**Conference Co-Chairs**

Prof. Dr.-Ing. Andreas Czylwik  
University of Duisburg-Essen  
e-mail czylwik@nts.uni-due.de

Dr.-Ing. Thorsten Schultze  
University of Duisburg-Essen  
e-mail schultze@nts.uni-due.de

Amanda Kimball, P.E.  
NFPA, Fire Protection Research Foundation  
Quincy, MA, United States of America  
e-mail akimball@nfpa.org  
Phone +01 617 984 7295

Thomas G. Cleary  
NIST, Gaithersburg, MD, United States of America  
e-mail thomas.cleary@nist.gov  
Phone +01 01 975 6858

**Conference organisation**

Universität Duisburg-Essen  
Prof. Dr. Andreas Czylwik  
Dr.-Ing. Thorsten Schultze  
Bismarckstrasse 81  
47057 Duisburg / Germany  
Phone +49 (0) 203 379 4404  
Fax +49 (0) 203 379 2902  
e-mail aube@uni-due.de

Fire Protection Research Foundation  
Amanda Kimball, P.E.  
1 Batterymarch Park  
Quincy, MA, USA 02169-7471  
Phone +01 617 984 7295  
e-mail akimball@nfpa.org

**Venue**

Universität Duisburg-Essen  
47057 Duisburg, Germany

**Call for Papers**

**SUPDET 2021**

**AUBE ’21**

17th International Conference on Automatic Fire Detection & Suppression, Detection and Signaling Research and Applications Conference

SUPDET 2021

**September 21 - 23, 2021**  
Duisburg, Germany
The Department of Communication Systems NTS at the University of Duisburg-Essen, Germany, is pleased to announce that the 17th International Conference on Automatic Fire Detection (AUBE’21) will be held on September 21-23, 2021 in co-operation with the NFPA Fire Protection Research Foundation, Quincy, MA, USA and will address the latest developments in research, technology, and applications for the fire protection community.

The upcoming AUBE’21 is jointly organized with the Suppression, Detection and Signaling Research and Applications Conference (SUPDET 2021).

Interested presenters are asked to submit an extended abstract (3 pages) by email not later than December 31, 2020 to aube@uni-due.de.

Submitted abstracts must include the full title, and name(s), affiliation(s), address(es), telephone number(s), and email address(es) of the author(s), with the presenter identified (underlined).

Abstracts must be original work and will be accepted on the basis of their quality and originality in the field of automatic fire detection, security systems and their applications. Abstracts should be absent of commercial overtones, be based on scientific aspects, present objective and credible results, and be without inherent bias. Abstracts that do not meet these criteria will not be accepted.

Authors are invited to submit new developments with a focus on the following topics. Case studies are also welcome.

**Suppression**
- Advancements in protection of high hazard commodities
- Developments to address environmental factors
- Special suppression applications/case studies
- Advancements with gaseous and clean agents
- Wildfire fighting
- New suppression technology
- Reliability and maintenance of systems
- Regulations and their impact
- Modeling and computer simulation
- Electrical energy storage: Lithium ion batteries
- Improving effectiveness and efficiency of systems
- Remote/automatic testing and maintenance

**Detection and Signaling**
- Multiple sensor & multiple criteria based fire detection: Design, technical set-up and testing
- Toxic gases and gas detection
- Smoke aerosol characterisation
- Detection by radiated emission
- Flame detection, video detection and image processing
- Fire detection in aircrafts
- Special applications: Detection in cable traces, clean rooms, tunnels, trains and ships, power plants, photovoltaic systems, wind turbines
- Aspiration systems
- Electrical energy storage: Lithium ion batteries
- Forest and wildland fires
- Wildfire applications
- Advancements in detection and signaling technology
- Domestic fire detection / Home smoke alarm applications
- Emergency notifications
- Integrated systems and smart buildings
- Integrated danger detection, building management
- Smart firefighting
- Improving effectiveness of systems
- Fire detection algorithms:
  - Theory, design and testing
  - Testing procedures in fire protection
  - Electromagnetic compatibility
  - Wireless detection & alarm systems
  - Robots in fire protection
  - International situation and future aspects concerning standards, testing methods and certification
  - Regulations and their impact on fire protection
  - Reliability, availability, service & remote maintenance

**Simulation**
- Modeling and computer simulation in fire protection
- Smoke spreading simulation
- Light scattering simulation
- FDS in fire detection

Abstracts will be reviewed by the technical program committee. The organizing committee will notify the authors of acceptance by March 15, 2021.

If selected, presenters will be asked to submit a full paper, 5 - 8 pages, for publication in the conference proceedings. On acceptance, full papers in English will be required by May 15, 2021. The oral presentations in English must not exceed 20 minutes.

The conference will be complemented by a table-top and poster exhibit. Companies interested in demonstrating their products at this conference should contact the conference organisation in Duisburg before August 1, 2021.

**AUBE’21 & SUPDET 2021 Conference Timeline**
- Submission deadline for abstracts: December 31, 2020
- Notification of acceptance: March 15, 2021
- Submission deadline for full papers: May 15, 2021
- Deadline for early registration: June 1, 2021
- Deadline for exhibition requests: August 1, 2021

**Additional Information**
If you would like more information on the arrangements for the upcoming conference, please visit nts.uni-due.de/aube21/aube21.html or contact the local organizers at aube@uni-due.de.