

atoms light ions electrons neutrons spectroscopy

School for advanced materials characterization

School overview

Internationally acknowledged European research centers will host complementary lectures for 5 days providing a comprehensive overview of techniques for material characterization. The school will offer a unique view of the characterization landscape in Europe, with particular attention to the energy, health and information technology application fields.

Audience targeted by the shool

Professionals, engineers, researchers from industry, facing material characterization issues

Entry requirements

No specific requirements

Competences covered

- Acquire a general overview of nanoscale characterization techniques and related roadmap
- Focus on methodology for the study of surfaces, interfaces, nanomaterials and nanostructures
- Describe the potential and limitations of the various techniques
- Practicals based on the general overview and on the topics focus through case studies

Duration 5 days

Locations INSTN/CEA-Grenoble, France Fraunhofer IKTS Dresden, Germany

Groups limited to 12 (on each location) Contacts Chantal Tardif – <u>chantal.tardif@cea.fr</u> (Grenoble) Andre Clausner – <u>Andre.clausner@ikts.fraunhofer.de</u> (Dresden)

Course content

The course covers:

- 3 general characterization topics:
- Chemical and morphological properties
- Electrical and morphological properties
- Structural and morphological properties
- 3 methodology axes:
- Surface analysis
- 3D Characterization
- Characterization by Large Scale Facilities



Main outcomes of the school

Theoretical lectures will be paired to practical works on real case studies that will highlight the capabilities and complementarities of the characterization techniques.

The lectures will be given and broadcasted from 2 sites renowned for their characterization expertise and their start-ofthe-art facilities.

Please contact us for more information on this course.









