



# 11<sup>th</sup> Heat Flow Calorimetry Symposium on Energetic Materials (HFCS-EM)



## Announcement and second Call for Paper

**Date:** 13-16 May 2019

**Deadline Abstracts:** January 15, 2019

**Place:** D-76318 Pfinztal, Germany

**Deadline Full papers:** March 31, 2019

Host: Fraunhofer Institute for Chemical Technology (ICT), D-76318 Pfinztal-Berghausen, Germany.  
Pfinztal-Berghausen is situated in vicinity of Karlsruhe, which is easy to reach by plane and train.

**Conference Co-Chair:** Dr. Manfred A. Bohn (Manfred.Bohn@ict.fraunhofer.de)  
Moritz Heil (Moritz.Heil@ict.fraunhofer.de)

Still in Work: Web-page of 11<sup>th</sup> HFCS-EM <https://www.ict.fraunhofer.de/en/conferences/conferences/hfc-symposium2019.html>

### Topics of HFCS-EM in 2019

- Performance evaluation of energetic materials regarding chemical compatibility, stability, ageing and in-service time
- Decomposition kinetics of energetic materials or decomposing chemicals – mechanisms, kinetic descriptions
- Modelling and simulation of thermal effects and hazards
- Use of heat flow - thermal behaviour or decomposing energetic chemicals in design and manufacturing
- Safety assessment of energetic materials or decomposing chemicals using heat flow techniques
- Testing – measurements and assessment procedures
- Other thermal methods: DSC, ARC, reaction batch calorimeter, solution calorimeter, titration techniques, reaction flow calorimeter
- Special thermal techniques using heat flow as determination of heat conductivity, heat capacity,..
- Combination with non-heat flow methods to analyse heat flow processes (HFC and gas generation, FTIR, Raman, HPLC,..)
- Instrumental improvements and innovations on heat flow techniques as calibration, performance, reproducibility,..
- Regulations and standards regarding heat flow methods

Participants typically stay in a hotel in Karlsruhe. Daily transportation from Karlsruhe to the institute and back is organised. The Symposium starts on Monday at later afternoon with registration and reception in Karlsruhe at hotel Achat Plaza. Lecture and presentation days are Tuesday to Thursday. All other information is given on the web-page.

#### Steering Committee Members:

Dr. Manfred A. Bohn, Fraunhofer ICT, Germany  
Mr. Moritz Heil, Fraunhofer ICT, Germany  
Dr. Michael Ramin, Nitrochemie Wimmis, Switzerland  
Mr. Wim de Klerk, TNO Defence, Security, Safety, The Netherlands  
Ms. Helge Schimansky, Rheinmetall Denel Munition, South Africa  
Dr. Sara K. Pliskin, NSWC Crane, USA  
Dr. Ryan Ubelhor, NSWC Crane, USA  
Ms. Terhi Meriläinen, FDRA, Finland  
Mr. Alan Macdonald, AWE, UK  
Dr. Ruth Tunnell, QINETIQ Fort Halstead, UK  
Dr. Alain Dejeaifve, PB Clermont, Belgium