

PARTNERS

DVM

The workshop will be held in cooperation with the German Association for Materials Research and Testing e.V. (DVM).

More information on DVM can be found at www.dvm-berlin.de



HTMTC

The High Temperature Mechanical Testing Committee (HTMTC) provides a forum for discussing optimised procedures for high temperature testing of materials. It operates as technical committee 11 of the European Structural Integrity Society (ESIS TC11).

More information on HTMTC can be found at www.structuralintegrity.eu



VENUE

The workshop will be held at Ludwig Erhard-Conference Hall at the Federal Institute for Materials Research and Testing in Berlin: www.bam.de

The German Capital Berlin provides numerous opportunities for touring historical sites, museums, concerts, theatres etc. For an overview, please check: www.berlin.de/en/

Arrival

By plane: Berlin Airport (BER)

By train: Berlin main station (Hauptbahnhof), connections from all directions by the fast InterCityExpress (ICE), InterCity (IC), and EuroCity (EC) trains

CONTACT

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🌐 www.bam.de/tmf-workshop.de

Sicherheit in Technik und Chemie



TMF-WORKSHOP 2024
Fifth International Workshop
on Thermo-Mechanical Fatigue
APRIL 25-26, 2024

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Components in the Aerospace, Power and Automotive engineering sectors are subjected to cyclic stresses and strains induced by thermal fluctuations and mechanical loads. For the design of such components, reliable fatigue data are required which need to be acquired using well accepted and reproducible testing procedures.

The first TMF-Workshop was held at BAM in 2005 on the occasion of the publication of a European Code of Practice for TMF testing. A successful series of workshops emerged since then, bringing together up to 100 experts in the field in each meeting.

The fifth TMF-Workshop will be held again at BAM, Berlin, Germany. The intention of this event is to continue the exchange of knowledge on thermo-mechanical fatigue. It provides a forum to present and discuss all recent developments in the field of thermo-mechanical fatigue.

Who should attend

The workshop is aimed at engineers, materials scientists and technical staff of research institutes and industry who share an interest in the various aspects of thermo-mechanical fatigue.

WORKSHOP TOPICS

- TMF properties of steels, cast iron, Aluminium-, Titanium-, Nickel-base and other alloys
- Cyclic deformation behaviour under TMF
- TMF crack growth and related methods
- Interactions of TMF with HCF, LCF and creep
- TMF in controlled environments
- Multiaxial TMF
- TMF of coated materials
- TMF and thermal fatigue of components
- TMF damage mechanisms
- Deformation and damage models for TMF
- TMF testing procedures
- Technology transfer and standardisation (including the revision of ISO 12111)
- Industrial applications with combined loading scenarios, including creep-fatigue

Language

The workshop will be held in English.

Submission of Abstracts

Attendees who wish to give an oral or poster presentation are invited to submit a one-page abstract of the intended contribution via e-mail to tmfconf@bam.de until **November 15, 2023**. Before, please pre-register on the workshop's website www.bam.de/tmf-workshop.de. An abstract template will then be provided via e-mail. Authors will be notified of abstract acceptance until December 15, 2023. A book of abstracts will be provided at the event. The related papers will be published in a virtual special issue of International Journal of Fatigue. Full papers will be due at the time of the workshop.

DATES AND DEADLINES

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|---------------------------|--------------|
| - Pre-registration | open |
| - Submission of abstracts | Nov 15, 2023 |
| - Notification of authors | Dec 15, 2023 |
| - Registration starts | Dec 15, 2023 |
| - Early bird until | Feb 28, 2024 |
| - Registration deadline | Apr 15, 2024 |
| - Papers due | Apr 25, 2024 |

Registration

The moderate registration fee will include workshop attendance, refreshments, one buffet dinner, and a copy of the book of abstracts.

For all details of the registration process, please visit the workshop's website at www.bam.de/tmf-workshop.de.

Scientific Committee

T. Beck, Kaiserslautern University, Germany

Th. Brendel, MTU Aero Engines, München, Germany

St. Guth, Karlsruhe Institute of Technology, Germany

H. Haase, Rolls-Royce Solutions, Friedrichshafen, Germany

Eh. Hosseini, EMPA, Dübendorf, Switzerland

Chr. Hyde, Nottingham University, UK

H. Klingelhöffer, BAM, Berlin, Germany

Chr. Kontermann, Darmstadt University/MPA, Germany

V. Maurel, MINES Paristech, Paris, France

M. McGaw, McGaw Technology, Fairview Park, USA

J. Olbricht, BAM, Berlin, Germany (Chairman)

M. Schurig, Rolls-Royce Deutschland, Dahlewitz, Germany

Chr. Schweizer, Fraunhofer IWM, Freiburg, Germany

S. Stekovic, Linköping University, Sweden

M. Whittaker, Swansea University, UK