 22<sup>nd</sup> January at IITRAM Ahmedabad, Gujarat, India.

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### Certificate of Presentation

Paper Title: The behavior of Pyro-Carbon Matrix synthesized through Isothermal Chemical Vapour Infiltration Process.

Author(s) name: Dipoo Kumar, Gomati N and Deepak Agarwal

This is to certify that Dr./Mr./Ms. Dipoo Kumar has presented the above mentioned paper in ICFAMMT-2022 held during 20<sup>th</sup> - 22<sup>nd</sup> January at IITRAM Ahmedabad, Gujarat, India.

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### Certificate of Presentation

Paper Title: Studies on Annealing Kinetics of Cold Forged AA6082 Alloy.

Author(s) name: Ashutosh Ranjan, Ashvani Kumar and Rahul Kulkarni

This is to certify that Dr./Mr./Ms. Ashutosh Ranjan has presented the above mentioned paper in ICFAMMT-2022 held during 20<sup>th</sup> - 22<sup>nd</sup> January at IITRAM Ahmedabad, Gujarat, India.

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### Certificate of Presentation

Paper Title: Electromechanical Instability Modeling of Particle-Reinforced Dielectric Elastomeric Actuators.

Author(s) name: Sankalp Gour, Deepak Kumar and Vinod Yadav

This is to certify that Dr./Mr./Ms. Sankalp Gour has presented the above mentioned paper in ICFAMMT-2022 held during 20th - 22nd January at IITRAM Ahmedabad, Gujarat, India.

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### Certificate of Presentation

Paper Title: Magnetic Steady Shear Flow Response of Water and Silicon Oil-Based Magnetorheological Fluid.

Author(s) name: Chandra Shekhar Maurya and Chiranjit Sarkar

This is to certify that Dr./Mr./Ms. Chandra Shekhar Maurya has presented the above mentioned paper in ICFAMMT-2022 held during 20<sup>th</sup> - 22<sup>nd</sup> January at IITRAM Ahmedabad, Gujarat, India.

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Certificate of Presentation

Paper Title: Preparation of Bamboo based Nano cellulose by Ball Milling.

Author(s) name: Yogendra Kumar Verma, Dr. Amit Kumar Singh and Dr. Manikant Paswan

This is to certify that Dr./Mr./Ms. Yogendra Kumar Verma has presented the above mentioned paper in ICFAMMT-2022 held during 20<sup>th</sup> - 22<sup>nd</sup> January at IITRAM Ahmedabad, Gujarat, India.

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### Certificate of Presentation

Paper Title: Experimental and Numerical Analysis of Diametric Compression Test of FRP Rings.

Author(s) name: Nagaraja T. K., Yogesha K.B. and Mruthunjaya M

This is to certify that Dr./Mr./Ms. Nagaraja has presented the above mentioned paper in ICFAMMT-2022 held during 20<sup>th</sup> - 22<sup>nd</sup> January at IITRAM Ahmedabad, Gujarat, India.

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### Certificate of Presentation

Paper Title: Thermo-Chemical Characterisation of Fe-Ni Alloys for Space Applications.

Author(s) name: Yogesh Ghotekar, Ravi Kumar Varma, Vimal Shah, Harshadrai Modi, Anup Vora, Ajay Kumar Lal and Bharat Makwana

This is to certify that Dr./Mr./Ms. Yogesh Ghotekar has presented the above mentioned paper in ICFAMMT-2022 held during 20<sup>th</sup> - 22<sup>nd</sup> January at IITRAM Ahmedabad, Gujarat, India.

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### Certificate of Presentation

Paper Title: Stress Analysis of Carbon Composite Material for Space Based RF Component Using CAE Simulation.

Author(s) name: Aaryan Shah, Ashish Soni, Dhaval Vartak and Pina Bhatt

This is to certify that Dr./Mr./Ms. Aaryan Shah has presented the above mentioned paper in ICFAMMT-2022 held during 20th - 22nd January at IITRAM Ahmedabad, Gujarat, India.

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### Certificate of Presentation

Paper Title: Development and Characterization of Low Thermal Conductivity Material From Reinforced Areca Husk Fibre Composite.

Author(s) name: Chethan G, Sunil K C and Yerol Narayana

This is to certify that Dr./Mr./Ms. Chethan G has presented the above mentioned paper in ICFAMMT-2022 held during 20<sup>th</sup> - 22<sup>nd</sup> January at IITRAM Ahmedabad, Gujarat, India.

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# Certificate of Presentation

Paper Title: Analytical Hierarchy Process Based Decision Making for fabricating CFRP for Space Applications Using Nanomaterials.

Author(s) name: Dhaval Vartak, Yogesh Ghotekar, Pina Bhatt, Bharat Makwana, B Satyanarayana, H N Shah and Jeetendrakumar Vadher

This is to certify that Dr./Mr./Ms. Dhaval Vartak has presented the above mentioned paper in ICFAMMT-2022 held during 20th - 22nd January at IITRAM Ahmedabad, Gujarat, India.

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### Certificate of Presentation

Paper Title: RF Shielding Effectiveness of Nano-composites for Space Payload Applications.

Author(s) name: Nandini Deshpande, Manisha Upadhyay, Dhaval Vartak, Bhuwan Semwal, Anil Shah and Ajay Lal

This is to certify that Dr./Mr./Ms. Nandini Deshpande has presented the above mentioned paper in ICFAMMT-2022 held during 20<sup>th</sup> - 22<sup>nd</sup> January at IITRAM Ahmedabad, Gujarat, India.

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### Certificate of Presentation

Paper Title: Effect of Deformation on Corrosion Resistance of 316 Austenitic Stainless Steel - A Review.

Author(s) name: Sourabh Shukla, Abhishek Gawai, Abhay Kewati, Anshula Gaurkar and Tulika Bawankar

This is to certify that Dr./Mr./Ms. Sourabh Shukla has presented the above mentioned paper in ICFAMMT-2022 held during 20<sup>th</sup> - 22<sup>nd</sup> January at IITRAM Ahmedabad, Gujarat, India.

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