

Announcement and Call for Papers

47th International Annual
Conference of the Fraunhofer ICT
June 28 – July 1, 2016

Convention Center,
Karlsruhe, Germany

Energetic Materials

Synthesis,
Characterization,
Processing



Fraunhofer

ICT

47th International Annual Conference of the Fraunhofer ICT

International Annual Conferences of the Fraunhofer ICT...

... with a different emphasis each year, cover scientific and technological progress in the entire field of energetic materials and the related disciplines. Held annually for over 40 years, the conferences have gained worldwide importance, with hundreds of participants from more than 30 nations each year. The conferences are held in Karlsruhe's modern Convention Center, one hour south of Frankfurt International Airport.

Energetic Materials – Synthesis, Characterization, Processing

Ongoing research programs worldwide cover the synthesis of energetic compounds and the processing of energetic materials. The classic focus of this research is new energetic materials with enhanced performance and reduced sensitivity. Recently new perspectives have emerged in this field. Increasing awareness of the risks that toxic compounds pose to humans and the environment has led to the banning of hazardous materials, and stimulated the search for non-critical substitute components. Other new perspectives include new synthesis and production methods that are environmentally friendly, or that give access to new energetic materials such as nanocomposites, nano-sized ingredients, co-crystals and energetic ionic liquids.

The 47th International Annual Conference of the Fraunhofer ICT will welcome contributions relating to the synthesis of new energetic components, non-hazardous synthesis and processing techniques, particle technology, binders, curing and bonding agents, oxidizers, formulations and characterization. In addition, associated applications in rocket and gun propellants, high explosives and pyrotechnics will be highlighted. Through participation in the ICT's 47th International Annual Conference, scientists from all over the world will have the opportunity to present, discuss and stay informed about the latest developments, and to generate some trend-setting ideas for the future of the energetic materials community.

Chairman of the Conference

Dr. Thomas Keicher

Fraunhofer ICT, Pfintzal, Germany

Announcement and Call for Papers

The Fraunhofer Institute for Chemical Technology is holding its 47th International Annual Conference on:

Energetic Materials – Synthesis, Characterization, Processing

Main topics

- Synthesis of energetic ingredients for high explosives, propellants and pyrotechnics
- Replacement of hazardous material/process with less hazardous material/process
- Unconventional synthesis and production methods (microreactor synthesis, sol gel synthesis, new mixing techniques etc.)
- Design of new high energy materials (HEM) and/or insensitive materials
- Processing techniques (safe process control and on-line analytics)
- Product characterization (performance, insensitivity, small scale testing, stability...)
- Novel applications of energetic materials

Presentation

Contributions to the conference can take the form of oral presentations (presentation time 20 minutes including discussion) or posters. Please submit an extended abstract not exceeding 500 words with optional figures and tables together with the exact title and name of the author(s). The papers will be published in the Conference Proceedings which will be available at the beginning of the event. Guidelines on how to prepare the text for publication will be sent to the authors.


Conference language

English

Deadlines

Abstracts (to manuela.wolff@ict.fraunhofer.de)	December 18, 2015
Reply to authors	February 2016
Full papers	April 2016

The program will be published in April 2016.



The Fraunhofer Institute for Chemical Technology ICT

The Fraunhofer ICT in Germany is a unique research and development facility with competence in the fields of energetic materials, energetic systems, polymer engineering, applied electrochemistry and environmental engineering. It comprises the entire spectrum from basic research tasks to application in products according to its customers' needs. In the field of propellants and explosives the Fraunhofer ICT, with its 500 employees, is the only research institute in Germany to perform contractual research for the Federal Ministry of Defence, the national and international defence industry as well as commercial clients. Founded in 1959, the Fraunhofer ICT has gained an international reputation, especially in the fields of:

- Material and processing technology
 - Formulation, characterization and manufacturing of energetic and polymeric materials
 - Mechanical and chemical processing technology
 - Substance and material properties and structure analysis
- Combustion, reaction kinetics
 - Physical and chemical analysis of combustion and detonation phenomena
 - Energy balance and conversion
 - Sensor technology
- Environmental and safety engineering
 - Gas explosions and hazards
 - Environmental testing
 - Waste disposal and recycling



Conference Management

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