Submittal of Abstracts to the 23rd International Water Mist Conference (#IWMC2023) in Antwerp on 18th and 19th September 2024

Abstract Guideline:

In order to facilitate the review of abstracts submitted to the yearly International Water Mist Conference (IWMC), the attached template should be used.

The abstracts should be free from commercial content. If descriptions of systems and equipment used in the work are necessary, specify this information, identifying the manufacturer, brand, or model without any use of superlatives.

An example of an acceptable abstract is provided on page 3.

Abstract Deadline is 15th May 2024! (Please see last page for submission deadline for presentation!)

TITLE! Format / Template for Abstract submitted to IWMC 2024

(centre title in **BOLD** letters in 18 point size)

First name Family name¹, First name Family name² and First name Family name³

¹Organisation, City, Country, E-mail address

²Organisation, City, Country, E-mail address

³Organisation, City, Country, E-mail address

(centre name and organisation, 11 point size, for multiple authorship underline presenting author)



(please add a photo)

Bio1: 2-3 sentences with which the moderator may introduce the speaker to the audience

Bio²: 2-3 sentences with which the moderator may introduce the speaker to the audience

Please add a photo (head shot) and the mobile phone number of the presenting speaker(s)!

Abstract

The submission should include title, author(s) and affiliation(s)/organization(s). The abstract should be structured logically to give an overview of what is to be presented. The following five elements should be used: background, objectives (50-100 words), general description of the method(s), results (300-400 words), and main conclusions as well as recommendations (50-100 words). The complete abstract should be 400 - 600 words in length and in 11 point size. Abstracts including figures and tables must not exceed 2 pages. Maximum file size is 4 MB.

KEYWORDS: At least 3 keywords in 11 point size are required with all letters in lower case and not bold.

Example

Water mist fire protection systems for the protection of flammable liquid hazards in industrial premises

Walter Mist¹ and Liquida Waters²

Foundation for Innovative Fire Protection Solutions, City of Knowledge, United Wisdom.

² Presenting author email: Liquida.Waters @company.org



BIO: John Smith has got 25 years' experience working with fire suppression systems. His work has primarily focussed on water mist and sprinkler systems. He has had posts in research and product development and is now Sales Director at company XYZ. John has written several papers and a book on fire extinguishing systems and has been involved in the design and supply of several prestigious and large engineering projects protected by water mist systems. John actively participates in standard's work and chairs the XYZ committee.

Abstract

[Background] Usually, foam or foam-water spray systems are used to protect flammable liquid hazards in industrial premises. However, due to an increasing environmental concern with foam liquids, a demand for optional fire protection systems has arisen. [Objective] The aim of this study was to investigate whether water mist fire protection systems could provide an equal level of protection, without the use of foam, as compared to a regular foam-water spray system. [Method] A series of fire tests were conducted with a deluge foam-water spray system designed in accordance with the recommendations given in NFPA 16 and several commercially available water mist fire protection systems. The tests were conducted inside an enclosed fire test compartment having a square floor area of 625 m² and ceiling height of 6 m, i.e. a total volume of 3 750 m³. Low flash point pool fires, with heat release rates ranging from 1 MW to 5 MW where used as the fire test sources. [Results] The tests revealed that the foam-water spray system extinguished the fires in fractions of minutes, whilst the water mist systems typically required longer times. Although the design densities of the water mist systems were less, the total required water supply requirements were comparable to the foam-water spray system. [Main conclusions and recommendations] It is concluded that the protection of low flash point fuel fires in enclosed compartments are viable with water mist fire protection systems, without the use of a foam additive. However, the systems may require longer

system duration times compared to a foam-water spray system and it is recommended that the potential risk for fire re-ignition is carefully considered.

KEYWORD: water mist systems, foam-water systems, flammable liquid hazards, industrial premises.

Note: This Abstract is entirely fictive but indicates how to structure an Abstract submitted to IWMC, using the five elements: background, objectives, methods, results, and main conclusions and recommendations. This particular Abstract contains 271 words.

Presentation Guidelines:

The presentations should be free from commercial content. If descriptions of systems and equipment used in the work are necessary, specify this information without identifying the manufacturer, brand, or model.

The failure to comply with these rules may result in the presentation not being uploaded on the IWMA webpage after the conference and the speaker(s) and/or company being blacklisted.

The first slide should contain:

- Title of the presentation
- Name of the author(s) and the name of the speaker(s)
- Affiliation (you may introduce your company, organization briefly)

The second slide should contain:

- An overview of the content of the presentation

The slides between the third slide and the last but two slides shall contain the content of the presentation – as has been mentioned: free of commercial information!

The last but one slide should contain:

- The conclusion

The final slide should contain:

Acknowledgement and contact information

Submission Deadline: 10th September 2024 (failure to hand in the <u>final</u> version of the presentation on this day may result in losing the presentation slot)