

Tuesday, 25th June 2019

08:30 Registration

Opening Session (Chairperson: Ignasi Queralt)

09:30 **TXRF-2019 organizers** *Opening*
09:50 **Eva MarguÍ** *"Past, present and future of TXRF"*
10:10 **Laura Borgese (Invited)** *"European network for chemical elemental analysis by total reflection X-Ray fluorescence"*

11:00 Coffee Break

Sample Preparation and Quantification (Chairperson: Alex Von Bohlen)

11:30 **Ramon Fernández (Invited)** *"Considerations about the effect of atomic chemical surrounding in the quantitative analysis by TXRF"*
12:00 **Markus Krämer** *"Better understanding TXRF-new options and challenges"*
12:20 **Kouichi Tsuji** *"Total reflection X-ray fluorescence analysis using carbon coated glass substrate"*
12:40 **Artem Maltsev** *"Chemometric approaches in TXRF"*
13:00 **Inmaculada De la Calle** *"Development of nanostructured materials for preconcentration of metal species prior to TXRF analysis"*

13:20 Lunch Break

14:30 DEMO Session (Bruker Nano GmbH)

16:00 Coffee Break

Biological and Medical Applications (Chairperson: Ursula Fittschen)

16:30 **Pawel Wróbel (Invited)** *"Challenges of trace elements analysis of human samples-case study of ovarian cancers"*
17:00 **Joanna Chwiej** *"The use of TXRF method for the analysis of potential biomarkers of human glioblastoma multiforme invasiveness in the rat brain"*
17:20 **Gabriella Mankovskii** *"Applications of TXRF in quantifying AuNPs uptake in cancer cells and tissues: comparisons with ICP"*
17:40 **Jasna Jablan** *"Multi-element analysis of seminal plasma using total reflection X-ray fluorescence spectroscopy"*
18:00 **Ana Pejović-Milić** *"TXRF based analysis of nasolacrimal duct tissue"*

19:30 Welcome Reception Sponsored by Bruker Nano GmbH

Wednesday, 26th June 2019

08:30 Registration

Instrumentation and Synchrotron Radiation (Chairperson: Christina Streli)

- 09:00 **Jun Kawai (Invited)** *"TXRF and polarized XRF spectrometers with 3D printer"*
09:30 **Diane Eichert** *"Synchrotron radiation TXRF: Strengths and challenges"*
09:50 **Mauro Guerra** *"Development of a double crystal X-ray spectrometer for fundamental parameter measurements"*
10:10 **Peter Wobrauschek** *"Dual energy band excitation by one multilayer for high Z and low Z elements"*
10:30 **Yukie Izumoto** *"TXRF analysis of uranium in the presence of competing elements"*

10:50 Coffee Break

Related Techniques (Part-I) (Chairperson: Kouichi Tsuji)

- 11:30 **Giancarlo Pepponi (Invited)** *"Arrays of linear, energy dispersive X-ray detectors for fluorescence and scattering acquisition"*
12:00 **Emmanuel Nolot** *"Grazing-Incidence X-ray fluorescence analysis of thin chalcogenide materials deposited on Bragg mirrors"*
12:20 **Juan José Leani** *"Time-Resolved energy dispersive inelastic X-ray scattering (TR-EDIXS) for fast chemical state investigations"*
12:40 **Diane Eichert** *"Quality control of nanolayered materials by XRR and GIXRF"*

13:00 Lunch Break

14:30 DEMO Session (Rigaku)

16:00 Coffee Break

Related Techniques (Part-II) (Chairperson: Jorge. H. Fernández)

- 16:30 **Dieter Ingerle** *"Combined GIXRF and XRR analysis (GIXA) of nanomaterials in the laboratory"*
16:50 **Simona Torrenco** *"Combined grazing-incidence X-ray fluorescence and X-ray reflectometry analysis of transition metal nitrides materials"*
17:10 **Shinjiro Hayakawa** *"Sulfur K-edge XAFS characterization of oriented P3HT thin films under grazing incidence conditions"*
17:30 **Alex Von Bohlen** *"Using GI-XRF for understanding TXRF"*

18:30 Social Activity: Girona Tour

Thursday, 27th June 2019

08:30 Registration

Environmental (Part-I) (Chairperson: Fabjola Bilo)

- 09:00 **Galina V.Pashkova (Invited)** *“Characterization of lake sediments composition by TXRF: tips and tricks”*
- 09:30 **Sebastian Böttger** *“Determination of gas phase mercury using TXRF”*
- 09:50 **Nabil Deabji** *“Application of TXRF in monitoring trace metals in particulate matter and cloud water”*
- 10:10 **Victor M.Chubarov** *“WDXRF and TXRF as tools for elemental analysis of ores”*
- 10:30 **Ignazio Allegretta** *“Quantification of major and minor elements in clays using total-reflection X-ray fluorescence spectroscopy”*

10:50 Coffee Break

Environmental (Part-II) (Chairperson: Ignazio Allegretta)

- 11:20 **Sofia Pessanha (Invited)** *“Comparison of TXRF and portable EDXRF system with triaxial geometry in the analysis of contaminated waters”*
- 11:50 **Hikari Takahara** *“Trace elemental analysis of high matrix samples with total reflection X-ray fluorescence spectrometry”*
- 12:10 **Armin Gross** *“The European project AEROMET “In-field TXRF analysis of element concentrations in ambient aerosols”*
- 12:30 **Szabina Török** *“TXRF to trace ultrafine aerosol particles in populated areas”*
- 12:50 **Cristina Vázquez** *“Adsorption enthalpy study in chemical systems through TXRF”*

13:10 Lunch Break

- 14:30 **Gifty E.Acquah** *“High throughput analysis of macro and micro nutrients in soils using XRF spectroscopy-A comparison of handheld and benchtop systems”*
- 14:50 **C.J.Guembou** *“XRF and γ -ray spectrometry characterization of sand samples from Douala basin-Cameroon”*

15:10 POSTER SESSION

16:00 Coffee Break

18:00 Excursion and Conference Dinner

Friday, 28th June 2019

09:00 Registration

Miscellaneous Applications (Chairperson: Ana Pejović-Milić)

- 09:30 **Cristina Vázquez (Invited)** *“Contribution of total reflection X-ray fluorescence for better understanding the cultural heritage”*
- 10:00 **Sangita Dhara (Invited)** *“TXRF for elemental characterization of nuclear materials: some recent studies”*
- 10:30 **Christian Gutsche** *“Combination of TXRF and complementary methods for advanced nanoparticles analysis”*
- 10:50 **Fabjola Bilo** *“New challenges for TXRF: direct analysis of cosmetics”*
- 11:10 **Giacomo Siviero** *“Trace element quantification in light fuels by TXRF”*

11:30 Coffee Break

12:00 **Closing Ceremony**
(Oral and Poster awards sponsored by JAAS)