NCCM 2025

Jointly Organized by



Gas Turbine Research Establishment DRDO, Ministry of Defence Bengaluru



Condition Monitoring Society of India (Regd. No. 45061/2003) Vishakhapatnam

November 27-28, 2025

Venue: HAL Management Academy Auditorium Bengaluru

Convener

Dr Sanjay G. Barad, Sc 'H' GTRE, Bengaluru-560 093 Mobile: 944 981 6291 Fax No.:080-25241507

Email ID:

convener.nccm2025@gmail.com

NATIONAL CONFERENCE ON CONDITION MONITORING—2025

THEME: INTEGRATED VEHICLE HEALTH MANAGEMENT

About Conditioning Monitoring Society of India

Condition Monitoring Society of India (CMSI) was established in the year 2003 with an intention to promote and emphasize the importance of condition monitoring in industrial maintenance. The Society intends to disseminate the latest trends in Condition Monitoring to the professionals/practicing engineers/ plant engineers by way of conducting conferences and workshops from time to time. The society also intends to be a common platform for condition monitoring professionals to share their experiences and expertise. The society has grown rapidly by setting up local chapters of the society at different places all over India. Apart from a large number of individual life members, several firms/institutions joined the society as its institutional members. The society also encourages students of Engineering by enrolling them as monitoring. student members condition

In its effort to fulfill the objectives of the society, CMSI conducted several National and International conferences since its inception. Each and every conference has been a platform for excellent deliberations among delegates from industry, academy and R&D labs. The conferences were highly appreciated for their uniqueness in content and conduct. The society also organizes an endowment lecture every year in association with GITAM (Deemed to be University) in honor of Dr V Bhujanaga Rao, Founder President of the society. Eminent experts from India and abroad such as Dr BKN Rao (UK), Dr BN Suresh (Padma Bhushan awardee) Dr Rajkumar Roy (UK), Dr Kota Harinarayana (Padma Sri awardee), Dr PS Goel (Padma Sri awardee) delivered these endowment talks. The society is striving to integrate all stake holders of machinery and structural health monitoring so as to benefit the country in its stride towards better productivity and stronger economical power.

About the Conference

As a part of CMSI's endeavor to bring out the growing importance and recent trends in condition monitoring, a two day National Conference on Condition Monitoring (NCCM-2025) is being organized in association with Gas Turbine Research Establishment, Bangalore during Nov 27-28, 2025 with an emphasis on Integrated Vehicle Health Monitoring. As the country is poised to leapfrog to become a global leader, it is imperative to chart out our own path in high technology domains.

It is expected that a significant number experts/practicing engineers from various organizations, institutes and industries will participate in this conference. The conference provides a common platform for interaction on the state of the art technology on condition monitoring strategies. It provides an opportunity to deliberate on latest trends in the field of condition monitoring. This would immensely benefit the maintenance engineers, R&D professionals, academicians and students.

Call for Papers

NCCM-2025 invites papers related to various disciplines on Condition Monitoring of Machines & Structural Health Monitoring for presentation at the conference and publication in the proceedings of the conference. The papers relevant to the topic with case studies are expected to benefit the participants most. Papers will be peer reviewed before accepting the final camera ready manuscripts

Topics

- Enhanced Sensor Technology
- AI & ML in Condition Monitoring
- Data Acquisition and Instrumentation
- Integration with Digital Twin
- Gas Turbine Health Management
- Aircraft Health Management
- Maintenance/Asset Management
- Vibration Monitoring
- IR Thermography
- Motor Current Signature Analysis
- Oil/Wear Debris Analysis/Ferrography
- Ultrasonics for Health Monitoring
- Structural Health Monitoring
- Damage Identification Algorithms
- Signal Processing Techniques for Monitoring

About GTRE, Bangalore

Gas Turbine Research Establishment (GTRE) under DRDO, Ministry of Defense, Government of India pioneering the Research & Development (R&D) in the field of military aero engines and related technologies. The charter of the establishment is to design and develop aero Gas-Turbine engines for military applications, besides carrying out advanced research in the are of aero gas-Turbine systems. In addition, the Establishment is responsible for establishing the requisite testing and prototype manufacturing facilities for components and full-scale engine development.

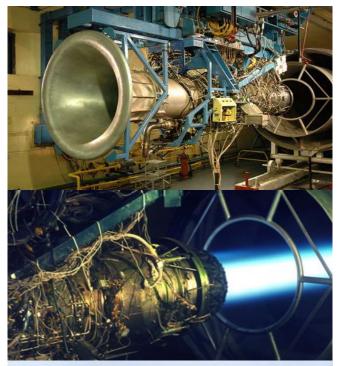
Under the aeronautical cluster of DRDO, establishment is currently engaged in the design & Development of Kaveri Derivative Engine (KDE) for Unmanned Combat Air Vehicle (UCAV), Small Turbo Fan Engine (STFE) and its variants for Unmanned Air Vehicle (UAV) applications, military grade turbocharger for battle tank application and advanced turbo gas generator for UAV application along with various technology development projects related to military aero engines.

Along with the aero engine development activities, GTRE is working towards addressing the field issues and providing technical support as and when required and supports the Indian tri services to address the imported gas turbines propulsion related technical issues. The condition monitoring expertise gained over the years have been extended to various organizations and services in identifying the root cause and suggest remedial measures.

About Bengaluru

Bangalore is unique in many ways. It has the most pleasant weather throughout the year which got itself the name "Pensioner's Paradise". It is the only cosmopolitan and multilingual city in the country which has welcomed everyone who wanted to make Bangalore their home and this speaks of the hospitable nature of the Bangaloreans. Bangalore which was a city known only within India a couple of decades ago has now found its place in the World Map







because of the export of software and software professionals to the entire world. Bangalore is now on everybody's tour itinerary while visiting India.

Bangalore city is now the nerve centre of industrial activity in the state with the presence of several Public Sector Undertakings. The Electronic City in Bommasandra and the Software Technology Park, called the IT Park, which has come up on the outskirts of the city, has earned the reputation of being the "Silicon Valley of India". Many multinational and Indian companies are represented here. Ranked among the 10 fastest growing cities in the world, Bangalore has many on-going and proposed projects in the industrial and Information Technology sectors. The city has slowly found a place in the country's history and off recently a place on the world map. Today Bangalore is India's fifth largest and the fastest growing city in Asia.

In addition to the tag of "Silicon Valley", it is also recognised as an 'Aviation Capital of India' as it houses premier aero space laboratories viz. DRDO, ISRO, NAL, and HAL. World recognized institutes like IISc, IIM, etc. are also located in this city. The city boasts itself in having large industrial houses that use extensively the Condition Monitoring tools. It is a pleasure to have this conference at this place that has multiple excellence.

Registration Fee

Key Dates

| Members of CMSI (Industry/R&D) Non Members (Industry/R&D) Members of CMSI (Academic) Non Members (Academic) Research Scholars | Rs. 3000 /- Rs. 4000 /- Rs. 2000 /- Rs. 3000 /- Rs. 1500 /- | Receipt of Abstract (150 to 200 words) Intimation of acceptance of Abstract Submission of full length paper Notification of review comments Final submission in camera ready format | - 31 Jul 2025 - 15 Aug 2025 - 15 Sep 2025 - 30 Sep 2025 - 30 Oct 2025 |
|---|---|---|---|
| Research Scholars Students (UG/PG Engg/Science) | Rs. 1500 /-Rs. 1000 /- | Final submission in camera ready format With Registration | - 30 Oct 2025 |

Note: Registration fee includes delegate kit, lunch on both days and conference dinner on the first day. Delegates are to make their own arrangement for accommodation and travel. Students/Research Scholars are to submit a bonafide certificate from Principal / Research guide of the institute in which he /she is pursuing studies / research at the time of registration. **Institutional members** of CMSI can avail **50% discount** on relevant Non member registration fee (i.e. **Rs 2000/-** each for Industry/R&D delegates and Rs 1500/- each for Academic delegates) for a maximum of three delegates.

Guidelines for submission of paper

- Any original contribution/constructive review not published elsewhere.
- Experimental investigation with definite conclusions.
- Case studies of industrial importance.
- Simulation studies with practical demonstration / result.
- Design of instruments / system/ software.
- Abstracts and camera ready manuscripts to be sent to 'convener.nccm2025@gmail.com' in electronic format.
- At least one of the authors is required to register and attend the conference for Presenting the paper.

The format for the paper is specified below:

- Paper should not exceed 8 (Eight) A4 Size pages.
- Font: Times New Roman.
- Margins: left = 1.5 inch, top, bottom & right = 1 inch.
- Title: 14 point bold, all caps; Author details: 12 point, italics.
- Abstract: 11 point italic with single line spacing to be placed after title and author details.
- Text: 12 point normal justified; Paragraph headings: 12 point bold, sentence case; Line spacing 1.5 lines.
- Figures to be inserted in .jpg/.bmp format.

Note:

- Commercialism / promotion of products should be avoided.
- Papers submitted without registering for conference by at least one of the authors will not be published.

CMSI Mission:

To develop and propagate the science and utilization of Condition Monitoring for machinery, equipment and systems throughout Indian Industry.

Exhibition

Apart from presentations, it is planned to have exhibits of products from industries and institutes dealing with experimental setups / instrumentation / software in the relevant areas of their latest products. Hiring cost of each stall (8' x 8' size) is **Rs 30,000/-.** Each stall will be provided with a table and two chairs Power supply will be provided if requested in advance for display of instruments/monitors/Computers etc.

Souvenir

A special souvenir will be brought out during NCCM 2025 consisting of abstracts of papers. It will also provide an opportunity for industries / dealers / traders/ equipment manufacturers / practicing engineers / consultants to advertise their products / services.

Back Cover (color) - Rs. 35,000 /Inside Back / Front cover
Full A4 size page (color) - Rs. 15,000 /Half A4 size page (B/W) - Rs. 4,000 /Half A4 size page (B/W) - Rs. 2,500 /-

Join the Forum

If you are not yet a member of CMSI, we welcome you now to join the forum. You can join by clicking the useful Link 'Online Registration' at society's website www.comsoi.org and submit your membership application. For any details , you can contact Society's General Secretary Dr. T. Venkata Ratnam (Mobile: 8333031876).

Dr. Samir V. Kamat, Secretary, Department of Defence R&D and Chairman, DRDO

Patrons

Dr. K Rajalakshmi Menon, DS & DG (Aero)
Sh RV Hara Prasad, DS & DG (NS & M)
Sh Jitendra J. Jadhav, DS & DG, ADA
Sh APVS Prasad, OS & Chief Executive, CEMILAC
Sh Y Dilip Kumar, OS & Director, ADE
Dr SV Ramana Murty, OS & Director, GTRE
Dr Abhay Anant Pashilkar, Director, NAL
Dr Abraham Varughese, OS & Director, NSTL

National Advisory Committee

| Dr. Kota Harinarayana, | Prof. K Venkata Subbaiah | Prof. Nalinaksh Vyas, | Shri. Anup Kumar Mallick |
|------------------------------|--------------------------|------------------------|------------------------------------|
| Program Director (Retd), ADA | Former Vice Chancellor, | IIT, Kanpur | GM, HAL Management Academy |
| | JNTU, Gurajada | | Bengaluru |
| Dr. V. Bhujanga Rao | | Prof. A R Mohanty | |
| Chairman, KFRC | Dr. Edwin Vijay Kumar, | IIT, Kharagpur | Sh. Suhas Patil |
| Former DG (NS&M), DRDO | Former GM, Vizag Steel | | Addl. Vice President |
| & Founder President, CMSI | | Prof. Rajiv Tiwari | Adani Power Ltd, Dahanu |
| | Dr. MRS Satyanarayna, | IIT, Guwahati | |
| Dr. CP Ramanarayanan | Vice President, CMSI | | Dr. Rana Dutta |
| Former DG (HR), DRDO | | Prof. AK Darpe | Senior TPM Consultant |
| & Former VC, DIAT | Sh. Probal Ghosh, | IIT, Delhi | Electrosteel Castings, Srkalahasti |
| | Sr. Vice President, | | |
| Sh. MZ Siddique | Tata Steel, Jamshedpur | Prof. Dhanesh N Manik, | Sh. SM Ramanathan, |
| Former DG (Aero) and | | IIT, Bombay | Dir (E, R&D) |
| DG(NS&M), DRDO | Sh. SS Kale | | BHEL, New Delhi |
| | Scientist G, CEMILAC | Prof. Chandramouli P | |
| Dr. Y. Sreenivas Rao | Bengaluru | IIT, Madras | RAdm Sanjay Adhana |
| Former DG(NS&M), DRDO | | | DGNATAA, Indian Navy |
| | Sh. K Ramesh | Sh. G U Narasimhulu | Mumbai |
| Prof. K. Ramji, | GM, AERDC | ED (Projects), | |
| Vice Chancellor, | HAL, Bengaluru | HPCL, Barmer | Air Cmdr K. Giri |
| Krishna University | | | IAF, New Delhi |
| Machilipatnam | Dr. Soumendu Jana | Dr. VPS Naidu | |
| | NAL, Bengaluru | NAL, Bengaluru | |

Organizing Committee

Chairman - Dr. SV Ramana Murthy, OS & Director, GTRE, Bengaluru

Co-chairman Sh PVS Ganesh Kumar, President, CMSI Convener Dr. Sanjay G. Barad, Sc. 'H, GTRE, Bengaluru Dr. T. Venkata Ratnam, General Secretary, CMSI Co convener Sh. Anil Kumar, SAO-II, GTRE, Bengaluru **Treasurer** Member Sh. P. Srinivas Rao, Sc G, GTRE, Bengaluru Member Sh. S. Ganeshan, Sc G,GTRE, Bengaluru Member Dr. RK Giridhar, Sc G, GTRE, Bengaluru Member Dr. Vijay Petley, Sc F, GTRE, Bengaluru Member

Member-Sh. Mukund Kumar Pandey, Sc F, GTRE, BengaluruMember-Sh. Prakash Kumar Yadu, Sc F, GTRE, BengaluruMember-Sh. Nagesh BK, Sc E, GTRE, Bangalore

Member - Sh. Sunil Kumar, Sc E, GTRE. Bengaluru

Member - Dr. Manjunath Dalbhanjan, Sc E, GTRE, Bengaluru

Member - Sh. Rashmi Rao, Sc F, GTRE, Bengaluru



NATIONAL CONFERENCE ON CONDITION MONITORING—2025 (NCCM-2025)



Condition Monitoring Society of India (Regd. No. 45061/2003) Vishakhapatnam

Registration Form

Gas Turbine Research Establishment DRDO, Ministry of Defence Bengaluru

| Name and Designa | tion | | | | |
|---|--------------------------|---|--|--|--|
| Organization | | | | | |
| Address | | | | | |
| | | | | | |
| | | | | | |
| Telephone Details | | Mobile | | | |
| | | Email ID | | | |
| Category | | Member (Industry/R&D/Academic)/ Non-member (Institutional Member (Industry/R&D/Academic)/ Res | ndustry/R&D/Academic)/ search Scholar/Student (UG/PG) (Engineering/Science) | | |
| Author/Co-author of Attending Conferen Presenting Paper | | Yes / No Yes / No Yes / No | | | |
| Is the delegate is sp | ponsored t | a Govt Establishment : Yes/No; If Yes, Authority letter | submitted: Yes/No | | |
| Registration Fee De | etails | | | | |
| DD / Cheque / Onlin | ne Transfei | Drawn in favo | ur of ' NCCM 2025' | | |
| Drawn on Bank | | dated | Amount Rs | | |
| | | | | | |
| Date | | | Signature | | |
| For Office Use: | If Author/ i) Copy Ri | Number; Delegate Kit issued: Yes/No; hor/Co-author of paper, whether following documents have been submitted: by Right Transfer Agreement ii) Security Certificate, if applicable | | | |
| Date | lii) NOC fr | m concerned authority, if applicable | Signature of Authorized Person | | |