

# 15th International Conference on Particle Induced X-ray Emission (PIXE2017) program

*Radisson Blu Resort, Split*

Sunday, April 2, 2017	
19:00 – 21:00	<b>PIXE2017 Welcome reception</b>
Monday, April 3, 2017	
8:00 – 9:00	Registration
9:00 – 9:20	<b>Opening remarks and welcome address by:</b> Stjepko Fazinić – PIXE2017 chair Tome Antičić – RBI Director General Miguel A. Reis – chair of the PIXE International Advisory Committee
	<b>Session 1</b> <b>Chair: Miguel A. Reis</b>
9:20 – 9:50	I-1 John L. Campbell <i>Martian Chronicles</i>
9:50 – 10:10	O-1 Wojciech Przybyłowicz <i>Elemental mapping using XFM with the Maia detector array and the nuclear microprobe with a single-detector: exploiting their individual merits</i>
10:10 – 10:30	O-2 Andreas G. Karydas <i>A review of potentialities and perspectives of proton induced quasi-monochromatic X-rays in fundamental studies and analytical applications</i>
10:30 – 11:00	Coffee/Tea break
	<b>Session 2</b> <b>Chair: Keizo Ishii</b>
11:00 – 11:30	I-2 Marek Pajek <i>Emission of M-x-rays induced by light and heavy ions</i>
11:30 – 11:50	O-3 David D. Cohen <i>Comparison of proton and carbon PIXE at the same ion velocity</i>
11:50 – 12:10	O-4 Liangdeng Yu <i>Investigation on MeV C-ion PIXE cross sections</i>
12:10 – 12:30	O-5 Johnny Dias <i>Projectile and target X-rays induced by heavy ions</i>
12:30 – 14:00	Lunch
	<b>Posters mounting</b>
	<b>Session 3</b> <b>Chair: Žiga Šmit</b>
14:00 – 14:30	I-3 Javier Miranda <i>Anisotropy and alignment in L-shell X-ray emission induced by ion impact</i>

14:30 – 14:50	O-6 Keizo Ishii <i>Theoretical detection limit of PIXE analysis using 20 MeV proton beams</i>
14:50 – 15:10	O-7 Mostafa Hazim <i>High energy PIXE: new K-shell ionization cross sections and comparison with theoretical values calculated using ECPSSR</i>
15:10 – 15:30	O-8 Alexandre Subercaze <i>High Energy PIXE: a powerful tool to characterize multi-layers thick samples</i>
15:30 – 16:00	Coffee/Tea break
	<b>Session 4</b> <b>Chair: Geoffrey W. Grime</b>
16:00 – 16:20	O-9 Paula Cristina Chaves <i>Study of geological samples from Azores ocean floor by High Resolution and High Energy PIXE</i>
16:20 – 16:40	O-10 Erin L. Flannigan <i>Mineral phase effects in PIXE analysis of igneous rocks</i>
16:45 – 18:00	<b>Round table: Detectors</b> Discussion moderator: Geoffrey W. Grime

<b>Tuesday, April 4, 2017</b>	
	<b>Session 5</b> <b>Chair: Milko Jakšić</b>
9:00 – 9:30	I-4 Francesco Paolo Romano <i>Full field PIXE by using an X-ray camera with high-energy and high-spatial resolution</i>
9:30 – 9:50	O-11 Josef Buchriegler <i>Full-field PIXE imaging: Multi-frame super-resolution to overcome optics pattern and imaging-based resolution limitations</i>
9:50 – 10:10	O-12 Thomas Calligaro <i>Development of a 3D positioner for the PIXE mapping of non-flat objects</i>
10:10 – 10:30	O-13 Laurent Pichon <i>Surface microtopography by stereo-PIXE for enhanced map processing</i>
10:30 – 11:00	Coffee/Tea break
	<b>Session 6</b> <b>Chair: Johnny Dias</b>
11:00 – 11:30	I-5 Matjaž Kavčič <i>Chemical speciation using WDS in the tender x-ray range</i>
11:30 – 11:50	O-14 Iva Božičević Mihalić <i>High resolution K X-ray spectra of selected silicates induced by MeV proton and carbon micro-beams</i>
11:50 – 12:10	O-15 Wataru Kada <i>Continuous IBIL analysis and imaging for visualization of chemical composition and modification occurred in microscopic scale targets</i>
12:10 – 12:30	<b>Group photo</b>
12:30 – 14:00	Lunch

	<b>Session 7</b> <b>Chair: Ivo Orlić</b>
14:00 – 14:30	I-6 Alfonso Mantero <i>PIXE simulation with Geant4</i>
14:30 – 14:50	O-16 John L. Campbell <i>Analysis of surface layers on Martian rocks with the APX-Yield code</i>
14:50 – 15:10	O-17 Miguel A. Reis <i>Simulation and fit of Ta L and M shells PIXE spectra obtained at the C2TN HRHE-PIXE facility using proton and oxygen ion beams</i>
15:10 – 15:30	O-18 Silvina Limandri <i>Standardless method for PIXE analysis</i>
15:30 – 17:00	<b>Posters, Coffee/Tea</b>
17:00 – 18:15	<b>Round table: Software</b> Discussion moderator: Ivo Orlić
18:15 – 19:15	<b>IHC-IAC Meeting</b>

<b>Wednesday, April 5, 2017</b>	
9:45 – 19:30	<b>Conference outing</b>

<b>Thursday, April 6, 2017</b>	
	<b>Session 8:</b> <b>Chair: Thomas Calligaro</b>
9:00 – 9:30	I-7 Zita Szikszai <i>Safe boundaries for analysis of heritage materials</i>
9:30 – 9:50	O-19 Žiga Šmit <i>Prehistoric glass beads from Slovenia</i>
9:50 – 10:10	O-20 Zoltán Szőkefalvi-Nagy <i>PIXE and PGAA - complementary methods for studies on ancient glass artefacts (from Byzantine, late medieval to modern Murano glass)</i>
10:10 – 10:30	O-21 Domagoj Mudronja <i>Comparative analysis of textile metal threads from liturgical vestments and folk costumes in Croatia</i>
10:30 – 11:00	Coffee/Tea break
	<b>Session 9</b> <b>Chair: Andrea Denker</b>
11:00 – 11:20	O-22 Mohamad Roumie <i>PIXE contribution for a database of Phoenician Pottery</i>
11:20 – 11:40	O-23 Žiga Šmit <i>Analysis of Greek small coinage from the classic period</i>

11:40 – 12:00	O-24 Hanan M. Sa'adeh <i>PIXE-RBS beamline in the University of Jordan Van de Graaff Accelerator (JUUVAC): Development and Applications</i>
12:00 – 12:20	O-25 Shivcharan Verma <i>Standardisation of the ion beam facility at Chandigarh cyclotron for simultaneous PIXE and PESA analysis</i>
12:20 – 14:20	Lunch
	<b>IAC Meeting during Lunch</b>
	<b>Session 10</b> <b>Chair: Wojciech Przybyłowicz</b>
14:20 – 14:50	I-8 Melanie J. Bailey <i>DAPNe-IBA: A new tool for the IBA community?</i>
14:50 – 15:10	O-26 Karen J. Cloete <i>In-air PIXE and MeV SIMS as analytical techniques for detecting xenobiotics and pharmaceutical compounds in human scalp hair</i>
15:10 – 15:30	O-27 Dragos A. Mirea <i>Particle Induced X-Ray Emission and Raman Spectroscopy in the study of patrimony art forgery</i>
15:30 – 15:50	O-28 Carla dos Santos <i>Elemental signature of Brazilian foodstuff by PIXE</i>
15:50 – 16:20	Coffee/Tea break
	<b>Session 11</b> <b>Chair: Zoltán Szókefalvi-Nagy</b>
16:20 – 16:50	I-9 Kenichiro Mizohata <i>Heavy ion induced X-ray production cross sections and simultaneous heavy ion PIXE analysis with other IBA methods</i>
16:50 – 17:10	O-29 Mandla Msimanga <i>X-ray production cross-sections in metallic films due to C, O and Si ion beams at MeV SIMS energies</i>
17:10 – 17:30	O-30 Tonči Tadić <i>Ion microbeam NRA and PIXE analyses of individual dust particles from JET tokamak</i>
17:30 – 17:50	O-31 Vincent Métivier <i>The Cyclotron Arronax for fundamental and applied research with light ion beams &lt;70 MeV</i>
19:30 –	<b>Conference banquet – Restaurant Kadena, Split</b>

Friday, April 7, 2017	
	<b>Session 12</b> <b>Chair: David D. Cohen</b>
9:00 – 9:30	I-10 Franco Lucarelli <i>The application of PIXE and complementary nuclear techniques to aerosol studies: the LABEC experience</i>
9:30 – 9:50	O-32 Willy Maenhaut <i>Source apportionment revisited for long-term measurements of fine aerosol trace elements at two locations in southern Norway</i>
9:50 – 10:10	O-33 Zsófia Kertész <i>Composition and sources of particulate matter pollution in five Hungarian cities in 2015</i>
10:10 – 10:30	O-34 Mohamad Roumie <i>Characterization of fine and coarse atmospheric particulate matter from Beirut suburb using PIXE technique</i>
10:30 – 11:00	Coffee/Tea break
	<b>Session 13</b> <b>Chair: Willy Maenhaut</b>
11:00 – 11:20	O-35 Marija Čargonja <i>Atmospheric impact of ship emission on fine particulate matter in the Port of Rijeka</i>
11:20 – 11:40	O-36 Alessandra Gianoncelli <i>Elemental distribution in feathers of the Common Swift (<i>Apus apus</i>), a PIXE, hard x-ray and soft x-ray fluorescence study</i>
11:40 – 12:00	<b>Conference overview – Closing remarks (by Miguel A. Reis)</b>