

Conference Programme (only presenters are listed)

Sunday 04/06/2017

18:00 - 19:00 Registration

19:00 Welcome Reception at the Belgium house



Monday 05/06/2017

09:00 - 09:15 Opening Ceremony (M. Ristić, I. Nowik, I. Felner)

Prof. Jay Fineberg, Dean of the Faculty

09:15 - 10:30 Session 1 (Chairperson: I. Nowik)

09:15 - 10:00 I.S. Lyubutin: *Erika Bauminger's magnetism supertransferred to superconductivity and biomedicine of nowadays*

10:00 - 10:30 G. Wortmann: *Mössbauer studies of Fe-based superconductors*

10:30 Group Photography

10:40 - 11:00 Coffee Break

11:00 - 13:00 Session 2 (Chairperson: I.S. Lyubutin)

11:00 - 11:30 M.I. Oshtrakh: *Biomedical applications of Mössbauer spectroscopy: The past, the present and future trends*

11:30 - 12:00 A.A. Kamnev: *Microbiological applications of the ^{57}Co emission and ^{57}Fe transmission variants of Mössbauer spectroscopy and their 'crossroad'*

12:00 - 12:30 A. Friedman: *Mössbauer spectroscopy and the understanding of the role of iron in neurodegeneration*

12:30 - 13:00 S.S. Stavrov: *Infrared and Mössbauer spectroscopies as complimentary tools to study protein electric field*

13:00 - 15:00 Lunch Time

15:00 - 16:30 Session 3 (Chairperson: A.A. Kamnev)

15:00 - 15:30 P.-E. Lippens: *Sn or Si in high capacity anode materials for Li-ion batteries?*

15:30 - 16:00 G. Dénès: *Application of Mössbauer spectroscopy for the study of tin(II) fluorides and chloride fluorides*

16:00 - 16:30 A. Lancok: *Mössbauer spectroscopy characterization of $[\text{Fe}(\eta^6\text{-C}_6\text{H}_6\text{-}n\text{Me}_n)_2]^{2+}$ dications*

16:30 - 17:00 Coffee Break

17:00 - 18:15 Session 4 (Chairperson: A. Lancok)

17:00 - 17:30 J. Wang: *Defects enhanced photocatalytic performance and magnetism on $\text{MO}_x(\text{N})\text{-TiO}_2$ nanocrystals*

17:30 - 18:00 D. Hanžel: *Application of Mössbauer spectroscopy in industrial heterogeneous catalysis*

18:00 - 18:15 S. Krehula: *Microstructural properties and OER activity of hydrothermally prepared Ni-Fe (oxy)hydroxides*

19:30 Conference Dinner at the Belgium House



Tuesday 06/06/2017

09:00 - 10:30 Session 5 (Chairperson: D.L. Nagy)

09:00 - 09:45 R. Röhlberger: *High-purity nuclear resonant polarimetry: applications and perspectives*

09:45 - 10:15 Y. Friedman: *Testing time dilation due to acceleration of a rotating Mössbauer absorber using synchrotron radiation*

10:15 - 10:30 R.H. Herber: *Metal atom dynamics in host-guest inclusion compounds*

10:30 - 11:00 **Coffee Break** 

11:00 - 13:00 Session 6 (Chairperson: R. Röhlberger)

11:00 - 11:30 J.-M. Greneche: *Mesoporous structures and Metal Oxide Frameworks (MOFs) investigated by Mössbauer spectrometry*

11:30 - 12:00 V. Kuncser: *Tuning magnetism and magneto-transport by cluster organization in Fe based nano-globular thin films*

12:00 - 12:30 J.F. Marco: *Mössbauer and EXAFS studies of bulk and thin film CoFe_2O_4 : cation distribution at room and low temperatures*

12:30 - 14:00 **Lunch Time** 

14:00 **Guided tour of the old city of Jerusalem**

Wednesday 07/06/2017

09:00 - 11:00 Session 7 (Chairperson: P. Gütlich)

09:00 - 09:30 D.L. Nagy: *Optimizing Fe^{2+} molecular switches by Mössbauer spectroscopy*

09:30 - 10:00 Y. Garcia: *Spin crossover in hybrid nanomaterials*

10:00 - 10:30 T. Kitazawa: *Mössbauer spectroscopic characterization of spin crossover 2D Hofmann-like coordination polymer materials*

10:30 - 11:00 F. Renz: *Spin state switching effects observed by Mössbauer spectroscopy*

11:00 - 11:30 K. Lázár: *Vaporization of steel by electric wire explosion in water: phase transitions and oxidation*

11:30 - 12:00 **Coffee Break** 

12:00 - 13:00 Session 8 (Levin Building, Chairperson: M. Khodas)

12:00 - 13:00 P. Gütlich: *Fundamental studies of spin crossover phenomena in iron(II) compounds*


13:15 - 15:00 **Lunch Time** 

15:00 - 16:30 Session 9 (Chairperson: M. Reissner)

15:00 - 15:30 E. Kuzmann: *Mössbauer and XRD investigations of electrodeposited novel binary, ternary and quaternary alloy coatings*

15:30 - 16:00 S.M. Dubiel: *Mössbauer spectroscopic characterization of magnetic, electronic and dynamic properties of selected Frank-Kasper phases*

16:00 - 16:30 B.F.O. Costa: *B2 ordering of mechanothesized bcc $(\text{FeCo})_{100-x}\text{Sn}_x$ alloys by annealing at moderate temperatures*

16:30 - 17:00 **Coffee Break** 

17:00 - 18:15 Session 10 (Chairperson: M.I. Oshtrakh)

17:00 - 17:30 G. Klingelhofer: *In-Situ Mössbauer and PIXE analysis of planetary surface, comets, and asteroids*

17:30 - 18:00 J. Galazka-Friedman: *Mössbauer spectroscopy - a useful method for classification of meteorites*

18:00 - 18:15 Chr. Bender Koch: *Metallic condensates from an iron meteorite impact*

18:15 Closing Ceremony (M. Ristić, I. Nowik, I. Felner)

POSTER PRESENTATIONS (Posters will be on display all the time during the conference)

P1 G. Dénès: *Application of Mössbauer spectroscopy for the study of the oxidation of tin(II) fluoride and chloride fluoride solid solutions at ambient temperature*

P2 P. Duda: *Mössbauer parameters of troilite present in ordinary chondrites type H, L and LL*

P3 V. Filippov: *Mössbauer investigation of FeCl₃ sediment after model water treatment by different aluminosilicate reagents*

P4 V. Filippov: *Iron state in nanoparticles in zirconium alloys with small and large iron contents*

P5 V.K. Garg: *Temperature effect on cationic migration in CoFe₂O₄@ZnO composites*

P6 A. Lancok: *Mössbauer spectroscopy characterization of Fe/Au multilayers structures fabricated by pulsed laser deposition*

P7 S. Musić: ⁵⁷Mössbauer spectroscopy in the study of selected iron ores

P8 S. Raut: *High spin to low spin transition in thermal plasma synthesized Fe-Ni alloy nanoparticles probed by Mössbauer spectroscopy*

P9 M. Reissner: *Magnetic properties and thermal stability of 1D Fe(IO₃)₃ particles*

P10 M.T. Sougrati: *Mössbauer investigation of iron phospho-silicide as negative electrode for Li-ion batteries*

P11 Y. Yamada: *Thermal reaction of sonochemically prepared amorphous Fe/C*