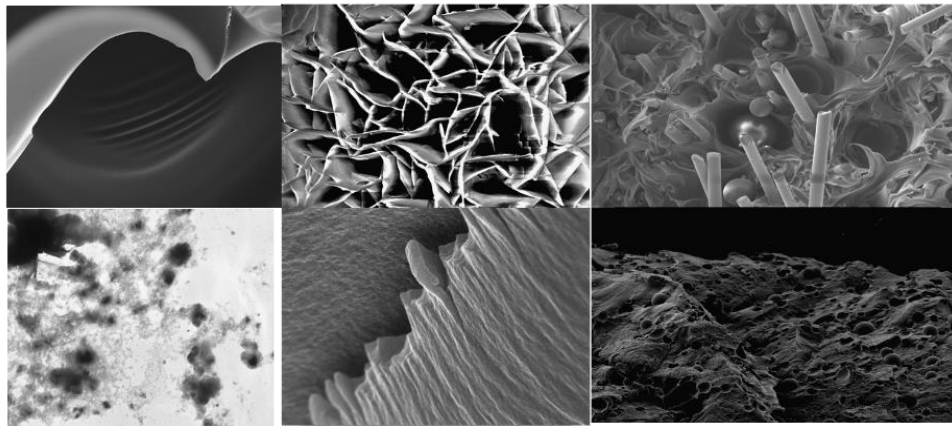


NANOSTRUC 2018

International Conference on Structural Nano Composites
23rd - 24th May 2018, Berlin Germany



Preliminary Conference Programme

Wednesday 23th May 2018

08:00–09:00	Registration (Room TBC)	
09:00-09:15	Welcome	
	Session 1.1: Applications: Nanomaterials and Nanocomposites –(Room TBC)	
	Chair- <i>Ha-Duong Ngo</i>	
09:15-09:55	Optical grating technology	
	<i>Marcus Lörger</i>	
09:55 -10:30	Smart electrically conductive polymeric nanocomposites	
	<i>Matej Mičušík, Eliška Číková and Mária Omastová</i>	
10:30-11:00	Coffee/Tea Break	
	Session 1.2: Automotive and Aerospace Materials (Room TBC)	Session 1.3: Nanosensors (Room TBC)
	Chair - <i>Sérgio Henrique Pezzin</i>	Chair – <i>Mária Omastová</i>
11:00-11:30	Reduced Order Modelling for Complex, Time Dependent and Multi-scale Modelling	Synthesis and applications of monolithic quasi 1D metal-semiconductor nanowire heterostructures
	<i>Kambiz Kayvantash</i>	<i>Alois Lugstein</i>
11:30-11:50	In situ mechanical synthesis of Al-Ti nanointermetallic reinforcements in AA 5052 alloy	CNT-based sensors for strain monitoring/sensing applications
	<i>Jairo Barauna and Rodnei Bertazzoli</i>	<i>Ana Santos, Luís Amorim, João Pedro Nunes, Luís Rocha, Alexandre Silva and Júlio Viana</i>
11:50-12:10	Processing and yield strength increase of an AM60-Based metal matrix nanocomposite (MMNC)	Structural, Morphological and Optical Properties of BaSnO ₃ films prepared by pulsed laser ablation
	<i>Hajo Dieringa</i>	<i>Jibi John, Radhakrishna Prabhu and V.P.Mahadevan Pillai</i>
12:10-12:30	Thermal diffusivity behaviour of multi-walled carbon nanotube reinforced Ti6Al4V metal matrix composites	A Novel Pd/g-CN nano composite for gas sensing application
	<i>Adewale Adegbenjo, Babatunde Obadele, Peter Olubambi, Mxolisi Shongwe and Samuel Adejuwon</i>	<i>Arif Ibrahim, Uzma Bano Memon, S P Duttagupta, J Praveen Kumar, A Sarkar and R K Singh Raman</i>
12:30-13:00	The role of the acetalization degree on the dynamical mechanical properties of polyvinylbutyral nanocomposites	Nanosilicon as a material for sensors and thermoelectrics
	<i>Sergio Pezzin and Jean Hoepfner</i>	<i>Androula G. Nassiopoulou and Manolis Hourdakís</i>
13:00-14:00	Lunch & Posters	

	Session 1.4: Keynote 2 (Room TBC)	Session 1.5: Keynote 3 (Room TBC)
	Chair – <i>Fengge Gao</i>	Chair – <i>Radhakrishna Prabhu</i>
14:00-14:40	Functional bionanocomposites prepared through cellulose mineralization <i>Yury Shchipunov</i>	Enhancement in thermoelectric properties of nanostructures: phonon scattering mechanism <i>Kamal Kumar Choudhary</i>
14:40-15:10	Functional polymer-based nanocomposite fibers via electrospinning <i>Theodora Krasia-Christoforou</i>	Polymer nanocomposites for waste water remediation <i>A K Mishra</i>
15:10-15:40	Material configuration in the Die, influences pultrusion process parameters and part properties <i>Arindam Mukherji and James Njuguna</i>	Numerical approaches in the study of hybrid nanofluids and their possible applications in solar energy <i>Alina Adriana Minea</i>
15:40-16:40	3 mins Poster Presentation (for Each Poster Presenter)	
16:40-17:00	Posters and Coffee/Tea Break	
19:00 – 10:30	GALA DINNER	
17:10-19:00	END OF DAY 1	

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Thursday 24th May 2018

	Session 2.1: Keynote Lectures (Room TBC) Chair - <i>Raquel Verdejo</i>	
09:00-09:45	Preparation and characterisation of cellulose nanocrystals for bio-based polyamide reinforcement <i>Agnieszka Leszczyńska, Paulina Radzik and Krzysztof Pielichowski</i>	
09:45-10:30	Nanocelluloses: Emerging biobased building blocks for nanostructured materials <i>Youssef Habibi</i>	
10:30 - 11:00	Posters & Coffee/Tea Break	
	Session 2.2: Hybrid Composites (Room TBC) Chair - <i>Theodora Krasia-Christoforou</i>	Session 2.3: Biomaterials and Biomedical devices Chair – <i>Youssef Habibi</i>
11:00-11:30	Carbon nanoparticles for epoxy hierarchical composites <i>Raquel Verdejo</i>	Polysaccharide-based Conducting and Nano-Hydrogels for Adsorption Applications <i>Susheel Kalia</i>
11:30-11:50	Influence of graphene oxide on mechanical and hydrophilic properties of epoxy/banana fiber composites <i>Preetam Bharadiya, Mukesh Singh and Satyendra Mishra</i>	Investigations on sensitivity enhancement of SPR biosensor using tunable wavelength and graphene layers <i>Kaushalkumar Bhavsar and Radhakrishna Prabhu</i>
11:50-12:10	Flexural and compression strength properties of novel Polyamide 6 nanocomposite materials <i>Urenna V. Adegbotolu, Krzysztof Pielichowski, Agnieszka Leszczyńska, Thomsz Majak, James Njuguna</i>	Fluorescent conjugates with halloysite - prospective biomarkers <i>Andrei Novikov, Anna Stavitskaya, Elvira Rozhina, Rawil Fakhrullin, Yuri Lvov and Vladimir Vinokurov</i>
12:10-12:30	Understanding the thermal and fire behaviors of cross-laminated timber <i>Zhongwen Zhang, Artem Kashtanov and Aravind Dasari</i>	Structure and Hardness of the Titanium after Induction Heat Treatment <i>Aleksandr Fomin, Marina Fomina, Vladimir Koshuro, Andrey Shelkunov, Ivan Egorov, Aleksey Voyko and Igor Rodionov</i>
12:30-13:00	Problems with the current filler-reinforced nanocomposite technology and their solutions <i>Fengge Gao</i>	3D arranged reduced graphene oxide – polyethylene glycol – amine based biosensor platform for super-sensitive detection of procalcitonin <i>Niels Grabbert, Markus Fiedler, Vera Meyer, Leopold Georgi, Katrin Hoepfner, Marc Ferch, Krystan Marquardt, Erik Jung, Piotr Mackowiak, Ha-Duong Ngo and Klaus-Dieter Lang</i>
13:00-14:00	Lunch & Posters	

	Session 2.4: Graphene and CNT Nanocomposites (Room TBC) <i>Chair – Krzysztof Pielichowski & Alina Adriana Minea</i>	Session 2.5: Nanocoatings and Thin Films (Room TBC) <i>Chair – Alois Lugstein & Sergio Pezzin</i>
14:00-14:20	A correlation between nano and micro-hardness properties of TiN nanoparticles strengthened SAF 2205 <i>Mahlitse Mphahlele, Samuel Oke, Oladeji Ige, Oluwasegun Falodun, Babatunde Obadele, Peter Olubambi and Mxolisi Shongwe</i>	Temperature effect on the mechanical characteristics of niobium nitride thin films <i>Violeta Merie, Marius Pustan, Gavril Negrea, Corina Birleanu and Florina Şerdean</i>
14:20-14:40	Polymeric Graphene- Nanocomposites: Multifunctional Materials for the Future. <i>Soney C George</i>	Analysis of humidity influence on adhesion and tribological properties of niobium nitride thin films <i>Florina Şerdean, Marius Pustan, Violeta Merie, Corina Birleanu and Horea Crişan</i>
14:40-15:00	Facile synthesis of nitrogen doped graphene oxide using graphite powder and flakes via modified Hummer's method <i>Kholiswa Yokwana, Khenfouch Mohammed, Alex Kuvarega, Sabelo Mhlanga and Edward N. Nxumalo</i>	Structure and Hardness of the Titanium after Induction Heat Treatment <i>Aleksandr Fomin, Marina Fomina, Vladimir Koshuro, Andrey Shelkunov, Ivan Egorov, Aleksey Voyko and Igor Rodionov</i>
15:00-15:20	Experimental and simulation studies of mechanical properties of amine functionalized graphene reinforced nano-composites <i>Kamal Sharma and Surender Kumar</i>	Effect of background oxygen pressure on the properties of Laser ablated SrWO ₄ thin films <i>Priya J S, Kavitha V S, Jibi John, Radhakrishna Prabhu and V.P.Mahadevan Pillai</i>
15:20-15:50	Self-assembly of organized clay nanotube patterns <i>Yuri Lvov, Rawil Fakhrullin and Andrei Novikov</i>	Diisobutylidithiophosphinatometal complexes [Mx(iBu ₂ PS ₂)y] as molecular precursors for thin films and nanoparticles of solar absorber materials <i>Sajid Nawaz, Abdul Qadeer Malik, Nazre Haider and Muhammad Azad Malik</i>
15:50 – 16:20	Effect of graphite addition on the tribological properties of pure titanium carbonitride (TiCN) prepared by spark plasma sintering <i>Gadifele Mekgwe, Peter Olubambi, Babatunde Obadele, Thabiso Langa and Jeremiah Akinribide</i>	Recovery of copper nanoparticles from waste printed circuit boards by using high voltage and chemical reduction technology <i>Samy Yousef, Maksym Tatariants, Regita Bendikienė and Gintaras Denafas</i>
16:20 – 16:50	Erbium modified titania decorated MWCNT Nanocomposite: A visible light driven photocatalyst for the decolourisation of Reactive Red 120 <i>Diseko Boikanyo, Ajay Kumar Mishra, Shivani Bhardwaj Mishra and Sabelo Dalton Mhlanga</i>	Fire retardant coatings for structural steel <i>Indraneel. S. Zope and Aravind Dasari</i>
16:50–17:30	POSTER AWARDS & CONFERENCE PROGRAMME CLOSURE	