Dr. M Stanley Whittingham, IAOEES' Honorary Chairman, addressed the Global Impact of Lithium Ion Battery in a special event at PDAC 2020

On March 2, 2020, Dr. M. Stanley Whittingham, Honorary Chairman of IAOEES, 2019 Nobel Laureate in Chemistry for the Invention of Li-ion Battery, Distinguished Professor of Chemistry & Director of the Institute for Materials Research and the Materials Science and Engineering Program, Binghamton University (State University of New York), met with Prof. Joey Jung, IAOEES' Co-Founder and Vice President of Finance, at a special event at PDAC 2020 in Toronto, ON, Canada. This event was hosted by Miller Thompson LLP and G&W Inc. The Prospectors & Developers Association of Canada (PDAC) is a premier international mining convention that attracts over 25,000 attendees from 135 countries every year. This special event was dedicated to lithium ion battery materials & rare-earth elements supply chains.

Dr. Whittingham gave a talk on "The Lithium-ion Battery and its Global Impact" in this special event. In this talk, he started with the development history of lithium-ion batteries, an invention by himself, Dr. John B. Goodenough, Dr. Akira Yoshino, and many others. He also commented on the trend for the advanced lithium ion battery development, the importance of lithium ion battery recycling, and the impact on mining sector. In particular, Dr. Whittingham discussed on the trend of NMC lithium cathode material development and the dependence on lithium, nickel, manganese, and cobalt. With the electrical vehicles powered by lithium-ion batteries gaining market share, the emergence of lithium-ion battery megafactories are rapid and relentless. It is anticipated that lithium ion battery production will increase from 455.1 GWh in 2019 to 2224.5 GWh by 2029 (Benchmark Mineral Intelligence), which have shifted global mining focus from the conventional minerals to battery materials such as lithium, cobalt, manganese, and graphite.

Dr. Whittingham's talk has strengthened IAOEES' objective of creating a global community to promote research and partnerships in the field of electrochemical energy science and technology. IAOEES will strive to push for green/clean energy revolution through the implementation of new electrochemical energy technologies to meet the global energy and environment challenges.

On behalf of the IAOEES and EEST2020 organization committee, Prof. Jung briefed Dr. Whittingham the status of Electrochemical Energy Reviews （EER） and the upcoming EEST2020 conference, scheduled to take place in Beijing, China this October. Dr. Whittingham advised that the committee should pay special attention to the ongoing COVID-19 virus outbreak, and he stressed that EEST2020 should be held only when the attendees' safety can be guaranteed. The EEST2020 organization committee will continue to monitor the COVID-19 situation and provide timely updates.