

Rapid-fire short communications and posters

update: August 30, 2017, subject to changes

Title	Authors	Affiliation	Topic	presenting author	Poster number
Presentation on Monday, Sept. 11, 2017					
Density dependence of the electrophoretic mobility measured over a wide range of particle concentrations	Denis Botin, Thomas Palberg	Institute of Physics, JGU, Mainz, Germany	1. basic principles of electrokinetic phenomena	Thomas Palberg	P1
Influence of geoelectric field on chemical reactivity of water	Igor V. Shevchenko	Institute of Bioorganic Chemistry, Kiev, Ukraine	1. basic principles of electrokinetic phenomena	Igor V. Shevchenko	P2
Electrokinetic transport in narrow channels with non-equilibrium electric double layers	Mathias Dietzel, Sebastian Dehe, Miklós Vécsei and Steffen Hardt	Institute for Nano- and Microfluidics, TU Darmstadt, Germany	1. basic principles of electrokinetic phenomena	Mathias Dietzel	P3
Electrokinetic Aspects of Mechanical Expression	M. Iwata*, H. Sadai*, N. Yabuta** and M. S. Jami***	*Department of Chemical Engineering, Osaka Prefecture University, Sakai, Japan **Yabuta Industries Co., Ltd, Akashi, Japan ***Department of Biotechnology Engineering, International Islamic University Malaysia, Kuala Lumpur, Malaysia	1. basic principles of electrokinetic phenomena	Masashi Iwata	P4
Electro-orientation of metallic particles: the case of silver nanowires	Paloma Arenas-Guerrero, Ángel V. Delgado, María L. Jiménez.	Department of Applied Physics, University of Granada, Spain.	1. basic principles of electrokinetic phenomena	Paloma Arenas-Guerrero	P5
Investigation of low-voltage electrowetting on multilayer-dielectrics with impedance spectroscopy	Yingjia Li, Brian P. Cahill	Institute for Bioprocessing and Analytical Measurement Techniques, Heilbad Heiligenstadt, Germany	1. basic principles of electrokinetic phenomena	Yingjia Li	P6
Models and numerical methods for ionic mixtures with volume constraints	J. Fuhrmann, A. Linke, Ch. Merdon	Weierstrass Institute for Applied Analysis and Stochastics, Berlin	1. basic principles of electrokinetic phenomena	Jürgen Fuhrmann	P7
Monitoring water alternate gas process using streaming potential	Siti Mardhiah Mohd Anuar, Mohd Zaidi Jaafar, Wan Rosli Wan Sulaiman, Abdul Razak Ismail	Universiti Teknologi Malaysia	1. basic principles of electrokinetic phenomena	Mohd Zaidi Jaafar	P8
Electroconvective instability in concentration polarization: An experimental perspective	Pramoda Kumar (1,2), Shmuel Rubinstein (2), Iris Visoly-Fisher (1), Roiy Sayag (1), Boris Zaltman (1) and Isaak Rubinstein (1)	1 Blaustein Institute for Desert Research, Ben-Gurion University of the Negev, Israel 2 School of Engineering and Applied Sciences, Harvard University, U.S.A	1. basic principles of electrokinetic phenomena	Pramoda Kumar	P9
Investigating the electrophoretic mobility of weak polyelectrolytes via coarse-grained simulations	David Sean, Christian Holm	University of Stuttgart	2. molecular theories	David Sean	P10
Diffusive-convective transition in simple driven electrolytes	Vladimir Lobaskin*, Roland R. Netz**	*University College Dublin, Ireland, **Free University Berlin, Germany	2. molecular theories	Vladimir Lobaskin	P11

Presentation on Tuesday, Sept. 12, 2017

Active and passive colloidal molecules from electro-kinetic self-assembly	Ran Niu, Thomas Palberg, Thomas Speck	Institute of Physics, JGU Mainz, Germany	3. electrokinetic assembly	Ran Niu	P24
Size effect of titanium dioxide nanoparticles on deposit behavior prepared by electrophoretic phenomena	Yasushige Mori, Yuta Nobuzane, Katsumi Tsuchiya	Doshisha University, Department of Chemical Engineering and Materials Science	3. electrokinetic assembly	Yasushige Mori	P25
Dynamic control of the concentration-polarization layer in a permselective membrane-microchannel system using electro-thermal force	Sinwook Park, Gilad Yossifon	Technion, I.I.T, Israel	3. electrokinetic assembly	Sinwook Park	P26
Streaming potential measurement during alkaline-surfactant-polymer progression in porous media	Mohd Zaidi Jaafar, Tengku Amran Tengku Mohd and Azad Anugerah Ali Rasol	Faculty of Chemical and Energy Engineering, Universiti Teknologi Malaysia, Skudai, MALAYSIA Faculty of Chemical Engineering, Universiti Teknologi MARA, Shah Alam, MALAYSIA	4. ion-specific effects in materials sciences	Mohd Zaidi Jaafar	P27
Loading and releasing charged therapeutic drugs at polyelectrolyte complex nanoparticles for bone healing	D. Vehlow, B. Urban, A. Gebert, K.S. Lips, M. Müller	Leibniz-Institut für Polymerforschung Dresden e.V.	6. ionic transport in polyelectrolyte complex materials	David Vehlow	P28
Experimental evaluation of the effect of solution temperature on salinity gradient energy	M.L. Jiménez, S. Ahualli, Z. Amador, M.M. Fernández, G. Iglesias, A.V. Delgado	Department of Applied Physics, School of Sciences, University of Granada, Granada, Spain	6. ionic transport in polyelectrolyte complex materials	M.L. Jiménez	P29
Soft carbon nanoparticles for desalination and energy production	S. Ahualli, M.M. Fernández, G. Iglesias, M.L. Jiménez, A.V. Delgado	S. Ahualli, M.M. Fernández, G. Iglesias, M.L. Jiménez, A.V. Delgado	6. ionic transport in polyelectrolyte complex materials	Silvia Ahualli	P30
Micro energy conversion by electrokinetic flows of polyelectrolyte non-Newtonian fluid in microchannels	Myung-Suk Chun (1), Byoungjin Chun (1), Ji-Young Lee (1,2)	1) Complex Fluids Laboratory, National Agenda Research Division, Korea Institute of Science and Technology (KIST), Seoul, Republic of Korea 2) Department of Chemical Engineering, The University of Seoul, Republic of Korea	6. ionic transport in polyelectrolyte complex materials	Myung-Suk Chun	P31