European Conference on X-Ray Spectrometry
June 19 – 24, 2016
Gothenburg, Sweden

Condensed program

http://exrs2016.se

chair@exrs2016.se

Venue: Wallenberg conference centre,
Medicinaregatan 20A, Gothenburg

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Revision history

May 15, 2016	Version 1
May 16, 2016	Niccolai et al. and Piksina et al. exchanged times.
May 17, 2016	Ito et al. x 2 changed with Sitko et al. and Ménesguen et al.
May 17, 2016	Leani et al. exchanges slot with Romano et al.
18 May, 2016	Corrected authors and title for Poster 48
20 May, 2016	Presentations by Nutsch and Unterumsberger exchanges slots.

Monday June20

	Wallenberg	Europe
08:15	**Registration**	
09:00	**Opening session**	
09:30	**Invited 1: Evaluation of huge spectral datasets resulting from x-ray fluorescence imaging.** Piet Van Espen and Vicente Osorio	
10:00	**Invited 2: Ionomics in plants: An approach using X-ray fluorescence** Ursula Fittschen, Ricarda Hoehner, Martin Radtke and Henning Kunz	
10:30	**XRF multivariate statistical analysis method for studying Syrian archaeological jars** Elias Hanna Bakraji	
10:45	**A new full-field XRF imaging system for non-invasive investigation of paintings** Pawel Wrobel, Tomasz Fiutowski, Piotr Frączek, Stefan Koperny, Marek Lankosz, Agata Mendys, Bartosz Mindur, Alicja Sikorska, Krzysztof Świentek, Piotr Wiącek and Wladyslaw Dabrowski	
11:00	Coffee break	
11:30	**Invited 3: European XFEL: Unique possibilities for X-ray spectrometry research** Serguei Molodtsov	**What It Takes to Produce a Quantitative Description of NEXAFS and RIXS in Chemical Compounds** Terrence Jach, John Vinson, Matthias Müller, Rainer Unterumsberger and Berkhard Beckhoff
11:45		**Polarized X-ray Fluorescence Intensity in 3D Geometry** Ryohei Tanaka, Shu Akiba, Koretaka Yuge and Jun Kawai
12:00	**Confocal micro-XRF imaging and WD-XRF imaging for monitoring of chemical reactions in solutions** Kouichi Tsuji, Yuki Takimoto, Tsuyoshi Matsuno, Naoki Kawahara and Jigi Chin	**The X-ray characteristic line: different contributions in the framework of the Boltzmann transport equation.** Jorge E. Fernandez

	Wallenberg	Europe
12:15	**Correlative 3-dimensional X-ray micro-spectroscopy of a single catalyst particle** Florian Meirer, Yijin Liu, Courtney M. Krest, Sam Webb and Bert M. Weckhuysen	**Detection of gadolinium in bone using x-ray fluorescence** Michelle Lord, Fiona McNeill, James Gräfe, Mike Noseworthy and David Chettle
12:30	Lunch	
13:30	**Invited 4: X-ray microscopy at the Hard X-ray Micro/Nano-Probe beamline P06 at PETRA III** Gerald Falkenberg	
14:00	**Challenges of Macro X-ray Fluorescence Imaging for the Investigation of Antique Polychrome Statues** Matthias Alfeld, Maud Mulliez, Philippe Martinez, Philippe Jockey and Philippe Walter	**Simulation of a planar portable energy dispersive x-ray fluorescence setup with GEANT4** Pedro Amaro
14:15	**3D imaging with confocal micro-XRF** Ioanna Mantouvalou, Tim Lachmann, Michael Haschke, Geert Van der Snickt, Ulrich Waldschlaeger and Birgit Kanngießer	**L3 transition probabilities of the titanium fluorescence lines in dependence of the oxidation state** Rainer Unterumsberger, Matthias Müller and Burkhard Beckhoff
14:30	**Zinc accumulation in mineralized osteosarcoma tissue determined with confocal SR-µXRF** Mirjam Rauwolf, Bernhard Pemmer, Andreas Roschger, Anna Turyanskaya, Stephan Smolek, Angelika Maderitsch, Peter Hischenhuber, Christoph Weixelbaumer, Martin Foelser, Rolf Simon, Susanna Lang, Stephan Puchner, Reinhard Windhager, Klaus Klaushofer, Peter Wobrauschek, Paul Roschger, Jochen Hofstaetter and Christina Streli	**New K-shell ionization cross sections for high energy PIXE and comparison with theoretical values of ECPSSR.** Mostafa Hazim, Arnaud Guertin, Ferid Haddad, Charbel Koumeir, Nathalie Michel, Vincent Metivier, Adnan Naja and Noel Servagent
14:45	Coffee break	

	Wallenberg	Europe
15:30	**Invited 5: Effect of temporal coherence in surface x-ray standing analysis of nano-structured materials** Manoj Tiwari	**XAFS study of the role of pH-Modulated Chelation in the Zinc Deposition Mechanisms within Microporous Electrodes** Alvaro Munoz Noval, Kazuhiro Fukami, Akira Koyama, Kuniaki Murase, Takeshi Abe, Takuya Kuruma and Shinjiro Hayakawa
15:45		**Elucidating core-shell atomic exchanges in In(Zn)P/ZnS nanocrystals using X-ray absorption spectroscopy** Deok-Yong Cho
16:00	**Application of the GIXRF analysis as a way of protection of goods against a fake** Valeriy Raznomazov, Nikolay Novikovskii and Dmitriy Sarychev	**Identifying Authentic Prehistoric Ban Chiang Pottery with XANES and SR-XRF** Prapong Klysubun, Wantana Klysubun, Weeraya Wongtepa, Chanakan Cholsuk and Somchai Na Nakhon Panom
16:15		

Poster session 1

Monday 20 June, Poster session 1

Poster session 1

Interactions of X-rays with matter and fundamental parameters

Post 1	**Columnar recombination in a-Se x-ray detectors** Oleksandr Bubon, Kakhaber Jandieri, Safa Kasap, Sergei Baranovskii and Alla Reznik
Post 2	**Investigation of Photon Induced X-ray Satellite Structure and Chemical effects on Intensity ratios of Chlorine** Shatendra Sharma and Jyotsna Sharma
Post 3	**Collimator and source contributions to the response function of planar Ge detectors: an analytical approach** Juan Alejandro García-Alvarez, Nora Maidana, José María Fernandez Varea and Vito Vanin
Post 4	**Fast calculating coordination numbers of nanoclusters from theory to practice** Jianqiang Wang, Weimin Yang and Zhongqiang Xu
Post 5	**The xraylib library for interactions of X-rays with matter** Tom Schoonjans, Antonio Brunetti, Bruno Golosio, Manuel Sanchez Del Rio, Vicente Armando Solé, Claudio Ferrero and Laszlo Vincze
Post 6	**XMI-MSIM: a general Monte Carlo simulation of energy-dispersive X-ray fluorescence spectrometers** Tom Schoonjans, Laszlo Vincze, V. Armando Solé and Claudio Ferrero
Post 7	**Chemometrics Based XRF and Scattering Spectrometry of Soil Quality** Hudson Kalambuka Angeyo and Ian Kaniu
Post 8	**Measurement of K fluorescence yields of Niobium and Rhodium using monochromatic radiation** Jonathan Riffaud, Marie-Christine Lépy, Yves Ménesguen and Anastasiia Novikova
Post 9	**Graphene oxide membranes in adsorption and determination of metal ions by EDXRF** Rafal Sitko, Marcin Musielak, Beata Zawisza, Ewa Talik and Anna Gagor
Post 10	**New measurements of X-ray fundamental parameters** Yves Ménesguen, Marie-Christine Lepy, Pollakowski Beatrix, Unterumsberger Rainer and Burkhard Beckhoff

XRS Instrumentation (X-ray sources, optics and detectors)

Post 11	**Evolutions in cryo-coolers for HPGe-based X-ray detectors.** Luc De Baerdemaeker and Jonas Douwen
Post 12	**Large Area 7-Channel Silicon Drift Detector Array** Andreas Pahlke, Reinhard Fojt, Michael Fraczek, Martin Hofmann, Jürgen Knobloch, Edgar Lechner, Natsuki Miyakawa, Steffen Pahlke, Jörg Rumpff, Oliver Scheid, Atakan Simsek and Ralf Stötter
Post 13	**Examining the Effects of Collimation on an X-Ray Tube Based Polarized EDXRF Setup** Eric Johnston, Soo Hyun Byun and Michael Farquharson
Post 14	**Determination of Optimal Metallic Secondary Target Thickness and Exposure Parameters for X-Ray Tube Based Polarized EDXRF** Eric Johnston, Soo Hyun Byun and Michael Farquharson
Post 15	**Full-energy peak efficiency of Si drift detectors for photons with energies above the Si K binding energy** Suelen Barros, Nora Maidana, José Maria Fernández-Varea and Vito Vanin

Quantification methodology and metrology

Post 16	**The major rock-forming elements determination in bottom sediments of the lake Baunt core by XRF method** Alena Amosova and Victor Chubarov

Post 17	**Geochemical characteristic of lake Baunt bottom sediments using X-ray fluorescence analysis** Alena Amosova and Victor Chubarov
Post 18	**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
Post 19	**Accurate determination of toxic elements on clams by Energy Dispersive X-Ray Spectrometry** Amaro
Post 20	**Improvement of detection limits in portable energy dispersive x-ray fluorescence setup with planar geometry** Pedro Amaro
Post 21	**X-ray fluorescence analysis of carbonatites using S8 TIGER spectrometer** Svetlana Shtel'makh, Alena Amosova, Tatyana Cherkashina and Galina Pashkova
Post 22	**Optimisation of the Epsilon 5 ED-XRF for the determination of a wide range of elements in aerosol samples.** Ana Cabal, Gert Nuyts, Bo Van den Bril, Koen Tote, Karolien De Wael and Piet Van Espen
	TXRF, GIXRF and related techniques
Post 23	**Determination of stoichiometric composition of the solid solution (1-x)BiFeO3-xPbFe1/2Nb1/2O3 by TXRF analysis.** Nikolay Novikovskii, Raznomazov Valeriy and Dmitriy Sarychev
Post 24	**TXRF spectrometry with PXWR specific design** Vladimir Egorov, Evgeny Egorov and Evgeny Lukianchenko
Post 25	**Unraveling the Transition Metal Dissolution of Li1Ni1/3Co1/3Mn1/3O2 by Deposition on Graphitic Anodes** Marco Evertz, Fabian Horsthemke, Johannes Kasnatscheew, Martin Winter and Sascha Nowak
Post 26	**Determination of low Z elements in uranium with better analytical results using vacuum sample chamber of a low Z – high Z TXRF Spectrometer** Kaushik Sanyal, Sangita Dhara and Nand Lal Misra
	Microbeam techniques, confocal XRF and X-Ray imaging
Post 27	**SSRF X-ray imaging beamline and its X-ray fluorescence imaging** Biao Deng
Post 28	**Study of the distribution profile of titanium in rats by micro synchrotron radiation based X-ray fluorescence** Magdalena Golasik, Pawel Wrobel, Tadeusz Librowski, Magdalena Olbert, Barbara Nowak, Marek Lankosz and Wojciech Piekoszewski
Post 29	**Simulation study on a micro-focus X-ray electron gun based on carbon nanotube cathode** Qingyun Chen, Xuesong Yuan, Lin Meng and Yang Yan
Post 30	**X-ray waveguide arrays: tailored near-fields by multi-beam interference** Qi Zhong, Tim Salditt, Mingwu Wen and Zhanshan Wang
Post 31	**Preliminary research on PCA for micro XRF imaging** Shota Aida, Takeshi Hasegawa and Kouichi Tsuji
Post 32	**Deconvolution of Element Depth Profiles of Self-prepared Paint Multilayers Obtained by Tabletop Confocal Micro X-ray Fluorescence Setup** Radek Prokes and Tomas Trojek
Post 33	**XRF Analysis of Pb and Fe Concentrations in Kohl** Eman Daar, Abdullah Al Subaie, K.S Al Mugren, S Barnes, A Al Anazi, A Al Yahyawi, S Al Omairy, H Al Sulaiti and D.A Bradley
Post 34	**The influence of transcranial Direct Current Stimulation on the elemental composition of brain structures in obese rats – the EDXRF study** Agata Ziomber, Artur Surowka, Pawel Wrobel and Magdalena Szczerbowska-Boruchowska

Post 35	**Highest Laboratory MicroXRF Sensitivity of Sub-Femtogram Achieved within a Second Enabled by Major Innovations in X-ray Microbeam Source and Optics** Wenbing Yun, Janos Kirz, Benjamin Stripe, Sylvia Lewis, Sh Lau, Alan Lyon, David Reynolds, Sharon Chen, Vladimir Semenov and Richard Ian Spink
Post 36	**Study of the homogeneity of aerosol filters by scanning MA-XRF.** Ana Cabal, Stijn Legrand, Bo Van den Bril, Koen Tote, Koen Janssens and Piet Van Espen
	Mobile and portable XRF
Post 37	**Proof-of-principle scan-free GEXRF measurements in the laboratory using an X-ray tube and a conventional CCD** Veronika Szwedowski, Jonas Baumann, Malte Spanier, Ioanna Mantouvalou, Birgit Kanngießer and Leona Bauer
Post 38	**Modeling of the Degradation of the Semiconductor Detector Energy Resolution in the Presence of Microphonic and Electrical Periodic Interference.** Andrei Stratilatov and Sterling Cornaby
Post 39	**Elemental analysis of dysprosium in neodymium-iron-boron magnet using portable TXRF spectrometer** Susumu Imashuku, Jun Takahashi, Shinsuke Kunimura and Kazuaki Wagatsuma
Post 40	**Monte Carlo simulation of reference materials obtained with a tri-axial portable EDXRF setup** Sofia Pessanha, Maria Luisa Carvalho, Matilde Alves and Jorge Sampaio
Post 41	**Spectral data treatment methodology to avoid the use of handheld Energy Dispersive X-ray Fluorescence spectrometers as black boxes** Cristina García-Florentino, Maite Maguregui, Héctor Morillas and Juan Manuel Madariaga
	XRS in Art and Cultural Heritage
Post 42	**Real-time elemental imaging of large area painted artworks with a novel mobile MA-XRF scanner** Francesco Paolo Romano, Claudia Caliri, Hellen C. Santos, Lighea Pappalardo and Francesca Rizzo
Post 43	**Study on antique yellow glass mosaics in Northern Thai architecture using synchrotron XRF and XANES spectroscopy** Wantana Klysubun, Prapong Klysubun, Supanun Lapboonrueng, Prae Chirawatkul and Chatree Saiyasombat
Post 44	**Analytical characterization of Attic Black Gloss and its South Italian Classical period imitations by means of Grazing incidence XANES and XRF analysis** Claudia Caliri, Andreas Germanos Karydas, Juan José Leani, Alessandro Migliori, Mateusz Czyzycki, Janos Osan, Lighea Pappalardo, Francesca Rizzo, Hellen Cristine Santos and Francesco Paolo Romano
Post 45	**Investigation of pottery from different Neolithic sites in southeast Albania using X-ray techniques** Erinda Ndrecka, Nikolla Civici, Filippo Niccolai, Ilir Gjipali and Stefano Ridolfi
Post 46	**Could a biological patina growing on a building act as a bioindicator of the atmospheric metal pollution? In situ and laboratory X-ray Fluorescence evidences** Cristina García-Florentino, Maite Maguregui, Héctor Morillas and Juan Manuel Madariaga
Post 47	**Could only X-ray fluorescence be able to differentiate red, yellow and transformed yellow ochre from Pompeii?** Iker Marcaida, Maite Maguregui, Silvia Fdez-Ortiz de Vallejuelo, Héctor Morillas, Kepa Castro, Marco Veneranda, Nagore Prieto-Taboada and Juan Manuel Madariaga
Post 48	**µXRF elemental mapping for technological studies of ancient ceramics** Christina Makarona, Ariane Jacobs, Karin Nys and Philippe Claeys
Post 49	**Techniques and materials used by the painter José de Escovar in the 17th mural and panel paintings at the chapel of the souls (southern portugal). A multi-analytical comparative approach.** Milene Gil and Teresa Ferreira

Post 50	**Removal of absorption artefacts on the elemental distribution images of paint layers acquired with tabletop macro-XRF setup** Pawel Wrobel, Piotr Frączek and Marek Lankosz
Post 51	**The coffee drawings of the Sculptor Lagoa Henriques: non-destructive analysis for conservation purposes** Marta Manso
	XRS in Advanced Materials and Nanoscience
Post 52	**Accelerated growth from clusters to metallic nanoparticles observed in electrochemical deposition of platinum within nanocavities in porous silicon, revealed by X-ray absorption fine-structure spectroscopy** Alvaro Munoz Noval, Kazuhiro Fukami, Akira Koyama, Dario Gallach, Daniel Hermida-Merino, Giuseppe Portale, Atsushi Kitada, Kuniaki Murase, Takeshi Abe, Shinjiro Hayakawa, Tetsuo Sakka and Ulises Amador-Elizondo
Post 53	**Investigation on morphology and impurities on Ionic Resins and nuclear grade graphite.** Stefania Bruni, Alessandro Gessi, Alfredo Luce, Giuseppe Marghella and Antonietta Rizzo
	XRS in Life Sciences and Forensics
Post 54	**Determination of Ruthenium in ion exchange membranes by Radioisotope induced Energy Dispersive X-ray Fluorescence** Daisy Joseph
Post 55	**Investigating tissue surrounding multi-channel cochlear implant electrode arrays with x-ray fluorescence microscopy** Kathryn Spiers, Tina Cardamone, John Furness, Jonathan Clark, James Patrick and Graeme Clark
Post 56	**Energy dispersive X-ray fluorescence spectrometry (EDXRF) for the direct multi-element analysis of dried blood spots** Eva Margui, Ignasi Queralt, Martin Resano, Luis Relo and Elena García
Post 57	**Titanium Diffusion in Shinbone of Rats with Osseointegrated Impants** Miriam Grenón, José Robledo, Juan Ibañez and Héctor Sánchez
Post 58	**Analysis of tooth enamel treated with over-the-counter bleaching gel: surface and in-depth measurements using u-EDXRF and u-Raman** Sara Coutinho, João Godinho, João Silveira, António Mata, Maria Luisa Carvaho and Sofia Pessanha
Post 59	**Application of XRF to determine the concentration of toxic elements in bivalves from Estuário do Tejo belonging to 7th century BC to 15th century AD** Catarina Fonseca, Sofia Pessanha, Maria Luisa Carvalho and António Alberto Dias
Post 60	**Study of the concentration of trace-metals in bivalve shellfish along the Portuguese Coastline** David Branha, Sofia Pessanha, Maria Luisa Carvalho and António Alberto Dias
Post 61	**Multielement analysis of swiss mice brains with Alzheimer's disease induced by β-amyloid oligomers** Ricardo Lopes, Danielle Almeida, Ramon Santos, Marcelino Anjos, Amanda Souza and Sergio Ferreira
Post 61B	**Non-invasive study of ecclesial art, materials and technique** Vornicu Nicoleta, Bibire Cristina and Doroftei Florica

Tuesday June 21

	Wallenberg	Europa
08:30	**Invited 6: Fundamental Parameters in Atomic Systems** José Paulo Santos	
09:00	**Curve fitting regression, a novel way to quantify boron using WD-XRF** Philippe Kikongi, Ryan Gosselin, Joanny Salvas, Jean-Sebastien Simard and Sonia Blais	**Influence of FP models and data compilations on the accuracy of analytical results** Timo Wolff, Dimitrijs Docenko, Fabian Nitsche, Elena Blokhina and Falk Reinhardt
09:15	**XMCD as a tool to determine the site occupation of cations in piezoelectric ferromagnetic GaFeO3(010) thin films** Dong-Hwan Kim and Jae-Young Kim	**Two-photon absorption at Angstrom wavelengths using off-resonant excitation by ultrashort XFEL pulses** Jean-Claude Dousse, Jakub Szlachetko, Joanna Hoszowska, Wojciech Blachucki, Yves Kayser, Bruce Patterson, Rafael Abela, Marek Pajek and Chris J. Milne
09:30	**Characterization of bio-molecular surfaces and liquids by means of reference-free X-ray spectrometry** Cornelia Streeck, Andreas Nutsch, Paul Dietrich, Tobias Fischer, Daniel Grötzsch, Carolin Nietzold, Wolfgang Malzer, Knut Rurack, Wolfgang Unger and Burkhard Beckhoff	**DT2 fit of a High Resolution EDS PIXE Yb2O3 spectrum** Miguel A. Reis and P. Cristina Chaves
09:45	**Research of Method for Improving the Accuracy of Online X-Ray Fluorescence Analysis in Coal** Yan Zhang, Wenbao Jia, Robin Gardner, Qing Shan, Daqian Hei, Yongsheng Ling and Da Chen	**GIMPy: an analysis software for X ray fluorescence and X ray reflectivity data** Fabio Brigidi and Giancarlo Pepponi
10:00	Coffee break	
10:30	**Invited 7: Ultra-brigth X ray Beams with Laser Plasma Accelerators** Victor Malka	
11:00	**XAS and micro-XRF analysis of mono and bi-metallic exopolysaccharide (FePd-EPS) bio-generated by K. oxytoca** Iztok Arcon, Stefano Paganelli, Oreste Piccolo, Michele Gallo, Katarina Vogel Mikus and Franco Baldi	**Analysis of CuP alloys using XRF spectrometry: elimination or limitation of microstructural effects** Jacek Anyszkiewicz, Tadeusz Gorewoda, Zofia Mzyk, Szymon Malara, Katarzyna Bilewska, Andrzej Cybulski, Joanna Gołębiewska-Kurzawska, Justyna Kostrzewa, Magdalena Grzegorczyk and Magdalena Knapik

	Wallenberg	Europe
11:15	**Study of Li-S batteries by S K-edge RIXS spectroscopy** Matjaz Kavcic, Matjaž Žitnik, Klemen Bucar, Marko Petric, Iztok Arcon, Robert Dominko and Alen Vizintin	**XAFS by an X-ray tube based laboratory spectrometer** Christopher Schlesiger, Lars Anklamm, Holger Stiel, Sebastian Praetz, Birgit Kanngießer and Wolfgang Malzer
11:30	**A multi-element Silicon Drift Detector system for Fluorescence Spectroscopy in the soft X-ray regime** Jernej Bufon, Alessandra Gianoncelli, Mahdi Ahangarianabhari, Matteo Altissimo, Pierluigi Bellutti, Giuseppe Bertuccio, Roberto Borghes, Sergio Carrato, Giuseppe Cautero, Sergio Fabiani, Massimo Gandola, Gabriele Giacomini, Dario Giuressi, George Kourousias, Ralf Hendrick Menk, Antonino Picciotto, Claudio Piemonte, Alexandre Rachevski, Irina Rashevskaya, Stefano Schillani, Andrea Stolfa, Andrea Vacchi, Gianluigi Zampa, Nicola Zampa and Nicola Zorzi	**X-ray photoelectron spectroscopy analysis of chemically modified halloysite mineral** Ilona Stabrawa, Beata Szczepanik, Dariusz Banaś, Aldona Kubala-Kukuś, Urszula Majewska, Jolanata Wudarczyk-Moćko, Janusz Braziewicz, Marek Pajek, Katarzyna Wojtowicz, Piotr Słomkiewicz and Paweł Jagodziński
11:45	**Optimized single shot NEXAFS in the soft X-ray region in the laboratory** Adrian Jonas, Ioanna Mantouvalou, Katharina Witte, Wjatscheslav Martyanov, Daniel Grötzsch, Robert Jung, Holger Stiel and Birgit Kanngießer	**A new quantitative X-ray system for micro-PIXE analysis** Jan Pallon, Nathaly De La Rosa, Mikael Elfman, Per Kristiansson, E.J.Charlotta Nilsson and Linus Ros
12:00	Lunch	
13:00	**Invited 8: The science of microcalorimeter spectrometers and science with microcalorimeter spectrometers** Joel Ullom	
13:30	**Analytical capabilities and applications developed at the IAEA multi-purpose X-ray spectrometry end-station at the XRF beamline of Elettra Sincrotrone Trieste** Mateusz Czyzycki, Juan Leani, Alessandro Migliori, Mladen Bogovac, Pawel Wrobel, Nikita Vakula, Janos Osan, Manoj Tiwari, Das Gangadhar, Ralf Kaiser and Andreas Karydas	**Complex control of the aluminum bath composition by X-ray fluorescence and X-ray diffraction analysis** Oksana Piksina, Eugene Andruschenko, Petr Dubinin, Sergey Kirik, Sergey Ruzhnikov, Alexandr Samoilo, Igor Yakimov and Aleksandr Zaloga

	Wallenberg	Europe
13:45	**Manganese distribution in antler and human bone by SR-µXRF analysis** Anna Turyanskaya, Mirjam Rauwolf, Andreas Roschger, Josef Prost, Peter Hischenhuber, Tomas Landete-Castillejos, Rolf Simon, Peter Wobrauschek, Paul Roschger, Jochen Hofstaetter and Christina Streli	**Qualifying PDMS deposited on silicon wafer surfaces as calibration standard for organic matter by X-ray spectrometry and XPS** Beatrix Pollakowski, Gerald Holzlechner, Andreas Lippitz, Burkhard Beckhoff and Wolfgang Unger
14:00	**RXR at XLab Frascati: a 3D confocal µXRF facility** Dariush Hampai, Andrea Liedl, Claudia Polese, Giorgio Cappuccio and Sultan Dabagov	**TXRF determinations of interfering elements using profile fitting** Sangita Dhara, Ajay Khooha, Ajit Kumar Singh, Mk Tiwari and Nand Lal Misra
14:15	**Pigments from fragments of Roman mural paintings analyzed with SR-MA-XRF** Rafaela Debastiani, Rolf Simon, Tilo Baumbach and Michael Fiederle	**A laboratory setup for angle-resolved XRF spectrometry for the investigation of elemental depth gradients** Malte Spanier, Christian Herzog, Daniel Grötsch, Felix Kramer, Janin Lubeck, Jan Weser, Cornelia Streeck, Ioanna Mantouvalou, Burkhard Beckhoff and Birgit Kanngießer
14:30	Coffee break	
15:15	Rigaku	
15:30	PN Detector	
15:45	Excillum	
16:00	Panalytical	
16:15	Spectro	
16:30	AmpTek	
16:45		

Fundamental parameters initiative

17:30	

Poster session 2

19:00	
19:15	

City reception

Tuesday 21 June

Poster session 2

Interactions of X-rays with matter and fundamental parameters

Post 62	**Simulation of the NIST vacuum double crystal spectrometer** Pedro Amaro
Post 63	**Absence of Chemical Shift of X-ray Fluorescence Spectra of Fe Kα in Fe-Si Binary Alloy** Ryohei Tanaka, Koretaka Yuge and Jun Kawai
Post 64	**Instrumentation for characterization of gases and analysis of the gas metal interface using X-Ray Spectrometry** Andreas Nutsch, Jan Weser, Daniel Grötzsch, Wolfgang Malzer and Burkhard Beckhoff
Post 65	**Prudent Pick Of Secondary Target to Subdue Spectral Interference for Quantification of Nickel in Ultramafic Rock with Polarized Energy Dispersive X –Ray Fluorescence (ED-XRF) Spectrometry.** Md Arif and P.V. Sunder Raju
Post 66	**Experimental determination of the Oxygen K-shell fluorescence yield of different Silicon sub-oxides** Malte Wansleben, Philipp Hönicke, Rainer Unterumsberger, Michael Kolbe, Beatrix Pollakowski and Burkhard Beckhoff
Post 67	**EDXRF analysis of polychromatic gold objects from the Archaeological Museum (MArTA) of Taranto, Italy** Giovanni Buccolieri, Alessandro Buccolieri, Eva Degl'Innocenti, Raffaele Casciaro, Roberto Cesareo and Alfredo Castellano
Post 68	**Methodology for a fast determination of Si(Li) response function parameters** Ana Bertol, P. Cristina Chaves, Miguel A. Reis, Ruth Hinrichs and Marcos Vasconcellos
Post 69	**Absolute GIXRF characterisation of Sn depth profiles in Ge** Fabio Brigidi, Giancarlo Pepponi, Maria Secchi, Damiano Giubertoni, Diane Madeleine Eichert and Werner Jark
Post 70	**Characterization of glass beads found during excavations at the Valongo Wharf (Rio de Janeiro, Brazil) using XRF and SEM-EDS** Renato Freitas
Post 71	**Surface characterization of silicon spheres by combined XRF and XPS analysis for determination of the Avogadro constant** Michael Kolbe, Rolf Fliegauf, Burkhard Beckhoff, Erik Darlatt, Ina Holfelder, Philipp Hönicke and Gerhard Ulm
	XRS Instrumentation (X-ray sources, optics and detectors)
Post 72	**Development of EDS system for nanometer scale elemental mapping by STJ array detectors** Go Fujii, Masahiro Ukibe, Shigetomo Shiki and Masataka Ohkubo
Post 73	**Hermetically closed detector modules for X-ray detection** Hartmut Schmidt, Heike Soltau, Adrian Niculae, Robert Lackner, Bechir Talbi, Markus Bornschlegl, Henrik Teuchtler and Armin Schöning
Post 74	**Integrated Measuring Head for Micro-spot EDXRF Analyzer optimized for precious alloys** Dattatraya Musale
Post 75	**Induced charge fluctuations in semiconductor hemispherical detectors** Victor Samedov
Post 76	**Automation of an EDXRF spectrometer with tri-axial geometry** António Barroso, Maria-Luisa Carvalho, José Paulo Santos and Mauro Guerra

	Quantification methodology and metrology
Post 77	**Precise determination of contaminants in pharmaceutical iron supplements with energy dispersive X-ray fluorescence technique** Pedro Amaro
Post 78	**Fast x-ray fluorescence determination of elements in vegetable materials** Pedro Amaro
Post 79	**First Results of Quantitative Speciation of Oxide Mixtures by using Resonant Inelastic X-Ray Scattering** Juan José Leani, José Robledo, Roberto Daniel Pérez, Carlos Pérez and Héctor Sánchez
Post 80	**ISO 17025 - conform determination of the measurement quantity "elemental mass per unit area" by means of reference-free XRF** Cornelia Streeck, Rainer Unterumsberger, Philipp Hönicke, Matthias Müller, Beatrix Pollakowski, Jan Weser and Burkhard Beckhoff
Post 81	**Development of liquid and gaseous sample-environments for soft X-ray excitation** Daniel Grötzsch, Cornelia Streeck, Wolfgang Malzer, Andreas Nutsch, Andrea Hornemann, Birgit Kanngießer and Burkhard Beckhoff
Post 82	**Al2O3-HfO2 nanolaminate characterization using a combined reference-free grazing incidence X-ray fluorescence and X-ray reflectometry methodology** Philipp Hönicke, Blanka Detlefs, Uwe Mühle, Beatrix Pollakowski, Eilbracht Janis and Burkhard Beckhoff
Post 83	**GIMPyGUI, a graphical user interface for the GIMPy code** Damiano Martorelli, Giancarlo Pepponi and Fabio Brigidi
Post 84	**Bio-inspired wet confinement sample holders for Total Reflection X-Ray Fluorescence Analysis** Giancarlo Pepponi, Simone Ghio, Damiano Martorelli, Maurizio Boscardin, Pierluigi Bellutti and Nicola M. Pugno
Post 85	**Characterization of nano-layers for transparent conductive oxides and power electronics by XRF and NEXAFS** Rainer Unterumsberger, Cornelia Streeck, Beatrix Pollakowski, Hélène Rotella, Emmanuel Nolot and Burkhard Beckhoff
Post 86	**Probing new thin and ultra-thin chalcogenide films with inline WDXRF and XPS metrology** Walter Pessoa, Anne Roule, Chiara Sabbione, Marie-Christine Lépy and Emmanuel Nolot
	TXRF, GIXRF and related techniques
Post 87	**Sample preparation for TXRF analysis of metal particles in used machine oil** Ryohei Hosomi and Kouichi Tsuji
Post 88	**Multielement analysis of vegetal foodstuff by means of low power total reflection X-ray fluorescence (TXRF) spectrometry** Rogerta Dalipi, Eva Margui, Laura Borgese and Laura Eleonora Depero
Post 89	**Application of TXRF for monitoring level of minerals and trace elements in the urine of the participants of mountain ultra-marathon race** Jasna Jablan
Post 90	**Total X-ray reflection spectrometry analysis of trace elements in tea and herbal infusions** Aleksandra Winkler, Mirjam Rauwolf, Anna Turyanskaya, Christina Streli and Johannes Sterba
Post 91	**Feasibility of Total Reflection X-ray Fluorescence (TXRF) for silver nanoparticles determination in soil adsorption studies** Laura Torrent, Eva Margui, Mònica Iglesias and Manuela Hidalgo
	Microbeam techniques, confocal XRF and X-Ray imaging
Post 92	**Pigment Characterization by Simultaneous X-ray Fluorescence and Diffraction with the pnCCD Imaging Spectrometer** Jeffrey Davis, Julia Schmidt, Martin Huth, Robert Hartmann, Sebastian Ihle, Daniel Steigenhöfer, Peter Holl, Heike Soltau and Lothar Strüder

Post 93	**X-ray tomography of a human cerebellum tissue** Mateusz Czyzycki, Pawel Wrobel, Lukasz Chmura, Walter Schroeder, Gerald Falkenberg, Dariusz Adamek and Marek Lankosz
Post 94	**SR-μXRF analysis of the zinc distribution in healing osteoporotic fractures** Mirjam Rauwolf, Anna Turyanskaya, Andreas Roschger, Josef Prost, Rolf Simon, Ian Pape, Kawal Sawhney, Peter Wobrauschek, Paul Roschger, Jochen Hofstaetter and Christina Streli
Post 95	**MAXI 2D-spectrometer: compact scanning device with variable spot size in the mm range for large area macro-scans** Peter Wobrauschek, Peter Allinger, Anna Turyanskaya, Alexander Utz, Stephan Smolek, Dieter Ingerle and Christina Streli
Post 96	**Magnesium-based biodegradable orthopedic implants by μXRF** Anna Turyanskaya, Mirjam Rauwolf, Andreas Roschger, Josef Prost, Peter Hischenhuber, Tomas Landete-Castillejos, Rolf Simon, Peter Wobrauschek, Paul Roschger, Jochen Hofstaetter and Christina Streli
Post 97	**Towards cryogenic measurements with a confocal micro-XRF setup** Tobias Drechsel, Daniel Groetzsch, Ulrich Waldschläger, Ioanna Mantouvalou and Birgit Kanngießer
Post 98	**Fast full area crystal domain screening using energy-dispersive micro-XRF** Falk Reinhardt, Roald Tagle, Max Buegler and Ulrich Waldschlaeger
	Mobile and portable XRF
Post 99	**The use of a portable X-ray fluorescence analyzer in the reconstitution of dinosaur fossils** Teresa Silva, Francisco Costa, Judite Fernandes, Rogério Calvo and Octávio Mateus
Post 100	**“Crono”: a fast and reconfigurable MACRO-XRF Scanner for cultural heritage applications** Roberto Alberti, Tommaso Frizzi, Luca Bombelli, Michele Gironda, Nicola Aresi, Costanza Miliani, Francesca Rosi and Laura Cartechini
Post 101	**Natural radioactivity and elemental composition of sands in the Douala region, Littoral of Cameroon Using Portable XRF and HPGe detector** Cébastien Joël Guembou Shouop, Maurice Ndontchueng Moyo, Grégoire Chene and David Strivay
Post 102	**Analysis of ancient gold artifacts using X-ray fluorescence** Hamilton Gama Filho, Ramon Santos, Davi Oliveira, Luis Fernando Oliveira, Haimon Alves, Claudio Prado, Joaquim Assis and Marcelino Anjos
Post 103	**X-ray fluorescence spectrometry reveals the meteoritic origin of Tutankhamun's iron dagger blade** Daniela Comelli, Roberto Alberti, Massimo D'Orazio, Luigi Folco, Mahmoud El-Halwagy, Abdelrazek Elnaggar, Austin Nevin, Franco Porcelli and Tommaso Frizzi
	Synchrotron XRS, XAFS, high resolution XES, and RIXS
Post 104	**Multi-Element SDD with Advanced Processing for High Count Rate and Mapping Applications** Shaul Barkan, Valeri Saveliev, Yen-Nai Wang, Liangyuan Feng, Mengyao Zhang, Elena Damron, Yutaka Tomimatsu and Roger Goldsbrough
Post 105	**Single shot NEXAFS investigations of biological samples in the soft X-ray region using a Laser Produced Plasma Source** Katharina Witte, Ioanna Mantouvalou, Adrian Jonas, Janina Lebendig, Wjatscheslav Martyanov, Daniel Grötzsch, Rocío Sánchez-De-Armas, Robert Jung, Holger Stiel and Birgit Kanngießer
Post 106	**Electronic structure of third-row elements studied by high energy resolution x-ray emission spectroscopy** Marko Petric, Matjaž Kavčič, Matjaž Žitnik, Klemen Bucar and Rok Bohinc
Post 107	**Characterization of Reflection Gratings by GIXRF and Application as Amplitude Beam Splitter for the 4 – 13 keV X-ray Energy Range** Diane Eichert and Werner Jark

Post 108	**Laboratory von Hámos X-ray Spectroscopy for Routine Sample Characterization** Zoltán Németh, Jakub Szlachetko, Éva Gabriella Bajnóczi and György Vankó
Post 109	**Application of the TXRF and XANES method for analysis of ovarian cancer cyst fluids** Dariusz Adamek, Lukasz Chmura, Maria Grzelak, Marek Lankosz and Beata Ostachowicz
Post 110	**XAFS studies of a CuPd catalyst at the Cu K-edge** Antonella Balerna
Post 111	**X-ray standing wave assisted depth resolved chemical speciation in periodic multilayer structures** Gangadhar Das, A. G. Karydas, Haranath Ghosh, M. Czyzycki, A. Migliori and Manoj Kumar Tiwari
Post 112	**A Laboratory Spectrometer for X-ray Emission Spectroscopy (XES) in Catalysis Research** Wolfgang Malzer, Daniel Grötzsch, Richard Gnewkow, Christopher Schlesiger, Sven Uwe Urban, Serena Debeer and Birgit Kanngießer
Post 113	**A high performance HAPG ring optic for X-ray Emission Spectroscopy** Richard Gnewkow, Wolfgang Malzer, Daniel Grötzsch, Christopher Schlesiger, Sven-Uwe Urban, Leon Merfort and Birgit Kanngießer
	PIXE instrumentation and applications
Post 114	**PIXE Analysis of the Effects of Air Pollution on the Ramparts of Sale City (Morocco)** Mounia Tahri, Moussa Bounakhla, Fatiha Zahry, Bouamar Baghdad, Isabel Garcia-Orellana and Leon Garcia-Leon
Post 115	**Spectroscopy of impact glasses, three methods compared** Marina Čalogović, Tihomir Marjanac and Stjepko Fazinic
Post 116	**Comparative Analysis of Airborne Particulate Matter Using TXRF and PIXE Techniques** Samuel Mwaniki Gaita, Margarete Mages, Josef Prost, Annemarie Wagner, Michael J Gatari, Johan Boman and Christina Streli
Post 117	**Exercise induced effects on a gym atmosphere** Matjaž Žitnik and Klemen Bucar
	WDXRS
Post 118	**WD- and ED-XRF imaging techniques for industrial and painting samples** Shota Aida, Masaki Yamanashi, Yuki Takimoto, Yuta Kitado, Francesco Paolo Romano, Koen Janssens and Kouichi Tsuji
Post 119	**Automated remelting as a new sample preparation method for analysis of Sn63Pb37 and SnAg3 solders using WDXRF in the aspect of the microstructural issue** Tadeusz Gorewoda, Jacek Anyszkiewicz, Zofia Mzyk, Katarzyna Bilewska, Szymon Malara, Andrzej Cybulski, Joanna Gołębiewska-Kurzawska, Justyna Kostrzewa, Magdalena Grzegorczyk and Magdalena Knapik
Post 120	**Polychromatic Simultaneous WDXRS for Chemical State Analysis using a Laboratory X-ray Source** Kenji Sato, Akihiro Nishimura, Masatomo Kaino and Susumu Adachi
Post 121	**C Kα X-ray emission spectra for the evaluation of the sp2/sp3 ratio of polymers** Dimitrios Anagnostopoulos, Loukas Koutsokeras, Apostolos Avgeropoulos and Panos Patsalas
	XRS in Art and Cultural Heritage
Post 122	**An EDXRF portable mapping system for cultural heritage: application on God the Father with Angels panel by Giotto** Anna Galli, Roberto Alberti, Nicola Aresi, Tommaso Frizzi, Luca Bombelli, Michele Gironda, Letizia Bonizzoni and Marco Martini

Post 123	**ON FORTY-TWO NOSE ORNAMENTS FROM THE TOMB OF THE LADY OF CAO** Roberto Cesareo, Angel Bustamante, Regulo Franco, Arabel Fernandez, Soraia Azeredo and Ricardo Lopes
Post 124	**Compositional and micro-structural study of joining methods in archaeological gold objects** Simona Scrivano, Miguel A. Respaldiza, Blanca Gómez-Tubío, Inés Ortega-Feliú, Francisco J. Ager and Antonio Paúl

Wednesday June 22

	Wallenberg	Europe
08:30	**XRF 30 years (XRF 1986 - 2016)**	
09:00	**Scanning-Free Grazing Emission XRF setup for Elemental Depth Profiling with nm Resolution** Jonas Baumann, Chrisitan Herzog, Malte Spanier, Daniel Grötzsch, Lars Lühl, Katharina Witte, Adrian Jonas, Sabrina Günther, Frank Förste, Robert Hartmann, Martin Huth, David Kalok, Daniel Steigenhöfer, Markus Krämer, Thomas Holz, Reiner Dietsch, Lothar Strüder, Birgit Kanngießer and Ioanna Mantouvalou	
09:15	**Application of TXRF and XRPD techniques for analysis of elemental and chemical composition of human kidney stones** Aldona Kubala-Kukuś, Michał Arabski, Ilona Stabrawa, Dariusz Banaś, Waldemar Różański, Urszula Majewska, Jolanta Wudarczyk-Moćko, Janusz Braziewicz, Marek Pajek and Stanisław Góźdź	
09:30	**Sample preparation for TXRF analysis of teas** Ryohei Hosomi, Yuri Tabuchi and Kouichi Tsuji	
09:45	**Analytical capabilities of could point extraction (CPE) in combination with low-power total X-ray fluorescence spectrometry (TXRF) for isolation and quantification of silver nanoparticles (AgNPs) in water extracts** Eva Margui, Laura Torrent, Manuela Hidalgo and Monica Iglesias	
10:00	Coffee break	
10:30	**Invited 9: Total reflection X-ray fluorescence analysis using weak white X-rays** Shinsuke Kunimura	

	Wallenberg	Europe
11:00	**Development of portable XRD: onsite analysis of paintings at the Rijksmuseum Amsterdam** Izumi Nakai, Airi Hirayama, Arisa Izumi, Yoshinari Abe, Kriengkamol Tantrakarn, Kazuo Taniguchi, Annelies Van Loon, Petria Noble, Fredrik Vanmeert and Koen Janssens	**High resolution EDXRF scanning of sediment cores, a way to look back in time.** Anders Rindby
11:15	**Errors in tabulated X-ray emission intensities limit the accuracy of X-ray Fluorescence analysis** Brianna Ganly, Yves Van Haarlem and James Tickner	**Near-real-time trace element measurements of ambient aerosols at a rural, traffic-influenced site in Switzerland** Markus Furger, Jay G. Slowik, María Cruz Minguillón, Christoph Hueglin, Krag Petterson, André S. H. Prévôt and Urs Baltensperger
11:30	**Development of a portable EDXRF spectrometer with a secondary target in a tri-axial geometry** Mauro Guerra, Matilde Alves, Maria Luisa Carvalho and Sofia Pessanha	**Two years monitoring of fine particulate matter and source apportionment in Rijeka, Croatia** Tatjana Ivošević, Marija Čargonja and Ivica Orlić
11:45	**CASTOR, a new tool for combined XRR-GIXRF analysis at SOLEIL** Anastasiia Novikova, Marie-Christine Lépy, Yves Ménesguen, Walter-Wilkener Batista-Pessoa, Hélène Rotella, Jean-Michel André and Philippe Jonnard	**Evaluation of water hyacinth (Eichhornia crassipes) as feedstock for biogas production: Application of X-ray Fluorescence.** David Maina, Christine Matindi, Paul Njogu and Michael Gatari
12:00	**Lunch followed by Excursion info**	
13:00		

Excursion: Boat through Gothenburg city, visit to The Swedish Ship Götheborg and Älvrummet

Thursday June 23

	Wallenberg	Europa
08:30	**Invited 10: Core-level RIXS: A versatile Spectroscopic Tool for Chemical State Assessments** Juan José Leani	
09:00	**Microscale mineral analysis of argillaceous rock thin sections after sorption experiment** Felician Gergely, Szabina Török, Rainer Dähn, Margit Fábián, Daniel Grolimund, Annamária Kéri and Janos Osan	**Multi-color inner-shell x-ray lasing using x-ray free electron laser femtosecond pulses** Joanna Hoszowska, Jakub Szlachetko, Jean-Claude Dousse, Wojciech Błachucki, Yves Kayser, Chris M. Milne, Maarten Nachtegaal, Bruce D. Patterson, Rafael Abela and Marek Pajek
09:15	**Confocal X-ray fluorescence spectrometer and commercial 3D printer** Imre Szaloki, Gabor Radocz and Anita Gerenyi	**What are the correct L-subshell photoionization cross sections for quantitative X-ray spectroscopy?** Philipp Hönicke, Michael Kolbe and Burkhard Beckhoff
09:30	**Synchrotron X-ray Microprobe Analysis of Crud Deposits in Pressurized Water Reactors** Vallerie Ann Samson, Daniel Grolimund, Matthias Martin and Heiko Dirk Potthast	**From droplet to layer – PVD for (T)XRF quantification** Markus Kraemer, Maria Becker, Burkhard Beckhoff, Reiner Dietsch, Gerald Falkenberg, Ursula Fittschen, Thomas Holz, Philipp Hönicke, Bernhard Nensel, Daniela Rogler, Alex von Bohlen and Danny Weissbach
09:45	**The XRF scanner of INFN-LABEC for the diagnostics in Cultural Heritage issues** Anna Mazzinghi, Chiara Ruberto, Caroline Czelusniak, Lara Palla, Lisa Castelli, Nicla Gelli, Lorenzo Giuntini, Pier Andrea Mandò and Francesco Taccetti	**Quantification of Nitrogen in Organic Reference Materials** Andreas Nutsch, Cornelia Streeck, Alex Shard and Burkhard Beckhoff
10:00	Coffee break	
10:30	**Invited 11: Time resolved studies of ultrafast structural changes in membrane proteins** Richard NEUTZE	**Cerium (IV) oxide decorated with graphene oxide as a novel nanocomposite in sorption of trace metal ions and speciation of arsenic and selenium determined by X-ray fluorescence spectrometry** Beata Zawisza, Anna Baranik, Rafal Sitko, Anna Gagor, Ignasi Queralt and Eva Margui
10:45		**Studies on Transylvanian native gold samples from Rosia Montana and Cavnic deposits using micro-PIXE** Beata Zawisza, Anna Baranik, Rafal Sitko, Anna Gagor, Ignasi Queralt and Eva Margui

	Wallenberg	Europe
11:00	**Doubly differential bremsstrahlung cross sections for 20 to 100 keV electrons impinging on various elements between 6 ≤ Z ≤ 79** Juan Alejandro García-Alvarez, Nora Maidana, José María Fernandez Varea, Suelen F. Barros, Osvaldo C.B. Santos, Marcos N. Martins, Alessio Mangiarotti, Tiago F. Silva, Alexandre Malafronte, Adirano J. Moraes and Vito Vanin	**Nanometer-scale surface investigations by means of scanning-free GEXRF** Yves Kayser, Jacinto Sa and Jakub Szlachetko
11:15	**Scanning electron microscope-cathodoluminescence (SEM-CL) analysis of inclusions in metals** Susumu Imashuku, Koichiro Ono and Kazuaki Wagatsuma	**X-ray Absorption Spectroscopy for Gemology Applications** Nirawat Thammajak, Rachanon Klondon and Sorapong Pongkrapan
11:30	**Precise measurements of cross sections for K-shell ionization by electron impact – 35-100 keV Te K as an example** Vito Vanin, Marcos Martins, Nora Maidana, Alessio Mangiarotti, Osvaldo Santos, Juan García-Alvarez, Suelen Barros, Manfredo Tabacniks, Cleber Rodrigues, Tiago Silva, Marina Koskinas, José M Fernández-Varea and Michael Pindzola	**A compact and calibratable von Hamos X-Ray Spectrometer based on cylindrical HAPG mosaic crystals for high-resolution XES** Ina Holfelder, Matthias Müller, Jan Weser and Burkhard Beckhoff
11:45	**Can SQRT(N) be used for the standard uncertainty in x-ray spectroscopy with semiconductor detectors?** Tibor Papp and John Maxwell	**Speciation depth-profiling of nano-structured specimen by combined GIXRF-NEXAFS** Beatrix Pollakowski, Peter Hoffmann, Marina Kosinova, Valentina Trunova, Wolfgang Ensinger and Burkhard Beckhoff
12:00	Lunch	
13:00	**Invited 12: Use of pixellated spectroscopic detectors for quantitative X-ray mammography** Silvia Pani	**A novel methodology based on ED-XRF and TXRF to quantify light and heavy elements present on aqueous and acid liquid extracts related with Cultural Heritage samples** Cristina García-Florentino, Maite Maguregui, Eva Marguí, Ignasi Queralt and Juan Manuel Madariaga
13:30	**Evidences of the use of mercury in medicine** Sofia Pessanha, Mauro Guerra, Marta Carvalho, Carina Ferreira, Marta Manso, José Paulo Santos, António Alberto Dias, Ana Guilherme Buzanich and Maria Luisa Carvalho	**Polycapillary Optics: from Idea to Technology (to the memory of Muradin Kumakhov)** Sultan Dabagov

	Wallenberg	Europe
13:45	**Assessment of heavy metals and hazardous substances in tattoo inks** Marta Manso, Ana Guilherme Buzanich, Sofia Pessanha, Mauro Guerra, Luisa Carvalho, Martin Radtke and Uwe Reinholz	**Cryogenic Analysis of Frozen Hydrated Biological Tissue at the Hard X-ray Micro-Probe Beamline at PETRA III** Jan Garrevoet, Walter Schroeder, Bjorn de Samber, Thorsten Claussen, Eva Vergucht, Ulrike Boesenberg, Mathias Alfeld, Matteusz Czyzycki, Michael Road, Laszlo Vincze and Gerald Falkenberg
14:00	**Elemental accumulation and their interaction with lichens** Shamayita Banerjee, Anindita Chakraborty, Sudarshan Mathummal and Nabakanta Jana	**Quantitative XRF-Analysis of technical Microstructures** Marcel Bremekamp, Joerg Leske and Bernhard Nensel
14:15	**Comparison between different quantification methods for the the analysis of precious alloys by ED-XRF** Filippo Niccolai, Alessandra Amato, Francesco Bitti, Sandro Gonzi, Dattatraya Musale, Andrea Puggelli, Jason Ravagli and Stefano Ridolfi	**Synthetically-generated Reference Spectra for X-ray Fluorescence with Presence of Peak Interference** Rutchanee Gullayanon
14:30	Coffee break	
15:15	Bruker	
15:30	Ketek	
15:45	XOS	
16:00	MoxTek	
16:15	Hitachi	
16:30	EXSA GA	
18:00	Poster session 3	
19:15	Conference dinner	

Thursday 23 June

Poster session 3

Interactions of X-rays with matter and fundamental parameters

Post 125	**The natural line widths, asymmetric indices, the visualization of 3d electron, and CK transitions in Ca – Ge elements** Y Ito, T Tochio, H Ohashi, S Fukushima, M Polasik, K Słabkowska, Ł Syrocki, E Szymańska, J Rzadkiewicz, P Indelicato, J Marques, M Martins, F Parente and J Santos
Post 126	**Detailed Figures and Tables in "The natural line widths, asymmetric indices, the visualization of 3d electron, and CK transitions in Ca – Ge elements"** Y Ito, T Tochio, H Ohashi, S Fukushima, M Polasik, K Słabkowska, E Szymańska, J Rzadkiewicz, P Indelicato, J Marques, M Martins, F Parente and J Santos
Post 127	**Influence of the conversion ratio of hydroxyapatite phantoms on coherent normalization for calibration of in vivo bone strontium measurements** Eric Da Silva, Jimmy Ng, Hazra Sokoli, James Grafe and Ana Pejovic-Milic
Post 128	**Overlying soft tissue correction based on Compton scattering for 125I-based in vivo bone strontium measurements: a simulation study** Hazra Sokoli, Ana Pejovic-Milic, David Fleming, James Gräfe and Eric Da Silva
Post 129	**Characterization of Protein Layers with X-Ray Spectrometry and Ellipsometry** Andreas Nutsch, Benjamin Kalas, Judit Nador, Miklos Fried, Peter Petrik and Burkhard Beckhoff
Post 130	**Recent determinations of x-ray fundamental parameters** Philipp Hönicke, Michael Kolbe, Rainer Unterumsberger, Beatrix Pollakowski and Burkhard Beckhoff
Post 131	**Breast cancer analysis using electron density and effective atomic number determined from measurements of the x-ray linear attenuation coefficient** Leonardo D. H. Soares, Roberto Daniel Perez, Juan José Leani, Héctor Jorge Sanchez, Maurício Moralles and Martin E Poletti

Quantification methodology and metrology

Post 132	**In vivo measurement of gadolinium in bone using a 241Am based X-ray fluorescence system** Zaid Keldani, Joanna Nguyen, Eric Da Silva, Ana Pejovic-Milic, Darrick Heyd and James Gräfe
Post 133	**Combined use of experimental detector responses with advanced modeling for increased performance of deconvolution algorithms in various applications** Charalampos Zarkadas
Post 134	**Five generations of UHV instrumentation for X-ray spectrometry - technology development and transfer for industrial, metrological and scientific applications -** Burkhard Beckhoff, Ina Holfelder, Janin Lubeck and Jan Weser
Post 135	**Thickness independent quantification of trace heavy elements in light matrix** Elena Blokhina, Franz Keller, Stephanie Hanning and Martin Kreyenschmidt
Post 136	**WDXRS as Standard Test Method for Determination of Organic Chloride Content in Crude Oil** Alexander V. Grigorev

TXRF, GIXRF and related techniques

Post 137	**Chemical analysis of airborne particulate matter collected on filters prepared by SMART STORE™ by means of X-Ray Fluorescence based techniques** Laura Borgese, Fabjola Bilo, Annalisa Zacco, Diane Eichert, Werner Jark, Kouichi Tsuji, Elza Bontempi and Laura Eleonora Depero

Post 138	**Total reflection X-ray fluorescence analysis of directly collected indoor aerosol samples – Preliminary results** Josef Prost, Andreas Windbichler, Anna Zinkl, Angelika Hable, Andreas G. Karydas, Johannes H. Sterba, Peter Wobrauschek and Christina Streli
Post 139	**Refitting an X-ray Diffraction System for combined GIXRF and XRR measurements** Dieter Ingerle, Werner Artner, Klaudia Hradil and Christina Streli
Post 140	**Comparison the results of Total X-ray fluorescence analysis with Gamma activation analysis.** Dmitriy Rezvan, Raznomazov Valeriy, Novikovsky Nikolay, Buraeva Elena and Dmitriy Sarychev
	Microbeam techniques, confocal XRF and X-Ray imaging
Post 141	**Non-Destructive Characterization of Experimental Gold Electroplating on Silver Substrates with Confocal Micro X-Ray Fluorescence (CXRF) for Cultural Heritage Studies** Kilian Laclavetine, F.J. Ager, L. Ferrazza, M. Ferretti, D. Juanes, I. Ortega-Feliú, Miguel Ángel Respaldiza, C. Roldán, Simona Scrivano and I. Traver
Post 142	**Designing optimal multilayer mirrors for a new generation of X-ray sources** Markus Kraemer, Reiner Dietsch, Thomas Holz, Holger Lasser, Bartek Lechowski, Sven Niese, Norman Niewrzella, Daniela Rogler and Danny Weissbach
Post 143	**Zinc distribution in human prostatic carcinoma cell line using synchrotron X-ray microfluorescence** Karolynne Rocha, Roberta Leitão, Eliane Barros, Aparecida Oliveira, Catarine Canellas, Marcelino Anjos, Luiz Nasciutti and Ricardo Lopes
Post 144	**Synchrotron X-ray microfluorescence mapping of Fe, Cu and Zn in prostate cell spheroids supplemented with Zn** Roberta Leitão, Karolynne Rocha, Eliane Barros, Aparecida Oliveira, Catarine Canellas, Marcelino Anjos, Luiz Nasciutti and Ricardo Lopes
Post 145	**Evaluation of the sensitometric curve of radiographic films through X-Ray fluorescence** Davi Oliveira, Elicardo Gonçalves, Marcelino Anjos, Joaquim Assis, Luis Fernando Oliveira and Ricardo Lopes
Post 146	**MicroXAS Beamline of the Swiss Light Source – a bright, multi-modal microscopic chemical imaging beamline** Vallerie Ann Samson, Dario Ferreira, Daniel Grolimund, Mario Birri and Beat Meyer
Post 147	**Discriminating barium- from titanium-based pigments in modern painting with the XRF-scanner of INFN-LABEC** Chiara Ruberto, Anna Mazzinghi, Caroline Czelusniak, Lara Palla, Lorenzo Giuntini, Lisa Castelli, Pier Andrea Mandò and Francesco Taccetti
Post 148	**Computed Microtomography Methodology to Study Bioturbation in Humid Muddy Sediments** Alessandra Silveira Machado, Simone Pennafirme, Alessandra de Castro Machado, Inaya Lima, Mirian Crapez and Ricardo Lopes

Post 149	**Ceramic materials characterization through computed microtomography and X-ray fluorescence** Alessandra Machado, Davi Oliveira, Rose Latini, Hamilton Gama Filho, Marcelino Anjos and Ricardo Lopes
Post 150	**X-RAY FLUORESCENCE IN ARCHAEOLOGY** Taibouni Nabila and Amokrane Arezki
	Synchrotron XRS, XAFS, high resolution XES, and RIXS
Post 151	**Cr, Cu and Zn K-edge SR-TXRF-XANES of indoor aerosol samples at BESSYII and ELETTRA** Josef Prost, Andreas Windbichler, Ana Guilherme Buzanich, Uwe Reinholz, Heinrich Riesemeier, Martin Radtke, Giancarlo Pepponi, Alessandro Migliori, Andreas G. Karydas, Mateusz Czyzycki, Diane M. Eichert, Werner H. Jark, Peter Wobrauschek and Christina Streli
Post 152	**Preparation and characterization of organic thin films for NEXAFS investigations in transmission mode** Janina Lebendig, Katharina Witte, Ioanna Mantouvalou, Robert Jung, Holger Stiel and Birgit Kanngiesser
Post 153	**Determination of Chromium and Manganese Species in water samples using X-ray Resonant Raman Scattering and Principal Component Analysis at the IAEA-Elettra synchrotron beamline end-station facility** Juan José Leani, José Robledo, Andreas Germanos Karydas, Alessandro Migliori and Héctor Jorge Sánchez
Post 154	**Changes in Li4Ti5O12 (LTO) Structure due to Charge Effects Analyzed by Resonant Inelastic X-Ray Scattering in Combination with Multivariate Methods** Juan José Leani, Jose I. Robledo, Fabiana Oliva, Mateusz Czyzycki, Andreas Karydas, Alessandro Migliori and Héctor Sánchez
Post 155	**Recent Developments of Multi-Element SDD XFR Spectrometers for High Count Rate Applications.** Valeri D Saveliev, Shaul Barkan, Liangyuan Feng, Yen-Nai Wang, Elena Damron, Mengyao Zhang and Roger Goldsbrough
Post 156	**Automated non-linear alignment of XRF spectra** George Kourousias, Fulvio Billé and Alessandra Gianoncelli
Post 157	**Fast X-ray Beam Intensity Stabilization for Absorption Spectroscopy and Spectromicroscopic Imaging** Vallerie Ann Samson, Daniel Grolimund, Mario Birri, Beat Meyer and Markus Williman
Post 158	**First in situ measurements with a newly developed SR-based 'single-shot' EXAFS set-up** Martin Radtke, Ana Guilherme Buzanich, Anke Kabelitz, Simone Rolf, Heinrich Riesemeier, Uwe Reinholz and Franziska Emmerling
Post 159	**X-ray absorption fine structure of sulfur in a Li-S battery cathode measured under protective atmosphere** Claudia Zech, Matthias Müller, Manfred Stamm, Ivan Raguzin, Leonid Ionov, Andreas Bund, Svetlozar-Dimitrov Ivanov and Burkhard Beckhoff
Post 160	**Emerging application fields: medical device characterisation by combined X-ray and IR spectrometry** Beatrix Pollakowski, Andrea Hornemann, Bonnie Tyler, Rory Steven, Peggy Emmer and Burkhard Beckhoff

	PIXE instrumentation and applications
Post 161	**Use of high energy PIXE/PIGE experiments to study the influence of moisture on X-rays analysis methods.** Alexandre Subercaze, Arnaud Guertin, Ferid Haddad, Mostafa Hazim, Liliane Jean-Soro, Charbel Koumeir, Vincent Métivier, Nathalie Michel, Catherine Neel, Ahmed Rahmani and Noel Servagent
Post 162	**Evaluation of the X-ray distribution of a syringe-needle type proton-induced X-ray source by Geant4 simulation** Yuchao Hu, Hitoshi Fukuda and Yoshiyuki Oguri
Post 163	**Comparison between XRF and PIXE techniques for the analysis of air particulate matter** Gerelmaa Gunchin, Peter Kregsamer, Christina Streli, Massimo Chiari, Silvia Nava, Giulia Calzolai, Shagjjamba Dagva, Lodoysamba Sereeter, Zuzaan Purev and Andreas Germanos Karydas
	Electron induced XRS
Post 164	**Structural studies of novel perovskite: BaLa2/3U5+O5.5** Rohan Phatak, Ashok Yadav, Nimai Pathak, Ruma Gupta, Shambhu Jha, Dibyendu Bhattacharyya, Amitabh Das and Sanjay Sali
Post 165	**DANTE, A Compact and Low-Power DPP to Exploit CUBE Ultimate Energy-Resolution and Count-Rate Capability** Luca Bombelli, Michele Manotti, Roberto Alberti and Tommaso Frizzi
	X-ray diffraction (XRD)
Post 166	**SAXS Investigation of Porosity and Fractal Properties of the Sintered Niobium** Leonid Skatkov and Valeriy Gomozov
Post 167	**Crystal structures of CoCl2 and Co(ClO4)2 complexes of 1,3-bis(1H-benzimidazol-2-yl)-2-oxapropane** Aydin Tavman, Adem Cinarli and Demet Gürbüz
Post 168	**Crystal Structures of N-(5-chloro-2-hydroxyphenyl)-5-bromosalicylaldimine and N-(5-methyl-2-hydroxyphenyl)-3,4-dimethoxybenzaldimine** Adem Cinarli, Demet Gürbüz and Aydın Tavman
Post 169	**Structural characterization of the diastereomeric complexes formed by dimethylacridino-18-crown-6 ether and the enantiomers of 1-(1-naphthyl)ethylamine hydrogen perchlorate** Tamás Németh, Ibolya Leveles, Tünde Tóth, Beáta G. Vértessy and Péter Huszthy
Post 170	**The effect of annealing W-SiC in Ar Ambient** Thabsile T. Thabethe, Thulani T. Hlatshwayo, Eric G. Njoroge, Tshepo Ntsoane and Johan B. Malherbe
Post 171	**Silicide formation in Pd-Si and Pd-SiC diffusion couples** Eric Njoroge, Chris Theron and Johan Malherbe
	XRS in Art and Cultural Heritage
Post 172	**Micro-PIXE and micro-SR-XRF – two excellent analytical techniques for History and Art studies** Daniela Stan, Bogdan Constantinescu and Angela Vasilescu
Post 173	**Efficiency of using calcium oxalate for protection of monumental limestone and marble** Domagoj Mudronja, Stjepko Fazinić, Iva Bozicevic Mihalic, Allesandro Migliori, Juan Jose Leani and Andreas Karydas

Post 174	**Energy dispersive X-ray fluorescence spectrometry (EDXRF) to investigate ancient Moroccan Jewish parchments** Latifa Hajji, Jamal Assouik, Sofia Pessanha and Maria Luisa Carvalho
	XRS in Earth and Environment sciences
Post 175	**Possibilities of low-power X-ray fluorescence spectrometry techniques for rapid multielemental analysis and imaging of vegetal foodstuffs** Eva Margui, Helena Gallardo, Ignasi Queralt, Josefina Tapias, Mauro Guerra and Maria Luisa Carvalho
Post 176	**Assessment of bone calcium and phosphorus content using μ-EDXRF: effects of long-term cadmium poisoning** Tsz Wing Cheung, Chun Yu Mak, Alan Wing Lun Law, Rafay Ahmed and Condon Lau
Post 177	**Developing Single and Multi-element Reference Materials for Evaluating XRF Measurements of Atmospheric Aerosols** Krystyna Trzepla, Sinan Yatkin, Warren White and Nicole Hyslop
Post 178	**Elemental Accumulation Patterns in Freshwater Biota** Annemarie Wagner and Margarete Mages
Post 179	**Silanized celluloze membranes for speciation and determination of selected trace metal ions by EDXRF** Rafal Sitko, Ewa Lukojko, Karina Kocot and Beata Zawisza
Post 180	**Determination of mercury concentration in tissue of Zebrafish (Danio rerio) using μ-EDXRF** Maria Silva, José Paulo Santos, Mário Diniz and Mauro Guerra
Post 181	**Photon Counting Energy Resolved Transmission Spectroscopy for Real-time Minerals Analysis** Paul Scoullar, Laura Grundy and Francis Linnane
Post 182	**Black carbon and elemental composition of PM2.5 in Kingston, Jamaica** Sepideh Hedman, Samuel Mwaniki Gaita and Johan Boman
	XRS in Industrial Quality and Process Control
Post 183	**The comparative verification of calibration curve and BG-FP methods for impurity analysis in drug materials** Hiroaki Furukawa, Naoto Ichimaru, Keijiro Suzuki, Makoto Nishino, Jennifer Broughton, Johan Leinders and Hirotomo Ochi
	XRS in Life Sciences and Forensics
Post 184	**Monte Carlo calibration for in vivo XRF** Mats Isaksson and Eva Forssell-Aronsson
Post 185	**Nano-imaging of particulate in human lung tissue by Soft X-ray and hard XRF Microscopy** Francesca Cammisuli, Alessandra Gianoncelli, Clara Rizzardi, Vincenzo Canzonieri and Lorella Pascolo
Post 186	**X-ray Spectroscopy in CMX4 Nuclear Forensic Interlaboratory Exercise** András Kocsonya
Post 187	**Study of trace Elements concentration in cancerous tissues by X-ray Fluorescence Spectroscopy (EDXRF)** Ana Magalhães, Alexandre Mogárrio, Maria Luísa Carvalho, José Paulo Santos, João O'Neill and Mauro Guerra
Post 188	**Study of trace elements in canine elbow dysplasia by PIGE and XRF** Mauro Guerra, Cátia Santos, Alexandra Silva, Adriana Costa, Maria-Luisa Carvalho, Adelaide Jesus, Martinho Capelão and Micaela Fonseca

Friday June 24

Wallenberg

08:30	**Invited 13: Comparison of XRF and PIXE imagings of paintings** Thomas Calligaro, Myriam Eveno, Victor Gonzalez, Eric Laval, Laurent Pichon and Elisabeth Ravaud
09:00	**MA-XRPD, a non-destructive imaging method capable of highly-specific mapping of degradation products in paintings** Frederik Vanmeert, Koen Janssens, Geert Van der Snickt, Lizet Klaassen, Margje Leeuwestein, Annelies Van Loon, Petria Noble and Joris Dik
09:15	**Pigments from fragments of Roman mural paintings analyzed with SR-MA-XRF** Rafaela Debastiani, Rolf Simon, Tilo Baumbach and Michael Fiederle
09:30	**Advances in EDXRF technology and applications** Pascal Lemberge, Didier Bonvin and Nathalie Keng
09:45	**Elementary characterization of environmental samples from pit lakes in Sweden** Juan Mantero, Rimon Thomas, Mats Isaksson, Eva Forssell-Aronsson, Elis Holm and Rafael García-Tenorio
10:00	Coffee break
10:30	**Invited 14: Developments on full field XRF and PIXE by using an X-ray camera with high-energy and high-spatial resolution** Francesco Paolo Romano, Claudia Caliri, Hellen C. Santos, Lighea Pappalardo and Francesca Rizzo
11:00	**JGIXA – a software package for the calculation and fitting of grazing incidence X-ray fluorescence and X-ray reflectivity data for the characterization of nanometer-layers and ultra-shallow-implants** Dieter Ingerle, Giancarlo Pepponi, Florian Meirer, Peter Wobrauschek and Christina Streli
11:15	**In-fab metrology of depth-dependent properties** Emmanuel Nolot, Helene Rotella, Gael Picot and Walter Pessoa
11:30	**Closing session**
12:00	Take away lunch