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PANalytical

Monday October 09, 2017 Technical University	Autumn school	Tuesday October 10, 2017 PTB at BESSY II
Fundamentals of X-ray – matter interaction Joanna Hoszowska	09:00 – 10:30	Quantification of Stratified materials Peter Brouwer
Quantification in Bulk analysis, Sherman / Fujino Michael Mantler	11:00 – 12:30	Modeling X-ray tubes and solid state detectors Timo Wolff
Monte Carlo Methods László Vincze	14:00 – 16:30	Spectra evaluation V. Armando Solé
Lab Visit (BLiX) and discussions	17:00 – 18:30	Lab Visit (PTB) and discussions
	18:50 – 21:00	Berliner Fahrbar - with the Party Tram back to the City

EXSA Workshop on quantitative methods in XRS

Wednesday, October 11, 2017		PTB Berlin-Charlottenburg
10:00	Wrap-up session Autumn School	Workshop registration
10:30	Joint poster session Autumn School and Workshop on quantitative methods in XRS (and Workshop registration)	
12:00	Light welcome lunch	
13:00	Welcome to PTB	
13:15	Quantitative FP-XRF beyond Sherman's equation (Keynote lecture) Peter Brouwer	
14:00	Confocal micro-X-ray fluorescence spectroscopy: from OD spectra to 3D visualization (Invited talk) Ioanna Mantouvalou	
14:30	Confocal Micro-X-ray Fluorescence Spectroscopy with a Metal Jet Source Leona Bauer	
14:50	X-ray fluorescence elemental imaging, and micro analysis of plant tissue samples Ursula Fittschen	
15:10	In-operando near sulfur K-edge X-ray absorption spectrometry of Li-S battery coin cells Claudia Zech	
15:30	coffee break	
16:00	Quantification of Intracellular Elemental Distributions using Fundamental Parameters (Invited talk) Björn De Samber	
16:30	Quantification of plastic materials by XRF using partial least squares regression of scattering tube spectra Michael Breuckmann	
16:50	Paper standards for elemental characterization of paper documents by X-ray fluorescence spectroscopy Marta Manso	
17:15	Quantitative Imaging (round table discussion) moderated by Birgit Kanngießner	
19:00	poster session with pretzel and beer	

EXSA Workshop on quantitative methods in XRS

Thursday, October 12, 2017		PTB Berlin-Charlottenburg
09:30	Welcome and poster prize	
09:45	GEXRF applications in surface-sensitive investigations (Invited talk) Yves Kayser	
10:15	Comparative Laboratory-based GEXRF and Synchrotron Radiation-based GIXRF Study on Thermoelectric Nanofilms Jonas Baumann	
10:35	Investigation of Chromium Scandium Multilayers with a Novel Scan-free Laboratory GEXRF Setup Veronika Szwedowski	
10:55	coffee break	
11:30	Where Compton Matters Timo Wolff	
11:50	XMI-MSIM: a general Monte Carlo simulation of energy-dispersive X-ray fluorescence spectrometers Tom Schoonjans	
12:10	Quantitative surface characterization by combined XRF and XPS analysis for silicon spheres (Avogadro project) Matthias Müller	
12:30	Lunch break	
13:45	EXSA General Assembly – EXSA members only	
14:15	Welcome to FP session / meeting	
14:20	Reassessment of Atomic Fundamental Parameters for X-Ray Methodologies (Invited talk) Mauro Guerra	
14:50	Determination of the K and L3 fluorescence yield of gallium in GaSe with low uncertainties Rainer Unterumsberger	
15:10	Direct neutrino mass measurement by the HOLMES experiment Andrei Puiu	
15:30	coffee break	

EXSA Workshop on quantitative methods in XRS / FP workshop

16:00	Fundamental parameter determination to improve spectroscopic methods Philipp Hönicke
16:20	High-precision measurements of $n=2 \rightarrow n=1$ transition energies and level widths in He- and Be-like argon ions Jose Paulo Santos
16:40	Superconducting microcalorimeters for x-ray fundamental parameter measurements Joseph W. Fowler
17:20	Fundamental Parameter (round table discussion) moderated by Michael Mantler
19:00	Networking reception

Friday, October 13, 2017		PTB Berlin-Charlottenburg
09:15	FP workshop perspectives	
09:30	Short presentations of poster presenters and of new members to the FP Initiative	
10:00	Report of last workshop (Uni Surrey & LNHB)	
10:20	Status and update of roadmap (PTB (& LNHB))	
11:00	coffee break	
11:30	Update of roadmap	
12:30	Lunch break	
13:20	Fund raising and perspectives, next workshop	



Please find the constantly updated schedule of the whole event at <https://goo.gl/TMmWqc>

EXSA Autumn school and Workshop on quantitative methods in XRS
Poster sessions Wednesday, October 12th, 10:30 a.m. and 7 p.m.

The xraylib library for interactions of X-rays with matter

Tom Schoonjans, Antonio Brunetti, Bruno Golosio, Manuel Sanchez Del Rio, V. Armando Solé,
Claudio Ferrero and Laszlo Vincze

Developments on Full Field XRF by using an X-ray camera with high-energy and high-spatial resolution

Claudia Caliri and Francesco Paolo Romano

Characterization of Venetian coins sesini (XVI century) through a combined XRF/XRD quantitative approach

Damiano Martorelli, Mauro Bortolotti and Luca Lutterotti

Measurement of K fluorescence yields of Niobium and Rhodium using monochromatic radiation

Jonathan Riffaud, Yves Ménesguen and Marie-Christine Lépy

In-operando near sulfur K-edge X-ray absorption spectrometry of Li-S battery coin cells

Claudia Zech, Olga Graetz, Svetlozar Ivanov, Philipp Hoenicke, Yves Kayser, Manfred Stamm, Andreas Bund and Burkhard Beckhoff

Calculations of Geometry and Efficiency Yields for XRF System which will be created help of SDD Detector and External X-Ray Tube

Oguz Kagan Koksai, Gokhan Apaydin and Erhan Cengiz

Characterization of Attic Black Gloss and its South Italian imitations by means of Grazing incidence XANES and XRF Analysis

Claudia Caliri, Andreas Germanos Karydas, Juan José Leani, Alessandro Migliori, Mateusz Czyzycki, János Osán and Francesco Paolo Romano

A compact and calibratable von-Hamos X-Ray Spectrometer based on full-cylindrical HAPG mosaic crystals

Malte Wansleben, Ina Holfelder, Yves Kayser, Jan Weser and Burkhard Beckhoff

Development of novel 3D Au /Si nanostructures for SERS analysis and characterisation by GIXRF.

Eleonora Cara, Federico Ferrarese Lupi, Andrea Mario Giovannozzi, Philipp Hoenicke, Yves Kayser, Natascia De Leo, Luca Boarino and Burkhard Beckhoff

Simulation of Large Solid Angle Effects for XRF Quantification – First Results

Hanna Dierks and Lars Lühl

EXSA Autumn school and Workshop on quantitative methods in XRS
Poster sessions Wednesday, October 12th, 10:30 a.m. and 7 p.m.

Spatially resolved composition and functionality of thin film solar cells

Maurizio Ritzer, Philipp Schöppe, Sven Schönherr, Konrad Ritter, Sergio Giraldo, Galina Gurieva, Gema Martínez-Criado, Susan Schorr, Edgardo Saucedo, Carsten Ronning and Claudia Schnohr

Applicability of a Laboratory Scan-Free GEXRF Setup for the Investigation of Nano-Layered Samples

Veronika Szwedowski, Jonas Baumann, Ioanna Mantouvalou and Wolfgang Malzer

A Laboratory Setup for Confocal Micro-XRF with an integrated Cryo-Jet for biological specimen

Frank Förste, Tobias Drechsel, Anja Kavčič, Ioanna Mantouvalou and Birgit Kanngießer

Adaption of conventional CCD cameras for lab-based grazing-emission X-ray fluorescence spectroscopy in the soft X-ray regime

Steffen Staeck, Jonas Baumann, Veronika Szwedowski, Ioanna Mantouvalou, Jan Weser and Birgit Kanngießer

Study of selected thin layered samples to validate secondary excitation effects in X-ray fluorescence analysis

André Wählich, Burkhard Beckhoff and Cornelia Streeck

XAS measurement with a novel von Hamos laboratory spectrometer for quantitative analysis of Fe species mixtures

Sebastian Praetz, Christopher Schlesiger, Wolfgang Malzer and Birgit Kanngießer

FPM model for low-power X-ray tube and SDD based X-ray fluorescent spectrometer

Anita Gerényi, Radócz Gábor and Imre Dr. Szaloki

Uncertainties in quantitative electron probe microanalysis due to inaccurate mass attenuation coefficients

Jan Dellith, Ralf Terborg and Andy Scheffel

How can we define spatial resolution in X-ray microscopy?

Aurelie Dehlinger, Lars Loetgering, Lars Lühl, Thomas Wilhein and Birgit Kanngießer

Visualizing and characterizing Gold Leaf through Macro-XRF Scanning

Douglas MacLellan, Arlen Heginbotham, Catherine Schmidt Patterson, Nancy Turner, Nathan Daly, Yvonne Szafran, Karen Trentleman