## Technical Program with Session Wise Details of "ICVAM 26" Conference)

### Day 1: 30th October 2026

| Schedule | Program Details |
|---|---|
| **08:00 – 9:00 am** | Spot Registration |
| **09:00 – 9:15 am** | Inauguration |
| **9:15 – 10:30 am** | Speech by the Convenor, Chief Guest, Guest of honour, Director, HoD (Mech), Vote of thanks by Jt. Convenor |
| **10:30 – 11:00 am** | High Tea |
| **11:00 – 01:30 Noon** | Keynote Session -1 (3-Invited Guest) |
| **01:30 – 02:30 pm** | Lunch Break |
| **02:30 – 03:00 pm** | Invited lecture (2-Invited Guest) |
| **03:00 – 03:00 pm** | Parallel Session (PS IA and PS IB) |
| **4:00 – 06:00 pm** | Keynote Session -2 (3-Invited Guest) |
| **6.00-6.30 PM** | Evening Tea/Snacks at GJLT |
| **06:30 – 09:00 pm** | Cultural Programme |
| **08:00 pm -10.30 pm** | Gala Dinner |

### Day 2: 31st October 2026

| Schedule | Program Details |
|---|---|
| **08:00 –9:00 am** | Breakfast |
| **09:00 –11:30 am** | Keynote Session 3 (3-Invited Guest) |
| **11:30 – 11:50 am** | High Tea |
| **11:50 am – 1:40 pm** | Keynote Session 4 (3-Invited Guest) |
| **01:40 – 03:00 pm** | Lunch Break |
| **03:00 – 04:00 pm** | Invited lecture (4-Invited Guest) |
| **04:00 – 05:00 pm** | Parallel Session (PS IIA, PS IIB, PS IIIA and PS IIIB) |
| **5:00 – 5:20 pm** | High Tea |
| **5:20 – 7:10 pm** | Keynote Session 5 (3-Invited Guest) |
| **07:30 – 09:30 pm** | Dinner |

**Day 3: 1st November 2026**

| Schedule | Program Details |
|---|---|
| **08:00 –9:00 am** | Breakfast |
| **09:00 –10:30 am** | Keynote Session 6 (2-Invited Guest) |
| | |
| **10:50 am – 11:50 pm** | Invited lecture (2-Invited Guest) |
| **11:50 – 12.00 Noon** | Tea |
| **11:50 Noon – 1.00 pm** | Parallel Session (PS IV-A, IV-B) |
| **01:30 – 03:00 pm** | Lunch Break |
| **03:00 – 04:00 pm** | Invited lecture (1-Invited Guest) |
| **4:00 – 5:00 pm** | Parallel Session (PS V-A, V-B, V-C, V-D) |
| **05:15 – 06:00 pm** | Valedictory Ceremony |

## Important Locations:

**GJLT: Golden Jubilee Lecture Theatre ( https://maps.app.goo.gl/SCrKfHZnf6vafW1D6)**

**TEXMiN; https://maps.app.goo.gl/1sBzfcwSQAu8m2zk6**

**IIT(ISM) Main Gate: https://maps.app.goo.gl/eYTKQ5yGWfbnLMsaA**

**Mechanical Engineering Department: https://maps.app.goo.gl/HFfhBAJrvs7YgAp4A**

**Day : D, Session : S, Group : G & Online : O**

## Day – 1 (30.10.26)

**Keynote Sessions - 1:** **Venue: GJLT**

| Time | Key Note Title | Speakers |
|---|---|---|
| **11.00 – 11.30** | From Molecular Insight to Prediction: AI in Corrosion Design. | Prof. Mikhail Zheludkevich, Helmholtz-Zentrum Hereon, Germany<br>Chair: (1) Prof. Manoj Gupta, NUS<br>(2) Prof. Maypati |
| **11.40 – 12.10** | Sensors-The eyes and ears of Indian Defence | Dr. Duvvuri Seshagiri, Director, NPOL, Kochi<br>Chair: (1) Prof. Raman Singh, Monash University,<br>(2) Suman Saha |
| **12.20 – 12.50** | Engineering Explorations in Musical Acoustics | Prof. P. Chandramouli, IIT, Madras<br>Chair: Prof. Anindya Chatterjee, IIT, Kanpur<br>(2) Prof. Aman |
| | | |

**Lunch (1.30 PM – 2.30 PM)**

**Venue: TEXMiN**

| Time | Invited Lecture followed by Parallel Session | |
|---|---|---|
| **2.30 – 2.50** | Invited Lecture (Prof Praveen Krishna IR, IIST Thiruvananthapuram)<br>Topic: Nonlinear Normal Modes of a Thin, Highly Flexible Cantilever Beam Using an Energy Balance Approach<br>Session Chair: Prof. Arpan Gupta | Invited Lecture (Prof. Nilesh P. Gurao, IIT Kanpur) Topic: Experimental and computational investigation on the fracture behaviour in a metastable FeMnCoCr high-entropy alloy.<br>Session Chair: Dr. S. Ganesan, GTRE, DRDO |
| | **Parallel session – IA** | **Parallel session – IB** |
| **3.00 – 4.00** | **D1S1G1**<br>**(30.10.26 / 3.00 PM– 4.00 PM)** | **D1S1G2**<br>**(30.10.26 / 3.00 PM– 4.00 PM)** |

**Keynote Sessions - 2:** **Venue: TEXMiN (Smart Class)**

| Key Note | Title | Speakers |
|---|---|---|
| **4.00 – 4.30** | Continuous and Explosive Transitions in Thermoacoustic Systems | Prof. R.I. Sujith, IIT Madras<br>Chair: Dr. Sanjay. G. Barad, NMRL (DRDO)<br>(2) Prof. Kabilan |
| **4.40 – 5.10** | Protein in Physiological Fluid Resists Brittle Stress Corrosion Cracking of Magnesium Alloys and Causes Unique and Novel Fracture Features | Prof. Raman Singh, Monash University, Australia<br>Chair: (1) Prof. Santosh Kapuria, IIT Delhi<br>(2) Prof. Ankit Saxena |
| **5.20 – 5.50** | Vibro-acoustic Stealth Materials for Naval Application | Dr. Debdutta Ratna, NMRL (DRDO), Ambernath<br>Chair: (1) Prof. R.I. Sujith, IIT Madras<br>(2) Prof.Likhar |

**Venue: GJLT**

| Time | Cultural program (by IIT(ISM) Family and External Troop) |
|---|---|
| 6.30 – 7.30 | Indian Classical music and Western Music |
| 7.30 – 9.00 | Classical dance and Rabindra Nitya |

**Venue: GJLT**

**Gala Dinner**

**(8.00 PM – 10.30 PM)**

## Day – 2 (31.10.26)

**Keynote Sessions - 3:** **Venue: GJLT**

| Time | Key Note Title | Speakers |
|---|---|---|
| 9.00 – 9.30 | The Turbine in Concert: Fusing data to reveal the machine within | Dr. Sanjay. G. Barad, Ex. Asso. Director, GTRE (DRDO)<br>Chair: Dr. Debdutta Ratna, NMRL<br>(2) Prof. Debanjan Maity |
| 9.40 – 10.10 | Guided wave actuation and sensing using flexoelectric transducers | Prof. Santosh Kapuria, IIT Delhi<br>(2) Chair: Prof. P. Chandramouli, IIT, Madras |
| 10.20 – 10.50 | Walking with Purpose: Goal directedness and the control structure of human walking | Prof. Joseph Cusumano, Penn State, USA<br>Chair: Prof. Srikanth Vedantam, IIT Madras<br>(2) Prof. Aditi Sengupta |
| 11.00 – 11.30 | Evolution of acoustical material property measurement techniques over the decades | Prof. A.R. Mohanty, IIT, Kharagpur<br>Chair: (1) R. P. Raju, Scientist-F<br>(2) Prof. Antarip Poddar |
| | | |

**Tea break**

**(11.30 PM – 11.50 Noon)**

**Keynote Sessions - 4:** **Venue: GJLT**

| Time | Keynote Title | Speakers |
|---|---|---|
| 11.50 – 12.20 | Constitutively informed particle dynamics: a novel discrete particle modelling approach | Prof. Srikanth Vedantam, IIT Madras<br>Chair: (1) Prof. Zbigniew L. Kowalewski<br>(2) Ved Prakash Dube |
| 12.30 – 1.00 | In-plane oscillations of a slack catenary using assumed modes | Prof. Anindya Chatterjee, IIT, Kanpur<br>Session Chair: (1) Prof. Joseph Cusumano, Penn State, USA<br>(2) Prof. Suparno Bhattacharyya |

**Lunch**

**(1.00 PM – 2.30 PM)**

**Venue: TEXMiN**

| Time | Invited Lecture followed by Parallel Session | |
|---|---|---|
| **2.30 – 2.50** | Invited Lecture (Prof. B. Venkatesham, Head, Mechanical & Aerospace Engineering, IIT Hyderabad)<br>Topic: Acoustic Analysis and Mitigation of Traffic and Jet Fan Noise in Road Tunnel<br>Session Chair: Prof. Abhijit Sarkar, IIT Madras | Invited Lecture (Dr. S. Ganasan, GTRE, DRDO, Bangalore)<br>Topic: Thermo-acoustic instability in gas turbine afterburner<br>Session Chair: Dr. Joydip Joardar, Scientist- G, ARCI (under DST), Hyderabad |
| | **Parallel session – II A** | **Parallel session – II B** |
| **3.00 – 4.00** | **D2S1G1**<br>**(31.10.26 / 3.00 PM– 4.00 PM)** | **D2S1G2**<br>**(31.10.26 / 3.00 PM– 4.00 PM)** |
| **Invited Lecture** | | |
| **4.00 – 4.20** | Invited Lecture (Prof. Abhijit Sarkar, IIT Madras)<br>Topic: Sound power radiation from plates using independent radiation modes<br>Chair: Prof. B. Venkatesham, IIT Hyderabad | Invited Lecture (Prof. Tanmay K. Bhandakkar, IIT Bombay) Topic: Fracture in Couple Stress Elasticity)<br>Topic: Circular crack in Couple stress elasticity: Mode-I loading<br>Chair: (1) Prof. Nilesh P. Gurao, IIT Kanpur |
| | **Parallel session – III A** | **Parallel session – III B** |
| **4.30 – 5.30** | **D2S2G1**<br>**(31.10.26 / 4.30 PM– 5.30 PM)** | **D2S2G2**<br>**(31.10.26 / 4.30 PM– 5.30 PM)** |
| **Tea Break**<br>**(5.00 PM – 5.20 PM)** | | |

**Keynote Sessions - 5:** **Venue: TEXMiN (Smart Class)**

| Key Note | Title | Authors |
|---|---|---|
| **5.30 – 5.50** | Damage analysis of power engineering steels supported by optical techniques | Prof. Zbigniew L. Kowalewski Polish Academy of Sciences, Poland<br>Session Chair: Prof. P.K. Sarkar<br>(2) Prof. Satadru Das Adhikary |
| **6.00 – 6.30** | Integration of Magnesium with Biomass for New Ecofriendly Lightweight Composites Supporting Circular Economy | Prof. Manoj Gupta, NUS, Singapore<br>Session Chair: Prof. Mikhail Zheludkevich, Helmholtz-Zentrum Hereon, Germany<br>(2) Prof. Pranesh Roy |
| **Dinner**<br>**(7.30 PM – 10.00 PM)** | | |

## Day – 3 (01.11.26)

**Venue: Mechanical Engineering**

| | Online Parallel session –A | Online Parallel session – B |
|---|---|---|
| 9.00 – 10.00 | **D3O1G1 (01.11.26 / 9.00 AM– 10.00 AM)** | **D3O1G2 (01.11.26 / 9.00 AM– 10.00 AM)** |

**Keynote Sessions - 6:** **Venue : GJLT**

| Key Note | Title | Authors |
|---|---|---|
| 10.00 – 10.30 | Using lab scale Mechanical Properties for safety assessment of Zr-2.5Nb alloy pressure tubes | Dr. R.N. Singh, Outstanding Scientist and Former Director, Materials Group of Bhabha Atomic Research Centre (BARC), Mumbai<br>Session Chair: Prof. Dhruva Kr. Singh<br>(2) Vivek kr. Sahu |
| 10.40 – 11.10 | Unlocking Rare Earth Resources: Advances in Extraction, Separation and Value Addition from Primary and Secondary Sources | Prof. Dhruva Kr. Singh<br>IIT (ISM) Dhanbad<br>Session Chair: R.N. Singh<br>(2) Prof. Ajay Bhandari |
| **Tea Break (11.20 AM – 11.30 PM)** | | |

**Venue: Mechanical Engineering**

| Time | Invited Lecture followed by Parallel Session | |
|---|---|---|
| 11.30 – 11.50 | Invited Lecture (Dr. Joydip Joardar, Scientist- G, ARCI (under DST), Hyderabad)<br>Topic: Development of nanostructured rare earth/transition metal-based composites for microwave absorption<br>Session Chair: Prof. Subhasis Sinha | Invited Lecture: (Dr. Sudip Sarkar, BARC, Mumabi)<br>Topic: Unveiling Complex Nanoscale Microstructure to Tune Magnetic properties in Complex Concentrated Alloys<br>Session Chair: Prof. Chandraprakash, IIT Kanpur |
| | **Parallel session – IV-A** | **Parallel session – IV-B** |
| 12.00 – 01.00 | **D3S1G1 (01.11.26 / 12.00 Noon– 1.00 PM)** | **D3S1G2 (01.11.26 / 12.00 Noon– 1.00 PM)** |
| **Lunch (1.00 PM – 2.30 PM)** | | |
| **Invited Lecture** | | |
| 2.30 – 2.50 | Invited Lecture by (Prof. Subhasis Sinha, IIT BHU) | |

| | | |
|---|---|---|
| | Topic: Microstructure-texture-mechanical property correlation in hot rolled 316L stainless steel through experiments and CPFEM simulation<br>Session Chair: Dr. Sudip Sarkar | |
| | **Parallel session –V-A** | **Parallel session –V-B** |
| **3.00 – 4.00** | **D3S2G1**<br>**(01.11.26 / 3.00 PM – 4.00 PM)** | **D3S2G2**<br>**(01.11.26 / 3.00 PM – 4.00 PM)** |
| **3.00 – 4.00** | **Parallel session –V-C** | **Parallel session –V-D** |
| | **D3S2G3**<br>**(01.11.26 / 3.00 PM – 4.00 PM)** | **D3S2G4**<br>**(01.11.26 / 3.00 PM – 4.00 PM)** |

**Venue : GJLT**

**Valedictory Function**

**(5.15 PM – 6.00 PM)**

**High Tea**

**End of Conference**