

| Monday, September 8 | |
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| 18:00 - 20:00 | Registration |
| 18:00 - 20:00 | Welcome Reception |

| Tuesday, September 9 | | | |
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| 08:00 - 12:00 | Registration | | |
| 09:00 - 09:15 | TXRF 2025 Opening Session | | |
| Session: TXRF History/Biomedical applications Chair: Maria Luisa Carvalho | | | |
| 09:15 - 10:00 | I-1 | J. Chwiej | FROM BULK TO SPATIAL INSIGHT: TXRF AND MICRO-XRF IN BIOMEDICAL INVESTIGATIONS |
| 10:00 - 10:25 | O-1 | R. Fernández-Ruiz | A BRIEF HISTORY OF TXRF TECHNOLOGICAL EVOLUTION |
| 10:25 - 10:45 | O-2 | I. Stabrawa | ANALYSIS OF ELEMENT CONCENTRATIONS IN THE BLOOD SERUM OF PATIENTS WITH RHEUMATOID ARTHRITIS (RA) |
| 10:45 - 11:15 | Coffee break | | |
| Session: TXRF History/Biomedical applications Chair: Maria Luisa Carvalho | | | |
| 11:15 - 11:45 | O-3 | Ch. Streli | TWENTY EDITIONS OF THE TXRF 2025 CONFERENCE |
| 11:45 - 12:10 | O-4 | A. Wilk | TXRF AND ICP-OES ANALYSIS OF MAGNETITE AND MAGHEMITE NANOPARTICLE BEHAVIOUR <i>IN VIVO</i> |
| 12:10 - 12:35 | O-5 | J. Jablan | EVALUATION OF BLOOD COLLECTION TUBE MATERIAL IMPACT ON TRACE ELEMENT QUANTIFICATION IN SERUM USING TXRF |
| 12:35 - 13:00 | O-6 | M. Piotrowska | STUDY OF ELEMENT CONCENTRATIONS IN BLOOD SERUM OF PATIENTS RECEIVING PARENTERAL NUTRITION USING TXRF |
| 13:00 - 14:15 | Conference Photo/Lunch | | |

| Session: Biological and environmental applications | | | |
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| Chair: Diane Eichert | | | |
| 14:15 - 14:40 | O-7 | H. Stosnach | POTATO PETIOLE ANALYSIS BY MEANS OF TXRF IN CONTRAST TO ICP-OES ANALYSIS |
| 14:40 - 15:05 | O-8 | N. Lal Mishra | ELEMENTAL DETERMINATIONS IN WATER SAMPLES OF MAHESHARA LAKE, GORAKHPUR, INDIA BY TOTAL REFLECTION X-RAY FLUORESCENCE |
| 15:05 - 15:30 | O-9 | S. Hauser | GREEN ANALYTICAL STRATEGIES FOR TRACE ELEMENT QUANTIFICATION IN BIOLOGICAL SAMPLES USING TXRF AND NANOLITER DEPOSITION TECHNIQUES |
| 15:30 - 16:00 | Coffee break | | |
| Session: Biological and environmental applications | | | |
| Chair: Diane Eichert | | | |
| 16:00 - 16:30 | O-10 | T. Matsuyama | APPLICATION OF FREEZE CONCENTRATION TECHNIQUE FOR IMPROVING SENSITIVITY OF TXRF ANALYSIS |
| 16:30 - 17:00 | O-11 | J. Osán | TXRF ANALYSIS FOR ELEMENTAL COMPOSITION AND METAL UPTAKE OF CLAYS FOR RADIOACTIVE WASTE REPOSITORY |
| 17:15 - 18:45 | Poster session/Lab visit | | |

| Wednesday, September 10 | | | |
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| Session: Environmental and industrial applications Chair: Peter Wobrauschek | | | |
| 09:00 - 09:45 | I-2 | E. Marguá | TXRF-BASED METHODS FOR THE ANALYSIS OF WASTE PRODUCTS FROM FOSSIL-FUELED POWER PLANTS |
| 09:45 - 10:15 | O-12 | G. Siviero | ELEMENTAL ANALYSIS OF CRITICAL RAW MATERIALS IN LITHIUM-ION BATTERY BLACK MASS: A TXRF-BASED APPROACH |

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| 10:15 - 10:45 | O-13 | T. Schwank | TRACE ANALYSIS OF COPPER, ZINC, LEAD, MANGANESE, CHROMIUM, COBALT AND NICKEL IN WORKPLACE AIR USING SUSPENSION-ASSISTED TXRF |
| 10:45 - 11:15 | Coffee break | | |
| Session: Particulate Matter Chair: Peter Wobrauschek | | | |
| 11:15 - 12:00 | I-3 | L. Borgese | ELEMENTAL ANALYSIS OF PARTICULATE MATTER: PRELIMINARY RESULTS FROM THE PROJECT "SMART-AIR" - SUSTAINABLE METHODS IN AIR RESEARCH QUALITY |
| 12:00 - 12:30 | O-14 | A. Gross | AN INNOVATIVE APPROACH MEASURING METAL CONCENTRATIONS IN AIRBORNE PARTICULATE MATTER |
| 12:30 - 13:00 | O-15 | D. Eichert | X-RAY FLUORESCENCE-BASED STUDIES OF PARTICULATE MATTER ON FILTERS |
| 13:00 - 14:15 | Lunch | | |
| 14:15 - 20:00 | Excursion | | |

| Thursday, September 11 | | | |
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| Session: Techniques related to TXRF Chair: Giancarlo Pepponi | | | |
| 09:00 - 09:45 | I-4 | K. Tsuji | X-RAY FLUORESCENCE ANALYTICAL TECHNIQUES RELATED TO X-RAY TOTAL REFLECTION |
| 09:45 - 10:15 | O-16 | M. Radtke | FROM TOTAL REFLECTION TO GRAZING EXIT: BAMLINE'S 20+-YEAR JOURNEY IN X-RAY FLUORESCENCE INNOVATION |
| 10:15 - 10:45 | O-17 | K. Siebers | NANOPLASTIC CHARACTERIZATION WITH T- AND GI-XRF AS PART OF A CORRELATED MICRO-SPECTROSCOPIC APPROACH |

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| 10:45 - 11:15 | Coffee break | | |
| Session: Techniques related to TXRF Chair: Giancarlo Pepponi | | | |
| 11:15 - 11:45 | O-18 | M. Pichois | MOS ₂ QUANTIFICATION OF OVERLAPPED ED-XRF SPECTRA USING SIMULATION AND COMBINED MEASUREMENTS |
| 11:45 - 12:10 | O-19 | E. G. Hatam | MODELING COMPLEX X-RAY TRAJECTORIES: A 3-D SIMULATION FOR PATH LENGTH AND YIELD CORRECTION IN MICRO-PIXE ANALYSIS OF ROUGH SURFACES |
| 12:10 - 12:35 | O-20 | G. Wesotowski | APPLICATION OF TOTAL REFLECTION X-RAY PHOTO-ELECTRON SPECTROSCOPY IN STUDIES OF METALLIC NANOLAYERS |
| 12:35 - 13:00 | O-21 | I. Djouada | STRUCTURAL AND MORPHOLOGICAL ANALYSIS OF EVAPORATED Ni FILMS ON GaAs (001) AND Si (111) |
| 13:00 - 14:15 | Lunch | | |
| Session: Experimental systems and procedures Chair: Dariusz Banaś | | | |
| 14:15 - 15:00 | I-5 | D. Ingerle | GIMOXS: A VERSATILE GI/TXRF SPECTROMETER FOR CHARACTERIZATION OF NANOMATERIALS IN THE LAB FROM C TO U |
| 15:00 - 15:30 | O-22 | E. Demenev | A MODULAR, LOW-COST MICROCONTROLLER-BASED READ-OUT SYSTEM FOR ENERGY DISPERSIVE X-RAY SPECTROSCOPY |
| 15:30 - 16:00 | Coffee break | | |
| Session: Experimental systems and procedures Chair: Dariusz Banaś | | | |
| 16:00 - 16:30 | O-23 | D. Eichert | 18115-4: A NEW ISO PROPOSAL FOR A STANDARD FOCUSED ON TXRF TERMINOLOGY |

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| 16:30 - 17:00 | O-24 | M. Krämer | X-RAY OPTICS IN TXRF AND GIXRF PRIMARY RADIATION: HOW TO GET YOUR MOST EXCITING BEAM |
| 17:00 - 17:30 | O-25 | F. Sand | FILM-LIKE RESIDUE PREPARATION BY PICOLITER PRINTING |
| 17:30 - 19:30 | Break | | |
| 20:00 - 22:30 | Conference Dinner | | |

| Friday, September 12 | | | |
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| Session: TXRF applications Chair: János Osán | | | |
| 09:00 - 09:35 | O-26 | F. Mähler | X-RAY EMISSION SPECTROSCOPY - AN SUPPORTING TOOL FOR TXRF MEASUREMENTS? |
| 09:35 - 10:10 | O-27 | U. Yanagisawa | EVAPORATIVE CONCENTRATION OF SOLUTION ONTO A HYDROPHILIC SPOT PRESERVED ON A FLUORINE-COATED GLASS SLIDE FOR HIGH-SENSITIVITY TXRF ANALYSIS |
| 10:10 - 10:45 | O-28 | H. Yoshii | DETECTION OF U AND PU IN THE PRESENCE OF SR BY HYBRID MEASUREMENT OF TXRF AND SPONTANEOUSLY EMITTED CHARACTERISTIC X-RAYS |
| 10:45 - 11:15 | Coffee break | | |
| Session: TXRF applications Chair: János Osán | | | |
| 11:15 - 11:45 | O-29 | A. Shaltout | VALORIZATION THE IMPORTANCE OF THE RECYCLING OF DIFFERENT TYPES OF STEEL SLAGS BASED ON X-RAY SPECTROMETRY'S |
| 11:45 - 12:15 | O-30 | A. Usman | CORRELATIVE SPECTROSCOPY AND QUANTIFICATION OF NMC ALLOYS USING XRF, SEM AND NANO GPS TECHNIQUE |

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| 12:15 - 12:45 | O-31 | R. Stachura | ANALYSIS OF ELEMENTAL COMPOSITION OF WOMEN'S AND MEN'S NAILS USING TOTAL REFLECTION X-RAY FLUORESCENCE (TXRF) METHOD |
| 12:45 - 13:00 | TXRF 2025 CLOSING REMARKS | | |
| 13:00 - 14:15 | Lunch | | |

POSTERS

| LIST OF POSTERS | | |
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| PS1 | P. Roth | DETERMINATION OF MANGANESE OXIDATION STATE IN AN ARTIFICIAL SLAG USING XANES SPECTROSCOPY |
| PS2 | E. Marguí | TXRF AS AN ANALYTICAL TOOL TO EXPLORE THE POTENTIAL OF SEWAGE SLUDGE ASHES FOR METAL REMOVAL IN WATERS |
| PS3 | E. Marguí | STUDY OF ZINC ADSORPTION IN REAL-TO-LIFE MICROPLASTICS BY MEANS OF TXRF ANALYSIS |
| PS4 | J. Jablan | OPTIMIZING ELEMENTAL ANALYSIS OF <i>PIPER NIGRUM</i> BY TXRF |
| PS5 | E. Kumar Santhosh | TEMPERATURE AND IKRUM DEPENDENCE IN TIMEPIX 3 USING KATHERINE READOUT & EVALUATION ON EFFICIENCY OF THE LINEAR COMPENSATION METHOD |
| PS6 | K. Gatożyńska | MECHANISM UNDERLYING TRANSPORT OF AN ANTICANCER COPPER(II) COMPLEX INTO A549 LUNG CANCER CELLS AND ACROSS CELL MONOLAYERS |
| PS7 | P. Moskwa | DETECTION OF SMALL AMOUNTS OF METAL IONS USING FLUORESCENT SENSORS AND THE TXRF METHOD |
| PS8 | N. Almulhem | A HIGHLY EFFICIENT DOWNCONVERTER FROM Er ³⁺ , Yb ³⁺ , AND Ce ³⁺ DOPED PHOSPHATE GLASS FOR NIR LASERS |
| PS9 | Md. Akhlak Alam | DEVELOPMENT OF AN XRF MEASUREMENT CELL FOR ELEMENTAL QUANTIFICATION AND MAPPING OF NEXT-GENERATION BATTERY MATERIALS |

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| PS10 | I. Queralt | DETERMINATION OF POTENTIALLY TOXIC ELEMENT CONTENT IN WILD MUSHROOMS AND ITS POTENTIAL BIOACCESSIBILITY THROUGH TOTAL REFLECTION X-RAY FLUORESCENCE |
| PS11 | M. Wada | EVALUATION OF THIOL SELF-ASSEMBLED MONOLAYER ON GOLD NANOPARTICLES USING TOTAL REFLECTION X-RAY FLUORESCENCE ANALYSIS |
| PS12 | P. Wobrauschek | CHARACTERIZATION OF THE ATI TXRF SPECTROMETER FOR THE DETECTION OF LOW Z ELEMENTS |
| PS13 | K. Lakomy | THE ANALYSIS OF SPIONs METABOLISM AND TOXICITY BASED ON THE ELEMENTAL COMPOSITION OF BLOOD SERUM DETERMINED WITH THE TXRF METHOD |
| PS14 | A. Tupys | PRODUCTION OF A MULTIFUNCTIONAL PLANT CRM WITH CERTIFIED CONTENT OF SELECTED ELEMENTS FOR USE IN SPECTRAL ANALYSIS |
| PS15 | P. Jagodziński | DEVELOPMENT OF A SOFTWARE FOR SIMULATIONS OF X-RAY REFLECTIVITY CURVES |
| PS16 | M. Krämer | AN INTERLABORATORY COMPARISON FOR XRF UNDER GRAZING INCIDENCE CONDITIONS (TXRF, GIXRF AND ANGLE-RESOLVED XRF) |
| PS17 | K. Tsuji | TOTAL REFLECTION X-RAY FLUORESCENCE ANALYSIS OF BIOLOGICAL SAMPLES SLICED USING MICROTOME |
| PS18 | J. Osán | TXRF ANALYSIS OF AIRBORNE PARTICULATE MATTER ORIGINATING FROM RESUSPENSION AND COMBUSTION |
| PS19 | T. Matsuyama | APPLICATION OF BAYESIAN ESTIMATION FOR TXRF ANALYSIS |
| PS20 | N. Wojtaś | POSSIBILITIES OF APPLICATION OF TXRF IN THE DIAGNOSIS OF THE ELEMENTAL COMPOSITION OF HUMAN BIOLOGICAL MATERIAL |
| PS21 | V. Grebnevs | UNLOCKING PRECISION IN HYDROXYAPATITE ANALYSIS WITH TXRF: ADDRESSING CHALLENGES IN Ca/P QUANTIFICATION |
| PS22 | S. Akbar | TXRF-BASED TRACE ANALYSIS IN DOPED CARBON QUANTUM DOTS |
| PS23 | F. Bilo | FROM AIR TO ELEMENT: EXPLORING TXRF CHARACTERIZATION OF PARTICULATE MATTER COLLECTED VIA LIQUID-PHASE BIOSAMPLING |