# **Swedish Nuclear Society Honorary Prize 2021**

#### Rationale

"The prize is awarded to **Dr. Kerstin Dahlgren** for her pioneering work on the Man, Technology, and Organization (MTO) interplay as being a vital part of nuclear safety, first in Sweden at the Swedish Radiation Safety Authority, and later internationally at the IAEA.

Kerstin laid the foundation for the MTO organization at Swedish Radiation Safety Authority in the 80's. Later she came to the IAEA to work on safety culture, where she contributed greatly to the development of new standards on fundamental safety and management systems, in addition to safety culture support to countries operating nuclear power plants. Back in Sweden, Kerstin assumed the role of Chief Nuclear Safety Officer at Vattenfall – providing strategic advice to the CEO on safety matters.

Kerstin has been an important voice, nationally and internationally, for spreading the knowledge of and raising the awareness of the importance of having a sound safety culture within an organization. Nowadays, the concept of safety culture is an integral part of nuclear safety. Introducing a new mind-set into the nuclear establishment was however not an easy task, further highlighting the work by Kerstin."

/SKS Board

#### **Background**

## Man, Technology, and Organization (MTO)

Prior to the accident at the Three Mile Island (TMI), little attention was paid to the human role in the safe operation of nuclear power plants. The prevailing mindset at the time was that human error is not a problem at a nuclear power plant. The investigation of the TMI accident showed that its root causes were primarily human-related. The Chernobyl accident also identified the important role of the organizational "safety culture", from the highest level of management down to the individual operators and technicians. Subsequent probabilistic safety assessment studies have confirmed that human factors constitute a significant contributor to the overall risk of nuclear power plants of the current generation. The realization of these facts has been one of the driving forces in the search for innovative reactor designs that are more forgiving of human errors.

### Swedish Nuclear Society (SKS)

The Swedish Nuclear Society is a non-profit organisation, promoting the peaceful use of nuclear science & technology. It was Established in 1958, and today it has 500 active members.

#### SKS Honorary Prize

The SKS honorary prize is awarded to someone,

"who has admirably promoted the technical and scientific development of peaceful nuclear technology or stimulated the exchange of experience and knowledge in the nuclear field or otherwise is deserved thereof."



Box 6242 102 34 STOCKHOLM



Photo from the prize ceremony. To the left, Kerstin Dahlgren, and to the right, Marcus Eriksson, chairman of the Swedish Nuclear Society.

Box 6242 102 34 STOCKHOLM

www.kärnteknik.se info@karnteknik.se

