



**Materials
Networking project
H2020-TWINN-2015**

**Faculty of Chemistry
and Pharmacy
University of Sofia**



WORKSHOP

“ADVANCED MATERIALS”



11-14 SEPTEMBER 2018



MARINA ROYAL PALACE

DUNI, BULGARIA

“Materials Networking” project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 692146.

Program
Tuesday, 11th September

17:00	Opening – Georgi Vayssilov – project coordinator
17:10	Krassimir Danov
OP1	“Growth of wormlike micelles in nonionic surfactant solutions: Quantitative theory vs. experiment”
17:30	Slavka Tcholakova
OP2	“Rheology of foams formed from polymer-surfactant mixtures”
17:50	Lachezar Christov
OP3	“Numerical calculation of molecular weight characteristics of polymers produced by atom transfer radical polymerization”
18:10	Zhulieta Valkova
OP4	“‘Self-shaping’ of multicomponent drops”
18:30	Nadya Politova-Brinkova
OP5	“Self-regulation of foam volume and bubble size during foaming via shear mixing”
18:50	Fatmegyul Mustan
SO1	“Role of surface rheological properties for the kinetics of bubble Ostwald ripening in saponin-stabilized foams”
19:00	Dinner

Wednesday, 12th September

09:00	Stefan Tsakovski
OP6	“MANOVA studies on toxicity and endocrine disrupting potential of packaging materials exposed to different extraction schemes”
09:20	Assya Bojinova
OP7	“Pharmaceutical drugs photodegradation by mechano activated ZnO catalysts”
09:40	Valentina Lyubomirova
OP8	“Analytical problems in the mass spectrometric analysis of environmental samples”
10:00	Júlia Garcia
SO2	“Synthesis and characterization of carbon supported Pt(Cu) core-shell nanoparticles for hydrogen oxidation in low temperature fuel cells”
10:10	Katarina Josifovska
SO3	“Endocrine Disruptors in water samples: A conjoined experimental and theoretical study under GC–MS conditions”
10:20	Coffee Break
10:50	Todor Dudev
OP9	“Competition between abiogenic Al ³⁺ and native Mg ²⁺ , Fe ²⁺ and Zn ²⁺ ions in protein binding sites: Implications for aluminum toxicity”
11:10	Alia Tadjer, Hristo Rashev
OP10	“DFT-based molecular design of alkaline-ion batteries”
11:30	Kai S. Exner
OP11	“Recent model development in theoretical electrochemistry in order to close the apparent community gap between electrocatalysis and battery research”
11:50	Iskra Koleva
SO4	“Stable subsurface carbon – a general feature of noble metal nanoparticles and surfaces”
12:00	Lorena Vega
SO5	“Atomic arrangement of PtCu bimetallic nanoparticles determined using topological energy expressions”

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12:10	Lunch
16:00	Ana Koleva
OP12	“Coumarins and their behavior in ultrasound promoted metal-mediated reactions”
16:20	Vladimir Gelev
OP13	“New stable isotope probes for NMR of proteins”
16:40	Rumen Lyapchev
SO6	“Influence of the NHC-system on the auxiliary ligand behavior in palladium allyl complexes in solution”
16:50	Aleksey Vasilev
OP14	“E-Z photoisomerization in photoswitchable molecular machines for triplet-triplet annihilation upconversion accelerated molecular organic solar thermal systems”
17:10	Coffee Break
17:40	Kai Zhang
OP15	“Designing conjugated polymers for visible light photocatalysis”
18:00	Gergana Georgieva
OP16	“Synergistic micellar growth in mixed surfactant solutions: Rheology and cryo-TEM imaging”
18:20	Martin Tsvetkov
OP17	“Visible light-driven photocatalytic activity of magnetic recoverable ternary g-C ₃ N ₄ /rGO/ZnFe ₂ O ₄ nanocomposites”
18:40	Vesselin Petrov
OP18	“On the multistate of 2'-hydroxyflavylium-flavanone system. Illustrating the concept of a timer with reset at the molecular level”
19:00	Tahmida Huq
SO7	Improving charge extraction from bismuth oxyiodide photovoltaics with 2-d metal dichalcogenide transport layers”
19:10	Kai Philipps
SO8	“Next generation organic light-emitting diodes (OLED) based on thermally activated delayed fluorescence (TADF) polymers”
19:20	Dinner

Thursday, 13th September

09:00	Petar Petrov
OP19	"Exploiting polymer chemistry towards advanced functional nanocarriers development"
09:20	Aneli Nedelcheva
OP20	“The importance of integrated approach in pharmacognosy: Study based on Bulgarian medicinal plants listed in the European pharmacopoeia”
09:40	David Ng
OP21	“Polymer conjugates for therapeutic applications”
10:00	Elisaveta Mladenova
OP22	“Analytical approach for botanical origin determination of Bulgarian honeydew honeys and monofloral honeys”
10:20	Stiliyana Pereva
OP23	“On the efficiency of cyclodextrin-based inclusion complexes with ibuprofen”
10:40	Stoyan Smoukov
OP24	“Growing Polymeric Micro- and Nanoparticles with Regular Anisotropic Shapes – Towards a Scalable Bottom-Up Synthesis”

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11:00	Leona Lingstedt
SO9	“Low voltage current-driven organic electrochemical transistor for biomedical applications”
11:10	Coffee Break
11:40	Yuri Kalvachev
OP25	“Hierarchical mordenite as a heterogeneous catalyst”
12:00	Simeon Stoyanov
OP26	“An environmentally benign antimicrobial nanoparticle based on a silver-infused lignin cores”
12:20	Peter Georgiev
SO10	“Size-dependent dielectric function of single gold nanoparticle, s surface plasmon resonance”
12:30	Lunch
16:00	Krasimir Vasilev
OP27	“Nanoengineered plasma polymer films for biomedical applications”
16:20	Benlin Hu
OP28	“The synthesis, stacking and charge transport of N-doped nanoribbons”
16:40	Anielen Halda Ribeiro
SO11	“Using light-emitting nanoparticles to control defects in organic diodes”
16:50	Elham Khodabakhshi
SO12	“Controlling charge transport and recombination in polymer/quantum dot-based OLEDs”
17:00	Coffee Break
17:30	Rumen Tomov
OP29	“Inkjet printing infiltration of Gd:CeO ₂ interlayer in commercial anode-supported SOFC”
17:50	Jingwei Hou
OP30	“Linking defects, hierarchical porosity generation and desalination performance in metal-organic frameworks”
18:10	Joan Coines
OP31	“Oxazoline or oxazolinium ion? The protonation state and conformation of the reaction intermediate of chitinase enzymes revisited”
18:30	Martí López
SO13	“Tuning activity of transition metal carbides by surface metal alloying: Case of study of CO ₂ capture”
18:40	Martin Amoza Dávila
SO14	“Understanding the origin of magnetic anisotropy in S=1/2 mononuclear transition metal complexes”
18:50	Agnieszka Mierczynska-Vasilev
OP32	“Magnetic removal of haze-forming proteins from white wines”
19:10	Dinner

Friday, 14th September

09:00	Konstantin Neyman
PL1	“Density-functional modelling of nanocomposite materials for catalysis and new energy technologies”
09:30	Spas Kolev
OP33	“Approaches for improving the permeability and stability of polymer inclusion membranes for the clean-up of thiocyanate from gold mine tailings water”
09:50	Steering Committee Meeting

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