

# V-MECH2025

*7<sup>th</sup> Edition of*

## **Mechanical and Aerospace Engineering**

*Virtual*

December 12, 2025

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**Contact us:**

Contact: +91 9440424355

E-mail: [v-mech2025@sciwideonline.com](mailto:v-mech2025@sciwideonline.com)

Website: <https://www.sciwideonline.com/v-mech2025/>



Webinar  
Timings

Speakers  
Timings

07:00 – 07:10

Introduction

07:10 – 07:50

02:10 – 02:50 P

Title: Unsteady Separation Region Characteristics Within a Normal Shock Wave - Lambda Foot Structure

**Phillip Ligrani, The University of Alabama in Huntsville, USA.**

07:50 – 08:30

13:20 – 14:00 P

Title: Advanced Multinary Heterostructures for Sustainable Green H2 Energy

**Tokeer Ahmad, Jamia Millia Islamia, India.**

08:30 – 09:05

16:30 – 17:05 K

Title: MHybrid Kenaf/Glass Composites: Properties, Design And Applications

**Muhammad Asyraf Muhammad Rizal, Universiti Teknologi Malaysia, Malaysia.**

09:05 – 09:40

17:05 – 17:40 K

Title: Assembly Interface Design for Uniform Assembly

**Yicong Zhou, Hunan University, China.**

09:40 – 10:15

19:40 – 20:15 K

Title: Reynolds analogy

**Razieh A Rezaei, University of Adelaide, Australia.**

10:15 – 10:50

11:15 – 11:50 K

Title: Complex network analysis of multi-energy systems

**Carmela Bernardo, University of Sannio, Italy.**

10:50 – 11:25

13:50 – 14:25 K

Title: Shape Reversibility and Solid-State Phase Transformations Governing Memory Behavior of Shape Memory Alloys

**Osman Adiguzel, Firat University, Turkey**

11:25 – 12:00 14:25 – 15:00 K

Title: Improving the Fatigue Design of Mechanical Systems such as Refrigerator

**Seongwoo Woo, Ethiopian Technical University, Ethiopia**

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12:00 – 12:20 13:00 – 13:20 I

Title: Analysis the propagation of cracks in a weld piping using the Markov method and FEM

**Luis Rafael Espinoza, University of Zaragoza, Spain**

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12:20 – 12:55 06:20 – 06:55 K

Title: Thermal Spraying for Modern Engineering: Technologies, Applications, and Market Trends

**John Dairo Henao Penenrey, SECIHTI-CIATEQ A.C, Mexico**

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12:55 – 13:05 14:55 – 15:05 e-poster

Title: Optimization of the blade design of a helicopter's main rotor with controlled geometry

**Andrejs Kovalovs, Riga Technical University, Latvia**

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13:05 – 13:15 21:05 – 21:15 e-poster

Title: First-Principles Study of the Structural, Electronic, and Mechanical Properties of Al-Tb Intermetallic Phases

**Yulei Qi, Jiangsu Ocean University, China**

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13:15 – 13:25 21:15 – 21:25 e-poster

Title: A Lightweight and Accurate Method for Underwater Small Object Detection

**Chuyang Li, Jiangsu Ocean University, China**

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13:25 – 13:35 21:25 – 21:35 e-poster

Title: An improved lightweight bearing defect detection method based on YOLOv8n

**Hongyu Chen, Jiangsu Ocean University, China**

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13:35 – 13:45 21:35 – 21:45 e-poster

Title: Microstructure, Mechanical Properties, and Corrosion Behavior of Mg-xDy Binary Alloys: Optimization of Dysprosium Content for Enhanced Performance

**Qian Ma, Jiangsu Ocean University, China**

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13:45 – 13:55 21:45 – 21:55 e-poster

Title: Effect of Molybdenum Addition on Mechanical Performance and Chloride Corrosion Behavior of TA18 Titanium Alloy

**Xu Yang, Jianguo Ocean University, China**

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13:55 – 14:05 19:55 – 20:05 e-poster

Title: A Bibliometric Analysis of Research on Reliability and Safety of Unmanned Aerial Vehicles: A Scopus-Based Study

**Miten Jain, Dwarkadas J. Sanghvi College of Engineering, India**

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**Closing Ceremony**