

## The AONSA Prize 2019

The Selection Committee (SC) for the AONSA Prize 2019 received multiple nominees by the nomination deadline (September 27, 2018) and intensively reviewed them for a few months. All of the nominees made significant contributions to the field of neutron scattering in the Asia-Oceania region and are highly qualified, reflecting the quality of neutron science in the Asia-Oceania Region. Finally the SC unanimously nominated Professor Mahn Won Kim as a recipient to the 21st Executive Committee Meeting held in Sydney, Australia on November 17, 2018 and the SC's nomination was officially approved. The recipient will be awarded a certificate, a medal and monetary prize (US\$5,000) at the Prize Ceremony to be held during the AOCNS-2019 (Nov. 18-22, 2019), Kaohsiung, Taiwan.



*Mahn Won Kim  
Department of Physics*

*Korea Advanced Institute of Science and Technology*

**Citation:** *“For his seminal contributions in building Asia-Oceania Neutron Scattering Association and the establishing of the neutron scattering community and facility in Korea, for his successful application of second harmonic generation (SHG) to investigate the air/liquid*

*interface, and for his devoted mentoring of young scientists in the community of neutron science.”*

**Mahn Won Kim** received Ph. D from University of California, Santa Barbara in 1975 and became a Research Associate of University of Pittsburgh. Then, he joined Exxon Research and Engineering Co. as Senior Staff Physicist. At Exxon, he started his neutron scattering science focused on soft matter and was best known for using SANS to determine the phase transition and critical phenomena in microemulsions. In 1995, Prof. Kim returned to Korea as Professor at KAIST. Upon his return, Prof. Kim became closely engaged with HANARO reactor facility (which began operation in 1995) providing scientific advice for its long term direction. Then, Prof. Kim served as the first President of Korean Neutron Beam Users Association (2003-2010) which was formally formed at the beginning of the HANARO Cold Neutron Facility Project (2003-2010). During this period, Prof. Kim played an exceptional leading role in formulating and supporting the project as the most influential and effective advocate for neutron scattering science to Korean government through his roles as President of Korea Institute for Advanced Study (KIAS) and President of KNBUA. Moreover, KNBUA became well established as a focal organization of neutron users in Korea promoting numerous domestic and international neutron scattering activities including neutron workshops, schools, and annual Japan-Korea neutron science meeting. At the same time, as a Physics Professor at KAIST, he educated many students and postdocs over the last 20 years, and many of his former students and postdocs are currently active members of domestic and international neutron community.

In addition, Kim has been one of major leaders in building the Asia-Oceania neutron scattering community. He chaired the Asia-Pacific Round Table Meeting on Neutron Science which was the



first formal preparatory meeting for establishing AONSA. And, he served as the first President of AONSA (2008-2010) during which the foundation of AONSA and friendship among AONSA colleagues were well established. Most recently, he served as an honorary chair of the ICNS 2017, which was the first ICNS held in Asia-Oceania region since AONSA was formed, and his honorary chairmanship contributed significantly to the success of the conference.

Kim's important and direct contribution to neutron science is his pioneering experimental works on soft matter. These works developed an idea of the underlying curvature elasticity that describes the state of microemulsions, which stimulated the subsequent theoretical developments. Another major breakthrough done by Kim is the first successful application of second harmonic

generation (SHG) to investigate the air/liquid interface. This technique has been widely applied since their pioneering work by several groups around the world and extended to other important issues such as the functional dynamics of ion channels in membranes.

For his seminal achievement in neutron science he received the following awards:

Fellow of The American Physical Society (1994), PARAMINS best patent - Lubes, (Exxon Chemical, 1996), Research Award of KAIST (2004), Best Teacher Award (College of Natural Science of KAIST, 2012)

**Dongfeng Chen**  
Vice president of AONSA