

List of posters – Monday, Sept. 11, 2017

Rapid-fire short communications, 12:00 to 12:30

Basic principles of electrokinetics

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|---|------------------------|--|
| 1 | Thomas Palberg | Density dependence of the electrophoretic mobility measured over a wide range of particle concentrations |
| 2 | Igor V. Shevchenko | Influence of geoelectric field on chemical reactivity of water |
| 3 | Mathias Dietzel | Electrokinetic transport in narrow channels with non-equilibrium electric double layers |
| 4 | Masashi Iwata | Electrokinetic aspects of mechanical expression |
| 5 | Paloma Arenas-Guerrero | Electro-orientation of metallic particles: the case of silver nanowires |
| 6 | Yingjia Li | Investigation of low-voltage electrowetting on multilayer-dielectrics with impedance spectroscopy |
| 7 | Jürgen Fuhrmann | Models and numerical methods for ionic mixtures with volume constraints |
| 8 | Mohd Zaidi Jaafar | Monitoring water alternate gas process using streaming potential |
| 9 | Pramoda Kumar | Electroconvective instability in concentration polarization:
An experimental perspective |

Molecular theories

- | | | |
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| 10 | David Sean | Investigating the electrophoretic mobility of weak polyelectrolytes via coarse-grained simulations |
| 11 | Vladimir Lobaskin | Diffusive-convective transition in simple driven electrolytes |

Further posters

Basic principles of electrokinetics

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| 12 | Yu-You Chu | Sedimentation of a pH-regulated nanoparticle in a generalized gravitational field |
| 13 | Yusuke Sato | Charging and aggregation of cellulose nanofiber:
experiments and modeling |
| 14 | Inhee Cho | Shear flow assisted characterization of extended space charge layer |
| 15 | Seoyun Sohn | Overlimiting conductance under 3-dimensional constriction |
| 16 | Keon Huh, Jung A Lee | Ion concentration polarization on dielectrics:
High Dukhin number limit |
| 17 | Petr Vágner | Thermodynamic study of YSZ spectroscopy |
| 18 | Yu-Min Chen | Influence of salt valence on the rectification behavior of nanofluidic diodes |
| 19 | Antonio Ramos | Electrokinetic manipulation of semiconductor nanowires |
| 20 | Nataliya Mishchuk | Electric double layer of hydrophobic particles |
| 21 | Aneta Michna | Influence of poly(allylamine hydrochloride) (PAH) macromolecules... |
| NEW | Replaced by
Xiao Xu | Effective charge and surface potential of dendritic polyglycerol sulfate:
A multiscale simulation study |
| 22 | Maria Morgia | Electrokinetic studies of polyelectrolyte/ polypeptides monolayers on mica |
| NEW | Replaced by
Ognen Pop-Georgievski | Impact of bioactive peptide motifs on the molecular structure, charging and non-fouling properties of poly(ethylene oxide) brushes |
| 23 | Nicolas Rivas | Electrokinetic simulations of drop deformation and breakup in an electric field |

List of posters – Tuesday, Sept. 12, 2017

Rapid-fire short communications, 11:50 to 12:20

- # **Electrokinetic assembly**
- 24 Ran Niu Active and passive colloidal molecules from electro-kinetic self-assembly
- 25 Yasushige Mori Size effect of titanium dioxide nanoparticles on deposit behavior prepared by electrophoretic phenomena
- 26 Sinwook Park Dynamic control of the concentration-polarization layer in a permselective membrane-microchannel system using electro-thermal force
- Ion-specific effects in materials sciences**
- 27 Mohd Zaidi Jaafar Streaming potential measurement during alkaline-surfactant-polymer progression in porous media
- Ionic transport in polyelectrolyte complex materials**
- 28 David Vehlow Loading and releasing charged therapeutic drugs at polyelectrolyte complex nanoparticles for bone healing
- 29 María Luisa Jiménez Experimental evaluation of the effect of solution temperature on salinity gradient energy
- 30 Silvia Ahualli Soft carbon nanoparticles for desalination and energy production
- 31 Myung-Suk Chun Micro energy conversion by electrokinetic flows of polyelectrolyte non-Newtonian fluid in microchannels

Further posters

- # **Electrokinetic assembly**
- 32 Eva-Maria Laux Molecular AC electrokinetics using interdigitated electrodes
- 33 Ralph Hölzel AC electrokinetic immobilisation of nanoparticles and proteins
- 34 Ran Niu Self assembled modular micro-swimmers: Speed and directional control
- 35 Thomas Palberg Electro-osmotic pumping for structured coatings
- 36 Atsushi Yamaguchi The maximum adsorption mass of lysozymes to silica particles: The role of electrostatic interaction
- Ion-specific effects in materials sciences**
- 37 Tajana Preocanin Quartz/aqueous electrolyte solution interface: molecular dynamic simulation and surface potential measurements
- 38 Motoyoshi Kobayashi Charge reversal of latex particles: effect of trivalent and hydrophobic ions
- 39 Takuya Sugimoto Homo- and hetero-aggregation stability between oppositely-charged particles with charge reversal
- 40 Chanbum Park Molecular simulations of electrolyte structure and dynamics in lithium-sulfur battery solvents
- 41 Anja Caspari Surface properties of carbon nanoparticles
- 42 Subramanian Ramanathan Graphene oxide-cobalt-imidazole modified glassy carbon electrode for electrochemical detection of trace amounts of arsenic in chicken
- Advanced instrumentation and methods**
- 43 Kazuho Nakamura Application of electrokinetic phenomena in membrane separation processes
- 44 Larysa L. Lysenko Intensification of electroosmotic dewatering of clay dispersions by means of charged porous additives
- Electrokinetics in bioanalytical applications and bioseparation**
- 45 Sandra Stanke AC electrical functionalization of nanoelectrode arrays for influenza virus detection