Dear colleagues,
We are pleased to announce the second lecture in IVS webinar series, "Advanced characteristization methods for materials and interfaces". **The 45-minute talk will be followed by a Q&A session where all the participants can ask questions (15 - 30 min.)**

Upcoming webinar:

Wednesday, March 13 at 14:00 (Israel time)

Click here for the Zoom link

" Atom Probe Tomography and correlative microscopy"

Prof. Oana Cojocaru-Mirédin
Department of Sustainable Systems Engineering (INATECH), University of Freiburg, Germany

It has been demonstrated over the years that atom probe tomography is a very powerful technique able to provide access to both structure and composition of materials sometimes down to atomic level. Another advantage is that the elemental distributions can be explored in three-dimensional (3D) view within the studied material, with typical dimensions of the analyzed volume of about $50\times50\times300$ nm^3 for state-of-the-art instruments.

Atom probe tomography (APT) and correlative microscopy, i.e. a combination of atom probe tomography with other (microscopy) techniques, is making considerable progress into the nanocharacterization of the advanced materials. This opens now the possibilty to answer long-standing questions in material science and to provide clear design strategies for synthesising internal interfaces with superior properties. Therefore, this presentation will show a selection of several studies including the study of grain boundaries in standard energy materials.

Oana Cojocaru-Mirédin received her Ph.D. degree in physics in 2009 from the University of Rouen, France, within the “Group Physique des Matériaux”. Afterward, she worked as a postdoc till 2012 at Max-Planck-Institut für Eisenforschung GmbH in Düsseldorf, Germany. By winning the “NanoMatFutur” competition organized by Federal Ministry for Education and Research in Germany, she became in 2013 the head of “Interface design in solar cells” group. In 2015, she moved to RWTH Aachen University within the I. Institute of Physics where she lead the “Nanocharacterization of Advanced Functional Materials” group. Since 2022, she is professor for “Cross-scale Material Characterization” at INATECH, University of Freiburg. Her research interests include the characterization and processing of compound semiconductors for energy applications by means of correlative microscopy, i.e. a combination of the atom probe tomography with other microscopy techniques. Dr. Cojocaru-Mirédin has more than 100 ISI recorded articles and contributions in more than 60 conferences.

Further details can be found on the IVS webinar page.
Hope to see you there !!