

Oral Presentations

Monday, July 12, 2010

Opening of Program and Chirality Award Lecture (Hall A)

- 16:50 – 17:10 **Opening and Chirality Medal Ceremony**
- 17:10 – 18:10 **[Chirality Medal Award Lecture]**
BIOACTIVE NATURAL PRODUCTS AND CHIRALITY
Kenji Mori
Emeritus Professor, The University of Tokyo, Japan

Chirality Medal Reception (Main Hall A)

- 18:10 – 21:00 **Chirality Medal Reception**

Tuesday, July 13, 2010

Plenary Session I (Hall A)

Chairperson: Kazuhiko Saigo

- 08:40 – 09:30 **[PL-1] PROTEIN SURFACE RECOGNITION: A SUPRAMOLECULAR APPROACH TO CONTROLLING BIOLOGICAL FUNCTION**
Andrew D. Hamilton
Department of Chemistry, University of Oxford, UK

- 09:30 – 10:00 **COFFEE BREAK (Hall C)**

Parallel Session A1 (Hall A)

Chairperson: Jérôme Lacour

- 10:00 – 10:30 **[IL-A1] INTELLIGENT NANOFIBERS WITH SUPRAMOLECULAR CHIRALITY**
Myongsoo Lee
Center for Supramolecular Nano-Assembly and Department of Chemistry, Seoul National University, Korea

- 10:30 – 11:00 **[IL-A2] CHIRALITY FOR MATERIALS SCIENCE**
Takuzo Aida
School of Engineering, The University of Tokyo, Japan

Parallel Session A2 (Hall A)

Chairperson: Myongsoo Lee

- 11:00 – 11:20 **[O-A1] SUPRAMOLECULAR MRI CONTRAST AGENTS**
PoI Besenius, Anja R.A. Palmans, E.W. Meijer
Laboratory of Macromolecular and Organic Chemistry and Institute of Complex Molecular Systems, Eindhoven University of Technology, Netherlands

Oral Presentations

- 11:20 – 11:40 **[O-A2] PYRIDINOPHANE CATALYSIS FOR ASYMMETRIC CYCLOPROPANATION WITH COPPER CARBENOID COCATALYSIS**
Hiroko Tanaka, **Nobuhiro Kanomata**
Department of Chemistry and Biochemistry, Waseda University, Japan
- 11:40 – 12:00 **[O-A3] THE SHAPE MATTERS: A DRAMATIC DEPENDENCE OF CHIROPTICAL RESPONSE ON THE CONFORMATION OF CHIRAL OLIGOMERS**
José Lorenzo Alonso-Gómez¹, Ana G. Petrovic², Pablo Rivera-Fuentes³, Fabrizio Santoro⁴, Nobuyuki Harada², Nina Berova², François Diederich³
¹*Organic Chemistry Department, Universidade de Vigo, Spain*
²*Department of Chemistry, Columbia University, USA*
³*Lab. für Organische Chemie, ETH Zurich Hönggerberg, Switzerland*
⁴*Istituto per i Processi Chimico-Fisici Consiglio Nazionale delle Ricerche, Italy*
- 12:00 – 13:10 **LUNCH / VENDOR SEMINAR**

Vendor Seminar – DAICEL CHEMICAL INDUSTRIES, Ltd. (Hall A)

- 12:00 – 12:45 **[VS-A1] FINDING THE BEST SEPARATION FOR ENANTIOMERIC MIXTURES**
Pilar Franco¹, Tong Zhang¹, Tatsushi Murakami²
¹*CHIRAL TECHNOLOGIES EUROPE, France*
²*DAICEL CHEMICAL INDUSTRIES, Ltd., CPI Company, Japan*

Parallel Session BI (Hall B)

- 10:00 – 10:30 **[IL-B1] STRATEGIC RESOLUTION VIA DIASTEREOMERIC SALT FORMATION**
Chairperson: Isao Azumaya
Kenichi Sakai¹, Rumiko Sakurai²
¹*Technology Development Division, Toray Fine Chemicals Co., Ltd., Japan*
²*Faculty of Pharmacy, Iwaki Meisei University, Japan*
- 10:30 – 11:00 **[IL-B2] ATTRITION ENHANCED DERACEMIZATION OF SOLID RACEMIC MIXTURES**
Bernard Kaptein¹, Wim L. Noorduin², Elias Vlieg², Richard M. Kellogg³
¹*DSM Innovative Synthesis BV, Netherlands*
²*IMM Solid State Chemistry, Radboud University Nijmegen, Netherlands*
³*Syncom, Netherlands*

Oral Presentations

Parallel Session B2 (Hall B)

Chairperson: Reiko Kuroda

- 11:00 – 11:20 **[O-B1] CONSTRUCTION OF HELICAL STRUCTURE USING WEAK INTER-/INTRAMOLECULAR INTERACTIONS**
Isao Azumaya, Hyma Masu, Kosuke Katagiri, Masahide Tominaga
Faculty of Pharmaceutical Sciences at Kagawa Campus, Tokushima Bunri University, Japan
- 11:20 – 11:40 **[O-B2] ABSOLUTE ASYMMETRIC SYNTHESIS BASED ON THE SPATIAL ORIENTATION OF ACHIRAL REACTANTS**
Alexander Kuhn¹, Peer Fischer²
¹*University of Bordeaux, Bordeaux Institute of Technology, Institute of Molecular Sciences, France*
²*Fraunhofer Institute for Physical Measurement Techniques, Germany*
- 11:40 – 12:00 **[O-B3] COVALENT SYNTHETIC METHOD OF ROTAXANE WITH THE STRUCTURE SPECIFIC CHIRALITY COMPOSED OF C_{∞v} AXLE AND C_s RING**
Keiji Hirose, Yuko Hinohara, Yamato Nakamura, Yoshito Tobe
Division of Frontier Materials Science, Graduate School of Engineering Science, Osaka University, Japan
- 12:00 – 13:10 **LUNCH / VENDOR SEMINAR**

Short Course – Prof. Harada (Hall B)

- 12:00 – 12:45 **[SC-B1] METHODS FOR DETERMINING ABSOLUTE CONFIGURATIONS BY CD, ¹H NMR, AND X-RAY: BASIC PRINCIPLES & APPLICATIONS**
Nobuyuki Harada
Emeritus Professor, Tohoku University, Sendai, Japan

Poster Session I (Hall C)

- 13:10 – 14:40 **POSTER SESSION 1**

Parallel Session A3 (Hall A)

Chairperson: Roberto Purrello

- 14:40 – 15:10 **[IL-A3] RELATIVE AND ABSOLUTE HANDEDNESS CONTROL IN HELICAL AROMATIC OLIGOAMIDE FOLDAMERS**
Ivan Huc
Institut Européen de Chimie Biologie - Université de Bordeaux, France

Oral Presentations

- 15:10 – 15:40 **[IL-A4] PUSHING THE LIMITS OF AMPLIFICATION OF CHIRALITY IN BENZENE-1,3,5-TRICARBOXAMIDES**
Anja R. A. Palmans
Laboratory of Molecular Science and Technology, Eindhoven University of Technology, Netherlands
- 15:40 – 16:00 **[O-A4] MODELING OF CHIRALITY AT THE NANOSCALE**
Mathieu Linares
Department of Theoretical Chemistry, Royal Institute of Technology, Sweden
- 16:00 – 16:20 **[O-A5] DYNAMIC CHIRALITY TRANSFER IN LABILE METAL COMPLEXES**
Hiroyuki Miyake, Hiroshi Tsukube
Department of Chemistry, Graduate School of Science, Osaka City University, Japan
- 16:20 – 16:50 **COFFEE BREAK (Hall C)**

Parallel Session B3 (Hall B)

Chairperson: Bezhana Chankvetadze

- 14:40 – 15:10 **[IL-B3] DIFFERENCES IN REGIO- AND STEREOSELECTIVE METABOLISM OF PROPRANOLOL AS A CHIRAL DRUG MODEL BETWEEN HUMANS AND MONKEYS**
Shizuo Narimatsu
Laboratory of Health Chemistry, Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama University, Japan
- 15:10 – 15:40 **[IL-B4] THE IMPACT OF CHIRALITY ON DRUG DEVELOPMENT: 30 YEARS OF PROGRESS**
John Caldwell
Faculty of Health and Life Sciences, University of Liverpool, UK
- 15:40 – 16:00 **[O-B4] SIMULTANEOUS ENANTIOMER SEPARATIONS OF ALL PROTEINOGENIC AMINO ACIDS USING A FULLY-AUTOMATED 2D-HPLC SYSTEM AND THE STUDY ON ACCUMULATION OF D-FORM IN THE D-AMINO-ACID OXIDASE DEFICIENT ANIMALS**
Kenji Hamase¹, Yurika Miyoshi¹, Kyoko Ueno¹, Kei Masuyama¹, Ryuichi Konno², Tadashi Okamura³, Masashi Mita⁴, Wolfgang Lindner⁵
¹Graduate School of Pharmaceutical Sciences, Kyushu University, Japan
²Center for Medical Science, International University of Health and Welfare, Japan
³Division of Animal Models, Department of Infectious Diseases, Research Institute, International Medical Center of Japan, Japan
⁴Innovative Science Research and Development Center, Shiseido Co., Ltd., Japan
⁵Institute of Analytical Chemistry and Food Chemistry, University of Vienna, Austria

Oral Presentations

16:00 – 16:20 [O-B5] PREPARATION AND APPLICATION OF METHYLCALIX[4]RESORCINARENE-BONDED SILICA PARTICLES AS CHIRAL STATIONARY PHASE IN HIGH-PERFORMANCE LIQUID CHROMATOGRAPHY

Huey Min Tan¹, Jia Zhao², Yinhan Gong^{2,3}

¹*Department of Chemistry, National University of Singapore, Singapore*

²*Department of Obstetrics and Gynaecology, Singapore*

³*Tropical Marine Science Institute, National University of Singapore, Singapore*

16:20 – 16:50 COFFEE BREAK (Hall C)

Parallel Session A4 (Hall A)

Chairperson: Ivan Huc

16:50 – 17:10 [O-A6] PHOTOPHYSICAL AND PHOTOCHEMICAL INVESTIGATION OF INTERACTION OF 5,10,15,20-TETRAKIS(N-METHYLPYRIDINIUM-4-YL)-21H,23H-PORPHINE WITH DOUBLE STRANDED DNA BY TIME-RESOLVED CIRCULAR DICHROISM SPECTRA

Shin Murakami, Yasuyuki Araki, Seiji Sakamoto, Takehiko Wada

Institute of Multidisciplinary Research for Advanced Materials, Tohoku University, Japan

17:10 – 17:30 [O-A7] THE EFFECT OF FENOTEROL STEREOCHEMISTRY ON THE β 2 ADRENERGIC RECEPTOR SYSTEM – A NEW MECHANISM OF CHIRAL RECOGNITION?

Krzysztof Jozwiak¹, Anita Plazinska¹, Lawrence Toll², Anthony Yiu-Ho Woo³, Rui-Ping Xiao³, Irving W. Wainer³

¹*Laboratory of Drug-Receptor Interactions, Medical University of Lublin, Poland*

²*SRI International, USA*

³*National Institute on Aging, USA*

17:30 – 17:50 [O-A8] HIGH-RESOLUTION ATOMIC FORCE MICROSCOPY OF HELICAL POLYMERS IN LANGMUIR-BLODGETT FILMS

Jiro Kumaki

Department of Polymer Science and Engineering, Graduate School of Science and Engineering, Yamagata University, Japan

17:50 – 18:20 [IL-A5] CHIRALITY TRANSFER FOR SENSING, MEMORY AND SEPARATION

Roberto Purrello¹, Alessandro D'Urso¹, Rosaria Lauceri²

¹*Department of Chemical Sciences, Catania University, Italy*

²*CNR-IBB-UOS Catania, Department of Chemical Sciences, Catania University, Italy*

Oral Presentations

Parallel Session B4 (Hall B)

Chairperson: Stig Allenmark

- 16:50 – 17:10 **[O-B6] ENANTIOSELECTIVE RECOGNITION WITH CYCLODEXTRINS: RECENT CE AND NMR STUDIES**
Bezhan Chankvetadze
Institute of Physical and Analytical Chemistry and Molecular Recognition and Separation Science Laboratory, School of Exact and Natural Sciences, Tbilisi State University, Georgia
- 17:10 – 17:30 **[O-B7] DEVELOPMENT OF NEW CHIRAL CHROMATOGRAPHIC METHODS FOR THE ANALYSIS AND PURIFICATION OF PHARMACEUTICAL SAMPLES**
Lu Zeng, Rongda Xu, Haihong Wu, Yinong Zhang, Daniel B. Kassel
Takeda San Diego, USA
- 17:30 – 17:50 **[O-B8] TOWARD UNDERSTANDING THE MECHANISM OF ENANTIOSELECTIVITY OF BOPINDOLOL WITH CARBOXYMETHYL β -CYCLODEXTRIN USING CAPILLARY ELECTROPHORESIS TECHNIQUE: MECHANISTIC AND MOLECULAR MODELING STUDIES**
Mohamed Hefnawy, Maha Sultan, Haya Al-Johar, Alaa A.-M. Abdel-Aziz
Department of Pharmaceutical Chemistry, College of Pharmacy, King Saud University, Saudi Arabia
- 17:50 – 18:20 **[IL-B5] ENANTIOSEPARATIONS BY CAPILLARY ELECTROPHORESIS USING ORGANIC NANOCRYSTALS**
Hiroshi Sudaki, Kenji Sueyoshi, Fumihiko Kitagawa, Koji Otsuka
Department of Material Chemistry, Graduate School of Engineering, Kyoto University, Japan

Wednesday, July 14, 2010

Plenary Session 2 (Hall A)

Chairperson: Yoshio Okamoto

- 08:40 – 09:30 **[PL-2] CHIRALITY AS A TOOL IN MATERIALS SCIENCE**
Roeland J.M. Nolte
Radboud University Nijmegen, Institute for Molecules and Materials, Netherlands
- 09:30 – 10:00 **COFFEE BREAK (Hall C)**

Oral Presentations

Parallel Session A5 (Hall A)

Chairperson: Wei Zhang

- 10:00 – 10:30 **[IL-A6] ONE-HANDED HELICES CONTROLLED BY ROTAXANE CHIRALITY**
Toshikazu Takata, Fumitaka Ishiwari, Kazuko Nakazono, Yasuhito Koyama
Department of Organic and Polymeric Materials, Tokyo Institute of Technology, Japan
- 10:30 – 11:00 **[IL-A7] LONG RANGE CHIRALITY TRANSFER IN RADICAL POLYMERIZATION OF BULKY VINYL MONOMERS**
Xinhua Wan
Beijing National Laboratory for Molecular Sciences, Key Laboratory of Polymer Chemistry and Physics of Ministry of Education, College of Chemistry and Molecular Engineering, Peking University, China

Parallel Session A6 (Hall A)

Chairperson: Xinhua Wan

- 11:00 – 11:20 **[O-A9] HELICAL FOLDING OF POLY(NAPHTHALENECARBOXAMIDE) ENHANCED BY SOLVOPHOBIC EFFECT**
Tsutomu Yokozawa, Kohichiro Mikami, Akihiro Yokoyama
Department of Material and Life Chemistry, Kanagawa University, Japan
- 11:20 – 11:40 **[O-A10] SYNTHESIS OF OPTICALLY ACTIVE QUATERNARY AMMONIUM POLYMERS AND THEIR APPLICATION IN ASYMMETRIC CATALYSIS**
Shinichi Itsuno, Naoki Haraguchi
Molecular Chemistry Division, Department of Environmental and Life Sciences, Graduate School of Engineering, Toyohashi University of Technology, Japan
- 11:40 – 12:00 **[O-A11] CHIRALITY-SWITCHABLE HELICAL POLYMER LIGAND FOR CATALYTIC ASYMMETRIC SYNTHESIS**
Michinori Suginome^{1,2}, Takeshi Yamamoto¹, Tetsuya Yamada¹, Yuuya Nagata¹
¹*Department of Synthetic Chemistry and Biological Chemistry, Graduate School of Engineering, Kyoto University, Japan*
²*Japan Science and Technology Agency (JST), CREST, Japan*
- 12:00 – 13:10 **LUNCH / VENDOR SEMINAR**

Vendor Seminar – JASCO Corporation (Hall A)

- 12:00 – 12:45 **[VS-A2] SEVERAL ATTACHMENTS EXPANDING CD APPLICATIONS**
Yoshiro Kondo
JASCO Corporation, Japan

Oral Presentations

Parallel Session B5 (Hall B)

Chairperson: Eric Francotte

- 10:00 – 10:30 **[IL-B6] DEVELOPMENT OF CYCLOFRUCTAN-BASED PHASES AND THEIR MECHANISM OF ACTION**
Daniel W. Armstrong
Department of Chemistry & Biochemistry, University of Texas at Arlington, USA
- 10:30 – 11:00 **[IL-B7] DEVELOPMENT OF CHIRAL SEPARATION METHODS**
Myung Ho Hyun
Department of Chemistry, Pusan National University, Korea

Parallel Session B6 (Hall B)

Chairperson: Christopher J. Welch

- 11:00 – 11:20 **[O-B9] ON THE MECHANISM OF CHIRAL RECOGNITION ON CELLULOSE TRIS(4-METHYLBENZOATE)**
Tohru Shibata¹, Kazuyoshi Ueda²
¹Life Sciences Development Center, Daicel Chemical Industries, Ltd., Japan
²Department of Advanced Materials Chemistry, Graduate School of Engineering, Yokohama National University, Japan
- 11:20 – 11:40 **[O-B10] CHARACTERIZATION OF PEPTIDE CHIRAL SELECTORS PREPARED BY SOLID-PHASE SYNTHESIS IN HPLC ENANTIOSEPARATION**
Kaname Ohyama¹, Kana Oyamada¹, Naoya Kishikawa¹, Yoshihito Ohba², Mitsuhiro Wada¹, Kenichiro Nakashima¹, Naotaka Kuroda¹
¹Graduate School of Biomedical Sciences, Nagasaki University, Japan
²Faculty of Pharmaceutical Sciences, Nagasaki International University, Japan
- 11:40 – 12:00 **[O-B11] GREEN CHIRAL HPLC – ENANTIOMERIC SEPARATIONS IN SUBCRITICAL WATER**
Guy Félix¹, Serge Droux²
¹CINaM (CNRS UPR 3118), Aix-Marseille Université, France
²KIRALYA, France

12:00 – 13:10 **LUNCH / VENDOR SEMINAR**

Vendor Seminar – Sigma-Aldrich (Hall B)

- 12:00 – 12:45 **[VS-B2] UNIVERSAL CHIRAL SCREENING SYSTEM FOR OPTIMIZED METHOD DEVELOPMENT**
David S. Bell, Jennifer E. Claus and Jay M. Jones
Sigma-Aldrich/Supelco, USA

Oral Presentations

Poster Session 2 (Hall C)

13:10 – 14:40 POSTER SESSION 2

Parallel Session A7 (Hall A)

Chairperson: Kenichi Sakai

14:40 – 15:10 **[IL-A8] PREFERENTIAL ENRICHMENT PHENOMENON OF AMINO ACIDS WITH A RACEMIC CRYSTAL STRUCTURE**

Rui Tamura¹, Sekai Iwama¹, Rajesh G. Gonnade¹, Hiroyasu Sato²,
Akihito Yamano², Hiroki Takahashi¹, Hirohito Tsue¹

¹*Graduate School of Human & Environmental Studies, Kyoto University, Japan*

²*Rigaku Corporation, Japan*

15:10 – 15:40 **[IL-A9] CHIRALITY RECOGNITION, GENERATION, ENHANCEMENT AND MEASUREMENTS IN THE SOLID STATE**

Reiko Kuroda

Department of Life Sciences, Graduate School of Arts and Sciences, The University of Tokyo, Japan

15:40 – 16:00 **[O-A12] VCD OBSERVATION AND CONTROL OF REVERSAL OF SUPRAMOLECULAR CHIRALITY IN PROTEIN FIBRILS**

Laurence A. Nafie, Dmitry Kurouski, Rina K. Dukor, Igor Lednev

Department of Chemistry, Syracuse University, USA

16:00 – 16:20 **[O-A13] C₃ SYMMETRIC CHIRAL BUCKYBOWLS**

Shuhei Higashibayashi¹, Ryoji Tsuruoka¹, Nasir Baig Rashid Baig¹, Hidehiro Sakurai^{1,2}

¹*Research Center for Molecular Scale Nanoscience, Institute for Molecular Science, Japan*

²*PRESTO, Japan Science and Technology Agency, Japan*

16:20 – 16:50 **COFFEE BREAK (Hall C)**

Parallel Session B7 (Hall B)

Chairperson: Wolfgang Lindner

14:40 – 15:10 **[IL-B8] PREPARATION OF OPTICALLY ACTIVE COMPOUNDS IN EARLY-STAGE DRUG DISCOVERY**

Toru Yamano

Medicinal Chemistry Research Laboratories, Pharmaceutical Research Division, Takeda Pharmaceutical Company, Ltd., Japan

Oral Presentations

- 15:10 – 15:40 **[IL-B9] ENANTIOSELECTIVE CHROMATOGRAPHY AS A KEY TECHNOLOGY IN THE GLOBAL STRATEGY FOR INVESTIGATING, PREPARING, AND DEVELOPING CHIRAL DRUGS**
Eric Francotte, Huynh Dan
Novartis Institutes for BioMedical Research, Global Discovery Chemistry, Switzerland
- 15:40 – 16:00 **[O-B12] SOLUBILITY OPTIMIZED HIGH THROUGHPUT PURIFICATION WITH SUPERCRITICAL FLUID TECHNOLOGY IN DRUG DISCOVERY AND EARLY DEVELOPMENT**
Kyung H. Gahm¹, Ke (Koko) Huang²
¹*Discovery Analytical Sciences, Molecular Structure, C R&D, Amgen, Inc, USA*
²*Department of Chemistry and Biochemistry, University of Texas at Arlington, USA*
- 16:00 – 16:20 **[O-B13] ON THE ACCURATE DETERMINATION OF THE ENANTIOMERIC EXCESSES (EE) IN BIO- AND METAL-CATALYZED ENANTIOSELECTIVE/ASYMMETRIC REACTIONS**
Ashraf Ghanem^{1,2}
¹*Department of Biomolecular Engineering, Graduate School of Science and Technology, Kyoto Institute of Technology, Japan*
²*Australian Centre for Research On Separation Science (ACROSS), School of Chemistry, University of Tasmania, Australia*
- 16:20 – 16:50 **COFFEE BREAK (Hall C)**

Parallel Session A8 (Hall A)

Chairperson: Michinori Suginome

- 16:50 – 17:10 **[O-A14] REFINING THE DIRHODIUM METHOD**
Helmut Duddeck, Jens T. Mattiza
Leibniz University Hannover, Institute of Organic Chemistry, Germany
- 17:10 – 17:30 **[O-A15] KEY BUILDING BLOCKS VIA ENZYME-MEDIATED SYNTHESIS**
Jörg Pietruszka¹, Max Bielitz, Patrick Bongen, Thomas Classen, Irene Kullartz, Katharina Neufeld, Melanie Schölzel, Robert Simon
¹*Heinrich-Heine-Universität Düsseldorf im Forschungszentrum Jülich, Germany*
- 17:30 – 17:50 **[O-A16] ENANTIOSELECTIVE DOMINO REACTIONS PROMOTED BY ACID-BASE ORGANOCATALYSTS**
Shinobu Takizawa, Naohito Inoue, Shuich Hirata, Hiroaki Sasai
The Institute of Scientific and Industrial Research (ISIR), Osaka University, Japan
- 17:50 – 18:10 **[O-A17] ENTHALPIC DISCRIMINATION OF CHIRAL LIMONENES IN NON-POLAR SOLVENTS**
Takayoshi Kimura, Satoko Kido, Tadashi Kamiyama, Masao Fujisawa
Department of Chemistry, Kinki University, Japan

Oral Presentations

Parallel Session B8 (Hall B)

Chairperson: Kenji Monde

- 16:50 – 17:10 **[O-B14] CHIRAL MACROCYCLE FOR CHIRAL DISCRIMINATION IN NMR AND HPLC**
Tadashi Ema¹, Daisuke Tanida¹, Kyoko Sugita¹, Kazuki Hamada¹, Toshinobu Korenaga¹, Takashi Sakai¹, Ken-ichiro Miyazawa², Atsushi Ohnishi²
¹*Division of Chemistry and Biochemistry, Graduate School of Natural Science and Technology, Okayama University, Japan*
²*CPI Company, Daicel Chemical Industries, Ltd., Japan*
- 17:10 – 17:30 **[O-B15] PHOTOELECTRON CIRCULAR DICHROISM (PECD): A POWERFUL CHIROPTICAL PROBE OF MOLECULAR STRUCTURES AND SOLVATION IN THE GAS PHASE**
Laurent Nahon¹, Gustavo Garcia¹, Héloïse Soldi-Lose¹, Steven Daly², Ivan Powis²
¹*Synchrotron SOLEIL, France*
²*School of chemistry, University of Nottingham, UK*
- 17:30 – 17:50 **[O-B16] CHIROPTICAL PROPERTIES OF WATER SOLUBLE CRYPTOPHANES STUDIED BY ECD AND VCD SPECTROSCOPY**
A. Bouchet¹, T. Brotin², D. Cavagnat¹, T. Buffeteau¹
¹*Institut des Sciences Moléculaires (CNRS, UMR 5255). Université de Bordeaux, France*
²*Laboratoire de chimie de l'ENS LYON (CNRS, UMR 5182). École Normale Supérieure de Lyon, France*
- 17:50 – 18:10 **[O-B17] INTENSIVE CHIROPTICAL PROPERTIES OF ACHIRAL CHROMOPHORE**
Paola Rizzo¹, Gaetano Guerra
¹*Dipartimento di Chimica, Università di Salerno, via Ponte don Melillo, Italy*

Thursday, July 15, 2010

Parallel Session A9 (Hall A)

Chairperson: Albert S. C. Chan

- 08:40 – 09:10 **[IL-A10] SHORT-LIVED CHIRAL ENOLATE INTERMEDIATES FOR RELIABLE ASYMMETRIC SYNTHESIS**
Takeo Kawabata
Institute for Chemical Research, Kyoto University, Japan
- 09:10 – 09:40 **[IL-A11] NEW APPROACHES TO ASYMMETRIC NUCLEOPHILIC CATALYSIS**
Daniel Seidel
Department of Chemistry and Chemical Biology, The State University of New Jersey, USA

Oral Presentations

09:40 – 10:10 **[IL-A12] RECENT ASPECTS OF ASYMMETRIC AUTOCATALYSIS AND THE ORIGINS OF HOMOCHIRALITY**
Kenso Soai
Department of Applied Chemistry and Chiral Material Research Center, Research Institute for Science and Technology, Tokyo University of Science, Japan

10:10 – 10:40 **COFFEE BREAK (Hall C)**

Parallel Session B9 (Hall B)

Chairperson: Anja Palmans

08:40 – 09:10 **[IL-B10] TRANSFORMATION OF CHIRAL INFORMATION IN SELF-ASSEMBLED OBJECTS**
Jan H. van Esch
Department of chemical Engineering, Delft University of Technology, Netherlands

09:10 – 09:40 **[IL-B11] PLUS / MINUS IN ASYMMETRIC SYNTHESIS AND CATALYSIS**
Jérôme Lacour
Department of Organic Chemistry, University of Geneva, Switzerland

09:40 – 10:10 **[IL-B12] THE DIAGNOSTIC POWER OF CHIRAL PORPHYRIN-PORPHYRIN INTERACTIONS: CD SPECTROSCOPIC RESPONSE**
Nina Berova
Department of Chemistry, Columbia University, USA

10:10 – 10:40 **COFFEE BREAK (Hall C)**

Parallel Session A10 (Hall A)

Chairperson: Kenso Soai

10:40 – 11:00 **[O-A18] IRIIDIUM-CATALYZED ASYMMETRIC ISOMERIZATION OF PRIMARY ALLYLIC ALCOHOLS**
Clément Mazet, Luca Mantilli
Department of Organic Chemistry, University of Geneva, Switzerland

11:00 – 11:20 **[O-A19] CATALYTIC GENERATION OF CHIRAL AMINOPHOSPHONIUM PHOSPHITE AS A HIGHLY REACTIVE P-NUCLEOPHILE**
Daisuke Uraguchi, Takaki Ito, Shinji Nakamura, Takashi Ooi
Department of Applied Chemistry, Graduate School of Engineering, Nagoya University, Japan

11:20 – 11:40 **[O-A20] MANDELIC ACID (DERIVATIVES) – ASYMMETRIC SYNTHESIS, SOLID PHASE BEHAVIOR AND CRYSTALLIZATION**
Jan von Langermann¹, Heike Lorenz¹, Andreas Seidel-Morgenstern^{1,2}
¹Max Planck Institute for Dynamics of Complex Technical Systems, Physical and Chemical Foundations of Process Engineering, Germany
²Otto von Guericke University Magdeburg, Chair of Chemical and Process Engineering, Germany

Oral Presentations

11:40 – 12:00 **[O-A21] ATROPISOMERISM OF α,β -UNSATURATED AMIDINES: STEREOSELECTIVE SYNTHESIS BY CATALYTIC DOMINO REACTION AND OPTICAL RESOLUTION**

Kiyosei Takasu, Naoya Shindoh, Yoshiji Takemoto
Graduate School of Pharmaceutical Sciences, Kyoto University, Japan

12:00 – 13:40 **LUNCH / VENDOR SEMINAR**

Vendor Seminar – Toray Fine Chemicals Co., Ltd. (Hall A)

12:00 – 12:45 **[VS-A3] PRACTICAL OPTICAL RESOLUTION**

Kenichi Sakai, Masao Morimoto
Technology Development Division, Toray Fine Chemicals Co., Ltd., Japan

Parallel Session B10 (Hall B)

Chairperson: Nina Berova

10:40 – 11:00 **[O-B18] DYNAMIC MOLECULAR HELICES WITH A HIGH π -ELECTRON DENSITY**

Eisuke Ohta¹, Hiroyasu Satoh², Shinji Ando¹, Atsuko Kosaka¹, Takanori Fukushima¹, Daisuke Hasizume¹, Mikio Yamasaki³, Kimiko Hasegawa³, Takuzo Aida^{1,2}

¹*Advanced Science Institute, RIKEN, Japan*

²*Nanospace Project, JST ERATO-SORST, Japan*

³*Rigaku, Japan*

11:00 – 11:20 **[O-B19] CIRCULAR DICHROISM SPECTROSCOPY AS A VALUABLE TOOL IN STEREOCHEMICAL STUDIES OF BIOACTIVE COMPOUNDS**

Jadwiga Frelek
Institute of Organic Chemistry of the Polish Academy of Sciences, Poland

11:20 – 11:40 **[O-B20] VIBRATIONAL CIRCULAR DICHROISM & ITS APPLICATION IN BIOMOLECULAR SCIENCE**

Kenji Monde, Atsufumi Nakahashi, Masataka Shibata, Tohru Taniguchi, Shota Saito, Mostafa A. S. Hammam, Nobuaki Miura
Laboratory of Chemical Biology, Graduate School of Life Science, Frontier Research Center for Post-genome Science and Technology, Hokkaido University, Japan

11:40 – 12:00 **[O-B21] DISULFIDE CHROMOPHORE AND ITS OPTICAL ACTIVITY**

Vladimír Baumruk¹, Lucie Bednářová², Markéta Kubáňová¹, Petr Maloň²
¹*Charles University in Prague, Faculty of Mathematics and Physics, Institute of Physics, Czech Republic*
²*Institute of Organic Chemistry and Biochemistry, Academy of Sciences of the Czech Republic, Czech Republic*

12:00 – 13:40 **LUNCH**

Oral Presentations

Parallel Session A I I (Hall A)

Chairperson: Daniel Seidel

13:40 – 14:10 [IL-A13] **ASYMMETRIC CYANOSILYLATION OF ALDEHYDES AND α -KETO ESTERS CATALYZED BY THE CHIRAL Ru–Li COMBINED SYSTEMS**

Takeshi Ohkuma

Division of Chemical Process Engineering, Graduate School of Engineering, Hokkaido University, Japan

14:10 – 14:40 [IL-A14] **HIGHLY EFFECTIVE CHIRAL LIGANDS FROM ASYMMETRIC CATALYTIC SYNTHESIS AND THEIR APPLICATIONS IN ASYMMETRIC C-C, C-O, AND C-N BOND FORMATION**

Albert S. C. Chan

Institute of Molecular Technology for Drug Discovery and Synthesis; and Department of Applied Biology and Chemical Technology, the Hong Kong Polytechnic University, Hong Kong

Parallel Session B I I (Hall B)

Chairperson: Daniel W. Armstrong

13:40 – 14:10 [IL-B13] **MOLECULAR CHIRALITY IN MURDER-MYSTERY NOVELS AND IN REAL-LIFE FORENSIC TOXICOLOGY**

Joseph Gal

Division of Clinical Pharmacology and Toxicology, School of Medicine, University of Colorado, USA

14:10 – 14:40 [IL-B14] **THE USE OF PLATFORM CHEMICAL TECHNOLOGIES FOR ACCESSING PHARMACEUTICAL ENANTIOPURITY AT MERCK**

Christopher J. Welch

Separation & Purification Center of Excellence, Merck Research Laboratories, USA

Plenary Session 3 (Hall A)

Chairperson: Kenji Mori

14:40 – 15:30 [PL-3] **PRACTICAL CATALYTIC ASYMMETRIC SYNTHESIS OF PROMISING DRUG CANDIDATES**

Masakatsu Shibasaki

Institute of Microbial Chemistry, Tokyo, Japan

15:30 – 16:00 **POSTER AWARD**

INVITATION OF CHIRALITY 2011 and CLOSING REMARKS