









International initiative on x-ray fundamental parameters

8th workshop, Lisbon, Portugal, April 16-17, 2015

Thursday, April 16

- 14:00 Welcome to Lisbon José Paulo Santos (U. Nova Lisboa) **Welcome to FCT-UNL** Fernando Santana (Dean of the FCT-UNL)
- **14:10 Objectives of the workshop** *Burkhard Beckhoff (PTB)*
- 14:20 Summary of the 2014 FP workshop at Paris Marie-Christine Lépy (LNHB)

Report of funded projects

14:30 EMRP projects IND07, NEW01 and ENG53 Burkhard Beckhoff (PTB) **Industrial collaborative project** *Matthias Müller (PTB)*

Scientific and technical presentations

- 14:50 Comparison between new and old $I(K\beta)/I(K\alpha)$ intensity ratios for elements in the range 12 < Z < 34 Joanna Hoszowska (Univ. Fribourg)
- 15:10 Novel self-consistent method to determine the instrumental broadening of a Laue-type crystal spectrometer Jean-Claude Dousse (Univ. Fribourg)
- 15:30 Soft x-ray emission spectrometry for FP determinations Matthias Müller (PTB)
- 15: 50 X-ray energy metrology using superconducting microcalorimeter arrays: a test campaign on lanthanide L lines Joel Ullom (NIST)
- 16:15 Coffee break
- 16:40 Measurement of the L fluorescence yields of bismuth Yves Ménesguen (LNE-LNHB)

- 17:00 Recent FP related activities of PTB in EMRP Philipp Hönicke (PTB)
- 17:20 Improved calculations of fundamental atomic parameters José Marques / J. Sampaio (Univ. Lisboa)
- 17:45 Presentation of recent developments in Ion Beam Analysis (synergistic particle-induced X-ray emission and elastic particle backscattering PIXE and EBS)

 Chris Jeynes (Univ. Surrey)
- **18:05 Webpage and publication database updates and follow-ups** *Michael Kolbe* (*PTB*)
- 18:30 Bus to Excursion and Dinner

Friday, April 17

9:00 Update process of the FP roadmap based on expert group results at recent FP workshops (see FP board for details) – part I

Suggestion on procedure for the roadmap update, Burkhard Beckhoff (PTB)

Project management and fund raising (group 1)

Summary on previous work *B. Beckhoff (PTB)*

New experimental determinations and methodology (group 2)

Summary on previous works *M.-C. Lépy (LNHB)*

Joint discussion and generation of roadmap update

Details on the fitting of an energy dispersive high resolution XMS-PIXE UO2 M-shell spectrum (M. A. Reis, C2TN)

Ad-hoc input by workshop attendees

10:20 Coffee break

10:40 Update process of the FP roadmap based on expert group results at recent FP workshops (see FP board for details) – part II

Theory & codes – challenges: competent use and update of parameters – (group 3)

Summary on previous works *José Paulo Santos (Univ. Nova Lisboa)*Comparison between theoretical and experimental data Mauro Guerra *(Univ. Nova Lisboa)*

Joint discussion and generation of roadmap update Ad-hoc input by workshop attendees

Integration of new experimental as well as theoretical parameters into critically evaluated compilations (*group 4*)

Summary on previous works Burkhard Beckhoff (PTB) Joint discussion and generation of roadmap update Ad-hoc input by workshop attendees

12:30 Lunch

14:00 Continuing a joint project *Moderator: Michael Mantler (Rigaku)*

Discussion on activities, priorities and funding options

- 14.50 Follow-up events and FP workshops B. Beckhoff and M.-C. Lépy
- **15:00 Conclusions and summary** B. Beckhoff and J. P. Santos