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

Radisson Blu Resort, Split

Sunday, April 2, 2017	
19:00 – 21:00	PIXE2017 Welcome reception

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

14:30 – 14:50	O-6 Keizo Ishii
14:30 – 14:50	Theoretical detection limit of PIXE analysis using 20 MeV proton beams
	O-7 Mostafa Hazim
14:50 – 15:10	High energy PIXE: new K-shell ionization cross sections and comparison with
	theoretical values calculated using ECPSSR
15:10 – 15:30	O-8 Alexandre Subercaze
13.10 - 13.30	High Energy PIXE: a powerful tool to characterize multi-layers thick samples
15:30 – 16:00	Coffee/Tea break
	Session 4
	Chair: Geoffrey W. Grime
	O-9 Paula Cristina Chaves
16:00 – 16:20	Study of geological samples from Azores ocean floor by High Resolution and
	High Energy PIXE
16:20 – 16:40	O-10 Erin L. Flannigan
10.20 - 10.40	Mineral phase effects in PIXE analysis of igneous rocks
16:45 – 18:00	Round table: Detectors
10.45 - 18.00	Discussion moderator: Geoffrey W. Grime

Tuesday, April 4, 2017	
	Session 5
	Chair: Milko Jakšić
	I-4 Francesco Paolo Romano
9:00 - 9:30	Full field PIXE by using an X-ray camera with high-energy and high-spatial
	resolution
	O-11 Josef Buchriegler
9:30 – 9:50	Full-field PIXE imaging: Multi-frame super-resolution to overcome optics
	pattern and imaging-based resolution limitations
9:50 – 10:10	O-12 Thomas Calligaro
9.30 - 10.10	Development of a 3D positioner for the PIXE mapping of non-flat objects
10:10 - 10:30	O-13 Laurent Pichon
10.10 - 10.30	Surface microtopography by stereo-PIXE for enhanced map processing
10:30 - 11:00	Coffee/Tea break
	Session 6
	Chair: Johnny Dias
11:00 – 11:30	I-5 Matjaž Kavčič
11.00 – 11.30	Chemical speciation using WDS in the tender x-ray range
	O-14 Iva Božičević Mihalić
11:30 – 11:50	High resolution K X-ray spectra of selected silicates induced by MeV proton
	and carbon micro-beams
	O-15 Wataru Kada
11:50 – 12:10	Continuous IBIL analysis and imaging for visualization of chemical
	composition and modification occurred in microscopic scale targets
12:10 - 12:30	Group photo
12:30 - 14:00	Lunch

	Session 7
	Chair: Ivo Orlić
14:00 – 14:30	I-6 Alfonso Mantero
14.00 – 14.50	PIXE simulation with Geant4
14.20 14.50	O-16 John L. Campbell
14:30 – 14:50	Analysis of surface layers on Martian rocks with the APX-Yield code
	O-17 Miguel A. Reis
14:50 - 15:10	Simulation and fit of Ta L and M shells PIXE spectra obtained at the C2TN
	HRHE-PIXE facility using proton and oxygen ion beams
15.10 15.20	O-18 Silvina Limandri
15:10 – 15:30	Standardless method for PIXE analysis
15:30 – 17:00	Posters, Coffee/Tea
17.00 10.15	Round table: Software
17:00 – 18:15	Discussion moderator: Ivo Orlić
18:15 – 19:15	IHC-IAC Meeting

Wednesday, April 5, 2017	
9:45 – 19:30	Conference outing

Thursday, April 6, 2017	
Session 8:	
	Chair: Thomas Calligaro
9:00 – 9:30	I-7 Zita Szikszai
9.00 – 9.30	Safe boundaries for analysis of heritage materials
9:30 – 9:50	O-19 Žiga Šmit
9.30 - 9.30	Prehistoric glass beads from Slovenia
	O-20 Zoltán Szőkefalvi-Nagy
9:50 - 10:10	PIXE and PGAA - complementary methods for studies on ancient glass
	artefacts (from Byzantine, late medieval to modern Murano glass)
	O-21 Domagoj Mudronja
10:10 - 10:30	Comparative analysis of textile metal threads from liturgical vestments and
	folk costumes in Croatia
10:30 - 11:00	Coffee/Tea break
	Session 9
	Chair: Andrea Denker
11:00 – 11:20	O-22 Mohamad Roumie
11.00 - 11.20	PIXE contribution for a database of Phoenician Pottery
11:20 – 11:40	O-23 Žiga Šmit
11.20 - 11.40	Analysis of Greek small coinage from the classic period

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

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