

■ Visa

Under German law responsibility for issuing visas lies with the missions of the Federal Republic of Germany, i.e. its embassies and consulates-general. Local responsibility for issuing the visa lies with the mission responsible for the area in which the applicant has his/her ordinary residence or domicile.

■ Registration

Registration exclusively online through the registration access on the conference website www.vhcf7.de. Registration for the conference is mandatory for the presentation of a lecture and the publication of the manuscript in the proceedings. A confirmation of the registration will be sent to the participant by e-mail / pdf.

■ Registration Fee

Early Bird Registration up to 1st March 2017
Member of DVM 880 EUR
Non-Member 970 EUR
Speaker (1 person per contribution) 790 EUR
Registration after 1st March 2017 will be subject to an extra charge of EUR 100,00.

According to § 4, para. 22, German Turnover-Tax Law registration fees are exempt from VAT. For social programmes such as sightseeing fees VAT is not shown according to the § 25 German Turnover-Tax Law (German: UstG).

■ Payment

All payments have to be made in Euro (€) by credit card or bank transfer. Registration fees have to be paid without deductions. All banking costs have to be paid by the participant. Credit cards (VISA, MasterCard, American Express) will be accepted as well as payment by bank transfer.

■ Cancellations

All changes or cancellations have to be submitted in writing (e-mail, telefax or airmail). In case of cancellation after 1st March 2017, the conference organiser is allowed to charge 50% of the registration fee plus 25€ service charge. Name substitutions will be accepted at any time at no extra charge. Cancellations received after 1st June 2017 are not refundable. All refunds will be settled after the conference.

■ Accommodation

Registration fee does not include hotel accommodation. Participants are responsible for booking their accommodation themselves. Recommendations will be soon available at the conference website.

■ Social Events, Technical Visits

To be announced soon on the conference website: www.vhcf7.de

■ Organizing Committee

M. Zimmermann, H.-J. Christ, M. Bacher-Höchst, C. Eberl, D. Eifler, H. W. Höppel, M. Sander

■ Scientific Committee

F. Ballani, F. Balle, T. Beck, H. Biermann, E. Bitzek, T. Blaß, C. Boller, B. Fiedler, M. Gude, A. Hartmaier, P. Horst, E. Kaufmann, E. Kerscher, U. Krupp, K.-H. Lang, U. Pietsch, B. Pyttel, R. Rolfes, M. Sinapius, W. Trojahn, A. Weidner, D. Weygand, P. Wierach, H.-W. Zoch

■ International Advisory Committee

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■ VHCF7 Executive Chairs

- *Prof. Dr.-Ing. Martina Zimmermann*
Institut für Werkstoffwissenschaft, TU Dresden and Fraunhofer Institut für Werkstoff- und Strahltechnik Dresden, Germany
- *Prof. Dr.-Ing. habil. Hans-Jürgen Christ*
Institut für Werkstofftechnik, Universität Siegen Siegen, Germany

■ Supporting Associations

-  Deutsche Gesellschaft für Materialkunde e.V.
-  Wissenschaftlicher Arbeitskreis e.V. der Universitätsprofessoren der Werkstofftechnik
-  Gruppo Italiano Frattura
-  Société Française de Métallurgie et de Matériaux
-  The Minerals, Metals & Materials Society, US
-  The Society of Materials Science, Japan
-  European Structural Integrity Society
-  International Congress on Fracture

■ Organization

 **DVM**
German Association for
Materials Research and Testing e.V.

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German Association for
Materials Research and Testing e.V.

VHCF7 Seventh International Conference on Very High Cycle Fatigue

Call for Papers



Semperoper Dresden © Shutterstock, Fraunhofer IWS Dresden

3 to 5 July 2017
Dresden, Germany

Aims and Scope

The Seventh International Conference on Very High Cycle Fatigue (VHCF7) is scheduled to be held from 3 to 5 July 2017 in Dresden, Germany.

With an increasing scarcity of resources, strategies to realize the most efficient design and engineering of components and hence an optimum utilization of cyclic strength of engineering materials becomes more and more important. Nowadays a growing number of components have to withstand a very/extremely high number of loading cycles. Thus, there is a global interest in, and need for, an improved understanding of the fatigue behavior and related damage mechanisms of structural materials in the very high cycle fatigue regime in order to develop reliable fatigue life prediction methods for number of cycles far beyond 10^6 . VHCF7 will continue the tradition to serve as a lively and fertile platform bringing together the international VHCF community and all those interested to present, discuss and learn about the latest findings from fundamental and applied research and to get to know the impact on practical applications.

The conference will comprise invited keynote lectures by outstanding international scientists, contributed oral presentations and posters. Suggestions for special topics are welcome. The conference language is English and the contributions are planned to be published via a renowned reviewed open-access journal.

Prof. Dr.-Ing. Martina Zimmermann

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Call for Papers in the following Scientific Topics

Fundamentals, physics and mechanisms

- Mechanisms of crack initiation
- Nonpropagating cracks, growth of short and long cracks
- Mechanisms of damage accumulation
- Influence of microstructure and defects

Parameters

- Influence of environment
- Influence of temperature
- Notch and gradient effects
- Effect of mean and residual stresses
- Effect of variable amplitude loading
- Effect of surface treatment
- Effect of test frequency

Experimental methods

- Fatigue testing machines
- Instrumentation and experimental methods
- Prognosis and health monitoring
- Advanced microstructural analysis techniques

Applications to components and structures

- Statistical and probabilistic modeling
- Development of life estimation models
- Assessment and modeling of fatigue damage and damage accumulation
- Actual structures and their components
- Case studies in industrial applications

Materials databases and its application

- Databases and application systems
- Analysis of material databases
- Effective big data analysis for VHCF

Numerical Modelling

- Methods from atomistic to continuum mechanics
- Measurement and assessment of modelling parameters
- Application and verification of simulation models

Timelines

- 30 March 2016 start of abstract submission
- 30 June 2016 end of abstract submission
- 30 September 2016 notification of authors about acceptance of papers
- 1st November 2016 start of Early Bird registration
- 1st March 2017
 - end of Early Bird registration
 - deadline for submission of full papers and registration including payment (conditional for publication of paper)
 - tentative programme online
- 1st June 2017
 - final programme
- 3 to 5 July 2017
VHCF7 Dresden Germany

Programme

The VHCF7 time schedule including session arrangements and abstracts of the contributions will be published on the conference website www.vhcf7.de.

Exhibition

An accompanying exhibition of material testing systems and services as well as technical literature is planned. For details see www.vhcf7.de.

Language

The conference language is English and will be required for abstracts, papers, posters and oral contributions.

Proceedings

Proceedings will be available at the conference.

Conference Venue

The name of Dresden is synonymous with art and culture. Dresden is the capital of Saxony and is located along the Elbe River. The 800 year old Baroque city offers cultural and art treasures of European rank, world-famous art collections, but also a lively theatre and music scene. Architectural jewels blend into a charming natural landscape. Situated close to the Elbe River in Dresden's leafy suburbs, the new Radisson Blu Park Hotel & Conference Centre, Dresden Radebeul, offers guests a peaceful location just 7 kilometres from Dresden city centre, 9 kilometres from Dresden Airport and 3 kilometres from the motorway, the hotel is easily accessible by road, rail and from the airport.

Travelling Information

Dresden is located just in the middle of the European Union and is reachable by motorways from Munich, Frankfurt, Hamburg or Berlin. Direct flights to Dresden are currently offered by over 20 airports all over the world or with only one stop from the international airports of Frankfurt and Munich.

Accommodation

Dresden-Radebeul offers a good range of hotel accommodation. Special arrangements for participants are being done and will be described soon at www.vhcf7.de

Insurance

The conference organiser cannot be made responsible for any personal accident or loss or damage of private property of participants and accompanying persons. Participants have to arrange for their own insurance cover if considered necessary.