

PROGRAMME

The 2nd Japanese-Italian Workshop on Liquid Crystals

UST Tsu Hall, Tsu City, Mie Prefecture
5-8 September 2004

September 5

Afternoon: Arrival

- 15:00-20:00 Reception (Lobby of Hotel Green Park Tsu)
- 19:30-21:00 Welcome Party (Restaurant 'LeVert' beside the Lobby)

September 6

UST Hall (on the 4th floor)

1-0 9:10-9:20

N. Koide, *Opening Address*

1-1 9:20-9:40

S. Kobayashi, T. Miyama, T. Masumi, H. Shiraki, Y. Sakai, Y. Shiraishi and N. Toshima, *Dielectric Properties and Electro-optic Characteristics of Metal Nanoparticles Doped TN-LCDs Exhibiting Fast EO Responses*

1-2 9:40 - 10:00

H. Takatsu, *Applications of Polymer Dispersed Liquid Crystals*

1-3 10:00 - 10:20

G. Chidichimo, D. Cupelli, M. De Benedittis, J. Lanzo, S. Manfredi, F. Nicoletta and L. Tortora, *ELECTRO-CHROMIC PDLC, OLCE, LCDPN*

1-4 10:20 - 10:40

T. Ikeda, M. Kondo, T. Maeda, M. Nakano and Y. Yu, *Reversible Deformation of Liquid-Crystalline Polymer Films by Light*

10:40 - 11:10 Coffee Break (Learning Room A on 4 floor)

1-5 11:10 - 11:30

C. Vena, C. Versace, G. Strangi and R. Bartolino, *Light Depolarization Effect by Electrohydrodynamic Turbulence in Nematic Liquid Crystals*

1-6 11:30 - 11:50

S. Naemura, *Hydrodynamic Behavior of Director Reorientation in a Vertically Aligned Nematic Cell*

1-7 11:50 - 12:10

G. J. Moro, *Molecular Theory of Dielectric Relaxation of Nematic Dimers*

1-8 12:10 - 12:30

G. R. Luckhurst, A. Sugimura, B. A. Timimi and H. Zimmermann, *Director Pendulum Oscillations in a Thin Nematic Film*

12:30 - 14:00 Lunch Break

1-9 14:00 - 14:20

M. Ozaki and K. Yoshino, *Photonic Effects and Laser Actions in Nano-Periodic Structured Liquid Crystals*

1-10 14:20 - 14:40

R. Caputo, A. V. Sukhov, C. P. Umeton and A. Veltri, *Realization of POLICRYPS Gratings -Optical and Electro-Optical Properties*

1-11 14:40 - 15:00

A. d'Alessandro, R. Beccherelli, R. Asquini, R. Bellini and D. Donisi, *Guided Wave Optoelectronic Devices Using Liquid Crystals and Composite Materials*

1-12 15:00 - 15:20

J. Hanna, *Charge Carrier Transport in Liquid Crystals*

15:20 - 16:00 Coffee Break

1-13 16:00 - 16:20

M. Torikai and M. Yamashita, *Similarities and Dissimilarities between the Influence of Anchoring Walls and External Fields in Nematic and Smectic A Orderings*

1-14 16:20 - 16:40

T. Bellini, *Nematic Ordering of Liquid Crystals Incorporated in Random Porous Media*

1-15 16:40 - 17:00

T. Kato, *Functional Anisotropic Assemblies: Liquid Crystalline Physical Gels and Ion-Conductive Liquid Crystals*

1-16 17:00 - 17:20

H. Yokoyama

17:30 - 19:00 Poster Presentations (see the last section)

- P1 - P18 UST Hall
- P19 - P34 Learning Room A

September 7

UST Hall

2-1 9:10 - 9:30

N. Koide and T. Mihara, *Photo-alignment Properties of Photo-crosslinked Films of Liquid Crystalline Polymers Containing Chalcone Derivative*

2-2 9:30 - 9:50

A. Crispini, G. Barberio, A. Bellusci, M. Ghedini, D. Pucci and E. Szerb, *4,4'-disubstituted-2,2'-bipyridine Ligands for Non Conventional Metal Containing Liquid Crystals*

2-3 9:50 - 10:10

M. Shimizu, M. Nata, K. Watanabe, T. Hiyama and S. Ujiie, *2,3,5,6,7,8-Hexasilabicyclo[2.2.2]octane-derived Columnar Liquid Crystals*

2-4 10:10 - 10:30

G. Galli, *Engineering Low Energy Surfaces through the Self-Assembly of Fluorinated Polymers with Diverse Macromolecular Architectures*

10:30 - 11:00 Coffee Break

2-5 11:00 - 11:20 H. Takezoe, *Large Linear and Nonlinear Circular Dichroism in Banana Mesogens*

2-6 11:20 - 11:40

K. Moriya, S. Yano, M. Eto and S. Kagabu, *Meosomorphic Phase and its Structure of 2-(4-alkoxyphenyl)-5-trifluoromethylpyridine*

2-7 11:40 - 12:00

C. Zannoni, *Computer Simulations for Increasingly Complex Liquid Crystals*

2-8 12:00 - 12:20

P. Pasini, *Recent Progress in Confined Liquid Crystal Lattice Models*

12:20 - 14:00 Lunch Break

2-9 14:00 - 14:20

N. Nakamura, *S-shaped and Novel U-shaped Molecular Structures of Liquid Crystalline 1,1'-Disubstituted Ferrocene Derivatives*

2-10 14:20 - 14:40

D. E. Lucchetta, L. Criante, O. Francescangeli and F. Simoni, *Compact Lasers Based on HPDLC Gratings*

2-11 14:40 - 15:00

G. Abbate, A. Marino, V. Tkachenko and F. Vita, *H-PDLC, Policryps, Poliphem: Composite Liquid Crystalline and Polymeric Materials for the Realization of High Performance Bragg Gratings. Characterization and Modeling*

2-12 15:00 - 15:20

G. Strangi, V. Barna, R. Caputo, A. de Luca, C. Versace, N. Scaramuzza, C. Umeton, R. Bartolino and G. Price, *Color Tunable Distributed Feedback Organic Micro-Cavity Laser*

15:20 - 16:00 Coffee Break

2-13 16:00 - 16:20

Y. Shimizu, H. Monobe, M. Heya and K. Awazu, *A Novel Technique for the Alignment Control of Highly Ordered Liquid Crystals Based on Vibrational Excitation of Chemical Bond by Polarized Infrared Laser*

2-14 16:20 - 16:40

N. Kawatsuki, K. Fujio, T. Hasegawa, H. Ono and A. Emoto, *Surface Relief Formation and Self-induced Molecular Reorientation in Photocrosslinkable Polymer Liquid Crystal and Resultant Polarization Gratings*

2-15 16:40 - 17:00

K. Fujimoto, *Mie Crystal Valley Project*

2-00 17:00 - 17:10

S. Naemura, *Closing Address*

19:00-21:30 Social Dinner (Hotel Green Park Tsu)

Part 1: 19:00-19:45 Talk and Demonstration (Assembly Room 'Shobu' on 6 floor)

- 19:00-19:05 M. Yamashita Welcome Address
- 19:05-19:45 T. Hayashi The Traditional Culture in Tsu 'Tojin Odori'

Part 2: 19:50-21:30 Banquet (Reception Hall 'Ano' on 6 floor)

- 19:50-19:55 T. Ikeda Opening Address
- 19:55-20:00 S. Kobayashi Toast
- 20:00-21:25 Dinner
- 21:25-21:30 P. Pasini Closing Address

September 8

- 8:00 - 19:00 Excursion
- 9:00 - 10:10 Sharp Kameyama Plant
- Afternoon: Goshō and Ginkakuji Temple in Kyoto

September 9

Departure

Poster Presentations

- P1** M. Fujiwara, K. Satoh and S. Mita, *Molecular Dynamics Simulation for Bulk Structure of Semifluorinated n-alkanes*
- P2** J.-H. Sung, H. Sato and H. Ichinose, *Molecular Dynamic Calculation of the Rotational Viscosity of a Binary Liquid Crystal Mixture*
- P3** T. Miyazaki and M. Yamashita, *MD Simulation of Bent Gay-Berne Molecule Systems — Molecular Shape and Flexibility —*
- P4** T. Koda, A. Nishioka and S. Ikeda, *Local Alignment Order in Isotropic Structure of Hard Spherical Discs*

- P5** M. Yasen, M. Torikai and M. Yamashita, *Phase Diagram of Nematics in the Fields and Phase Transitions in the Uniaxially Anchored Systems*
- P6** M. Ito, M. Torikai and M. Yamashita, *Molecular Theory of Crossover between Homeotropic and Homogeneous Structures in the System Anchored by Parallel Walls*
- P7** S. Tanaka, *On the Reason Why Intermediate Phases appear in Antiferroelectric Smectics*
- P8** D. Kamada, G. R. Luckhurst, K. Okumoto, A. Sugimura, B. A. Timimi and H. Zimmermann, *Director Realignment Process for 9CB near the Smectic A - Nematic Transition*
- P9** H. Harada, Y. Iwata, M. Todorokihara and H. Naito, *Observation and Theoretical Interpretation of Helical Tubular Filaments of a Smectic-A Phase in an Isotropic Phase*
- P10** L. Andreozzi, M. Faetti, F. Zulli, M. Giordano and G. Galli, *Rheological Response of Polydisperse Nematic Polymethacrylates: Relaxation Times and Conformational Transition*
- P11** K. Yabuuchi and T. Kato, *Self-Assembly of Pyridyl Derivatives and Their Silver Complexes: Formation of Liquid Crystalline Phases and Organogels*
- P12** M. Moriyama, M. Kimura, M. Yoshio, N. Mizoshita and T. Kato, *Functional Liquid Crystalline Physical Gels Containing Photoresponsive Self-Assembled Fibers*
- P13** K. Kiyohara, H. Monobe, N. Terasawa and Y. Shimizu, *Surface Anchoring of Rod-like Molecules on Corrugated Substrates*
- P14** S. K. Lee, S. Heo, C. W. Park, K.-T. Kang, Y. Shimbo, K. Nishida, Y. Takanishi and H. Takezoe, *Synthesis and Mesomorphic Properties of the New Chiral Banana-shaped Liquid Crystals with Chiral 3-(alkoxy)propoxy and (S)-w-(2-methyl-1-butoxy)alkoxy Terminal Groups*
- P15** S. Kutsumizu, K. Hosoyama, M. Yamada, K. Tanaka, R. Akiyama, R. Tatami, S. Sakurai and E. Funai, *Smectic C to Cubic Phase Transition of 4'-n-docosyloxy-3'-nitrobiphenyl-4-carboxylic Acid (ANBC-22) and AC Electric Field Effect*
- P16** S. Hashimoto, T. Hanasaki and N. Nakamura, *Synthesis and Mesomorphic Properties of Dimeric Liquid Crystals Containing Fluorinated Phenyl Cores*

- P17** K. Kaneko and N. Nakamura, *Phase Transition behavior and ER Effect of Side Chain Liquid Crystalline Polysiloxane Derivative Including Mesogens with Cyano Group and Fluorine Atom in the Side Chain*
- P18** K. Moriya, M. Jinno and M. Kajiwara, *Phase Transition in Organophosphazenes: the Effect of Backbones on the Mesogenicity*
- P19** J. Hwang, J. W. Wu, M. H. Song, B. Park and H. Takezoe, *Optical Diode Using a Nematic Liquid Crystal Layer Sandwiched by Cholesteric Liquid Crystal Layers with Hetero-Photonic Bandgap Structures*
- P20** R. Ozaki, Y. Matsuhisa, M. Ozaki and K. Yoshino, *Low Driving Voltage Tunable Laser Based on One-dimensional Photonic Crystal Containing Liquid Crystal Layer*
- P21** F. Simoni, L. Lucchetti and M. Gentili, *Optical Phase Conjugation by Colossal Nonlinearity in Liquid Crystals*
- P22** K. Okano, A. Shishido, T. Shiono and T. Ikeda, *Synthesis and Properties of Highly Birefringent Polymer Azo-Tolane Liquid Crystals: Effect of the Position of Tolane Moiety in the Side Chain*
- P23** A. Bellusci, G. Barberio, A. Crispini, M. Ghedini, M. La Deda and D. Pucci, *Promesogenic Lanthanide (III) s-diketone Complexes with Nitrogen Aromatic Ligands: Role of the Substituents on the Synthesis and Luminescence Properties.*
- P24** Y.-mi Nam, H. Mochizuki, M. Kawamoto, M. Kinoshita, T. Shiono and T. Ikeda, *Polarized Electroluminescence by Means of Bipolar Charge-Transporting Polymer Liquid Crystals Containing Oxadiazole and Carbazole Moieties in the Same Side Chain*
- P25** K. Takamura, M. Kinoshita, M. Kawamoto, T. Shiono and T. Ikeda, *Liquid-Crystalline Behavior and Emission Properties of Polyesters Containing Carbazole and Oxadiazole Moieties in the Main Chain*
- P26** A. Saishoji, A. Shishido, T. Shiono and T. Ikeda, *Holographic Grating Formation Based on Bragg Diffraction in Polymer Films Containing a Donor-Acceptor Type Azobenzene Moiety*
- P27** M. Ishiguro, A. Shishido, T. Shiono and T. Ikeda, *Holographic Gratings with Polymer Azobenzene Films Containing a Tolane Moiety*

- P28** M. Kondo, T. Maeda, Y. Yu, A. Shishido, T. Shiono and T. Ikeda, *Photoinduced Bending of Azobenzene Liquid-Crystalline Elastomer Films: Novel Photoresponsive Behavior of Films with Homeotropic Alignment*
- P29** E. Satoh, Y. Itoh and N. Kimura, *Observation of Transitional Change of the Reflection Spectrum during the Polymerization of the Reactive Cholesteric LC Mixture*
- P30** V. Bruno, S. Marino, M. Castriota, E. Cazzanelli, G. Strangi, C. Versace and N. Scaramuzza, *Direct and Inverse Electrooptical Response in Liquid Crystal Cells Containing Oxide Thin Films*
- P31** N. Kawatsuki, Y. Kitani and A. Oda, *Synthesis and Photoinduced Reorientation of Polymethacrylates Comprising Photocrosslinkable Phenylbenzoate Mesogenic Side Groups*
- P32** N. Kawatsuki, T. Shiraku and E. Uchida, *Influence of Molecular Weight on Photoinduced Reorientation of 4-Methoxyazobenzene-Containing Polymethacrylate Films Using 633 nm He-Ne Laser*
- P33** H. Kurihara, A. Shishido, O. Tsutsumi, T. Shiono and T. Ikeda, *Photoinduced Change in Birefringence and Optical Switching in the Near-Infrared Region Based on Photochemical Phase Transition of Azobenzene Liquid Crystals*
- P34** M. Yaegashi, A. Shishido, T. Shiono and T. Ikeda, *Novel Liquid-Crystalline Phenylene-Thienylene Co-Oligomers for Photoinduced Reorientation of Liquid Crystals*