3rd International Symposium on the Manipulation of Advanced Smart Materials

- Recent Developments in Spectroscopic Studies of Oriented Phases -

1st – 3rd September, 2010
I & I Land
Shijonawate, Osaka, Japan

Organized by the High Technology Research Center
(Osaka Sangyo University)
(http://www.osaka-sandai.ac.jp/hrc18)

1st September 2010 (Wednesday) at I & I Hall

9:30- 9:50 Ch: Zimmermann	**Opening Remarks** Prof. Geoffrey R. Luckhurst, University of Southampton, United Kingdom
Lecture 1 9:50- 10:30 Ch: Zimmermann	Prof. James W. Emsley, University of Southampton, United Kingdom Using magnetic-field induced dipolar couplings at 23.5T (1GHz for protons) to study mesogenic molecules in the isotropic phase
Lecture 2 10:30-11:10 Ch: Zimmermann	Prof. Jukka P. Jokisaari, University of Oulu, Finland Use of atomic and small molecular probes in an NMR study of a ferroelectric liquid crystal and a novel crucial technique to study biaxiality of thermotropic liquid crystals
11:10-11:40	**Coffee Break**
Lecture 3 11:40-12:20 Ch: Madsen	Prof. Jagdish K. Vij, Trinity College, University of Dublin, Ireland Field induced transformations in the biaxial order of non-tilted phases in a Bent-Core Smectic Liquid Crystal and biaxiality in the nematic phase
Lecture 4 12:20-13:00 Ch: Madsen	Dr. Mario Cifelli, University of Pisa, Italy Translational Self Diffusion in Smectic Phases of Calamitic Liquid Crystals
13:30-14:30	**Lunch at Vent et Vert**
14:30-15:30	**Break**
15:30-17:00	**Round Table Discussion at I & I Hall** Chair by Prof. Luckhurst **(Coffee Break)**
17:00	**Close**

2nd September 2010 (Thursday) at I & I Hall

Lecture 5 9:30- 10:10 Ch: Naito	Prof. Hideo Takezoe (Tokyo Institute of Technology, Japan)
	Spontaneous Buckled Structure for Enhancing Outcoupled Organic Electroluminescence
Lecture 6 10:10-10:50 Ch: Naito	Prof. Rauzah Hashim, University of Malaya, Malaysia
	Mesophase Structure Investigation of Self-Assembly Structures of Branched Chain *β-D*-Glycosides by Small-Angle X-Ray Scattering
10:50-11:20	**Coffee Break**
Lecture 7 11:20-12:00 Ch: Cifelli	Prof. Mitsumasa Iwamoto, Tokyo Institute of Technology, Japan
	Probing and Modeling of Visualized Carrier Motion in Organic Films by Optical Second Harmonic Generation
Lecture 8 12:00-12:40 Ch: Cifelli	Prof. Louis A. Madsen, Virginia Technology, USA
	Understanding Conduction and Anisotropy in Nanostructured Soft Materials using Multi-Modal NMR
13:00-14:00	**Lunch at Vent et Vert**
14:00-15:00	**Break**

15:00-18:00 Ch: Wakita	**Poster Presentation** Invited P1: Polar Uniaxial and Biaxial Nematic Phases formed from V-shaped Molecules by G. R. Luckhurst, Timothy J. Sluckin and Tung To Invited P2: Computer Simulation of Nematic Liquid Crystals formed by Monoclinic Molecules by Rauzah Hashim, G. R. Luckhurst and Hock-Seng Nguan Invited P3: A novel and potential biaxial liquid crystal phase formed by an organo-silicon tetrapode. A deuterium NMR investigation by Dr. B. A. Timimi et al. Invited P4: Conforcal-Microscopy Analysis of Photoluminescence on Silver-Indium-Disulfide Crystals by Prof. K. Wakita et al. Invited P5: Leslie Viscosity Coefficients of Nematic Liquid Crystals with Negative Dielectric Anisotropy Determined from Transient Current Analysis Using a Genetic Algorithm by Prof. H. Naito, et al. Invited P6: Field-induced Alignment of Liquid Crystal Director by A. M. Kantola, G. R. Luckhurst, A. Sugimura, T. Tanaka and B. A. Timimi P1: Evaluation of Simulation by Bound Water investigation base on Deuterium NMR & DSC Spectroscopy by Seyed Mohammad Mirzadeh Husseini, Rauzah Hashim, Thorsten Heidelberg P2: Synthesis, Thermal and Magnetic Properties of Cobalt(II) Comlex by J. T. Tee, N. Abdullah, M.H. Chisholm, E. J. Halperin, P. Truitt P3: Nematic in confined Geometries: An ESR Investigation by C. R. Mamat, G. R. Luckhurst, B. A. Timimi P4: Simultaneous Determination of Elastic Constants and Anchoring Energy of Nematic Liquid Crystal Cells from Capacitance-Voltage Measurement by K. Iwata et al. P5: Effective Rotational Viscosity of Vertical Alignment Nematic Liquid Crystal Cells with Negative Dielectric Anisotropy by K. Iwata et al. **Coffee Break** (16:00-16:30) HRC 1: Liquid Crystal Alignment Induced by Perfluoropolymer Films Exposed to Linearly Polarized Ultraviolet Light by K. Usami HRC 2: Deuterium NMR Study of the Nematic Director Distribution during the Relaxation Process by Y. Tanaka et al. HRC 3: Deuterium NMR Study on Static Director Distribution for a Low Molar Mass Nematic, S. Torii et al. HRC 4: FEL用高輝度電界放出電子ビーム源に関する研究 by 綱脇惠章, 草場光博 HRC 5: Heat-Resistant Transparent Conducting Films with ZnO-Based Multilayered Structures Fabricated by Pulsed Laser Deposition by Y. Nakamura et al. HRC 6: Fabrication of Transparent Conducting ZnO Films for Dye-Sensitized Solar Cells by T. Watanabe et al. HRC 7: Analysis of Eye Movement concerning Evaluation of Hexagonal Pattern Structure in Wire Net Craft by A. Goto HRC 8: オンラインショッピング利用者の行動分析: グリッド環境におけるタスクスケジューリング by 平松綾子, 山崎高弘
18:00-19:00	**Break**
19:00-21:00	**Banquet at Vent et Vert**

3rd September 2010 (Friday) at I & I Hall

Lecture 9 9:20- 10:00 Ch: Timimi	Prof. Assis Martins, New University of Lisbon, Portugal NMR and director dynamics in non-homogeneous nematics confined between parallel plates and subjected to orthogonal magnetic and electric fields
Lecture 10 10:00-10:40 Ch: Timimi	Prof. Akihiko Sugimura, Osaka Sangyo University, Japan Deuterium NMR Study of Static and Dynamic Non-Uniform Director Alignments for a Nematic Liquid Crystal
10:40-11:10	**Coffee Break**
Lecture 11 11:10-11:50 Ch: Sugimura	Prof. Carlo A. Veracini, University of Pisa, Italy Effect of the Magnetic Field on the Structure of Chiral Phases by NMR
11:50-12:00 Ch: Sugimura	**Closing Remarks** Prof. James W. Emsley
13:00-14:00	**Lunch at Vent et Vert**
14:00	**Close**