



FunHy Newsletter

Who and where

All three FunHy PhD students, Gustav Ek, Magnus Moe Nygård and Jakob Grinderslev participated in both the Gordon Research Seminar (GRS) "Evolving Hydrogen-Metal Functional Materials" and the Gordon Research Conference (GRC) "Hydrogen-Metal systems" during 29/6-5/7 2019. The event was held in Barcelona, Spain and was organized by Hope Sartain and Giovanni Capurso (GRS) as well as Ned Stetson, Michael Hirscher, Tom Autrey and Ping Chen (GRC).

Why

The GRS offers a unique opportunity for students and post-docs to present and discuss new and unpublished data as the presentations and following discussions are considered as private. This offers training of scientific discussions in an international setting with students with similar level of experience as well as panel discussions on future career options. During the GRS, Magnus Moe Nygård presented an oral presentation titled "A Mechanistic Explanation of the Destabilization Mechanism in Metal Hydrides Formed from High-Entropy Alloys". The students also then attended the GRC to listen to invited talks from experts in the metalhydrogen field. The theme of the GRC was "Understanding the Interaction of Hydrogen with Materials from the atomic Level to systems" covering topics ranging from "Hydrogen in space" to "Developing Applications for Hydride Materials". All three FunHy PhD students presented posters during the GRC;

Gustav Ek - "Hydrides of High Entropy Alloys in the Ti-V-Zr-Nb-Hf system"

Magnus Moe Nygård - "A Mechanistic Explanation of the Destabilization Mechanism in Metal Hydrides Formed from High-Entropy Alloys"

Jakob Grinderslev - "Dihydrogen Bonding and Dynamics in Ammonium Borohydride"

FunHy PI, Torben R. Jensen also presented an invited oral presentation titled "Multifunctional Hydrides for Energy Storage: Hydrogen and Batteries" sharing results from the FunHy project with the international community. FunHy associated PhD student Mads Amdisen also presented a poster "Novel Solid-State Electrolytes based on Borohydrides".



FunHy webpage: <u>http://inano.au.dk/en/about/research-groups/nano-energy-</u>materials/projects/neutrons-for-multi-functional-hydrides-funhy/