

The Department of Communication Systems NTS at the University of Duisburg-Essen, Germany, is pleased to announce that the '18th International Conference on Automatic Fire Detection' (AUBE'24) will be held September 24-26, 2024, at the University of Duisburg-Essen, Duisburg/Germany, in cooperation 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'24 is jointly organized with the Suppression, Detection and Signaling Research and Applications Conference (SUPDET 2024).

Interested presenters are kindly asked to submit an extended abstract (3 pages) by e-mail to aube@uni-due.de not later than April 21st, 2024.

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. A list of possible topics can be found on the next page. Case studies are also welcome.

#### **Conference Timeline:**

#### **Submission deadline for abstracts**

Notification of acceptance Submission deadline for full papers

Deadline for early registration Deadline for exhibition requests

Conference in Duisburg, Germany **Venue:** University of Duisburg-Essen

April 21st, 2024

May 10<sup>th</sup>, 2024 July 1<sup>st</sup>, 2024

July 7<sup>th</sup>, 2024 August 1<sup>st</sup>, 2024

September 24<sup>th</sup> – 26<sup>th</sup>, 2024

### **Additional Information:**

If you would like more information on the arrangements for the upcoming conference, please visit <a href="https://www.uni-due.de/nts/aube24">https://www.uni-due.de/nts/aube24</a> or contact the local organizers at aube@uni-due.de.



# **SUPDET 2024**

# AUBE 24

# Short overview of possible topics (not complete):

## **Suppression**

- Advancements in protection of high hazard commodities
- Special suppression applications/case studies
- Advancements with gaseous and clean agents
- Wildfire fighting
- New suppression technologies
- Reliability and maintenance of suppression systems
- Regulations and their impact
- Modeling and simulation of suppression systems and their impact
- 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
- Toxic gases and gas detection
- Smoke aerosol characterization,
- Simulation of fire and non-fire aerosol light scattering
- Flame detection, video detection and image processing
- Special applications: aircrafts, cable traces, clean rooms, tunnels, trains, ships, power plants, photovoltaic systems, wind turbines
- Aspiration systems
- Electrical energy storage: Lithium-ion batteries
- Forest and wildland fires, wildfire applications
- Domestic fire detection / Home smoke alarm applications
- Emergency notifications
- $\bullet$  Integrated systems and smart buildings, building management
- Fire detection algorithms: Theory, design and testing
- Testing procedures in fire protection
- Standards, testing methods and certification
- Regulations and their impact on fire protection
- Reliability, availability, service & remote maintenance
- Modeling and computer simulation in fire protection
- FDS in fire detection



# **SUPDET 2024**





Abstracts will be reviewed by the technical program committee. The organizing committee will notify the authors of acceptance by May 1<sup>st</sup>, 2024.

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 July  $1^{st}$ , 2024. The oral presentations must not exceed 20 minutes.

The conference will be complemented by a table-top and poster exhibit. Companies interested in presenting their products at this conference are requested to contact the conference organization in Duisburg before August 1<sup>st</sup>, 2024.

## **Conference Co-Chairs:**

**Prof. Dr.-Ing. Andreas Czylwik**, University of Duisburg-Essen e-mail <u>czylwik@nts.uni-due.de</u>

**Amanda Kimball**, P.E. NFPA, Fire Protection Research Foundation e-mail akimball@nfpa.org



# **Conference Organisation:**

### Universität Duisburg-Essen

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Offen im Denken

#### **Fire Protection Research Foundation**

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