



Provisional Programm



2010 ANNUAL ELyT WORKSHOP

Sunday 14 March 2010

17:00	Welcome General presentation of the Workshop
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Bio-science and Engineering.
Chairmen:

17:30	Bio Tribology of Catheters, BioCath Vincent Fridrici, vincent.fridrici@ec-lyon.fr , Makoto Ohta, ohta@biofluid.ifs.tohoku.ac.jp
18:00	Project BioCellFric : Understanding the Relation between Cell Friction, Adhesion and Motion: Modeling and Experiments Using Dictyostelium. Laurent Gole, Charlotte Rivière et Jean-Paul Rieu (LPMCN, Université Claude Bernard Lyon 1), Yoshinori Hayakawa (Physics Department, Tohoku University) Yoshinori Hayakawa, hida@cmpt.phys.tohoku.ac.jp , jean-paul.rieu@univ-lyon1.fr
18:30	Lipid biology and its application. LipidScience Michel Lagarde, michel.lagarde@insa-lyon.fr , Noriko Osumi, osumi@mail.tains.tohoku.ac.jp

19:30 Diner



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Monday 15 March 2010

Durability Reliability in Energy and Transportation.

Chairmen:

8:30	Non Destructive Evaluation & Mitigation, NDE & Mitigation Joël Courbon, joel.courbon@insa-lyon.fr , Tetsuya Uchimoto, uchimoto@ifs.tohoku.ac.jp
9:00	Self-powered and Wireless Smart Systems and its Applications to Vibration Control/Energy Harvesting and Structural Health Monitoring, SPWSS D. Guyomar, daniel.guyomar@insa-lyon.fr , H. Fukunaga, fukunaga@ssl.mech.tohoku.ac.jp
9:30	Understanding and Managing SCC, UMaSCC B. Normand, bernard.normand@insa-lyon.fr , Y. Watanabe yutaka.watanabe@qse.tohoku.ac.jp

10:00 Coffee break

10:30	Aging and damage of Polymers for coating and insulation under irradiations (Nuclear Power Plants applications), PolymIrrad L. Chazeau, C. Gauthier, catherine.gauthier@insa-lyon.fr , Momoji Kubo, momoji@aki.che.tohoku.ac.jp
11:00	Metallic Coating processed by Cold Spray, Cold spray A. Combescure, alain.combescure@insa-lyon.fr , K Ogawa, kogawa@rift.mech.tohoku.ac.jp

Flow Dynamics, Heat Transfers and Microfluidics

Chairmen:

11:30	"Transition and control in three-dimensional boundary layers". B Pier Heat and Mass Transfer Properties of Biological Surface Morphologies, BioHeatMassTransf , Benoit Pier, benoit.pier@ec-lyon.fr , Atsushi Shirai, shirai@ifs.tohoku.ac.jp
12:00	Radiative properties of complex materials for design and control of engineering systems, RadiativMat , R. Vaillon, rodolphe.vaillon@insa-lyon.fr , Shigenao Maruyama, maruyama@ifs.tohoku.ac.jp

12:45 Lunch

14:15 15:00	Poster session
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Session: The key role of free radicals in material aging.

Chairmen: Tetsuo. Shoji

15:00	Prof. Takeda and Prof. Shoji (Shoji),
15:30	Prof. Digby MacDonald (B Normand)
16:00	3D fatigue crack propagation understanding through a combined use of 3D X Tomography, eXtended-Finte Element Method and eXtended-Digital image correlation. A Combescure, A Gravouil, J Réthoré Université de Lyon, INSA, LaMCoS UMR CNRS J Y Buffières, N Limodin, Université de Lyon, INSA, MATEIS UMR CNRS S Roux, F Hild, Université Paris sud, ENS Cachan LMT, UMR CNRS
16:30	Marangoni effect in metal-silicate self separation Stéphane Labrosse, Hidenori Terasaki & Ian Mattas)
17:00	' Nanostructured metallic materials for future nuclear plants' Michel Perez, Damien Fabregue, Pierre- Francois Gobin

19:30 Banquet

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Tuesday 16 March 2010

Micro and Nano Scale Materials and Devices.

Chairmen:

8:30	Development of probes and of an Active Nanostructured Calibration Standard for SThM Techniques, SThMstandard Severine Gomes, severine.gomes@insa-lyon.fr , Takahito Ono, tono@cc.mech.tohoku.ac.jp
9:00	NANOstructured Co Alloys for Hip IMPlant: Optimisation of the Microstructure and Damage Mechanisms, NANOCHIMPion D. Fabregue, damien.fabregue@insa-lyon.fr , Akihiko Chiba, a.chiba@imr.tohoku.ac.jp
9:30	Fatigue and Cracking Resistance of Bulk Metallic Glasses, BMG J.-M. Pelletier, jean-marc.pelletier@insa-lyon.fr , Yoshihiko Yokoyama, yy@imr.tohoku.ac.jp
10:00	Great Improvement of the Lateral Resolution of AFM Electrical Measurements Using Specific Tips, TEGAMI G. Bremond, george.bremond@insa-lyon.fr , Kotone Akiyama, akiyama@mems.mech.tohoku.ac.jp

10:30 Coffee break

Micro and Nano Scale Materials and Devices.

Chairmen:

11:00	Silicon and Germanium Based NanoMaterials for Photovoltaic Application, SIMPA Alain Fave, alain.fave@insa-lyon.fr , Noritaka Usami, usa@imr.tohoku.ac.jp
11:30	Nano-intercalated Systems with Accurate Physical Property Control, NANOINTER Alfonso San-Miguel, sanmiguel@univ-lyon1.fr , Katsumi Tanigaki, tanigaki@sspns.phys.tohoku.ac.jp
12:00	Electron microscopy for nanostructures, EMINA Thierry Epicier, thierry.epicier@insa-lyon.fr , Toyohiko Kono, tjkonno@imr.tohoku.ac.jp

12:30 Lunch

14:00	Materials behavior under high pressures, HP-MAT "Material properties at the base of the Earth mantle" Jan Matas, Motohiko Murakami and Eiji Ohtani Jan Matas, jan.matas@ens-lyon.fr , Prof Ohtani, ohtani@mail.tains.tohoku.ac.jp
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14:30 15:30	Poster session / new projects
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Tribology.

Chairmen:

15:30	Bioengineering of Tactile Perception: Haptic Tribometry, Artfinger Hassan Zahounani, hassan.zahouani@ec-lyon.fr , Mami Tanaka, mami@rose.mech.tohoku.ac.jp
16:00	Experimental and Quantum Chemical Molecular Dynamics Approach to Action Mechanisms of Lubricant Additives, TRIBOCHEM Jean Michel Martin, Clotilde Minfray, clotilde.minfray@ec-lyon.fr , Momoji Kubo, momoji@aki.che.tohoku.ac.jp
16:30	Nano-Scale Modeling of Tribological Interfaces, NaSMoTI "Nano-Scale Modeling of Confined Liquid Films and Bridges" Philippe Vergne, philippe.vergne@insa-lyon.fr , Takashi Tokumasu, tokumasu@ifs.tohoku.ac.jp
17:00	Friction and Contact Noise, FrictionNoise Alain Le Bot, alain.le-bot@ec-lyon.fr , Koshi Adachi, koshi@tribo.mech.tohoku.ac.jp
17:30	Tribologically-based Design Strategies for Advanced Carbon Coatings, CarbonCoat Julien Fontaine, julien.fontaine@ec-lyon.fr , Hiroyuki Miki, miki@wert.ifs.tohoku.ac.jp

18:00	Discussion. Next issue.
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19:30 Diner