3-2. AWARD

Incentive Award in the 17th AESJ Kansai meeting

Advanced Atomic Energy Research Section Yasuyuki Ogino (D3)

The 17th Atomic Energy Society of Japan (AESJ) Kansai meeting, which was sponsored by the Kansai Branch of AESJ, was held on 10th March 2022 online. This event provides young researchers and students in the field of nuclear fission and fusion science and engineering and surrounding area an opportunity to present their works.

Mr. Yasuyuki Ogino (D3) attended and made an oral presentation on the title of "Methodology research of neutron distribution measurement inside the fusion blanket mock-up using activation foils and an imaging plate". He presented the method and analysed results of neutron distribution measurement inside the fusion blanket mock-up using various material foils, an imaging plate, and the compact DD fusion neutron source. In this meeting, he received the Incentive Award from the Kansai Branch of AESJ.



Poster Award in the 2nd IAE Student Research Presentation meeting

Advanced Atomic Energy Research Section Fu Nomoto (M2)

The 2nd IAE Student Research Presentation meeting, which was sponsored by the Institute of Advanced Energy (Kyoto University), was held on December 16 (Fri.).

Mr. Fu Nomoto (M2) attended and made a poster presentation on the topic of "Electrochemical purification in fusion liquid blanket (in Japanese)". The following is an overview of presentation.

Liquid lithium lead eutectic alloy (Li–Pb), a candidate of tritium breeding material in a fusion blanket, is easy to contain bismuth (Bi) as an initial impurity or transmutation product from lead (Pb). In this research, an electrochemical method using chloride molten salt was employed to reduce Bi.

He received the Poster Award from Institute of

He received the Poster Award from Institute of Advanced Energy, Kyoto University. The criteria for judging posters are as follows. 1. Is it easy to understand for people in other fields? 2.Positioning of the research 3. Questions and answers 4. Poster Preview Presentation.



Shimadzu Research Promotion Award (Shimadzu Science Foundation)

Functional Materials Science and Engineering Research Section Yuhei Miyauchi (Professor)

Professor Yuhei Miyauchi was awarded Shimadzu Research Promotion Award from Shimadzu Science Foundation on February 20th, 2023. The award is given to researchers under the age of 45 belonging to research institutions in Japan who have achieved original results in basic research and applied/practical research in the fields of science and technology, mainly in the area of scientific instrumentation, and whose research is expected to be further developed. He was awarded the award on the achievements of "Measurements of Novel Thermal Effects in Exciton Emission of Carbon Nanotubes".

In his award lecture, which was held on February 20th, 2023 at Hotel Okura Kyoto, he presented his achievements on clarifying mechanism of thermalization suppression and brightening of excitons in carbon nanotubes (CNTs) on dimensionality modification, discovery of thermal up-conversion luminescence phenomena and ultra-narrowband exciton thermal radiation phenomena in CNTs. These achievements opened new opportunities for applications of carbon nanotubes in future quantum photonics, bioimaging, and energy engineering fields.





Iijima Award for Young Scientists in the 63rd Fullerenes-Nanotubes-Graphene General Symposium

Functional Materials Science and Engineering Research Section Akira Takakura (Program-specific researcher)

In the 63rd Fullerenes-Nanotubes-Graphene General Symposium which was held on August 31st-September 2nd, 2022 at Tokyo Metropolitan University, Dr. Akira Takakura made an oral presentation on the topic of "Efficient coalescence of carbon nanotubes with preserved chiral angles" and he received the Iijima Award for Young Scientists. The award was established by The Fullerenes, Nanotubes and Graphene (FNTG) Research Society in order to recognize superior symposium presentations by young researchers (in principle, 40 years of age or younger).



The 1st Place Award of the Engineering Ceramics Division (ECD) Best Poster Awards (The ECD of The American Ceramic Society)

Functional Materials Science and Engineering Research Section Hiroyuki Sakai (M2)

The poster "Effect of eutectic reaction on RE-silicate formation by surface modification of SiC" presented during the 46th International Conference on Advanced Ceramics & Composites Virtual Meeting held in January 2022, has received the 1st Place Award of the ECD Best Poster Awards. The award consists of a \$500 prize, a certificate and complimentary ACerS Global Graduate Researcher Network (GGRN) membership.

The award ceremonies were held during the plenary session of the 47th International Conference on Advanced Ceramics & Composites, held in Daytona Beach, Florida in January 2023.



Award for Distinguished Activity (FY2022), Japan Society of Maintenology

Advanced Energy Structural Materials Research Section Kazunori Morishita (Associate Professor)

Dr. Kazunori Morishita was awarded for his many years of distinguished activities from the Japan Society of Maintenology on July 13, 2022. This award is annually given to those who have made a remarkable contribution to the activities of the Society, both in Japan and overseas. It includes contributions to business promotion, business operation, membership services, education related to the maintenology, and human resource development. This year, his continuous research and educational activities on nuclear materials, his great contribution to the extensive management of the society, and also his recent special efforts to establish the West Japan Branch of the society, were highly acclaimed. The award ceremony was held on the first day of the annual meeting of the society held at Kyoto University Clock Tower Centennial Hall.



2022 Distinguished Achievement Award, Materials Scienece and Tehnology Division, Atomic Energy Society of Japan

Advanced Energy Structural Materials Research Section Kazunori Morishita (Associate Professor)

Dr. Kazunori Morishita was awarded for his distinguished research activities from Materials Science and Technology Division, the Atomic Energy Society of Japan. This award is annually given to the member who has made outstanding contributions and achievements in the field of nuclear energy materials research. This year, his many years of great contributions to the research and education on nuclear materials, especially his unique multiscale modeling research efforts to elucidate the irradiation damage process in nuclear materials, were highly acclaimed. The award ceremony was held on September 8, 2022 at the annual division meeting held at Ibaraki University.



Student Session Outstanding Achievement Award in the Japan Society of Maintenology (*Prize for Creativeness*)

Advanced Energy Structural Materials Research Section Yuting Chen (D3)

The Japan Society of Maintenology was founded in 2003 to establish "Maintenology" of nuclear power plants, other complex artifacts, and the natural environments, emerged by collecting a wide variety of information and knowledge of engineering, technology, natural science, sociology.

At 2022 annual meeting of this society held at Kyoto University on July 15, 2022, Ms. Yuting Chen gave the oral and poster presentations on "Molecular dynamics simulation study of non-equilibrium defect formation in iron under Irradiation". Their efforts to find new defect generation mechanisms were highly evaluated, and her presentation eventually won the Student Session Award ("Prize for creativeness").



Student Session Outstanding Achievement Award in the Japan Society of Maintenology (*Grand prize*)

> Advanced Energy Structural Materials Research Section Zhu Liangfan (D1)

The Japan Society of Maintenology was founded in 2003 to establish "Maintenology" of nuclear power plants, other complex artifacts, and the natural environments, emerged by collecting a wide variety of information and knowledge of engineering, technology, natural science, sociology.

At 2022 annual meeting of this society held at Kyoto University on July 15, 2022, Mr. Liangfan Zhu gave the oral and poster presentations on "Modeling on the formation of solute atom clusters in RPV steel due to irradiation". Their efforts to explore the new methodology to establish irradiation correlation rules were highly focused, and his presentation eventually won the Student Session Award, "Grand prize".



Student Session Outstanding Achievement Award in the Japan Society of Maintenology (*Prize for encouragement*)

> Advanced Energy Structural Materials Research Section Yuuki Hamasaki (M2)

The Japan Society of Maintenology was founded in 2003 to establish "Maintenology" of nuclear power plants, other complex artifacts, and the natural environments, emerged by collecting a wide variety of information and knowledge of engineering, technology, natural science, sociology.

At 2022 annual meeting of this society held at Kyoto University on July 15, 2022, Mr. Yuuki Hamasaki gave the oral and poster presentations on "Challenges to develop the new device "dister" consisting of a LED and a light receiving element". Their efforts to explore the new energy device were interested, and his presentation eventually won the Student Session Award ("Prize for encouragement").



Student Poster Session Outstanding Achievement Award in the Atomic Energy Society of Japan Student Network

Advanced Energy Structural Materials Research Section Zhu Liangfan (D1)

The Atomic Energy Society of Japan was founded in 1959 as the only organization in Japan that aims to contribute towards progress in the development of atomic energy by seeking academic and technological advances pertaining to the peaceful use of atomic energy. In the 2023 Annual Spring Meeting held at the University of Tokyo, Mr. Zhu made a poster presentation on their effort on "Statistical evaluation of non-equilibrium defect formation in Fe under neutron irradiation", and received the Student Session Outstanding Achievement Award for their creative research using statistics. (Photo below: Zhu is second from the right in the first row.



2022 Best Figure Prize, Materials Scienece and Technology Division, Atomic Energy Society of Japan

Advanced Energy Structural Materials Research Section Yuting Chen (D3)

Ms. Yuting Chen was awarded for the 2022 Best Figure Prize from Materials Science and Technology Division, Atomic Energy Society of Japan. This award is annually given to those who have taken academic drawings that are considered to be a great impact on the progress of research on nuclear materials. This year, the movies captured in her molecular dynamics simulations in which the mechanism of athermal defect production in irradiated materials was investigated, were highly acclaimed. The award ceremony was held on March 15, 2023 at the annual division meeting held at the University of Tokyo.



OPTICA Best Student Presentation Award (The 15th Pacific Rim Conference on Lasers and Electro-Optics)

Optical Nano-science Research Section Heejun Kim (D2)

Mr. Heejun Kim (D2) was awarded OPTICA Best Student Presentation Award in the 15th Pacific Rim Conference on Lasers and Electro-Optics (CLEO Pacific Rim, CLEO-PR 2022) on August 3rd, 2022. The OPTICA Best Student Presentation Award is given to students who have presented outstanding academic results in the field of lasers and electro-optics. He was awarded this prize on the achievements of "Observation of Moire Exciton Dynamics in Twisted MoSe₂ - WSe₂ Heterstrobilayer".



Young Scientist Poster Award in the 62th Fullerenes Nanotubes and Graphene Research Society General Symposium

Optical Nano-science Research Section Duanfei Dong (M2)

Mr. Duanfei Dong (M2) was awarded Young Scientist Poster Award in the 62th Fullerenes Nanotubes and Graphene Research Society General Symposium on September 31th, 2022. The Young Researcher's Award is given to students and young researchers who have presented outstanding academic results in the field of material science of fullerenes, nanotubes and graphene. He was awarded this prize on the achievements of "Electrically tunable moire trions in twisted WSe₂/MoSe₂ heterobilayers" from the Fullerenes Nanotubes Graphene General Research Society. He was also selected Nanoscale Horizon Award from the Young Researcher's Award.



Best Student Award in the 13th International Symposium of Advanced Energy Science

Optical Nano-science Research Section Masafumi Shimasaki (D6)

Mr. Masafumi Shimazaki (D6) was awarded Best Student Award in the 13th International Symposium of Advanced Energy Science on September 6th, 2022. The Best Student's Award is given to students and young researchers who have presented outstanding academic results in the field of advanced energy science. He was awarded this prize on the achievements of "Directional exciton energy transport via asymmetric energy landscape in lateral heteromonolayer WSe₂-MoSe₂".



Research Encouragement Award at The 54th Symposium on Molten Salt Chemstry

Chemical Reaction Complex Processes Research Section Wataru Moteki (D1)

The 54th Molten Salt Symposium, which was organized by the Molten Salt Committee of the Electrochemical Society of Japan, was held on 29th September, 2022. The purpose of this event is to provide researchers and students in molten salt chemistry and related fields with opportunities to present their work and to promote academic and industrial development in the field.

Mr. Wataru Moteki (D1) attended the symposium and made an oral presentation entitled "Electrodeposition of Crystalline Si in Molten KF–KCl–K₂SiF₆ Using Liquid Zn Electrode: Study Using Zn Film Electrodes Prepared on Graphite Plate Substrates by Electrodeposition". He received the Research Encouragement Award.



Student Presentation Award at The 90th ECSJ Spring Meeting

Chemical Reaction Complex Processes Research Section Wataru Moteki (D1)

The 90th ECSJ Spring Meeting, which was sponsored by the Electrochemical Society of Japan, was held on March 27–29th, 2023. This event provides young researchers and students in the field of electrochemistry and its surrounding area an opportunity to present their works.

Mr. Wataru Moteki (D1) attended and made an oral presentation on the topic of "Electrodeposition of Crystalline Si in Molten KF–KCl–K₂SiF₆ Using Liquid Zn Electrode: Study with Zn Film Electrodes Prepared on Silicon Plate Substrates by Electrodeposition"

He received the Student Presentation Award from the Electrochemical Society of Japan.

