

Ledare SSF Nyhetsbrev december 2019

Dear Esteemed Nobel Laureate, Dr. Akira Yoshino

Jag använder årets sista nyhetsbrev till att dela det korta avslutningsanförande jag höll vid IVA:s Nobelseminarium på Luciadagen – Future Battery Technology and Ecosystem. Vem som var hedersgästgäst och huvudtalare framgår av ledarens rubrik. Denne berättar ödmjukt om att det krävdes en miljon försök med olika kolbaserade material innan det moderna litiumjonbatteriet kunde lanseras. Forskning tar inga genvägar. Ett längre referat av seminariet finns på IVA:s och SSF:s nyhetsplatser, skrivet av Eva Regårdh.

-Today, we celebrate science and innovation around the element [Li] for a sustainable development and mobile IT society. Here is a message from the seminar's sponsor and a mini lecture by a physics professor, in the same person.

Once upon a time – a long time ago - there was Big Bang;
and lithium [Li] was formed.

Lithium is one of the primordial elements produced during nucleosynthesis during the Big Bang. Under cosmic particle (proton) irradiation, [⁷Li] undergoes transmutation to helium atoms (also the first man-made nuclear reaction in 1932). Some lithium is of course later produced in stars but burned at the similar rate. The lithium we use is thus brother and sister atoms to that in the Exoplanets, if we were ever to go there for mining. In that sense lithium is not a renewable element over a galactic time frame. So much more reason to be in awe of this precious element.

The situation obviously craves a lot of Lithium!

These are my closing remarks for the seminar; We owe it to Dr Yoshino for opening the door to Lithium Ion Battery Technology and pointing out the road to its ecosystem.

The situation obviously craves a lot of lithium! Here, we need green mining and recycling.

Now, I feel intellectually fully charged and pledge to engage as CEO for the Swedish Foundation for Strategic Research to continue supporting battery and energy-related materials research.

Scientific excellence, innovation, and impact on the society also outside of academia will be the legacies of this seminar.

On behalf of the organizers and sponsors of this seminar, IVA, SSF, Sweden-Japan Foundation, Japan Society for the Promotion of Science, and Embassy of Japan, I thank you all for attending.

Lars Hultman, vd SSF