

Sep. 7 (Mon)		
PARALLEL SESSION A @ 5F-A&B (Mielparque)		
	Chair	Y. Sugahara (Waseda University, Japan)
13:30-14:00	I-Mo-1-01	Non-hydrolytic sol-gel processing of oxides: fundamentals and applications *P. H. Mutin, B. Boury, K. Bouchmella (Institut Charles Gerhardt Montpellier, France)
14:00-14:15	O-Mo-1-01	Going back to basic: sol to gel silica transition in fast evaporating systems observed by time resolved infrared spectroscopy *P. Innocenzi ¹ , L. Malfatti ¹ , D. Carboni ¹ , M. Takahashi ² (¹ University of Sassari, Italy, ² Osaka Prefecture University, Japan)
14:15-14:30	O-Mo-1-02	Cosolvent-free synthesis of monolithic silica glasses and their application to transparent glass-ceramic phosphors *K. Kajihara, S. Yamaguchi, K. Kaneko, K. Kanamura (Tokyo Metropolitan University, Japan)
	Chair	Michel Wong-Chi-Man (ENSCM Montpellier, France)
14:30-14:45	O-Mo-1-03	Stable carboxylic acid-functionalized alkoxy silanes and their sol-gel processing *A. Feinle, F. Leichtfried, S. Flaig, N. Hüsing (Paris Lodron University Salzburg, Austria)
14:45-15:00	O-Mo-1-04	Facile preparation of soluble polymer containing POSS units in main chain *Y. Kaneko ¹ , T. Tokunaga ¹ , S. Koge ² , T. Mizumo ² , J. Ohshita ² (¹ Kagoshima University, Japan, ² Hiroshima University, Japan)
15:00-15:15	O-Mo-1-05	Non-hydrolytic template-assisted sol-gel synthesis of mesoporous silico- and metallophosphates *J. Pinkas ^{1,2} , A. Styskalik ^{1,2} , D. Skoda ^{1,2} , Z. Moravec ¹ , C. E. Barnes ³ (¹ Masaryk University, Czech Republic, ² CEITEC MU, Czech Republic, ³ University of Tennessee, United States)
15:15-15:30	O-Mo-1-06	From sol-gel and colloidal chemistry to functional zinc oxide or silica nanomaterials C. Neaime ² , M. Amela-cortes ² , M. Mortier ³ , P. Gredin ³ , Y. Molard ² , S. Cordier ² , *F. Grasset ^{1,2} , N. Saito ⁴ , H. Haneda ⁴ , N. Ohashi ⁴ (¹ CNRS, Japan, ² University of Rennes 1-CNRS, France, ³ CNRS-Chimie ParisTech, France, ⁴ NIMS, Japan)
15:30-16:00	Coffee Break	
	Chair	Plinio Innocenzi (University of Sassari, Italy)
16:00-16:30	I-Mo-2-01	Solution syntheses of inorganic monolayers with tuned lateral size and surface chemistry *Y. Oaki, H. Imai (Keio University, Japan)
16:30-16:45	O-Mo-2-01	Strict alignment control of mesochannels in mesostructured

		silica films driven by elastic properties of the liquid crystal phase *H. Miyata, M. Takahashi, S. Kitamura (Canon Inc., Japan)
16:45-17:00	O-Mo-2-02	Numerical study on self-assembly of BaTiO₃ nanocrystals in an aqueous solution *K. Yasui, K. Kato (AIST, Japan)
	Chair	Y. Daiko (Nagoya Institute of Technology, Japan)
17:00-17:15	O-Mo-2-03	Metal hydroxide nanoclusters in aqueous media and ordered mesoporous crystalline hydroxides for green chemistry *Y. Tokudome, N. Tarutani, T. Morimoto, M. Takahashi (Osaka Prefecture University, Japan)
17:15-17:30	O-Mo-2-04	Hyperbranched polyethoxysiloxane - a unique silica precursor polymer for the preparation of silica micro- and nano-capsules *X. Zhu ^{1,2} , H. Wang ^{1,2} , Y. Zhao ^{1,2} , M. Möller ^{1,2} (¹ RWTH Aachen University, Germany, ² DWI - Leibniz-Institute for Interactive Materials e.V., Germany)
17:30-17:45	O-Mo-2-05	Micro-patterning and dielectric properties of barium titanate nanocube ordered assembly *K-I. Mimura, K. Kato (AIST, Japan)
17:45-18:00	O-Mo-2-06	Nanostructured silk fibroin films as a platform for biosensors, new optical materials and mirrorless lasers *S. Ribeiro ¹ , E. Pecoraro ¹ , J. Gonçalves ¹ , L. Lima ¹ , M. Moraes ² , M. Cavicchioli ¹ , M. Santos ¹ , R. Silva ¹ (¹ São Paulo State Univ., Brazil, ² Univ Federal de São Paulo, Brazil)
PARALLEL SESSION B @ 6F-C&D (Mielparque)		
	Chair	R. Almeida (Instituto Superior Tecnico / UL, Portugal)
13:30-14:00	I-Mo-10-01	Development of anti-reflective alumina coating films by sol-gel process with hot water treatment *K. Tadanaga (Hokkaido University, Japan)
14:00-14:15	O-Mo-10-01	Photocrosslinking of Metal Oxo-Clusters: a versatile route towards functional metal oxide micro-nanopatterns F. Stehlin, C-C. Yeh, D. Berling, F. Wieder, A. Ponche, A. Spangenberg, *O. Soppera (CNRS, France)
14:15-14:30	O-Mo-10-02	Sol-Gel preparation of Bragg fibers with a silica core and cladding of arsenic sulfide and silica xerogel layers *V. Matejec, J. Pedlikova, I. Barton, J. Mrazek, O. Podrazky (Institute of Photonics and Electronics of the AS CR, v.v.i., Czech)

		Republic)
14:30-14:45	O-Mo-10-03	Composite sol-gel materials with plasmonic nanostructures for optical applications *S. Parola ¹ , F. Lerouge ¹ , D. Chateau ¹ , A. Liotta ¹ , I. Levchuk ^{1,4} , C. Guillard ⁴ , F. Chaput ¹ , D. Krein ² , T. Cooper ² , C. Lopes ³ , M. Lindgren ³ (¹ Ecole Normale Supérieure de Lyon, France, ² Air Force Research Laboratory, United States, ³ Swedish Defence Research Agency, Sweden, ⁴ University Lyon 1, CNRS, France)
	Chair	A. Matsuda (Toyohashi Institute of Technology, Japan)
14:45-15:00	O-Mo-10-04	Fabrication of metallic meso-gratings by using mesoporous silica as a template *S. Murai ^{1,2} , S. Uno ¹ , K. Fujita ¹ , K. Tanaka ¹ (¹ Kyoto University, Japan, ² JST, Japan)
15:00-15:15	O-Mo-10-05	Photo thermal double control liquid crystal light scattering displays with loofah-like 3D gel networks *S. Chen, X. Wang (Zhejiang University of Technology, China)
15:15-15:30	O-Mo-10-06	UV (Ultraviolet) resistant sol-gel derived siloxane hybrid material for UV light emitting diode (LED) encapsulant *J. Bae, Y. Kim, Y. Lim, B-S. Bae (KAIST, South Korea)
15:30-16:00	Coffee Break	
16:00-16:15	O-Mo-10-07	Heavily Yb-doped active sol-gel materials *R. M. Almeida, T. Ribeiro, J. Ferreira, L. Santos, M. C. Goncalves (Instituto Superior Tecnico / UL, Portugal)
16:15-16:30	O-Mo-10-08	Synthesis of SrO-ZrO₂-Al₂O₃ amorphous oxide/porous alumina composite materials for new phosphor *T. Fujii, T. Kishi, T. Yano (Tokyo Institute of Technology, Japan)
	Chair	K. Kato (AIST, Japan)
16:30-17:00	I-Mo-9-01	Chemical solution-processed ferroelectric thin Films and nanostructures *N. Bassiri-Gharb (Georgia Institute of Technology, United States)
17:00-17:15	O-Mo-9-01	Study of ferroelectric-on-silicon growth and related optoelectronic devices with the sol-gel process *H. Ye ¹ , Y. Yin ² (¹ Zhejiang University, China, ² University of Electronic Science and Technology of China, China)
17:15-17:30	O-Mo-9-02	Chemical solution processing of lead-free piezoelectric (K,Na)(Nb,Ta)O₃ thin films and their properties *W. Sakamoto ¹ , N. Kondo ¹ , T. Iijima ² , I. Yuitoo ³ , T. Takeuchi ³ , T. Yogo ¹

		(¹ Nagoya University, Japan, ² AIST, Japan, ³ Waseda University, Japan)
17:30-17:45	O-Mo-9-03	Mechanical, electrical and magnetic characterization of barium titanate/cobalt ferrite nanocomposite thin films synthesized by sol-gel process *N. Della Santina Mohallem, L. Moreira Seara, H. R. Andrade (Universidade Federal de Minas Gerais, Brazil)
17:45-18:00	O-Mo-9-04	(K_{0.5}Na_{0.5})NbO₃ piezoelectric thin films derived from sol-gel processing modified with chemical agents *Y. Wang ^{1,2} , M. S. Mirshekarloo ² , K. Yao ² , F. E. H. Tay ¹ (¹ National University of Singapore, Singapore, ² A*STAR (Agency for Science, Technology and Research), Singapore)
Sep. 8 (Tue)		
8:30-17:30	Registration @ Mielparque 5F	
PARALLEL SESSION A @ 5F-A&B (Mielparque)		
	Chair	K. Kanamori (Kyoto University, Japan)
9:00-9:30	I-Tu-4-01	Graphene-based nanostructures in sol-gel thin films: highly performing nanocomposites and integrated processing *L. Malfatti (University of Sassari, Italy)
9:30-9:45	O-Tu-4-01 ⇒ Move to P-Tu-4-25	Cobalt, nickel, molybdenum and tungsten oxides-carbon nanocomposites synthesis by combination of sol-gel and sonochemical techniques *K. Kotsareva ¹ , E. Trusova ¹ , A. Kirichenko ² (¹ Baikov Institute of Metallurgy and Materials Science, RAS, Russian Fed, ² Technological Institute for Superhard and Novel Carbon Materials, Russian Fed)
9:45-10:00	O-Tu-4-02	Modified sol-gel synthesis and characterization of hybrid and composite nanoparticles based on metal oxides *E. Trusova (A.A. Baikov Institute of Metallurgy and Materials Science, RAS, Moscow, Russia, Russian Fed)
10:00-10:15	O-Tu-4-03	Fabrication of osteoconductive composites consisting of sol-gel derived CaO-SiO₂ spheres and poly(etheretherketone) *I. Y. Kim ¹ , S. B. Cho ² , C. Ohtsuki ¹ (¹ Nagoya University, Japan, ² Korea Institute of Geosciences and Mineral Resources (KIGAM), South Korea)
10:15-10:30	O-Tu-4-04	Nanocomposites with BaTiO₃/SrTiO₃ hybrid fillers exhibiting enhanced dielectric behaviours and energy-storage densities D. Yu, N. Xu, L. Hu, *Q-L. Zhang, H. Yang (Zhejiang University, China)
10:30-11:00	Coffee Break	
	Chair	X.-Z. Guo (Zhejiang University, China)
11:00-11:15	O-Tu-4-05	Non-hydrolytic sol-gel synthesis: an innovative approach to obtain

		<p>nanocomposite materials</p> <p>*M. Messori¹, F. Bondioli², C. Sciancalepore¹ (1University of Modena and Reggio Emilia, Italy, 2University of Parma, Italy)</p>
11:15-11:30	O-Tu-4-06	<p>Formation and manipulation of sol-gel based composite films by electrochemistry (Withdrawn)</p> <p>*D. Mandler^{1,2}, L. Liu^{1,2} (1The Hebrew University of Jerusalem, Israel, 2Nanyang Technological University, Singapore)</p>
11:30-11:45	O-Tu-4-07	<p>Sulfur-based nanocomposite cathodes for long-life and high-energy lithium/sulfur batteries</p> <p>*T. Brezesinski (Karlsruhe Institute of Technology, Germany)</p>
11:45-12:00	O-Tu-4-08	<p>Zinc oxide nanocomposite porous films containing carbon quantum dots for sensitized and tunable photoluminescence</p> <p>*K. Suzuki^{1,2}, L. Malfatti¹, D. Carboni¹, M. Takahashi², P. Innocenzi¹ (1University of Sassari, Italy, 2Osaka Prefecture University, Japan)</p>
PARALLEL SESSION B @ 6F-C&D (Mielparque)		
	Chair	A. Shimojima (Waseda University, Japan)
9:00-9:30	I-Tu-7-01	<p>Rational design of microporous hybrid organosilica membranes for molecular separations</p> <p>*A. Ten Elshof (University of Twente, Netherlands)</p>
9:30-9:45	O-Tu-7-01	<p>Facile removal of structure directing agent from zeolite membranes using atmospheric pressure plasma jet</p> <p>*D-Y. Kang, H-T. Chien (National Taiwan University, Taiwan)</p>
9:45-10:00	O-Tu-7-02	<p>Electrochemical deposition of silica sol-gel films: analysis of key variables</p> <p>*M. Guglielmi, G. Giordano, A. Gennaro, C. Durante (University of Padova, Italy)</p>
10:00-10:15	O-Tu-7-03	<p>A study into ice-phobic coatings via modified chemistry and morphology</p> <p>*L. Wu, J. Tan, M. Qian, C. W. Koh (Singapore Institute of Manufacturing Technology, Singapore)</p>
10:15-10:30	O-Tu-7-04	<p>Structure and properties of the V-doped TiO₂ thin films obtained by sol-gel and microwave assisted sol-gel methods</p> <p>*L. Predoana¹, J. M. Calderon-moreno¹, M. Anastasescu¹, M. Stoica¹, I. Stanciu², S. Preda¹, A. Szekeres³, M. Gartner¹, M. Zaharescu¹ (1Ilie Murgulescu Institute of Physical Chemistry, Romanian Academy, Romania, 2Maritime University, Romania, 3Institute of Solid State Physics, Bulgaria)</p>

10:30-11:00	Coffee Break	
	Chair	S.-K. Park (Chung-Ang University, South Korea)
11:00-11:15	O-Tu-7-05	Synthesis and surface modification of indium doped zinc oxide TCO films for organo-lead perovskite PV devices *G. S. Grader, G. E. Shter, O. Dinner (Technion -Israel Institute of Technology, Israel)
11:15-11:30	O-Tu-7-06	Advantages of cyclic planar sol-gel precursor in production of high-performance protective coatings for metals/alloys *M. Rodošek ¹ , M. Koželj ¹ , L. Slemenik Perše ¹ , R. Cerc Korošec ² , A. Šurca Vuk ¹ (¹ National Institute of Chemistry, Slovenia, ² Faculty of Chemistry and Chemical Technology, Slovenia)
11:30-11:45	O-Tu-7-07	Optical and thermal properties of sol-gel-derived porous silica coating glasses *G. Zhao, X. Zhang, J. Li, G. Shen, B. Song, G. Han (Zhejiang University, China)
11:45-12:00	O-Tu-7-08	Multicomponent charge gradients using silane chemistry *K. Ashraf ¹ , M. Collinson ¹ , D. Higgins ² (¹ Virginia Commonwealth University, United States, ² Kansas State University, United States)
POSTER SESSION @ 7F-Orion (Mielparque)		
12:30-14:30	Category 1-7	
PARALLEL SESSION A @ 5F-A&B (Mielparque)		
	Chair	L. Marfatti (University of Sassari, Italy)
14:30-15:00	I-Tu-5-01	Synthesis and applications of several sol-gel derived materials via sol-gel process combining with other technologies *X.-Z. Guo, Q. Zhang, X. Ding, Q. Shen, H. Yang (Zhejiang University, China)
15:00-15:15	O-Tu-5-01	Sol-gel synthesis of porous monolithic phosphate materials *Y. Zhu, K. Yoneda, A. Tanaka, K. Kanamori, K. Nakanishi (Kyoto University, Japan)
15:15-15:30	O-Tu-5-02	Hierarchically organized and anisotropic porous silica monoliths *N. Hüsing ¹ , F. Putz ¹ , M. S. Elsaesser ¹ , C. Balzer ² , G. Reichenauer ² , R. Morak ³ , O. Paris ³ (¹ Paris Lodron University Salzburg, Austria, ² Bavarian Center for Applied Energy Research, Germany, ³ Montanuniversitaet Leoben, Austria)
15:30-15:45	O-Tu-5-03	Sol-gel chemistry for diverse carbon nanostructures *A.-H. Lu

		(Dalian University of Technology, China)
15:45-16:15		Coffee Break
	Chair	T. Tsuru (Hiroshima University, Japan)
16:15-16:30	O-Tu-5-04	New approach for synthesis of nanocrystalline magnesium hydroxide and oxide systems via sol-gel technology *A. Vedyagin ¹ , I. Mishakov ^{1,2} , T. Karnaukhov ^{1,3} , T. Maksimova ¹ , E. Ilyina ¹ (¹ Boreskov Institute of Catalysis, Russian Fed, ² Novosibirsk State Technical University, Russian Fed, ³ Novosibirsk State University, Russian Fed)
16:30-16:45	O-Tu-5-05	Porous aluminum oxide fibers *K. Sinkó, P. Ádám (L. Eötvös University, Hungary)
16:45-17:15	I-Tu-6-01	Breakthroughs in cost-effective, scalable production of superinsulating, ambient-dried silica aerogel and silica biopolymer hybrid aerogels: from lab to pilot scale L. Huber, S. Zhao, P. Tingaut, M. M. Koebel (Laboratory for Building Energy Materials and Components, EMPA, Switzerland)
17:15-17:30	O-Tu-6-01	Influence of organic crosslinks on the properties of aerogels derived from 1,6-bis(trimethoxysilyl)hexane *K. Kanamori, Y. Aoki, T. Shimizu, K. Nakanishi (Kyoto University, Japan)
17:30-17:45	O-Tu-6-02	Super-insulating paper-honeycomb silica-aerogel composite *B. Milow, A. Berkefeld, L. Ratke (German Aerospace Centre, Germany)
17:45-18:00	O-Tu-6-03	A simple method to adjust the hierarchical structure of the aerogels within a large range *A. Du, S. Huang, W. Xu, Z. Zhang, J. Shen, B. Zhou (Tongji University, China)
PARALLEL SESSION B @ 6F-C&D (Mielparque)		
	Chair	A. ten Elshof (University of Twente, Netherlands)
14:30-15:00	I-Tu-7-02	Low-temperature and sol-gel derived metal-oxide thin-film-devices via photochemical activations *S. K. Park (Chung-Ang University, South Korea)
15:00-15:15	O-Tu-7-09	Alcohol-assisted water condensation and stabilization into hydrophobic mesoporosity *M. Boudot ^{1,2,3} , D. R. Ceratti ² , M. Faustini ² , C. Boissière ² , D. Grosso ²

		(¹ Kyushu University, Japan, ² UPMC, France, ³ Polyrise, France)
15:15-15:30	O-Tu-7-10	Exploiting sol-gel chemistry for advanced nanofluidic devices: capillary filling, separations and reactions into self-assembled tunable mesostructured films *D. R. Ceratti, M. Faustini, D. Grosso (Collège de France - UPMC, France)
15:30-15:45	O-Tu-7-11	Facile synthesis of defect free, mesoporous alumina and doped alumina films by sol-gel process *G. Kunde ¹ , B. Sehgal ² (¹ University of Saskatchewan, Canada, ² M. S. University of Baroda, India)
15:45-16:15	Coffee Break	
	Chair	M. Guglielmi (University of Padova, Italy)
16:15-16:45	I-Tu-3-01	Controlled assembly of molecular building blocks toward functional siloxane-based nanomaterials *A. Shimojima (Waseda University, Japan)
16:45-17:00	O-Tu-3-01	Structure impact on lifetime of radical confined in nanostructured silicas *E. Besson ¹ , F. Vibert ¹ , E. Bloch ² , S. Queyroy ¹ , M. Bertrand ¹ , S. Marque ¹ , S. Gastaldi ¹ (¹ Aix Marseille Université, France, ² Aix Marseille Université, France)
17:00-17:15	O-Tu-3-02	Novel strategies to metal oxide hybrid nanostructures *N. Pinna (Humboldt-Universität zu Berlin, Germany)
17:15-17:30	O-Tu-3-03	Novel amorphous materials composed of organically modified polyoxometalates: structure and thermoplastic properties *H. Kozuka ¹ , S. Oda ¹ , S. Kohara ² , K. Suzuki ¹ , H. Nakano ¹ , H. Uchiyama ¹ (¹ Kansai University, Japan, ² Japan Synchrotron Radiation Research Institute/SPring-8, Japan)
17:30-17:45	O-Tu-3-04	Ethylene polymerization mediated by nickel(II) covalently anchored to silica xerogels *S. Lambert ¹ , L. Sacco ² (¹ University of Liege, Belgium, ² University of Liege, Belgium)
17:45-18:00	O-Tu-3-05	Controlled synthesis of multifunctional gold nanocomposites for imaging-guided photothermal therapy Y. Li, *Y. Gao, J. Shi (East China University of Science and Technology, China)

Sep. 9 (Wed)		
8:30-17:30	Registration @ Mielparque 5F	
PARALLEL SESSION A @ 5F-A&B (Mielparque)		
	Chair	F. Babonneau (UPMC-CNRS-Collège de France, France)
8:30-8:45	O-We-6-01	Assembly of crystalline ultrasmall copper nitride particles into freestanding 3D aerogel *R. Deshmukh, F. Rechberger, E. Tervoort, M. Niederberger (ETH Zurich, Switzerland)
8:45-9:00	O-We-6-02	Ionothermal sol-gel route towards carbon aerogels *T-P. Fellingner, J. Zhu, Y. Chang, M. Antonietti (MPI for Colloids and Interfaces, Germany)
9:00-9:15	O-We-6-03	Preparation and performances of nanostructured Layered Double Hydroxide aerogels using supercritical CO₂ drying *V. Prevot ¹ , C. Forano ² , R. Mahdi ² , C. Guerard Helaine ² , M. Lemaire ² , S. Nishimura ³ , M. Takahashi ³ , Y. Tokudome ³ (¹ CNRS, France, ² Université Blaise Pascal, France, ³ Osaka Prefecture University, Japan)
9:15-9:30	O-We-6-04	Metal oxide nanoparticle based macroscopic BaTiO₃ and conducting antimony-doped tin oxide aerogels *F. Rechberger, M. Niederberger (ETH Zurich, Laboratory for Multifunctional Materials, Switzerland)
	Chair	M. Takahashi (Osaka Prefecture University, Japan)
9:30-10:00	I-We-8-01	Molecular mechanisms in formation, stabilization and transformations of metal oxide colloids and their implication in the development of functional nanostructures *V. Kessler, G. Seisenbaeva (Swedish University of Agricultural Sciences, Sweden)
10:00-10:15	O-We-8-01	Silica coated soft-magnetic carbonyl iron microspheres via sol-gel process and their magneto-response *H. J. Choi ¹ , Y. D. Liu ² (¹ Inha University, South Korea, ² Yanshan University, China)
10:15-10:45	Coffee Break	
10:45-11:00	O-We-8-02	A novel solvent exchange method for surface modification of colloidal mesoporous silica nanoparticles *E. Yamamoto, A. Shimojima, H. Wada, K. Kuroda (Waseda University, Japan)
11:00-11:15	O-We-8-03	Optical properties of SiO₂@TiO₂ core-shell nanoparticles *S. Aldabe Bilmes ¹ , S. Ullah ^{2,3} , E. P. Ferreira-Neto ² , M. L. Martínez Ricci ¹ , U. P. Rodrigues-Filho ²

		(¹ Universidad de Buenos Aires, Argentina, ² University of São Paulo, Brazil, ³ University of Peshawar, Pakistan)
11:15-11:30	O-We-8-04	Solution self-assembly strategy for the preparation of advanced low dimensional nanocarbons *Q. Sun, X-Q. Zhang, A-H. Lu (Dalian University of Technology, China)
11:30-11:45	O-We-8-05	Sol-gel to hybrid alginate@TiO₂ microcapsules as a reservoir of animal cells and drug delivery system for cell therapy *B-L. Su, G. Leroux, C. Meunier, C. Michiels (University of Namur, Belgium)
PARALLEL SESSION B @ 6F-C&D (Mielparque)		
	Chair	D.-P. Kim (POSTECH, South Korea)
8:30-9:00	I-We-3-01	Architecture and decoration at the mesoscale: complex nanosystems with localized chemistry through chemical building blocks *G. Soler-illia ^{1,2} (¹ Universidad de San Martín, Argentina, ² University of Buenos Aires, Argentina)
9:00-9:15	O-We-3-01	Synthesis of cage octasilicate polymer *T. Gunji, T. Igarashi, S. Tsukada, Y. Abe (Tokyo University of Science, Japan)
9:15-9:30	O-We-3-02	Self-organisation of organosilicas: new approach for nanostructuring of hybrid thin films showing optoelectronic properties G. Roche ¹ , Y-T. Tsai ² , Y. Geerts ³ , G. Wantz ² , O. Dautel ¹ , *J. Moreau ¹ (¹ Institut Charles Gerhardt de Montpellier - ENSCM, France, ² Institut Polytechnique de Bordeaux - ENSCBP, France, ³ Université Libre de Bruxelles, Belgium)
	Chair	G. Soler-illia (Universidad de San Martín, Argentina, University of Buenos Aires, Argentina)
9:30-9:45	O-We-3-03	Thermally-induced peristaltic motion of surface wrinkles on bilayered hydrogels *M. Takahashi, H. Kuniwaki, K. Suzuki, Y. Tokudome (Osaka Prefecture University, Japan)
9:45-10:00	O-We-3-04	Utilization of silicon based preceramic polymers for microfluidic applications *D.-P. Kim (POSTECH, South Korea)
10:00-10:15	O-We-3-05	Rheology and thermal behavior of MTMS-DMDMS melting gels *A. Jitianu ¹ , L. Francisco ¹ , M. Jitianu ² , M. Baraniak ² , L. C. Klein ³

		(¹ Lehman College - City University Of New York, United States, ² William Paterson University, United States, ³ Rutgers University, United States)
10:15-10:45		Coffee Break
	Chair	V. Kessler (Swedish University of Agricultural Sciences, Sweden)
10:45-11:15	I-We-12-01	An automated materials screening approach for the development of sol-gel derived monolithic silica enzyme reactor columns *J. Brennan, A. M. Smith, J. Fortuna, E. Forsberg (McMaster University, Canada)
11:15-11:30	O-We-12-02	DNAzyme encapsulation within silica-zirconia colorless thin films for fluorescence reporting *N. Landreau ¹ , V. Guieu ² , C. Ravelet ² , E. Peyrin ² , L. Mugheri ¹ (¹ CEA, France, ² Université Grenoble Alpes-CNRS, France)
13:00-17:00		Optional Tours (Free Time)
18:00-21:00		Photograph & Conference Dinner @ Genji (Granvia)

Sep. 10 (Thu)		
8:30-17:30	Registration @ Mielparque 5F	
AWARD AND ISGS SESSIONS @ Genji (Granvia)		
Life Achievement Award Chair: Prof. Jean-Marie Nedelec		
8:30-9:15	LA-Th-01	History of Hybrid Materials : From prehistory to modern applications Clément Sanchez (College de France, France)
D. R. Ulrich Award Chair: Prof. Andrei Jitianu		
9:15-9:45	UL-Th-01	Nanocomposite of metal nanoparticles and metal oxides prepared through liquid-phase synthesis Go Kawamura (Toyohashi University of Technology, Japan)
ISGS Session		
9:45-10:05	President message including an introduction of new board member (by Prof. Jean-Marie Nedelec) Introduction of Sol-Gel 2017 (by Prof. Benoît Heinrichs)	
10:05-10:30	Coffee Break	
INDUSTRIAL SESSION @ Genji (Granvia) Chair: Dr. Florence Babonneau		
10:30-10:50	I-Th-15-01	Discovery of a sol-gel reinforcing the strength of hair structure: mechanisms of action and macroscopic effects on the hair *H. Samain, H. Philippe, H. Georges, J-R. Valerie, L. Frederic, P. Patricia (L'Oreal Company, France)
10:50-11:05	O-Th-15-01	Tunable mechanical and adhesive properties of hybrid silica coatings on polycarbonate *K. Lioni ¹ , L. Cui ² , W. Volksen ¹ , R. Dauskardt ² , G. Dubois ¹ , B. Toury ³ (¹ IBM, United States, ² Stanford, United States, ³ University of Lyon, France)
11:05-11:20	O-Th-15-02	Development of the novel manufacturing method for the sol-gel composite flake *K. Doshita, K. Shimokawa (Nippon Sheet Glass Co., LTD., Japan)
11:20-11:40	I-Th-15-02	Sol-gel technologies by KRI under the four categories of 0-3 dimension shape *M. Toki (KRI, Inc., Japan)
11:40-11:55	O-Th-15-03	Light trapping structures made by simple liquid-based process *J. Teisseire ¹ , B. Brudieu ^{1,2,4} , A. Le Bris ^{1,3} , I. Gozhyk ¹ , F. Guillemot ⁴ , G.

		Dantelle ² , F. Sorin ³ , T. Gacoin ² (¹ Joint laboratory CNRS/Saint-Gobain UMR 125, France, ² Ecole Polytechnique, France, ³ Ecole Polytechnique Fédérale de Lausanne, Switzerland, ⁴ Saint-Gobain Recherche, France)
11:55-12:15	I-Th-15-03	Mesoporous organosilica-based heterogeneous molecular catalysis for sustainable organic synthesis *S. Inagaki (Toyota Central R&D Labs., Inc., Japan)
12:15-12:30	O-Th-15-04	Sol-gel foams: the latest means of preventing fires and explosions *D. Kuprin ¹ , A. Vinogradov ² , V. Vinogradov ² , I. Abduragimov ³ , G. Kuprin ¹ (¹ Research and production association "Modern fire technology", "NPO SOPOT", Russian Fed, ² ITMO University, Russian Fed, ³ Bauman Moscow State Technical University, Russian Fed)
POSTER SESSION @ 7F-Orion (Mielparque)		
12:30-14:30	Category 8-15	
PARALLEL SESSION A @ 5F-A&B (Mielparque)		
	Chair	S. A. Bilmes (University of Buenos Aires, Argentina)
14:30-15:00	I-Th-11-01	Sol-gel processing for ferroelectric and antiferroelectric thin films with complex and volatile compositions and their sensor applications *K. Yao, M. Sharifzadeh Mirshekarloo (A*STAR (Agency for Science, Technology and Research), Singapore)
15:00-15:15	O-Th-11-01	Aqueous sol-gel process to produce crystalline doped TiO₂ powders and films at ambient temperature for photocatalysis and anti-corrosion applications C. M. Malengreaux ¹ , G. L-M. Leonard ¹ , S. Pirard ¹ , S. Remy ¹ , S. Douven ¹ , J. R. Bartlett ² , *B. Heinrichs ¹ (¹ University of Liege, Belgium, ² University of the Sunshine Coast, Australia)
15:15-15:30	O-Th-11-02	Cationic co-doped TiO₂ nanoparticles as efficient visible light active photocatalyst: experimental and theoretical study *D. Primc ¹ , L. Mayrhofer ² , M. Walter ² , M. Niederberger ¹ (¹ ETH Zurich, Switzerland, ² Fraunhofer Institute for Mechanics of Materials, Germany)
15:30-15:45	O-Th-11-03	Preparation of highly active metallo N-heterocyclic carbene based heterogeneous catalysts using sol-gel process and surface organometallic chemistry *C. Thieuleux ¹ , T. Maishal ¹ , I. Karame ¹ , M. Samantaray ¹ , M. Baffert ¹ , M.

		Conley ² , J. Alauzun ³ , A. Mehdi ³ , D. Gajan ⁴ , A. Lesage ⁴ , L. Emsley ⁴ , C. Coperet ² (¹ CNRS, France, ² ETH Zurich, Switzerland, ³ University of Montpellier II, France, ⁴ University of Lyon, France)
15:45-16:15	Coffee Break	
	Chair	K. Yao (A*STAR, Singapore))
16:15-16:30	O-Th-11-04	Selective hydrogenation of alkynes under continuous flow using Pd - SiO₂ monoliths *C-H. Pélisson ^{1,2} , A. Sachse ² , N. Linares ³ , P. Barbaro ³ , F. Fajula ² , A. Galarnau ² (¹ Kyoto University, Japan, ² Université de Montpellier/ENSCM, France, ³ CNP, Italy)
16:30-16:45	O-Th-11-05	Enhancing activity and selectivity of biocatalysts by tailored sol-gel entrapment *F. Peter, C. Paul, E. Biro, P. Borza, A. Todea (University Politehnica of Timisoara, Romania)
16:45-17:15	I-Th-14-01	Recent advances on the NMR characterization of sol-gel derived materials *F. Babonneau (UPMC-CNRS-Collège de France, France)
17:15-17:30	O-Th-14-01	Combined approach: in situ coupling of electrochemical measurements of sol-gel materials with vibrational and AFM techniques *A. Šurca Vuk, A. Kreta, M. Rodošek (National Institute of Chemistry, Slovenia)
17:30-17:45	O-Th-14-02	Monitoring global diffusion of water within nanoporous monolithic sol-gel materials by environmental ellipsometry optical probing M. Boudot ³ , D. Grosso ³ , W. Bamogo ² , *L. Mugheri ¹ (¹ CEA, France, ² CNRS, France, ³ UPMC, Collège de France, France)
17:45-18:00	O-Th-14-03	Interface and local structure emphases inside geopolymers as a function of alkalis nature and time *J-M. Nedelec ¹ , G. Renaudin ¹ , F. Leroux ¹ , C. Taviot-Gueho ¹ , A. Poulesquen ² , F. Frizon ² (¹ ENSCCF, France, ² CEA, France)
PARALLEL SESSION B @ 6F-C&D (Mielparque)		
	Chair	K. Katagiri (Hiroshima University, Japan)
14:30-15:00	I-Th-12-01	Intracellular drug release based on mesoporous silica nanoparticles. From cancer therapy to tissue engineering *M. Lindén (University of Ulm, Germany)
15:00-15:15	O-Th-12-01	Functionalized silica nanoparticles with pH-sensitive and cytotoxic

		stopper for autonomous and multi-drug delivery *C. Carcel, S. Giret, M. Wong Chi Man (ENSCM, France)
15:15-15:30	O-Th-12-02	Withdrawn
15:30-15:45	O-Th-12-03	Silica nanotubes with controlled length for biomedical applications *S. Chen ¹ , N. Hanagata ² , A. Osaka ³ (¹ Taiyuan University of Technology, China, ² National Institute for Materials Science, Japan, ³ Okayama University, Japan)
15:45-16:15	Coffee Break	
	Chair	Mika Lindén (University of Ulm, Germany)
16:15-16:30	O-Th-12-04	Thrombolytic sol-gel materials *V. Vinogradov ¹ , Y. Chapurina ¹ , A. Vinogradov ¹ , V. Sobolev ¹ , I. Dudanov ^{2,3} , V. Vinogradov ¹ (¹ ITMO University, Russian Fed, ² Petrozavodsk State University, Russian Fed, ³ St. Petersburg's Mariinsky hospital, Russian Fed)
16:30-16:45	O-Th-12-05	Design of binary sol-gel lithium-silica sol-gel glasses for cartilage regeneration *A. Maçon ¹ , S. Li ¹ , M. Jacquemin ¹ , S. Page ² , S. Bertazzo ¹ , J. Hanna ² , J. Jones ¹ (¹ Imperial College London, United Kingdom, ² The University of Warwick, United Kingdom)
16:45-17:00	O-Th-12-06	Modification of polyethylene terephthalate substrate with chitosan-silicate hybrid and in vitro cytocompatibility *Y. Shirotsaki ¹ , I. Ishida ² , S. Hayakawa ² , A. Osaka ² , M. H. Fernandes ³ (¹ Kyushu Institute of Technology, Japan, ² Okayama University, Japan, ³ Universidade do Porto, Portugal)
17:00-17:15	O-Th-12-07	From glass to hybrid: calcium containing poly(caprolactone) / Silica sol-gel hybrid for bone regeneration *H-K. Ting ¹ , F. Tallia ¹ , G. Poologasundarampillai ¹ , S. Li ¹ , S. Page ² , J. Hanna ² , J. R. Jones ¹ (¹ Imperial College London, United Kingdom, ² The University of Warwick, United Kingdom)
17:15-17:30	O-Th-12-08	Synthesis of silica nanoparticles in reverse micelles with mixed-solvent polar cores: tailoring nanoreactor structure and properties *J. Bartlett ¹ , K. Bürglová ² , J. Hlaváč ² (¹ University of the Sunshine Coast, Australia, ² Palacky University, Czech Republic)
17:30-17:45	O-Th-12-09	Synthesis of calcium pyrophosphate glasses by soft chemistry: structural and morphological characterizations *J. Soulie ¹ , P. Gras ¹ , D. Laurencin ² , O. Marsan ¹ , O. Varlet ¹ , C. Rey ¹ , C.

		Combes ¹ (¹ Institut National Polytechnique de Toulouse, France, ² CNRS, France)
17:45-18:00	O-Th-12-10	Gel point determination thanks to Diffusive Wave Spectroscopy R. Ramsch, *M. Fleury (Formulacion, France)
18:00-19:00	Poster Award & Travel Grants Ceremony (with drinks) Chair: Prof. Masahide Takahashi	

Sep. 11 (Fri)		
8:30-12:00	Registration @ Mielparque 5F	
PARALLEL SESSION @ 5F-A&B (Mielparque)		
	Chair	K. Tadanaga (Hokkaido University, Japan)
9:00-9:30	I-Fr-13-01	Controlling the structure and porosity of materials for energy and environmental applications *R. Caruso ^{1,2} (¹ The University of Melbourne, Australia, ² CSIRO, Australia)
9:30-9:45	O-Fr-13-01	Mesoporous materials derived from nanostructured metal oxides *G. Seisenbaeva ¹ , J-M. Nedelec ² , V. Etacheri ³ , V. Pol ³ , V. Kessler ¹ (¹ Swedish University of Agricultural Sciences, Sweden, ² Clermont Universite, France, ³ Purdue University, United States)
9:45-10:00	O-Fr-13-02	AlO_x coating on Mg-doped LiN_{0.5}Co_{0.2}Mn_{0.3}O₂ by the sol-gel method to improve cyclability for lithium ion batteries *C-E. Liu, C-H. Tsai, Y-C. Chang, S-C. Liao (Industrial Technology Research Institute, Taiwan)
10:00-10:15	O-Fr-13-03	Studies on porous monolithic carbon electrodes for energy storage *G. Hasegawa, K. Kanamori, K. Nakanishi, T. Abe (Kyoto University, Japan)
10:15-10:30	O-Fr-13-04	Carbon xerogels as model materials for electrochemical devices *N. Job, M-L. C. Piedboeuf, A. Zubiaur, F. Deschamps, A. F. Léonard (University of Liège, Belgium)
10:30-11:00	Coffee Break	
	Chair	R. Caruso (The University of Melbourne / CSIRO, Australia)
11:00-11:15	O-Fr-13-05	Oxide bulk materials with improved thermoelectric performances by controlling microstructure with sol-gel processing ways *E. Combe ^{1,2} , F. Boschini ² , A. Schrijnemakers ² , R. Cloots ² , E. Guilmeau ³ , R. Funahashi ¹ (¹ AIST, Japan, ² University of Liège, Chemistry Institute, Belgium, ³ Ensicaen, France)
11:15-11:30	O-Fr-13-06	Solution synthesis of Al doped ZnO transparent electrodes: mission impossible or need for more insight? *M. K. Van Bael ^{1,2} , K. Elen ^{2,1} , A. Hardy ^{1,2} (¹ Hasselt University, Belgium, ² imec vzw, Belgium)
11:30-11:45	O-Fr-13-07	Is TiO₂ brookite a good photocatalyst for degradation of pollutants in water and in air? S. Pigeot-Rémy ¹ , C. Hérisson ³ , R. Hazime ² , D. Gregory ² , O. Durupthy ¹ , C. Ferronato ² , C. Colbeau-Justin ³ , C. Guillard ² , *S. Cassaignon ¹ (¹ UPMC, France, ² Univ. Lyon 1, France, ³ Univ. Paris Sud, France)

11:45-12:00	O-Fr-13-08	The development of highly efficient CaO-based sorbents for CO₂ capture M. Broda, *A. Kierzkowska, C. R. Müller (ETH Zurich, Switzerland)
12:00-12:15	O-Fr-13-09	Sol-gel coating for the preservation of cultural heritage *F. Bondioli, L. Bergamonti, I. Alfieri, A. Lorenzi, G. Predieri, P. P. Lottici (University of Parma, Italy)
12:15-12:30	O-Fr-13-10	The increase of the WO₃ symmetry by inclusion of the Ti⁴⁺ into its structure *M. Hočevár, U. Opara Krašovec (University of Ljubljana, Slovenia)
12:30-	Closing Remarks	