



SHM-NDT 2018 International Symposium on Structural Health Monitoring and Nondestructive Testing

Call for Papers

→ 04-05 October 2018
Saarbruecken, Germany
www.shm-ndt.net

Focus of the Symposium

Industry 4.0 forms an opportunity for a paradigm shift- from traditional Structural Health Monitoring and conventional Nondestructive testing to digital monitoring for process control and optimization. This requires new and intelligent, self-learning sensors. In this context, sensors are viewed primarily as complex systems, such as ultrasound or X-ray computed tomographs, thermography and eddy current sensors or electromagnetic sensors. These systems require an intelligent design and implementation, but the multidimensional and complex data streams generated by those sensors must also be intelligently analyzed using advanced image processing and modern machine learning techniques.

The aim of the International Symposium on Structural Health Monitoring and Nondestructive Testing is to provide an overview of the latest breakthroughs in SHM and NDT and their interactions with various industrial fields. Internationally acknowledged experts and researchers in the field of SHM, NDT and data processing will communicate about the latest research and development activities.

The symposium provides a forum for end-users, scientists, equipment suppliers and for an interested audience to discuss current scientific topics and to examine products as well as present and future possibilities for SHM and NDT.

The symposium will be a 2-day conference with oral presentations, poster session and industrial exhibition.



Venue

The symposium will take place at the School of Engineering at htw saar, University of Applied Sciences Saarbruecken. htw saar is an application-oriented university with more than 6,000 students and nearly 450 members of academic faculty and administrative staff. The university has five academic units: the Business School, the School of Architecture and Civil Engineering, the School of Engineering, the School of Social Sciences and the Franco-German Institute for Technology and Business.

It offers more than 45 full-time degree programs, which have all been accredited by external accreditation organizations. Additionally, the university offers a growing number of postgraduate education programs for working professionals. The university conducts significant research in robustness, efficiency and sustainability of manufacturing processes.

The city of Saarbruecken is the state capital and regional center of the federal state of Saarland, which is situated in the Saar-Lor-Lux region, at the heart of Europe. Saarbruecken is very well connected to the highly developed road and rail network as well as airports nearby.

Keynote Speakers

Gao Xiaorong, Director of Photoelectric Engineering Institute and Nondestructive Testing Research Center, Chengdu, China

Randolf Hanke, Director of Fraunhofer Institute for Nondestructive Testing IZFP, Saarbruecken, Germany

Valerie Kaftandjian, National Institute of Applied Sciences, INSA-Lyon, France

Xavier Maldague, University Laval, Quebec, Canada

Symposium Topics

- Structural Health Monitoring
- NDT sensors, detectors and sources: ultrasound, acoustical emission, X-ray, thermography, eddy currents, EMAT etc.
- Modeling and Simulation
- Reliability, Probability of Detection
- Sensor data fusion
- Reconstruction techniques
- Defect detection & localization methods
- Signal and image processing

Submission of Papers

Participants are invited to submit an abstract in English until 31 March 2018. Please use the template provided on the symposium's website. Accepted abstracts are invited to submit full paper by 01 September 2018. Full papers will be published in NDT.net, the Web's Largest Open Access Database of Nondestructive Testing (NDT) ISSN 1435-4934. For inclusion in the final program and in the conference proceedings, at least one of the authors of accepted papers needs to register until 10 July 2018.

Best Student Award

This award recognizes an exceptional contribution. The best paper authored primarily by a Graduate or PhD student and presented by the student at the symposium will be awarded. The winner will be announced during the gala dinner. A monetary prize and a certificate will be handed over to the winner.

Important Dates

- Call for exhibitors opening: **01 December 2017**
- Abstract submission deadline: **31 March 2018**
- Notification of acceptance: **01 May 2018**
- Registration opening: **01 May 2018**
- Full paper submission deadline: **01 September 2018**
- End of early bird registration: **15 July 2018**
- Symposium date: **04-05 October 2018**

Exhibition

- Exhibitors can book one of the sponsoring packages A or B (refer to the sponsoring flyer)
- Innovative technology or application Demonstrations are invited
- please contact us per mail for further information

Technical Program Committee

A distinguished Technical Program Committee (TPC) has been formed to evaluate and provide feedback on abstracts and final papers received, compile the program and chair sessions.

General Chairman

Prof. Dr. Ahmad Osman, htw saar, Fraunhofer IZFP, Germany

Scientific Committee

Prof. Dr. Ahmad Osman, htw saar, Fraunhofer IZFP, Germany
Prof. Dr. Bernd Valeske, htw saar, Fraunhofer IZFP, Germany
PD. Dr. Martin Spies, Fraunhofer IZFP, Germany
Hdr. Dr. Philipp Guy, INSA-Lyon, France
Dr. Thomas Monnier, INSA-Lyon, France
Prof. Dr. Valerie Kaftandjian, INSA-Lyon, France
Dr. Ulf Hassler, Fraunhofer EZRT, Germany

Organizing Committee

SHM-NDT 2018 is organized by htw saar in cooperation with FITT gGmbH, INSA-Lyon, Fraunhofer IZFP, Fraunhofer EZRT, DGZfP e.V., COFREND and NDT.net.

htw saar

Hochschule für
Technik und Wirtschaft
des Saarlandes
University of
Applied Sciences



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