



2454-7

#### Joint ICTP-IAEA Workshop on Advanced Synchrotron Radiation Based X-ray Spectrometry Techniques

22 - 26 April 2013

#### **Round Table Discussion**

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Germany

## round table discussion

"New perspectives for advanced training and research for the IAEA member states in accessing and utilizing the newly developed XRF beamline at Elettra Sincrotrone Trieste" at the joint ICTP-IAEA Workshop on Advanced Synchrotron Radiation Based X-ray Spectrometry Techniques

<u>Panel contributors:</u> B. Beckhoff (PTB), A. Karydas (IAEA), D. Eichert (ELETTRA),M. Kiskinova (ELETTRA), J. Niemela (ICTP), H. Hoorani (SESAME)

Topics: advanced training needs of workshop participants (survey results)
research interests of workshop participants (survey results)
support schemes for access to SR by workshop organisers
open discussion on training schemes and research implementation

#### **Survey - intention**



## **Evaluation of the 37 input request forms provided**

to facilitate the round table discussion "New perspectives for advanced training and research for the IAEA member states in accessing and utilizing the newly developed XRF beamline at Elettra Sincrotrone Trieste" at the joint ICTP-IAEA Workshop on Advanced Synchrotron Radiation Based X-ray Spectrometry Techniques

Please fill out this form, checking all boxes appropriate for you and / or your group / institution and return it by Tuesday during lunch to PTB staff.

Name	
Status	29 workshop participant
	3 associate
	5 lecturer
	0 organiser

## Survey - training needs I



Training – how many people in your group / institution will need training prior to access to Elettra?	21 1 to 2 13 3 to 4  other: $1x > 10$
Training – which of the following training formats would you and /or your group / institution find appealing?	6 distance learning / e-learning 18 workshop with tutorials 26 hands-on instrumentation training other:

# Survey - training needs II



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<b>Training</b> – which of the	15 synchrotron radiation
following topics do you	21 X-ray Fluorescence Analysis (XRF)
think would be interesting	18 sample preparation
for <b>basic</b> training?	19 methods of data evaluation
	other:
<b>Training</b> – which of the	17 beamline parameter optimization
following topics do you	7 vacuum / UHV instrumentation
think would be interesting	13 grazing incidence XRF
for <b>advanced</b> training?	18 X-ray Absorption Spectroscopy (XAFS)
	24 XRF and / or XAFS quantification
	other:





Research – which of the	25 advanced materials and nanoscience
following application	15 art and cultural heritage
areas are of interest to you	15 earth and environment sciences
and / or your group /	10 industrial quality and process control
institution?	10 life sciences and forensics
	other:
Research – which of the	31 quantitative elemental composition
following <b>analytical</b>	20 layer thickness determination
aspects are of interest to	25 elemental mapping or depth profiling
you and / or your group /	14 chemical binding states (speciation)
institution?	15 surface contamination or interfaces
	other: statistical meth., validation theory,
	local structure, impact of photo-electrons,
	highly homogeneous reference samples

## **Survey - research interests**



Research – which of the following x-ray analytical techniques are of interest to you and / or your group / institution?

- 28 X-ray Fluorescence Analysis (XRF)
- 22 X-ray Absorption Spectroscopy (XAFS)
- 19 grazing incidence XRF and / or XAFS
- 15 micro-beam XRF and / or XAFS
- 12 confocal XRF and / or XAFS

other: 2x X-ray microscopy,

1x X-ray microtomography,

2x inelastic x-ray scattering,

2x electron spectroscopy,

2x powder XRD