

# ELOPTO-2006

11th International Symposium on Colloidal and Molecular Electro-Optics

May 22-25, 2006

Institute for Chemical Research,  
Kyoto University, Uji City, Kyoto, Japan

Homepage: <http://www.elopto.jp/>



## THIRD CIRCULAR

### Important Dates

- Mar. 31, 2006:** Deadline for submission of abstract paper.  
**Mar. 31, 2006:** Deadline for registration.  
**Mar. 31, 2006:** Deadline for hotel reservation.  
**May 22-25, 2006:** ELOPTO-2006 symposium.  
**Aug. 31, 2006:** Deadline for submission of paper for the special issue of *Colloids & Surfaces B: Biointerfaces*

### Cosponsors

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The Society of Polymer Science, Japan  
The Society of Fiber Science and Technology, Japan

### Grants-in-Aid Acknowledged

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Professor Emeritus Kiwamu Yamaoka, Hiroshima University  
Professor Emeritus Tsuneo Okubo, Gifu University

Persons and organizations listed above are deeply acknowledged for their financial supports for ELOPTO-2006.

On behalf of the organizers of ELOPTO-2006  
Dr. Tsuneo Okubo  
Professor, Yamagata University  
Professor Emeritus, Gifu University  
Head, Institute for Colloidal Organization

## Plenary Lecturers

Professor **Benjamin Chu** (State Univ. of New York, USA)

*“Macromolecular and Colloidal Manipulation in Electro-Spun Scaffolds for Non-Viral Gene Delivery”*

Professor **Thomas Palberg** (Univ. of Mainz, Germany)

*“Electro-optic Experiments with Colloidal Crystals”*

Professor **Toshio Yanagida** (Osaka Univ., Japan)

*“Single Molecule Nano-Bioscience”*

## Invited Speakers

Prof. **Hiroyuki Asanuma** (Univ. Tokyo, Japan), Prof. **Sanford A. Asher** (Univ. Pittsburgh, USA), Prof. **Matthias Ballauf** (Univ. Bayreuth, Germany), Prof. **Tommaso Bellini** (Univ. Milano, Italy), Prof. **Jean-Louis Dejjardin** (Univ. Perpignan, France), Prof. **Arnljot Elgsaeter** (Trondheim Univ., Norway), Prof. **Hiroshi Furusawa** (Kochi Univ. Tech., Japan), Prof. **Jose Garcia de la Torre** (Univ. Murcia, Italy), Prof. **Jian Ping Gong** (Hokkaido Univ., Japan), Prof. **Steve Granick** (Univ. Illinois at Urbana, USA), Dr. **Toshiharu Hirai** (Shokubai Kasei Co., Japan), Prof. **Tomiki Ikeda** (Tokyo Inst. Tech., Japan), Prof. **Kohzo Ito** (Univ. Tokyo, Japan), Prof. **Tomokazu Iyoda** (Tokyo Inst. Tech., Japan), Prof. **Yuri Kalmykov** (Univ. Perpignan, France), Prof. **Kazunori Kataoka** (Univ. Tokyo, Japan), Prof. **Haruma Kawaguchi** (Keio Univ., Japan), Dr. **Susumu Kawase** (Soken Chemicals Co., Japan), Prof. **Hiromi Kitano** (Toyama Univ., Japan), Prof. **Shinobu Koda** (Nagoya Univ., Japan), Dr. **Hiroshi Nakamura** (Toyota Central R/D Lab., Japan), Prof. **Mamoru Nango** (Nagoya Inst. Tech., Japan), Prof. **Eberhard Neumann** (Univ. Bielefeld, Germany), Prof. **Kohji Nishida** (Kyoto Univ., Japan), Prof. **Yutaka Ohmori** (Osaka Univ., Japan), Prof. **Hiroyuki Ohshima** (Tokyo Univ. Sci., Japan), Prof. **Atsuhiko Osuka** (Kyoto Univ., Japan), Prof. **Ivana Petkanchin** (Bulgarian Acad. Sci., Bulgaria), Prof. **Dietmar Poershke** (MPI, Germany), Dr. **Kenji Sakamoto** (NIMS, Japan), Prof. **Zoltan A. Schelly** (Texas Univ. Arlington, USA), Prof. **Toshiyuki Shikata** (Osaka Univ., Japan), Dr. **Tetsuo Shimizu** (Daikin Co., Japan), Prof. **Masatsugu Shimomura** (Hokkaido Univ., Japan), Prof. **Takeshi Shimomura** (Univ. Tokyo, Japan), Prof. **Francesco Stellacci** (MIT, USA), Prof. **Nancy Stellwagen** (Univ. Iowa, USA), Prof. **Maria Stoimenova** (Bulgarian Acad. Sci., Bulgaria), Prof. **Stoyl P. Stoylov** (Bulgarian Acad. Sci., Bulgaria), Dr. **Motohiko Tanaka** (NIFS, Japan), Prof. **Hirokazu Toriumi** (Univ. Tokyo, Japan), Prof. **Norihiro Umeda** (Tokyo Univ. Agri.Tech., Japan), Prof. **Vladislav Voitylov** (St. Petersburg State Univ., Russia), Prof. **Junji Watanabe** (Tokyo Inst. Tech., Japan), Prof. **Masayoshi Watanabe** (Yokohama National Univ., Japan), Prof. **Toshiyuki Watanabe** (Tokyo Univ. Agri. Tech., Japan), Prof. **Sunao Yamada** (Kyusyu Univ., Japan), Prof. **Masafumi Yoshida** (Musashi Inst. Tech., Japan), Prof. **Kenichi Yoshikawa** (Kyoto Univ., Japan), Prof. **Ryo Yoshida** (Univ. Tokyo, Japan), Prof. **Khoji Yoshinaga** (Kyusyu Inst. Tech., Japan)

## Presentation Programs (tentative)

### Oral Presentations

Main Hall (1F) of the Joint Research Laboratory, Institute for Chemical Research

Monday, May 22

09:00-09:10 *Opening Remarks*

[Presiding: T. Kanaya]

09:10-10:00 PL01 **Benjamin Chu** (State Univ. of N.Y.)

*“Macromolecular and Colloidal Manipulation in Electro-Spun Scaffolds for Non-Viral Gene Delivery”*

[Presiding: T. Bellini & T. Shikata]

10:00-10:20 1S01 Kazuyoshi Ogawa, Masafumi Miyake, **Etsuo Kokufuta** (Inst. of Appl. Biochem. Tsukuba Univ.)  
*“Light Scattering Study on Polyelectrolyte Complexation between Anionic and Cationic Nanogels in Salt-free Aqueous Solutions”*

10:20-10:40 1S02 **Khozo Ito** (Univ. of Tokyo)

*“Slide-Ring Gel: Topological Gel with Freely Movable Cross-Links”*

10:40-11:05 1S03 **Ryo Yoshida** (Univ. of Tokyo)

- 11:05-11:30 **1S04** Jian P. Gong, T. Tominaga, T. Kurokawa, Y. Osada (Hokkaido Univ.)  
 “Self-Oscillating Polymer and Gels: Toward Novel Biomimetic Materials”  
 “Elastic-Hydrodynamic Transition of Gel Friction”
- 11:30-13:00 *Lunch Time*
- [Presiding: S. Stoylov & T. Watanabe]
- 13:00-13:20 **1S05** Toshiyuki Shikata<sup>1</sup>, Aiko Sakamoto<sup>1</sup>, Kenji Hanabusa<sup>2</sup> (<sup>1</sup>Osaka Univ., <sup>2</sup>Shinshu Univ.)  
 “Huge Macro-Dipoles Generated in Supramolecular Polymers Formed by Gelator Molecules in Nonpolar Media”
- 13:20-13:45 **1S06** Francesco Mantegazza, Maria Luisa Jimenez, Tommaso Bellini (Univ. of Milano)  
 “Anomalous Field-Induced Particle Orientation in Mixtures of Charged Rod-Like and Spherical Colloids”
- 13:45-14:10 **1S07** Tomokazu Iyoda (CRL - Tokyo Inst. of Tech.)  
 “Highly Ordered Phase-segregated Nano-cylinder Structures in Multifunctional Block Copolymer Thin Films”
- 14:10-14:35 **1S08** Masatsugu Shimomura (Hokkaido Univ.)  
 “Spontaneous Formation of Polymer Nanoparticles in Non-Equilibrium Process”
- 14:35-14:55 **1S09** J.-F. Vanhumbecq, Joris Proost (Univ. Catholique de Louvain)  
 “In-Situ Optical Monitoring of Dielectric and Electrostrictive Properties of Anodised Thin Films for Biochip Applications”
- 14:55-15:10 *Coffee Break*
- [Presiding: T. Iyoda & T. Palberg]
- 15:10-15:35 **1S10** Junji Watanabe (Tokyo Inst. of Tech.)  
 “New Exotic Liquid Crystals with Spontaneous Polarization and Chirality Exploited from Understanding of Polymeric Effect on Smectic Structure”
- 15:35-16:00 **1S11** Stoyl P. Stoylov (Bulgarian Acad. of Sci.)  
 “Electro-Optical Investigation of the Dipole Moments of Nanoparticles” or “Electro-Optic Evidence for the Electric Dipole Moments of Nanoparticles and Macromolecules”
- 16:00-16:25 **1S12** Tomiki Ikeda (Tokyo Inst. of Tech.)  
 “Photoinduced Bending of Polymer Films - Photomobile Polymers”
- 16:25-16:50 **1S13** Atsuhiko Osuka (Kyoto Univ.)  
 “Construction of Porphyrin-Based Large Architectures and Their Photophysics”
- 16:50-17:15 **1S14** Yutaka Ohmori (Osaka Univ., CASI)  
 “Highly Efficient Flexible Polymeric Electroluminescent Devices”
- 17:15-17:35 **1S15** Toshiyuki Watanabe (Tokyo Univ. of Agriculture and Tech.)  
 “Nonlinear Optical Properties of Nano-particles and Their Applications”
- 18:00-19:40 *Mixer*

## Tuesday, May 23

[Presiding: E. Kokufuta]

- 09:00-09:50 PL02 Toshio Yanagida (Osaka Univ.)  
 “Single Molecule Nano-Bioscience”
- [Presiding: K. Ito & E. Neumann]
- 09:50-10:15 **2S01** Kiwamu Yamaoka (Hiroshima Univ.)  
 “Anomalous Electric Birefringence Behavior of Sonicated DNA Fragments as Observed in Reversing-Pulse Transients and Steady-State Sign Reversal. A Multicomponent Approach”
- 10:15-10:35 **2S02** Shinobu Koda (Nagoya Univ.)  
 “Ultrasonically Induced Birefringence of Rod-like Micelles in Aqueous Solutions”
- 10:35-11:00 **2S03** Hiroyuki Asanuma (Nagoya Univ.)  
 “Azobenzene-Tethered DNA as a Photo-Switching Biodevice”
- 11:00-11:25 **2S04** Masayoshi Watanabe, Yukikazu Takeoka, Shinichiro Tabata, Kazuhide Ueno (Yokohama National Univ.)  
 “Nano-structured Polymeric Materials Prepared by Using Colloidal Crystal Templates”
- 11:25-13:00 *Lunch Time*

[Presiding: N. Stellwagen & M. Watanabe]

- 13:00-13:25 **2S05** Kazunori Kataoka (Univ. of Tokyo)  
“Smart Polymeric Micelles as Nanocarriers for Gene and Drug Delivery”
- 13:25-13:50 **2S06** S. Kakorin, E. Neumann (Univ. of Bielefeld)  
“High-Field Polarization Electrooptics and Conductometry of Biocolloidal Particles, Lipid Vesicles and Cellular Organelles”
- 13:50-14:15 **2S07** Haruma Kawaguchi (Keio Univ.)  
“Polymer Colloids as Biospecific Reactors”
- 14:15-14:35 **2S08** Kohji Yoshinaga, Emiko Mouri, Hiroyuki Karakawa (Kyushu Inst. of Tech.)  
“Approach to Photonic Crystals by Immobilization of Colloidal Crystals of Polymer-grafted Silica”
- 14:35-14:55 **2S09** Ts. Radeva, K. Kamburova, I. Petkanchin (Bulgarian Acad. of Sci.)  
“Electro-Optics of Multilayers from Biopolymers”
- 14:55-15:15 **2S10** Hiromi Kitano (Toyama Univ.)  
“Sensing Capabilities of Colloidal Gold Modified with Various Kinds of Self-Assembled Monolayers on a Glass Substrate”
- 15:15-15:30 *Coffee Break*

[Presiding: Y. Kalmykov & K. Yoshinaga]

- 15:30-15:55 **2S11** N. C. Stellwagen, Y. J. Lu (Univ. of Iowa)  
“The Use of Transient Electric Birefringence to Analyze Sequence-Dependent Curvature in DNA Molecules”
- 15:55-16:15 **2S12** Kazuhito Watanabe, Kaori Kamata, Tomokazu Iyoda (Tokyo Inst. of Tech.)  
“Photo-orientation and Ion Channel Function of Phase-segregated Nanocylinder Array Structures in Amphiphilic Block Copolymer Thin Films”
- 16:15-16:35 **2S13** Hiroshi Nakamura, Masahiko Ishii, Azusa Tsukigase, Masashi Harada, Hideyuki Nakano (Toyota Central Res. & Dev. Lab., Inc.)  
“Optical Properties and Microstructures of Colloidal Crystalline Arrays Composed of Titania Nanosheets Coated Spheres”
- 16:35-16:55 **2S14** Takeshi Shimomura (Univ. of Tokyo)  
“Two Dimensional Spectroscopy of Electric Birefringence Relaxation: Application to Polyelectrolyte and Microemulsion Systems”
- 16:55-17:15 **2S15** E. Stellwagen, Q. Dong, A. Abdulla, N. C. Stellwagen (Univ. of Iowa)  
“Hairpin Formation in Single-Stranded DNA Oligomers”
- 17:15-17:35 **2S16** Masaru Oda<sup>1,2</sup>, Atsushi Hasegawa<sup>2</sup>, Noriya Iwami<sup>2</sup>, Ken Nishiura<sup>2</sup>, Naohisa Ando<sup>2</sup>, Hiromi Horiuchi<sup>2</sup>, Toshiro Tani<sup>1,2</sup> (<sup>1</sup>SRI for Future Nano-Sci. and Tech., <sup>2</sup>Dept. of Appl. Phys., Tokyo Univ. of Agriculture and Tech.)  
“Reversible Photobluening of CdSe/ZnS/TOPO Nanocrystals”

## Wednesday, May 24

[Presiding: T. Okubo]

- 09:00-09:50 **PL03** Thomas Palberg (Univ. of Mainz)  
“Electro-optic Experiments with Colloidal Crystals”

[Presiding: H. Frusawa & Z. Schelly]

- 09:50-10:15 **3S01** Matthias Ballauff (Univ. of Bayreuth)  
“Synchrotron Radiation and Colloids: Use of Anomalous Dispersion for Structural Studies of Colloidal Systems”
- 10:15-10:35 **3S02** Susumu Kawase, Tetsuya Yoshida (Soken Chem. R & D Center)  
“Application of Colloidal Crystals as the Optical Materials”
- 10:35-10:55 **3S03** Thomas Palberg, Martin Medebach, Jaegen Horbach, Thorsten Kreer, Apratin Chatterji, Christian Holm, Vladmir Lobashkin (Johannes Outenberg Univ. Mainz)  
“From Microscopic to Effective Interactions in Charged Colloidal Systems”
- 10:55-11:20 **3S04** Sanford A. Asher (Univ. of Pittsburgh)  
“Polymerized Crystalline Colloidal Array Photonic Crystals for Chemical Sensing and Optoelectronics”
- 11:20-11:40 **3S05** Tsuneo Okubo (Yamagata Univ.)  
“Convective, Sedimentation and Drying Dissipative Structures in Colloidal Dispersions”

- 11:40-13:00 *Lunch Time*

[Presiding: D. Pörschke & M. Yoshida]

- 13:00-13:20 3S06 Mieko Taniguchi, Chimari Okada, Youichi Yazawa, T. Yamame (Nagoya Univ.)  
“Divalent Cation-Induced Conformational Changes of Myosin Observed by Atomic Force Microscopy”
- 13:20-13:45 3S07 Zoltan Schelly (Univ. of Texas)  
“Subnanometer Size Uncapped Quantum Dots via Electroporation of Synthetic Vesicles”
- 13:45-14:05 3S08 K. L. Wu, S. K. Lai (National Central Univ.)  
“Thermal Response of a Microgel System”
- 14:05-14:30 3S09 Jose Garcia de la Torre (Univ. of Murcia)  
“Simulation Methodologies for Electro-Optic Properties of Macromolecules and Nanoparticles in Solution”
- 14:30-14:55 3S10 A. Spartakov, A. Trusov, V. Vojtylov (St. Petersburg State Univ.)  
“Complex Electrooptic Research of Nano-Particle Parameters in Colloids”
- 14:55-15:15 3S11 Natalia Yevlampieva ( St. Petersburg State Univ.)  
“Fullerene C60 Adducts as the Classical Electro-Optical Objects”
- 15:15-15:40 3S12 Maria Stoimenova (Bulgarian Acad. of Sci.)  
“Scaling Procedures in Colloidal Electro-Optics”
- 15:40-16:00 3S13 Mitsuhiro Matsumoto, Sae Koibuchi, Naoki Hayashi (Univ. of Tokushima)  
“Electric Birefringence and Streaming-Electric Birefringence of Synthesized Imogolite: The Electric Dependence of Anisotropy of Electric Polarizability”
- 16:00-16:20 3S14 Hiroki Arai, Miki Egami, Akira Nakashima (Catalysts & Chem. Ind. Co., Ltd.)  
“Porous Low-k Dielectric Materials with High Mechanical Strength”
- 16:20-16:40 3S15 Marian Sedlak (Slovak Acad. of Sci.)  
“Title to be announced”
- 18:00-20:00 *Banquet*

## Thursday, May 25

[Presiding: H. Oshima & F. Stellacci]

- 09:00-09:25 4S01 Kenichi Yoshikawa (Kyoto Univ.)  
“Self-Emergence of Spatio-Temporal Order under Laser Field”
- 09:25-09:50 4S02 Dietmar Pörschke (Max Planck Inst. für Biophys. Chem.)  
“New Dimensions for Electro-Optics”
- 09:50-10:10 4S03 Koji Nishida, Tsuyoshi Tsubouchi, Toshiji Kanaya (Kyoto Univ.)  
“Phase Separation and Aggregation in Polyelectrolyte Solutions”
- 10:10-10:35 4S04 Steve Granick (Univ. of Illinois)  
“Watching Molecules Diffuse at Soft and Hard Surfaces”
- 10:35-11:00 4S05 Motohiko Tanaka, Motoyasu Sato (National Inst. for Fusion Sci.)  
“Heating of Water and Ionic Solutions by Applied Microwaves: Molecular Dynamics Study”
- 11:00-11:25 4S06 Ivana B. Petkanchin (Bulgarian Acad. of Sci.)  
“Electro-Optics: Application to Ions Dynamics”
- 11:25-13:00 *Lunch Time*

[Presiding: S. Granick & M. Tanaka]

- 13:00-13:20 4S07 Masafumi Yoshida, Kenichiro Kimura, Yumiko Tsushima (Musashi Inst. of Tech.)  
“Monte Carlo Brownian Dynamics Simulation of Polyelectrolyte Solutions”
- 13:20-13:45 4S08 Francesco Stellacci (Massachusetts Inst. of Tech.)  
“Self-Assembly on Curved Surfaces”
- 13:45-14:05 4S09 Hiroshi Frusawa (Kochi Univ. of Tech.)  
“Strong Coupling Theory of Colloids as Soft Core Fluids”
- 14:05-14:30 4S10 Stine Nalum Naess, Arnljot Elgsaeter (Norwegian Univ. of Sci. and Tech.)  
“Brownian Dynamics Simulations of Rotational Diffusion. New Choice of Generalized Coordinates Yields Singularity Free Algorithms”
- 14:30-14:55 4S11 Hiroyuki Ohshima (Tokyo Univ. of Sci.)  
“Colloid Vibration Potential and Ion Vibration Potential in a Suspension of Colloidal Particles”
- 14:55-15:20 4S12 Jean-Louis Dejardin (Univ. de Perpignan)  
“Subdiffusive Relaxation Processes in Strong External Fields”
- 15:20-15:45 4S13 Yuri Kalmykov (Univ. de Perpignan)  
“Rotational Brownian Motion and Kerr Effect Relaxation in Electric Fields of Arbitrary Strength”

15:45-16:00 *Coffee Break*

[Presiding: J. Dejardin & A. Tsuchida]

- 16:00-16:20 4S14 Sergio R. Aragon, David K. Hahn (San Francisco State Univ.)  
“Accurate Calculation of the Kerr Constant of Proteins by Boundary Element Methods”
- 16:20-16:40 4S15 Kenji Sakamoto (National Inst. for Materials Sci.)  
“Alignment of liquid crystalline molecules and polymers induced by photo-aligned polyimide films”
- 16:40-17:00 4S16 Norihiro Umeda (Tokyo Univ. of Agriculture and Tech.)  
“Anisotropic Nano-Imaging by Polarization Contrast Near-Field Optical Microscope”
- 17:00-17:25 4S17 Mamoru Nango (Nagoya Inst. of Tech.)  
“Molecular Assembly of Artificial Photosynthetic Antenna Core Complex on Electrodes”
- 17:25-17:50 4S18 Sunao Yamada, Yasuro Niidome, Hironobu Takahashi (Kyushu Univ.)  
“Laser Writing in a Gold Nanorod-Poly(vinyl alcohol) Composite Film”
- 17:50-18:10 4S19 H. Toriumi (Univ. of Tokyo)  
“Title to be announced”
- 18:10-18:20 *Closing Remarks*

## Poster Presentations

Center Area (1F) of the Joint Research Laboratory, Institute for Chemical Research

Monday, May 22, 13:00-18:35, Obligation Time: 17:35-18:35

Tuesday, May 23, 13:00-17:00

- P01 Chieh-Ming Chao, K. H. Wu, C. I. Liu, C. K. Shih, T. C. Chang (Chung Cheng Inst. of Tech., National Defense Univ.)  
“Synthesis and Characterization of Metal Ion-Polyamidoamine Dendrimer (PAMAM; G2.0) Complexes by EPR”
- P02 Chiho Fujita, Hiroshi Matsunami, Kazuyoshi Ogawa, Etsuo Kokufuta (Tsukuba Univ.)  
“Light Scattering Study on Self-Assembly in Aqueous Protein/Polymer Systems (II): Complexation with Polyelectrolytes”
- P03 H. E. Perez Sanchez, F. G. Diaz, Jose Garcia de la Torre (Univ. de Murcia)  
“Electro-Optic Properties of Bent and Semiflexible Rod Molecules in Solution”
- P04 Masashi Harada, Masahiko Ishii, Hiroshi Nakamura (Toyota Central Res. & Dev. Lab., Inc.)  
“Recrystallization Process of Colloidal Crystals Disturbed by Optical Tweezers”
- P05 Hiroshi Horiuchi<sup>1</sup>, Fumi Tachibana<sup>1</sup>, Noriya Iwami<sup>1</sup>, Akashi, Ohtaki<sup>2</sup>, Ryo Iizuka<sup>2</sup>, Masaru Oda<sup>1,3</sup>, Toshiro Tani<sup>1,3</sup>, Masafumi Yohda<sup>2,3</sup> (<sup>1</sup>Dept. of Appl. Phys., <sup>2</sup>Dept. of Biotech. and Life Sci., <sup>3</sup>SRI for Future nano-sci. and Tech., Tokyo Univ. of Agriculture and Tech.)  
“CdSe/ZnS/TOPO nanocrystal-chaperone bioconjugates in aqueous solution: synthesis and its characterization using single molecule detection”
- P06 Masahiko Ishii, Masashi Harada, Azusa Tsukigase, Hiroshi Nakamura (Toyota Central Res. & Dev. Lab., Inc.)  
“Photonic Band Structures of Colloidal Crystalline Arrays Measured with Angle-Resolved Reflection Spectroscopy”
- P07 Hiroshi Kimura, Akira Tsuchida, Tsuneo Okubo (Gifu Univ.)  
“Rheo-Optical Studies for Colloidal Crystals”
- P08 Mitsuhiro Matsumoto, Jun Matsumoto and Kouji Takahashi (Univ. of Tokushima)  
“Relation of Saturated Electric Birefringence of Fractionated Bentonite with the Concentration of Cation”
- P09 Mitsuhiro Matsumoto and Masato Shodai (Univ. Of Tokushima)  
“Deposition of Silver Metal on Bentonite Surface and Its Electric Birefringence”
- P10 Hiroshi Matsunami, Chiho Fujita, Kazuyoshi Ogawa, Etsuo Kokufuta (Tsukuba Univ.)  
“Light Scattering Study on Self-Assembly in Aqueous Protein/Polymer Systems (I): Intra-polymer Complex Formation”
- P11 Ts. Radeva, Victoria Milkova, I. Petkanchin (Bulgarian Acad. of Sci.)  
“Electric Properties of Multilayers from Polyelectrolytes of Different Molecular Weight”
- P12 Emiko Mouri, Yoshitaka Okazaki, Motokazu Terada, Hiroyuki Karakawa, Kohji Yoshinaga (Kyushu Inst. of Tech.)  
“Structural Estimation and Properties of Polymer-grafted Colloidal Particle Monolayer”
- P13 Kenji Nakamura, Toshiyuki Shikata (Osaka Univ.)  
“Hyper High Frequency Dielectric Relaxation Behavior of Aqueous Polyelectrolyte Solution”
- P14 Koji Nishida, Takashi Konishi, Junpei Yamamoto, Toshiji Kanaya (Kyoto Univ.)

- “Liquid Crystal Analogue of Mesomorphic Phase of Isotactic Polypropylene”  
P15 Kazuyoshi Ogawa, Etsuo Kokufuta (Tsukuba Univ.)  
“Light Scattering Study on Polyelectrolyte Complexation between Cationic Nanogel and Strong Polyanion”  
P16 Yousuke Ono, Toshiyuki Shikata (Osaka Univ.)  
“Dielectric Relaxation Behavior of Aqueous Solution of Carbobetaines with Varying Inter-Charge Distances”  
P17 Thomas Palberg, Thorsten Preis, Ralf Biehl (Johannes Gutenberg Univ. Mainz)  
“Sliding Mechanisms of Crystal Plastic Flow under Electro-Shear”  
P18 A. G. Dobrikova, M. I. Dimitrov, S. G. Taneva, Ivana B. Petkanchin (Bulgarian Acad. of Sci.)  
“Protein-coated  $\beta$ -Ferric Hydrrous Oxide Particles: An Electrokinetics and Electro-optics Study”  
P19 Larysa Shapran, Hans Joachim Schaeae, Thomas Palberg (Johannes Gutenberg Univ. Mainz)  
“Elastic Constants of Colloidal Crystals from Electro-Shear Experiments”  
P20 Chien-Chou Shih, Cheng-Pang Yin, Te-Chung Chang, Jaw-Shiow Chu, Tseug-Rong Wu (Chung Cheng Inst. of Tech., National Defense Univ.)  
“Characterization and Antibacterial Activity of Ag(I), Ni(II), Cu(II) and Cr(III) Complexes with Diethanolamine-Containing Poly(methylmethacrylate)”  
P21 Nancy C. Stellwagen (Univ. of Iowa)  
“Title to be announced”  
P22 Shinsaku Takagi<sup>1</sup>, Hajime Tanaka<sup>2</sup> (<sup>1</sup>Musashi Inst. of Tech., <sup>2</sup>Univ. of Tokyo)  
“Rayleigh-Brillouin Spectroscopy for Turbid Colloidal Suspension”  
P23 Shiro Takashima (Prof. Emer. Univ. of Pennsylvania)  
“The Effect of Oxygen Binding on the Dipole Moment of Hemoglobin Molecule. Another Study with a wider Frequency Range”  
P24 Akira Tsuchida<sup>1</sup>, Hiroshi Kimura<sup>1</sup>, Tsuneo Okubo<sup>1</sup>, Koichi Ito<sup>2</sup> (<sup>1</sup>Gifu Univ., <sup>2</sup>Toyohashi Univ. Tech.)  
“Colloidal Crystals of Core-Shell Type Colloidal Spheres”  
P25 A. Mel'nikov, A. Trusov, Vladislav Vojtylov (St. Petersburg State Univ.)  
“Electrooptic and Dynamic Light Scattering Research of Rod-like and Flattened Particles in Colloid Systems”  
P26 L. Babadzanjanz, A. Voitylov, Vladislav Vojtylov (St. Petersburg State Univ.)  
“Numerical Methods of Inverse Problem Solutions in Electrooptics of Polydisperse Colloids”  
P27 Kuo H. Wu, Y. M. Shin, T. H. Ting, C. C. Yang (Chung Cheng Inst. of Tech., National Defense Univ.)  
“Magnetic Nanocomposites: Preparation and Characterization of NiZn Ferrite-Coated Bamboo Charcoal”  
P28 Constantine V. Yerin (Stavropol State Univ.)  
“Light Scattering by Magnetic Colloids in an Electric and Magnetic Fields”  
P29 Masafumi Yoshida, Kinuko Niihara (Musashi Inst. of Tech.)  
“Computer Simulation of Electric Conductivity in Electrolyte Solution”  
P30 Kohji Yoshinaga, Mayo Nakano, Seishu Komune, Emiko Mouri, Hiroyuki Karakawa (Kyushu Inst. of Tech.)  
“Modification of Colloidal Silica with Polymer containing Iron(0) Complex Moiety and Colloidal Crystallization in Organic Solvents”

## Presentation Information

### Oral Presentations (Main Hall (1F) of the Joint Research Laboratory, Institute for Chemical Research)

Plenary lecture: 50 min (including 5 min discussion)

Invited talk: 25 min (including 5 min discussion) or 20 min (including 5 min discussion)

General talk: 20 min (including 5 min discussion)

- 1) Time including changeover, please check your speech time by the tentative program of this circular.
- 2) It is strongly recommended that individuals using computer projection must bring their own laptop computer with the appropriate presentation software. The connector from the projector to your computer is limited to a D-sub 15 pin male connection. AC voltage is 100 V in Japan.
- 3) If you bring a CD-R or USB memory containing your presentation, you are advised to bring backup OHP (Overhead Projection) sheets. No extension of the presentation time due to the PC trouble is allowed. OHP projection will be available upon request to the secretariat.
- 4) Neither 35 mm slide projectors nor VHS videotape player will be available.

### Poster Presentations (Center Area (1F) of the Joint Research Laboratory, Institute for Chemical Research)

Presentation time: 13:00-18:35, May 22 (Mon.) and 13:00-17:00, May 23 (Tue.)

Obligation Time: 17:35-18:35, May 22 (Mon.)

- 1) The size of the poster panel for each presenter: 90 cm (width) × 120 cm (height)

- 2) The title, author(s)' name(s) and affiliation(s) should appear at the top area.
- 3) The poster will be attached to the panel by point pins, which will be supplied at front desk of the symposium.

## Abstract Preparation and Submission

All participants submitting papers (Plenary, Invited, General Oral and Poster Papers) must submit ABSTRACT. Deadline for submission of abstract papers is **March 31, 2006**. The abstract should be send by e-mail ([hkimura@apchem.gifu-u.ac.jp](mailto:hkimura@apchem.gifu-u.ac.jp)) as an attached MSWord file to the ELOPTO-2006 secretariat. The MSWord file should be named as "surname.doc". If you submit two or more abstracts, you name them as "surmane1.doc", "surname2.doc", ---. The file size of the abstract is recommended to be less than 1 MB.

### How to write abstract papers

- 1) Processor: MSWord (language: English)
- 2) Page: A4 (210 mm width × 297 mm height), 1 page
- 3) Margin: 25 mm all sides
- 4) Font: Times New Roman  
Title: 14 point bold, centered  
Author(s): Full names(s), 12 point, centered, presenting author underlined  
Affiliation and address: 12 point italic, centered  
E-mail address of the presenting author underlined: 12 point, centered  
Text and References: 10.5 point
- 5) Line space in the text: single space, leave a single space between E-mail address and main text
- 6) Illustrations: Proper figure preparation is required for optimum reproduction of line drawings and photographs. Only black and white figures will be acceptable.

## Publication of Special Edition in "Colloids & Surfaces B: Biointerfaces"

All participants submitting papers (Plenary, Invited and General (Oral & Poster) Papers) in ELOPTO-2006 are invited to submit their original and review articles to the special edition of "Colloids and Surfaces B: Biointerfaces", Elsevier (Editor: Prof. H. Ohshima, Guest Editors: Profs. T. Okubo, E. Kokufuta and K. Yamaoka). Online-submission through Internet (open the homepage below) must be made by **August 31, 2006**. All the papers submitted will be reviewed.

Information for Authors is available from home page:

[http://www.elsevier.com/wps/find/products\\_in\\_subject\\_and\\_group.cws\\_home/523888](http://www.elsevier.com/wps/find/products_in_subject_and_group.cws_home/523888)

## Mixer and Banquet

All speakers (oral & poster, and the spouse of invited speakers) are invited to Mixer (May 22, evening) and Banquet (May 24, evening).

## Registration and Hotel Reservation

Deadline for registration and hotel reservation is **March 31, 2006**. All participants except plenary lecturers and accompanying persons must pay the registration fee, 30,000 Japanese Yen (JPY). The fee includes admission to the scientific program and a copy of conference abstracts. Admission to the mixer, banquet, and refreshment breaks are also included. If you asked some member of organizing committee for the registration, please confirm if the registration is completed. Be careful that without registration your presentation will be cancelled from the program. It is not possible to register at the front desk of the symposium site. The registration and hotel reservation form can be found at the following page of this circular. The full details including payment are on the form. Registration should be made by completing the Registration and Hotel Reservation Form and **returning the form by e-mail ([gifu@or.knt.co.jp](mailto:gifu@or.knt.co.jp))** as an attached MSWord document file to the ELOPTO-2006 official travel agency.

**Kinki Nippon Tourist Co., Ltd., Gifu Branch**

9-20 Kanda, 6F, G-front Build., Gifu 500-8833, JAPAN, Phone: +81-58-265-0203, Fax: +81-58-264-2070

E-mail: [gifu@or.knt.co.jp](mailto:gifu@or.knt.co.jp), <http://www.knt.co.jp/kokusai/top.htm>

## Cancellation and Refunds

Due to advance financial commitments, refunds of registration fees requested after **March 31, 2006** cannot be guaranteed. Processing fee of 5,000 Japanese Yen (JPY) will be withheld from all refunds. As for the cancel charge for accommodation and travel tickets, please refer to the travel agency.

## Correspondence

All the scientific and administration correspondence should be directed to the Secretariat of ELOPTO-2006. As for the correspondence of registration and accommodation, please contact with the official travel agency.

### **ELOPTO-2006 Secretariat**

Prof. Akira Tsuchida

Department of Applied Chemistry, Faculty of Engineering, Gifu University,  
Yanagido, Gifu 501-1193, JAPAN

Phone: +81-58-293-2624, Fax: +81-58-293-2628, E-mail: [tsuchida@apchem.gifu-u.ac.jp](mailto:tsuchida@apchem.gifu-u.ac.jp)

## Travel Information

Access to Uji city, Kyoto-fu and other travel information are described in the Second Circular:  
<http://www.elopto.jp/> in detail.

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## **ELOPTO-2006 (May 22-25, 2006)**

### **REGISTRATION and HOTEL RESERVATION FORM**

Your symposium registration fee (**30,000 Japanese Yen (JPY)**) is paid by credit card. Deadline for registration and hotel reservation is **March 31, 2006**. After completing this form, please cut this page and send as a separate attached MSWord file by e-mail to the address: **gifu@or.knt.co.jp** (Kinki Nippon Tourist, Gifu Branch: Official Travel Agency of ELOPTO-2006). If you are Japanese, please write both in English and Japanese.

**[1] NAME AND ADDRESS** (please fill completely)

Full Name (Family/First/Middle):

Male or Female:

Academic Title or Rank (Mr./Mrs./Ms./Prof./Dr., etc):

Affiliation:

Address of Communications (Street/City/State/Zip, etc):

Country:

Phone (and/or Fax):

E-mail:

**[2] CREDIT CARD** (please fill completely)

Credit Card Type (VISA/Master, etc):

Card Holder's Name:

Card Number:

Expiration Date (Month/Year):

**[3] HOTEL RESERVATION**

Though no hotel is available around Obaku station (Uji City), there are many hotels in Kyoto city. Hotel reservation is possible by your contact to the ELOPTO-2006 official travel agency (commission: 500 Japanese Yen (JPY) in each).

**Check the hotel you want to reserve:**

Rack Rate (including a breakfast and tax) for the hotels close to JR Kyoto station.

Twin bed room charge:        (    ) New Miyako Hotel: 24,150 JPY

Single bed room charge:        (    ) APA Hotel (Kyoto-Ekimae): 9,975 JPY

(    ) APA Hotel (Kyoto-Eki-Horikawadori): 9,450 JPY

(    ) Hotel Hokke Club Kyoto: 8,500 JPY

(    ) Kyoto Daiichi Hotel: 7,200 JPY

**If you need ticket reservation etc, please fill the following also. The travel agency will contact you by e-mail.**

Train ticket in Japan is necessary:

Air ticket is necessary:

Sightseeing plan is necessary:

I have accompanying person(s):

I need contact (from travel agency/secretariat):

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