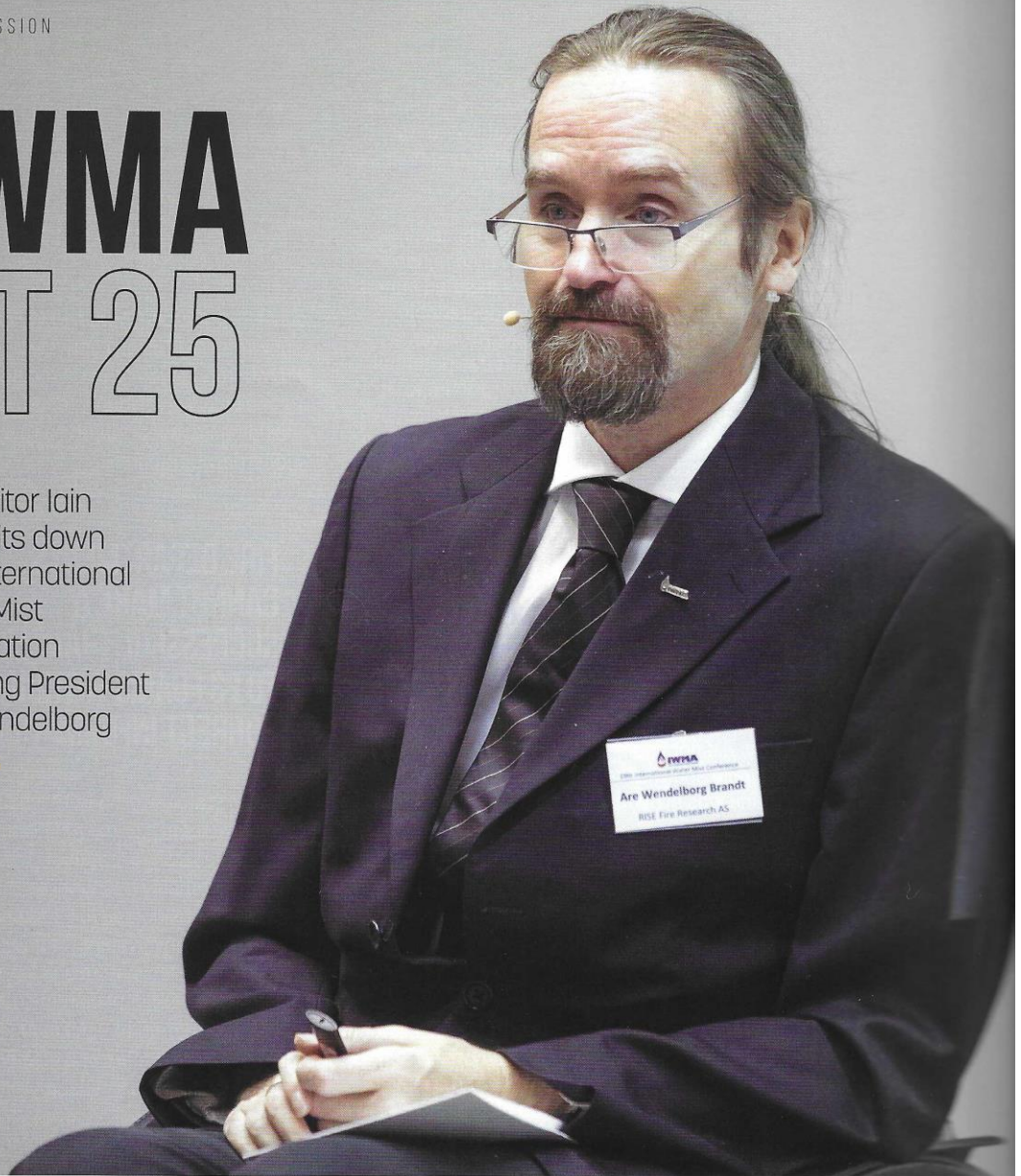


IWMA AT 25

IFSJ Editor Iain Hoey sits down with International Water Mist Association outgoing President Are Wendelborg



The year 2023 is a crucial year for the International Water Mist Association (IWMA) For one, the organisation celebrates its 25th anniversary.

Furthermore, the current IWMA president Are Wendelborg Brandt will close the annual International Water Mist Conference for the last time. His second and final term as IWMA president will come to an end in 2024. IWMA has now started looking for a successor to follow into his footsteps.

In this interview Are Wendelborg takes a look back at 25 years of IWMA, his time as IWMA president and also talks about the achievements regarding the water mist technology.

How did you become interested in water mist technology?

I started my academic education with a B.S. in electrical engineering in Norway, after a

year as trainee at Fire Hazards and Quantitative Risk Assessment Group at Shell Research Limited (Thornton, England) I went on to the University of Leeds, where I finished a Master of Science in Combustion and Energy in 1997. I then moved back to Norway where I was offered a job as research scientist at the Norwegian fire research laboratory (SINTEF NBL).

At that time the focus on water mist had increased due to the ban

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of halon and several large incidents like the one on the Scandinavian Star on 7th April 1990. 158 people were killed in a fire onboard the ferry – nearly 50 per cent of people on board. It was therefore natural that a lot of work went into the development of the water mist technology and the standard for documenting the extinguishing effect. The main focus in the early phase was towards the maritime market but it has since also included many land-based applications.

What unique facets of water mist technology fascinated you?

Water is a fascinating extinguishing media with unique properties. In addition to being a clean environmentally friendly extinguishing media it has the ability to attack all three sides of the fire triangle. With the right application of water mist, you can get an inerting effect just like with a gas extinguishing system, wetting of the surfaces as a traditional sprinkler system in addition to cooling of the atmosphere. This makes water mist extremely versatile.

What inspired you to run for IWMA president?

I was recruited in to the IWMA by Ragnar Wighus, who was my colleague and mentor at the Norwegian Fire Research Laboratory (now RISE Fire Research AS) and were accepted into the Scientific Council in 2009. When Ragnar announced his retirement in 2018, he encouraged me to run for the IWMA presidency. I think the best pieces of advice he has given me was to

look for opportunities, to further develop the technology and to avoid focussing on the problems.

How would you sum up your tenure as IWMA president?

It is difficult to single out one highlight, but I have to admit that I have really enjoyed the privilege of participating in hosting the annual conferences. It is always a great pleasure to meet all the people in the community, both new and old, and see things have developed during the years. In regard to a key achievement, I think the establishing of the new land-based water mist standard (EN 14972) must be singled out as the most important event for IWMA the last few years.

A lot of people have devoted a lot of time and effort during the last 20 years into achieving this and I believe it has done a lot for the acceptance of the water mist technology. The most challenging period for us was – as for so many others – the Covid year when we had to cancel the conference. That period was challenging both socially and financially for IWMA. ▶





How has water mist technology evolved?

There is a rapid development within electronics, and this has now started to be integrated into water mist systems. Evolving from that are more intelligent systems that can utilise and optimise the use of water.

How can global adoption of water mist technology be increased?

In my personal view I think that working together with the traditional sprinkler industry to promote water as the best extinguishing medium can possibly open up new markets that both the water mist industry and the sprinkler industry can benefit from. In addition, the work on extending the EN 14972 is important to get a more general recognition.

Which areas have shown significant growth in water mist system use?

The most significant gain is within land-based applications with the

new EN 14972 standard. A lot of effort has also been made towards the challenges with new environmentally friendly buildings technics and the new energy carriers for transport.

Are there any situations where you would advise against the use of water mist systems?

I believe that all types of extinguishing systems have their strength and weaknesses, water mist included. The important thing is that the people that make the decision have enough knowledge to choose the best extinguishing system for their application and do not just choose the one they are most familiar with. For water mist there are some challenges with outdoor applications and large open spaces, but these are areas that the industry is working on.

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What do you believe are the main advantages of water mist technology?

There are many advantages with using water mist, maybe one of the most important ones is the

environmental aspect. Since water mist systems use significantly less water than traditional sprinkler systems it produces less wastewater from the extinguishing process, it needs thinner pipes hence less materials and it can be used in regions where water is less available.

Will you remain involved with the IWMA and the water mist field post-presidency?

Hopefully, I can still be a resource for IWMA even after I step down as president. I no longer work at RISE Fire Research, so I will not be as involved in the field of fire extinguishing as I used to be. However, in addition to my position at the Norwegian University of Science and Technology I have started my own company, A Brandt Consulting, so hopefully I will still be involved with some projects and stay in touch with the community.

Reflecting on IWMA's 25-year history, what association achievement in promoting water mist technology makes you most proud?

I believe that the International Water Mist Association has played a crucial role in getting water mist to where it is today. Maybe the most important contribution was that IWMA has brought together all stakeholders which are interested and involved in the technology. The result was the formation of a community that has been and is working together to promote the technology and to make people aware of its benefits – eco-friendliness and all the others.

It has also contributed to making sure that the water mist community is working seriously towards proper use and documentation for the applications where water mist can be used. Many people are very dedicated when it comes to water mist and I am happy to say that most of them are members of IWMA. ■