

Symposium The state of the art in actinide research (SYAR)

jointly organized by
the Mass Spectrometry Division (MS) and
the Atomic Physics Division (A)

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Actinide research exhibits exciting and multidisciplinary facets ranging from atomic and nuclear physics through chemistry to nuclear forensics and medical applications. State-of-the-art methodologies including mass spectrometric techniques enable an effective production and handling of actinide samples, allowing for practical applications in the fields of medical diagnosis and treatment as well as environmental monitoring. Novel routes are taken to enable precise, sensitive, and efficient experiments for fundamental properties on rare or short-lived isotopes at the edge of nuclear stability to face the still limited understanding of these complex many-body systems. This symposium aims to point out recent advances in actinide research and to initiate discussions between the different scientific communities about new R&D perspectives provided by coming up research centers and facilities in Europe and worldwide.

Overview of Invited Talks and Sessions

(Lecture hall Audimax)

Invited Talks

SYAR 1.1	Wed	10:45–11:15	Audimax	Application of Inorganic Mass Spectrometry in Nuclear Forensics — •KLAUS MAYER, MARIA WALLENUS, ZSOLT VARGA, MAGNUS HEDBERG, MICHAEL KRACHLER
SYAR 1.2	Wed	11:15–11:45	Audimax	Actinide elements and fundamental nuclear structure studies — •IAIN MOORE
SYAR 1.3	Wed	11:45–12:15	Audimax	Pushing the Limits: Detection of Long-Lived Actinides at VERA — •KARIN HAIN, MICHAEL KERN, JIXIN QIAO, FRANCESCA QUINTO, AYA SAKAGUCHI, PETER STEIER, GABRIELE WALLNER, ANDREAS WIEDERIN, AKIHIKO YOKOYAMA, ROBIN GOLSER
SYAR 1.4	Wed	12:15–12:45	Audimax	Use of the actinides in medical research — •THOMAS ELIAS COCOLIOS

Sessions

SYAR 1.1–1.4	Wed	10:45–12:45	Audimax	The state of the art in actinide research
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