

1st BioTiNet Workshop: Advanced Methods for Materials Characterization

23-27 October 2011, Ljubljana-Slovenia, Hotel Slon

Final Programme:

Sunday, 23 October 2011

17:00-19:00	Registration
19:00-21:00	Welcome reception

Monday, 24 October 2011

9.00- 9.10	Welcome address	Prof. S. Kobe, JSI (Slovenia)
9.10-9.30	Opening	Prof. J. Eckert, IFW (Germany), Project Coordinator
9.30-10.00	<i>Chairperson: Prof. M. Calin</i>	
	Standardization, a tool to help bringing innovative technology from the laboratory to the market	Dr. Guido De Jongh, European Committee for Standardization (Belgium)
10.00-10.30	Coffee break	
10.30-10.40	<i>Chairperson: Prof. J.M. Dubois</i>	
	Recruitment of BioTiNet ESR fellows - Presentations of young researchers	Prof. M. Calin, IFW (Germany)
10.40-12.30	ESR presentations* (Matthias Bönisch/IFW, Jose Julio Gutierrez Moreno/UOI, Yaofeng Guo/INPG, Anna Paulina Hynowska/UAB, Mathew Speirs/KUL, Martina Lorenzetti/IJS)	BioTiNet fellows
12.30-14.00	Lunch	
	<i>Chairperson: Prof. J. Eckert</i>	
14.00-15.30	ESR presentations* (Ajit Panigrahi/UniVie, Nataliia Stepina/UOXF.DJ, Somayeh Abdi/IFW, Mehdi Golozar/UCAM, Ganna Yablokova/KUL, ESR_8/WUT)	BioTiNet fellows
15.30-16.00	Coffee break	
16.00-17.00	<i>Chairperson: Dr. K. Georgarakis</i>	
	Tutorials:	
16.00-16.30	Mechanical properties of Ti-based glassy and nanocomposite alloys	Dr. J. Sort, UAB (Spain)
16.30-17.00	Shear bond strength testing in dentistry	Dr. P. Jevnikar, UKC (Slovenia)
17.00-18.30	Networking: discussion on research activities <i>Moderators: Dr. A. Gebert, Dr. J. Schrooten</i>	
19.30	Dinner	

Tuesday, 25 October 2011

9.00-10.30	<i>Chairperson: Prof. S. Novak</i>	
	Tutorials:	
9.00-9.30	Magnetic properties of “non-magnetic” materials	Prof. P.J.McGuinness,JSI (Slovenia)
9.30-10.00	Roughness and its effects in tribology	Prof. M. Kalin /J. Kogovšek Uni Lj.-Mech.Eng (Slovenia)
10.00-10.30	Analytical approaches for the determination of trace amounts of metal ions released from Ti based alloys	Prof. R. Milačič, A. Martinčič, J. Ščančar, JSI (Slovenia)
10.30-11.00	Coffee break	
11.00-12.30	<i>Chairperson: Dr. A. Gebert</i>	
	Tutorials:	
11.00-11.30	Electrochemical methods for corrosion behaviour characterization	Dr. P. Schmutz, EMPA (Switzerland)
11.30-12.00	Role of surface defect density on corrosion resistance of coatings (or coatings - scratch test)	Dr. D. Kek Merl/Dr. M. Čekada, JSI (Slovenia)
12.00-12.30	Structural characterisation of materials using synchrotron radiation	Dr. M. Stoica, IFW, (Germany)
12.30-14.00	Lunch	
14.00-15.30	<i>Chairperson: Prof. M.D. Baro</i>	
	Tutorials:	
14.00-14.30	Characterization of Ti-based surfaces with X-ray photoelectron spectroscopy	Prof. J. Kovač, JSI (Slovenia)
14.30-15.00	Microscopy: from optical to TEM	Prof. G. Dražič, JSI (Slovenia)
15.00-15.30	Advanced methods for materials characterisation using TEM	Prof. T. Waitz, UniVie (Austria)
15.30-16.00	Coffee break	
16.00-17.00	<i>Chairperson: Prof. N. Grobert</i>	
	Tutorials:	
16.00-16.30	Scanning electron microscopy, SEM, EDS, WDS, EBSD of inorganic materials	Dr. Z. Samardžija, JSI (Slovenia)
16.30-17.00	Characterization of porous Ti-structures	Dr. J. Luyten, KUL (Belgium)
17.00-18.30	Networking: discussion on research activities <i>Moderators: Prof. M. Zehetbauer, Prof. M. Calin</i>	
19.00	Dinner	

Wednesday, 26 October 2011

9.00-10.30	<i>Chairperson: Dr. R. Brooks</i>	
	Tutorials:	
9.00-9.30	Inside to the microstructure of biological sample	Dr. J. Štrus, Uni Lj. (Slovenia)
9.30-10.00	Bone-to-implant contact	Prof. M. Čeh, JSI (Slovenia)
10.00-10.30	Aspects of characterising nanomaterials for their implementation as building blocks in future medical applications	Prof. N. Grobert, UOXF.DJ (UK)
10.30-11.00	Coffee break	
11.00-12.30	<i>Chairperson: Prof. M. Lewandowska</i>	
	Tutorials:	
11.00-11.30	Confocal and advanced super-resolution fluorescence microscopy: studies of brain astrocytes	Prof. R. Zorec, Medical Uni Lj. (Slovenia)

11.30-12.00	Tracking radical generation by titanate nanoparticle through EPR spectroscopy and nanoparticle uptake into the cell by fluorescence microspectroscopy	Dr. J. Štrancar, JSI (Slovenia)
12.00-12.30	Fundamentals and applications of AFM/MFM	Dr. A. Hassanien, NIC (Slovenia)
12.30-14.00	Lunch	
14.00-14.50	Consortium management meeting (training aspects; admin. & financial issues)	Prof. M. Calin/ Dr. V. Efimova, IFW (Germany)
14.50-16.20	<i>Chairperson: Dr. M. Stoica</i>	
	Tutorials:	
14.50-15.20	Differential scanning calorimetry as a tool for analysis of defects in materials	Dr. D. Setman, UniVie (Austria)
15.20-15.50	XRD of thin coatings	Prof. A. Meden, Uni Lj. (Slovenia)
15.50-16.20	Quantitative analysis of size, shape, spatial distribution	Prof. M. Lewandowska, WUT (Poland)
16.20	Labtour- "Jozef Stefan" Institute -IJS	
17.30-19.00	Old city walk	
19.00	Workshop dinner at the Ljubljana Castle	

Thursday, 27 October 2011

9.00-10.30	<i>Chairperson: Prof. S. Novak</i>	
	Tutorials:	
9.00-9.30	Different methods and approaches for in vitro assessment of cytotoxicity	Dr. N. Kregar Velikonja, Educell d.o.o. (Slovenia)
9.30-10.00	Genotoxic hazard of nanomaterials: many questions and some answers	Dr. J. Petkovič, National Institute of Biology (Slovenia)
10.00-10.30	Immunological response to metallic implants	Dr. P. Korošec MD, Hospital KOPA (Slovenia)
10.30-11.00	Coffee break	
11.00-12.00	<i>Chairperson: Dr. Ch. Lekka</i>	
	Tutorials:	
11.00-11.30	Osteointegration and adverse tissue reactions in clinical use of implants	K. Ravnihar, MD, General Hospital, Jesenice (Slovenia)
11.30-12.00	Meta-analysis opportunities: optimizing titanium implant	Prof. M. Gasik, Aalto University (Finland)
12.00-12.30	Summary	Dr. J. Schrooten, KUL (Belgium)
	Concluding remarks	Prof. S. Kobe, JSI (Slovenia)
12.30	Lunch	

* Case studies /ESR fellows: 10 minutes + 5 min discussion