9TH INTERNATIONAL CONFERENCE ON

CREEP, FATIGUE AND CREEP-FATIGUE INTERACTION

April 7-9, 2027, Mamallapuram, India

www.cf-9.in

The Ninth International Conference on Creep, Fatigue and Creep-Fatigue Interaction (CF-9) will be held from April 7–9, 2027 at Ideal Beach Resort, Mamallapuram, Tamil Nadu, India. Commenced in the year 1987, the esteemed quadrennial International Conference on Creep, Fatigue and Creep-Fatigue Interaction (CF) series is organized by the premier global organization, **Indira Gandhi Centre for Atomic Research (IGCAR), Kalpakkam** in association with the Metal Sciences Division and the Kalpakkam Chapter of the **Indian Institute of Metals (IIM)**, and in collaboration with the **Japan Society of Mechanical Engineers (JSME)**. The previous conferences of the CF-series had attracted over 300 delegates including several overseas participants. Eminent researchers and engineers working in the contemporary developments of creep, fatigue, creep-fatigue interaction, materials development and high temperature design will be invited to share their knowledge and expertise on these topics during the conference. Contributory papers for oral and poster presentations are solicited. The language of the conference is English.

SCOPE OF THE CONFERENCE

The 9th International Conference Creep, Fatigue and Creep-Fatigue Interaction (CF-9) shall be focused on the cutting-edge and innovative topics of Creep, Fatigue and Creep-Fatigue Interaction, and structural integrity of materials and structures. Performance of materials under creep, fatigue and combined creep-fatigue loadings is of utmost importance in the design, operation and reliability of high temperature components. Advanced nuclear reactors and fossil fuel fired advanced ultra supercritical power plants provide cleaner energy options that help combat challenges involved in addressing the growing global energy demands with reduced greenhouse emissions. These involve multifaceted technologies and operating environments which pose new challenges for materials development and understanding of their mechanical behavior. New materials are being developed to meet the applications for components operating at increasingly higher temperatures and aggressive environments. Widespread damage due to creep and fatigue encountered in aviation and transport industries adversely impact safety and reliability of associated structures. Besides, extension of the useful service life of the existing operating power plants is attractive in view of the high capital costs associated with the construction of new plants. Structural integrity assessment and life management require innovative methods for materials testing, damage assessment, remnant life prediction and materials modeling. CF-9 aims to bring together experts working in the areas of creep, fatigue and creep-fatigue interaction, development of high temperature materials and life assessment to facilitate mutual interaction and exchange of knowledge and experience. It would also serve as a platform for discussion on the current advances and identify future R&D needs and collaborations in the above areas.

Following are the broad areas included in the scope of the conference:

- Creep, fatigue and creep-fatigue interaction
- Low cycle, high cycle, very high cycle, thermomechanical and fretting fatigue
- Multiaxial creep, fatigue and component testing

- Creep, fatigue and creep-fatigue crack growth
- Advances in modeling of creep and fatigue deformation and damage
- Structural integrity, failure analysis and remaining life assessment
- Design against creep, fatigue and their interaction
- Design codes – application for creep and fatigue
- Materials for fission, fusion nuclear reactors and advanced ultra-supercritical power plants
- Materials for aerospace and defense applications
- Application of AI/ML in prediction of mechanical properties
- Advances in mechanical testing of bulk and small volume specimens
- Environmental and irradiation effects on mechanical properties
- Creep, fatigue and creep-fatigue interaction in weld joints

WHO SHOULD PARTICIPATE OF THE CONFERENCE

Delegates: The conference would be of relevance to Researchers, Academicians, Design Engineers, Alloy Designers, Regulatory Authorities and Failure Analysts.

Organizations: Research and Development Organizations, Academic Institutions, Materials Manufacturers, Nuclear, Fossil fired, Automobile, Aerospace, Chemical and Petrochemical Industries.

CALL FOR ABSTRACTS CONFERENCE

Authors are invited to submit abstracts of their papers in not more than 250 words latest by **December 31, 2026**. The text shall be typed in 12 point Times New Roman font with single line spacing and full justification. Detailed affiliation of all authors along with the e-mail address of the corresponding author shall be provided in the abstract. Submission has to be done online through the website www.cf-9.in as per the template specified.

PUBLICATION ABSTRACTS CONFERENCE

Accepted abstracts will appear in the abstract book cum souvenir. It is planned to bring out a special issue of the Transactions of the Indian Institute of Metals on the topic of the conference after peer review. Guidelines for full manuscript submission will be released in due course.

REGISTRATION FEE* CONFERENCE

Indian delegates	**Rate**	
	INR	**USD**
Members of Indian Institute of Metals	14,000	
Non-members	15,000	
Students	10,000	
Spouse	10,000	
Overseas delegates		500
Student delegates		400
Spouse		400

**18% taxes extra*

Participants of CF-9 are requested to register online. The registration fee would cover the delegate kit, conference souvenir cum book of abstracts, tea and lunch on the conference days and banquet dinner. Payments towards registration fee, sponsorship etc. shall be made in

favour of CFCFI payable at State Bank of India, Meenambakkam or through bank transfer (domestic: NEFT, overseas: SWIFT). Details are given below:

Account Name	**CFCFI**
Account Number	**39127750441**
IFSC Code	**SBIN0005789**
SWIFT Code	**SBININBB298**

SPONSORSHIP OPPORTUNITIES

The conference will provide a unique opportunity for organisations and industries to promote their products/services to the focused national and international delegates. The sponsors will have an excellent opportunity to interact with engineers / scientists / academicians during the conference. Sponsorship opportunities and souvenir advertisement details are given below.

Level of Sponsorship	Fee*	Benefits to Sponsor
DINNER	Rs. 6,00,000 or US $ 8,000	10 min. PowerPoint presentation before the start of Banquet dinner, banner during dinner, announcement in the invitation card, logo on the website and cover page of the Souvenir, one page profile of the organisation and full page colour advertisement in Souvenir, free registration for THREE delegates and complimentary exhibition stall.
LUNCH	Rs. 5,00,000 or US $ 6,000	Banner during lunch, announcement in the invitation card, logo on the website, full page colour advertisement in Souvenir, free registration for TWO delegates and complimentary exhibition stall.
TECHNICAL SESSION	Rs. 2,00,000 or US $ 3,000	Banner on the stage during the session, announcement at the beginning and end of the session and free registration for ONE delegate

**GST on RCM Basis*

SOUVENIR-ADVERTISEMENTS

Paper size: A4, Print Area: 17×24 cm
Print material required from the advertiser: preferably soft copy / art work / typed material

Advertisement Details	Fee*
Back outside cover page – Colour	Rs. 1,75,000/- (US $ 2,500)
Inside cover page – Colour	Rs. 1,25,000/- (US $ 2,000)
Full page (Inside) – Colour	Rs. 1,00,000/- (US $ 1,500)
Full page (Inside) – Black & White	Rs. 75,000/- (US $ 1,000)
Half page (Inside) – Black & White	Rs. 50,000/- (US $ 700)

**5% taxes extra*

INDIRA GANDHI CENTRE FOR ATOMIC RESEARCH CONFERENCE

Indira Gandhi Centre for Atomic Research was established in 1971. The Centre is engaged in broad-based multidisciplinary programmes of scientific research and advanced engineering directed towards the development of fast breeder reactor technology in India. IGCAR has successfully operated the Fast Breeder Test Reactor (FBTR) for the last four decades with a unique carbide fuel that laid the foundation for the 500 MWe Prototype Fast Breeder Reactor (PFBR), which has recently attained criticality. KAMINI, a unique research reactor using a U^{233} based fuel, is also operational at IGCAR. Over the years, IGCAR has established comprehensive R&D facilities covering the entire spectrum of fast reactor technology related to sodium technology, reactor engineering, reactor physics, metallurgy and materials, chemistry of fuels and its materials, fuel reprocessing, reactor safety, control and instrumentation, computer applications etc., and has developed a strong base in a variety of disciplines related to this advanced technology. The two commercial reactors of Madras Atomic Power Station are also located at Kalpakkam.

VENUE

The conference will be held at Ideal Beach Resort, Mamallapuram, Tamil Nadu located 60 Km south of the metropolitan city of Chennai (formerly called Madras) and 15 Km away from Indira Gandhi Centre for Atomic Research, Kalpakkam. Chennai is one of the major industrial cities in India and has numerous academic and research institutions. The city is well connected by international airlines from all over the world. This southern part of the country is also well known for its traditional culture and art. Mamallapuram is famous for its monolithic rock carvings, built largely between the 7th and the 9th centuries, and has been classified as a UNESCO World Heritage Site. Pondicherry, situated about 80 Km south of Kalpakkam was a famous port city and an erstwhile French colony. The city is home to Aurobindo Ashram, Auroville, beaches, churches and temples and attracts a large number of tourists. Auroville is a universal town where people from about 45 countries, from all age groups, social classes, backgrounds and cultures, live in peace and harmony to realize human oneness. Kanchipuram, the famous temple city which is about 65 Km north-west of Kalpakkam is another popular tourist attraction.

For more details, please refer to the following websites:
www.tamilnadutourism.org
www.mahabalipuram.co.in
www.auroville.org
www.kanchi.nic.in

WEATHER

As the conference venue is on the sea beach, the weather during April will generally be pleasant and warm.

ACCOMMODATION

Mamallapuram being an international tourist spot, there will be great demand for hotel rooms. The organising committee will make block booking of limited number of rooms in a few hotels around the venue with special rates for the conference delegates. Further details will be notified on the conference website in due course.

VISA INFORMATION

All overseas nationals entering India are required to possess a valid international travel document in the form of a national passport with a valid Visa obtained from the Indian consulate/embassies in their respective countries. They are advised to apply for **Conference Visa** (not Tourist-Visa/Business-Visa) for attending the CF-9. A letter of invitation will be provided on demand in advance for the purpose of applying for the Visa.

More details are available at: https://indianvisaonline.gov.in/visa/index.html.

AIRPORT

Chennai International Airport (MAA) has adjoining Kamaraj Domestic Terminal and Anna International Terminal.

TIME

GMT+5:30

IMPORTANT DATES

Abstract submission : December 31, 2026
Notification of abstract acceptance : January 18, 2027
Submission of full manuscript : February 28, 2027

FOR FURTHER INFORMATION, PLEASE CONTACT:

Dr. A. Nagesha
Chairman, CF-9

Dr. Vani Shankar
Convener, CF-9

Dr. G.V. Prasad Reddy
Co-Convener, CF-9

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