|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Atom Probe Tomography workshop at Hultgren Laboratory, KTH**  Workshop | 20 Nov 2020 | 10:00 -16:10 CET  Online: <https://kth-se.zoom.us/j/64737783898> | *En bild som visar mat, ritning  Automatiskt genererad beskrivning* | **Duplex steel**  **Cr - 30 at.%**  **Ni - 8.5 at.%**  **Cu - 1 at.%**  **15x15x45nm3** | |  |
| Dear all,  At Hultgren Laboratory, Department of Materials Science and Engineering, a central facility within the research infrastructure at KTH, we aim to establish atom probe tomography (APT) as a technique in our suite of advanced characterization tools. APT is capable of 3D mapping of materials structures with sub-nanometre spatial resolution and can therefore provide new insight into a variety of materials systems.  We are pleased to invite you to the first APT workshop organized by the Hultgren Laboratory on **Friday** the **20th of November**. We believe your experience and application areas would benefit the community that we want to bring together around APT experimentation.  At the workshop, leading APT scientist will present current-state-of-the-art and future of APT instrumentation as well as application examples. In addition, we would like to survey your potential need and requirements to use APT at KTH to solve your research and development problems. The aim is to establish APT for both academic and industrial needs, complementing the existing research infrastructure in the region, and which can easily be integrated into your current workflow.  We hope this would be of interest to you.  Best regards,  Alexander Dahlström and Peter Hedström | | | |  |  |

**Tentative schedule**

|  |  |
| --- | --- |
| Time | Activity |
| 10.00 – 10.30 | Welcome and Introduction to Hultgren Laboratory, by **Prof. Peter Hedström, KTH.** |
| 10.30 – 11.00 | APT steel research in materials design, solid mechanics and aerospace applications, by **Dr Frederic Danoix, Univ. Rouen.** |
| 11.00 – 11.30 | State-of-the-art APT instrumentation and its future, the fundamentals of voltage and laser-assisted field evaporation in metals and semiconductors, by **Prof. Francois Vurpillot, Univ. Rouen.** |
| 11.30 – 12.00 | Ongoing APT research connected to the Hultgren Laboratory, by **Dr Alexander Dahlström, KTH.** |
| 12.00 – 13.30 | **Lunch break** |
| 13.30 – 14.00 | APT research at CMAL Chalmers; thin films in solar cell devices, nuclear materials, and composition measurements of carbides, by **Assoc. Prof. Mattias Thuvander, Chalmers Univ.** |
| 14.00 – 14.30 | Industrial perspective on APT, TBD. |
| 14.30 – 15.15 | Introduction to the LEAP 5000 platform, case studies and advanced applications in materials design, as well as an overview of the state-of-the-art in data analysis, by **M.Sc. Robert Ulfiig, Senior APT Product Manager, CAMECA Instruments Inc., US.** |
| 15.15 – 15.50 | Breakout session in smaller groups for discussions. |
| 15.50 – 16.10 | Joint discussion and closing of the workshop. |

*This workshop is organized by the Hultgren Laboratory, supported by Hero-m 2i, sponsored by KTH’s materials platform.*

To enter the meeting please R.S.V.P. by mail to [adahlstr@kth.se](mailto:adahlstr@kth.se)