Tuesday, July 13, 2010

Poster Session I (Hall C)

13:10 – 14:40

[PA-1] CHIRAL STATIONARY PHASE BASED ON NAPHTHYL ETHYL FUNCTIONALIZED CYCLOFRUCTAN FOR HPLC SEPARATION OF ENANTIOMERS
Eva Tesařová[1], Květa Kalíková[1], Zuzana Bosáková[2], Daniel W. Armstrong[2]
[1]*Department of Physical and Macromolecular Chemistry, Faculty of Science, Charles University in Prague, Czech Republic*
[2]*Department of Analytical Chemistry, Faculty of Science, Charles University in Prague, Czech Republic*
[3]*Department of Chemistry and Biochemistry, University of Texas at Arlington, USA*

[PA-2] IMMOBILIZATION AND CHIRAL RECOGNITION OF REGIOSELECTIVE AMYLOSE DERIVATIVES AS CHIRAL STATIONARY PHASES FOR HPLC
Jun Shen[1], Tomoyuki Ikai[2], Xiande Shen[1], Yoshio Okamoto[1,2]
[1]*College of Material Science and Chemical Engineering, Harbin Engineering University, China*
[2]*Nagoya University, Japan*

[PA-3] PREPARATION OF BINAPHTHOL DERIVED CHIRAL STATIONARY PHASES
Yi Jun Zhang[1,2], **Jae Jeong Ryoo**[1]
[1]*Department of Chemistry, Graduate School, Kyungpook National University, Korea*
[2]*Henan Institute of Science and Technology, China*

[PA-4] A RATIONAL APPROACH TO THE DESIGN OF NEW "CRAB-LIKE" CHIRAL STATIONARY PHASES: SYNTHESIS AND EVALUATION
Claudio Villani[1], Ilaria D'Acquarica[1], Francesco Gasparrini[1], Dorina Kotoni[1], Cristina Cimarelli[2], Gianni Palmieri[2], Denise Wallworth[3]
[1]*Dipartimento di Chimica e Tecnologie del Farmaco, Sapienza Università di Roma, Italy*
[2]*Dipartimento di Scienze Chimiche, Università di Camerino, Italy*
[3]*Sigma-Aldrich Chemie GmbH, Germany*

[PA-5] THE COMPARISON OF ENANTIOMERIC SELECTIVITY IN PRIMARY AMINO ACIDS SEPARATION WITH TWO TYPE OF CROWN ETHER-BONDED PHASE IN HIGH PERFORMANCE LIQUID CHROMATOGRAPHY
Juhyeon Jin, Sung-Yong An, Jong-min Lee
Department of chromatography, RStech Corporation, Korea

[PA-6] EVALUATION OF THE ENANTIOSELECTIVITY OF A MONOLITHIC STATIONARY PHASE BASED UPON (*S*)-1-(1-NAPHTHYL)ETHYLAMINE USING MICRO-LIQUID CHROMATOGRAPHY (µ-LC)
Saowalak Whungsinsujarit[1], Dr. Cristina Legido-Quigley[1], Dr. Norman W. Smith[1]
[1]*Pharmaceutical Research Division, School of Biomedical and Health Science, King's College, UK*

[PA-7] EVALUATION OF BOROMYCIN AS A CHIRAL SELECTOR IN NON-AQUEOUS CAPILLARY ELECTROPHORESIS
Vítězslav Maier[1], Martin Švidrnoch[1], Jan Petr[1], Václav Ranc[1], Daniel W. Armstrong[2], **Juraj Ševčík**[1]
[1]*Department of Analytical Chemistry, Faculty of Science, Palacký University in Olomouc, Czech*
[2]*Department of Chemistry and Biochemistry, The University of Texas at Arlington, USA*

[PA-8] DIRECT HPLC MONITORING OF LIPASE-CATALYZED KINETIC RESOLUTION OF ACIDIC/ANTI-INFLAMMATORY DRUGS IN NON-STANDARD ORGANIC SOLVENTS
A. 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*

[PA-9] UNIVERSAL CHIRAL SCREENING SYSTEM FOR OPTIMIZED METHOD DEVELOPMENT
David S. Bell, Jennifer E. Claus, Jay M. Jones
Sigma-Aldrich/Supelco, USA

[PA-10] GREEN CHIRAL HPLC – ENANTIOMERIC SEPARATIONS IN SUBCRITICAL WATER ON CHIRALCEL OD AND CHIRALPAK AD
S. Droux[1], G. Félix[2]
[1]*KIRALYA, France*
[2]*CINaM (CNRS UPR 3118), Aix-Marseille Université, France*

[PA-11] **HIGH THROUGHPUT SCREENING METHOD USING 3 MICRON POLYSACCHARIDE-BASED IMMOBILISED TYPE COLUMNS**
Atsushi Ohnishi, Takafumi Onishi, Tohru Shibata
CPI Company, Daicel chemical Industries, ltd., Japan

[PA-12] **PERFORMANCE TEST OF PARALLEL SFC TECHNIQUE FOR METHOD DEVELOPMENTS**
Marcel Althaus[1], Chrystelle Vignal[1], **Holger Gumm**[2]
[1]*Hoffmann La Roche, Switzerland*
[2]*Sepiatec GmbH, Germany*

[PA-13] **DEVELOPMENT OF A 2D-HPLC SYSTEM FOR THE SIMULTANEOUS ENATIOSELECTIVE DETERMINATION OF NEUROACTIVE AMINO ACIDS**
Yurika Miyoshi[1], Kyoko Ueno[1], Hai Han[1], Kei Masuyama[1], Yosuke Tojo[1], Masashi Mita[2], Tsuneaki Kaneko[2], Kenji Hamase[1]
[1]*Graduate School of Pharmaceutical Sciences, Kyushu University, Japan*
[2]*Innovative Science Research and Development Center, Shiseido Co., Ltd., Japan*

[PA-14] **SIMULTANEOUS 2D-HPLC DETERMINATION OF D-ASPARTIC ACID AND D-GLUTAMIC ACID IN THE TISSUES AND PHYSIOLOGICAL FLUIDS OF VARIOUS STRAINS OF MICE**
Hai Han[1], Yurika Miyoshi[1], Yosuke Tojo[1], Wolfgang Lindner[2], Kenji Hamase[1]
[1]*Graduate School of Pharmaceutical Sciences, Kyushu University, Japan*
[2]*Institute of Analytical Chemistry and Food Chemistry, University of Vienna, Austria*

[PA-15] **ESTABLISHMENT OF A 2D-HPLC SYSTEM FOR THE SIMULTANEOUS DETERMINATION OF *N*-METHYL-D-ASPARTIC ACID AND ITS ANALOGUES**
Reiko Koga[1], Yurika Miyoshi[1], Masashi Mita[2], Wolfgang Lindner[3], Kenji Hamase[1]
[1]*Graduate School of Pharmaceutical Sciences, Kyushu University, Japan*
[2]*Innovative Science Research and Development Center, Shiseido Co., Ltd., Japan*
[3]*Institute of Analytical Chemistry and Food Chemistry, University of Vienna, Austria*

[PA-16] **LC-MS COMPATIBLE REVERSED-PHASE SCREENING STRATEGIES ON DAICEL PROTEIN-BASED COLUMNS: CHIRAL-AGP, CHIRAL-HSA AND CHIRAL-CBH**
Takashi MICHISHITA, Tong ZHANG, **Pilar FRANCO**
Chiral Technologies Europe, France

[PA-17] **REVERSED PHASE SCREENING STRATEGIES ON DAICEL POLYSACCHARIDE-BASED CHIRAL STATIONARY PHASES**
Tong ZHANG[1], Dung NGUYEN[1], **Shoji MIYAMOTO**[2], Pilar FRANCO[1]
[1]Chiral Technologies Europe, France
[2]Daicel Chemical Industries, Ltd., CPI Company, Japan

[PA-18] **COMPLEMENTARY ENANTIOSELECTIVE RECOGNITION ON DAICEL POLYSACCARIDE-DERIVED CHIRALPAK AY, AZ AND CHIRALCEL OZ**
Ryota HAMASAKI[1], Shoji MIYAMOTO[1], Tong ZHANG[2], Dung NGUYEN[2], Jean-Michel HEYM[2], Pilar FRANCO[2]
[1]Daicel Chemical Industries, Ltd., CPI Company, Japan
[2]Chiral Technologies Europe, France

[PA-19] **ENANTIOSEPERATION OF PRANOPROFEN IN EQUINE PLASMA AND URINE BY CHIRAL LIQUID CHROMATOGRAPHY-MASS SPECTROMETRY**
K. R. Kim[1], J. Yu[1,2], K. S. Han[2], G. Lee[3,4,5], M. J. Paik[3,4]
[1]*Biometabolite Analysis Laboratory, College of Pharmacy, Sungkyunkwan University, Korea*
[2]*Racing Laboratory, Korea Racing Authority, Korea*
[3]*Institute for Neuroregeneration and Stem Cell Research, School of Medicine, Ajou University, Korea*
[4]*Department of Molecular Science and Technology, School of Medicine, Ajou University, Korea*
[5]*Institute for Medical Science, School of Medicine, Ajou University, Korea*

[PA-20] **ENANTIOMERIC SEPARATION OF 1-(BENZOFURAN-2-YL)ALKYLAMINES ON THREE DIFFERENT CROWN ETHER-BASED CHIRAL STATIONARY PHASES**
Soohyun Park, Myung Ho Hyun
Department of Chemistry, Pusan National University, Korea

[PA-21] **ENANTIOMERIC SEPARATION OF 3-AMINO-1,4-BENZODIAZEPIN-2-ONES ON CROWN ETRHER-BASED CHIRAL STATIONARY PHASES**
Jeyoung Park, Myung Ho Hyun
Department of Chemistry, Pusan National University, Korea

[PA-22] **VALIDATION OF CHIRAL HIGH-PERFORMANCE LIQUID CHROMATOGRAPHY METHOD FOR ENANTIOMERIC SEPARATION AND QUANTITATIVE DETERMINATION OF IBUPROFEN IN COMMERCIAL TABLETS**

Assem Abdollahpour[1], Mojtaba Shamsipur[2], Ramin Asgharian[3], Soheila Haghgoo[4], Parastou Yaghoubi[5]
[1]*Department of Chemistry, Faculty of Science, Tarbiat Modares University, Iran*
[2]*Department of Chemistry, Faculty of Science, Razi University, Iran*
[3]*Islamic Azad University, Department of Pharmaceutical Science, Iran*
[4]*Department of Drug and Food Control, Faculty of Pharmacy, Medical Sciences, University of Tehran, Iran*
[5]*Department of Chemistry, De Anza college, USA*

[PA-23] **ENANTIOMERIC ANALYSIS OF SERINE AND THREONINE AS NAPROXEN DERIVATIVES BY FLUORIMETRIC LIQUID CHROMATOGRAPHY**

Tang-Chia Chung[1], Hwang-Shang Kou[1], Cheng-Ying Yu[2], Hsin-Lung Wu[1]
[1]*School of Pharmacy, Kaohsiung Medical University, Taiwan*
[2]*Department of Pharmacy, Kaohsiung Medical University Hospital, Kaohsiung Medical University, Taiwan*

[PA-24] **ENANTIOMERIC SEPARATION OF PROTON PUMP INHIBITORS (PPIS) AND ANALOGUES ON A LIGAND EXCHANGE CHIRAL STATIONARY PHASE**

Jinjoo Ha, Donghee Ma, Myung Ho Hyun
Department of Chemistry, Pusan National University, Korea

[PA-25] **ENANTIOMERIC SEPARATION N-DERIVATIVES OF 4-AMINO-1,4-BENZODIAZEPIN-2-ONE ON PIRKLE-TYPE CHIRAL STATIONARY PHASES**

Donghee Ma, Jeyoung Park, Myung Ho Hyun
Department of Chemistry, Pusan National University, Korea

[PA-26] **DIRECT CHROMATOGRAPHIC SEPARATION OF THYROXINE ENANTIOMERS IN PHARMACEUTICAL FORMULATIONS USING CROWN ETHER DERIVED CHIRAL STATIONARY PHASES**

So Hee Jeon, Wonjae Lee
College of Pharmacy, Chosun University, Korea

[PA-27] **SEPERATION OF THERAPEUTIC ISOMERS BY HPLC AND LC/TOFMS**

Insun Lee, Yang Ha Cho, Sooyeul Cho, Jinho Kim, In Sun Hwang, Sungil Kim, Ji Hyun Lee, Su Yeon Cho, Jung Hee Lee, Soon Young Han
Advanced Analysis Team, Toxicological Evaluation and Research Department, National Institute of Food and Drug Safety Evaluation, Korea Food & Drug Administration, Korea

[PA-28] **LIQUID CHROMATOGRAPHIC SEPARATION OF THE ENANTIOMERS OF AMINO ACID ESTERS AS 9-ANTHRALDIMINE DERIVATIVES ON COATING AND COVALENTLY BONDED TYPE POLYSACCHARIDE-DERIVED CHIRAL STATIONARY PHASES**

Hu Huang, Wonjae Lee
College of Pharmacy, Chosun University, Korea

[PA-29] **CHIRAL SEPARATION OF *N*-METHYL ASPARTIC ACID AS *N*-ETHOXYLCARBONYLATED (S)-(+)-2-OCTYL ESTER BY ACHIRAL GAS CHROMATOGRAPHY–MASS SPECTROMETRY**

Duc-Toan Nguyen[1], Man Jeong Paik[1,2], Kyoung-Rae Kim[3], Young-Hwan Ahn[2,4], Gwang Lee[1,5]
[1]*Department of Molecular Science and Technology, Ajou University, Republic of Korea*
[2]*Institute for Neuroregeneration and Stem Cell Research, School of Medicine, Ajou University, Korea*
[3]*Biometabolite Analysis Laboratory, College of Pharmacy, Sungkyunkwan University, Korea*
[4]*Department of Neurosurgery and* [5]*Institute for Medical Science, School of Medicine, Ajou University, Korea*

[PA-30] **ENANTIOMER SEPARATIONS OF ALL PROTEINOGENIC AMINO ACIDS AS THEIR NBD-DERIVATIVES USING VARIOUS NARROWBORE-ENANTIOSELECTIVE COLUMNS**

Kyoko Ueno[1], Yurika Miyoshi[1], Masashi Mita[2], Wolfgang Lindner[3], Kenji Hamase[1]
[1]*Graduate School of Pharmaceutical Sciences, Kyushu University, Japan*
[2]*Innovative Science Research and Development Center, Shiseido Co., Ltd., Japan*
[3]*Institute of Analytical Chemistry and Food Chemistry, University of Vienna, Austria*

[PA-31] **ENANTIOSEPARATION OF SULPIRIDE BY CAPILLARY ELECTROPHORESIS AND ITS APPLICATION TO PHARMACOKINETIC STUDY**

Ching-Ling Cheng[1], Yu-Chien Tseng[2], Chen-Hsi Chou[2, 3]
[1]*Department of Pharmacy, Chia-Nan University of Pharmacy and Science, Tainan*
[2]*Institute of Clinical Pharmacy, College of Medicine, National Cheng Kung University, Tainan*
[3]*Department of Pharmacy, National Cheng Kung University Hospital, Taiwan*

[PA-32] ENANTIOMERIC SEPARATION OF LACTIC ACID IN MICROORGANISM AS OPENTAFLUOROPROPIONYLATED (S)-(+)-3-METHYL-2-BUTYLESTER BY ACHIRAL GAS CHROMATOGRAPHY–MASS SPECTROMETRY

Jaehwan Yoon[1], Duc-Toan Nguyen[1], Han Seung Chae[1], Pyung Cheon Lee[1], Kyoung-Rae Kim[2], Young-Hwan Ahn[3, 4], Gwang Lee[1, 5], Man Jeong Paik[1, 4]
[1]*Department of Molecular Science and Technology, Ajou University*
[2]*Biometabolite Analysis Laboratory, College of Pharmacy, Sungkyunkwan University*
[3]*Department of Neurosurgery* [4]*Institute for Neuroregeneration and Stem Cell Research and* [5] *Institute for Medical Science, School of Medicine, Ajou University, Korea*

[PA-33] ENANTIOSEPARATION OF (+)-PRAERUPTORIN A AND (–)-PRAERUPTORIN A AND THEIR METABOLISM BY POOLED LIVER MICROSOMES OF RATS AND HUMANS

Yue-Lin Song, Wang-Hui Jing, Ru Yan, Yi-Tao Wang
Institute of Chinese Medical Sciences, University of Macau

[PA-34] NOVEL CHIRALITY CONTROL BY MEANS OF DIELECTRICALLY CONTROLLED RESOLUTION (DCR)

Rumiko Sakurai[1], Atsushi Yuzawa[2], Masanori Yamaura[1], Kenichi Sakai[3]
[1]*Faculty of Pharmacy, Iwaki Meisei University, Japan*
[2]*R&D Division, Yamakawa Chemical Industry Co., Ltd, Kitaibaraki, Japan*
[3]*Technology Development Division, Toray Fine Chemicals Co., Ltd, Nagoya, Japan*

[PA-35] HIGHLY SENSITIVE CHIRAL ANALYSIS OF PHARMACEUTICAL DRUGS IN CAPILLARY ELECTROPHORESIS

Takayuki Kawai, Kenji Sueyoshi, Fumihiko Kitagawa, Koji Otsuka
Department of Material Chemistry, Graduate School of Engineering, Kyoto University, Japan

[PA-36] REVERSAL OF ENANTIOMER MIGRATION ORDER FOR SIBUTRAMINE IN CHIRAL CAPILLARY ELECTROPHORESIS

Hongmei Zhu[1], Enqi Wu[1], Jianbo Chen[1], Yu-Seon Jang[1], Won-Ku Kang[2], Hu Huang[3], Wonjae Lee[3], Jong Seong Kang[1]
[1]*College of Pharmacy, Chungnam National University, Korea*
[2]*College of Pharmacy, Taegu Catholic University, Korea*
[3]*College of Pharmacy, Chosun University, Korea*

[PA-37] CLARIFICATION OF CHIRAL RECOGNITION MECHANISM IN RESOLUTION OF RACEMIC 2-METHYLPIPERAZINE WITH ENANTIOPURE TARTARIC ACID

Masao Morimoto[1], Hiroshi Katagiri[2], Kenichi Sakai[1]
[1]*Specialty Chemicals Technology Development Department, Toray Fine Chemicals Co., Ltd., Japan*
[2]*Department of Chemistry and Chemical Engineering, Graduate School of Science and Engineering, Yamagata University, Japan*

[PA-38] PREFERENTIAL ENRICHMENT OF DL-HISTIDINE-FUMARIC ACID CO-CRYSTALS

Sekai Iwama[1], Rajesh G. Gonnade[1], Yuko Mori[1], Hiroyasu Sato[2], Akihito Yamano[2], Hiroki Takahashi[1], Hirohito Tsue[1], Rui Tamura[1]
[1]*Graduate School of Human & Environmental Studies, Kyoto University, Japan*
[2]*Rigaku Corporation, Japan*

[PA-39] PREFERENTIAL ENRICHMENT OF DL-PHENYLALANINE-FUMARIC ACID CO-CRYSTALS

Rajesh Gonnade, Sekai Iwama, Yoko Mori, Hiroki Takahashi, Hirohito Tsue, Rui Tamura
Graduate School of Human & Environmental Studies, Kyoto University, Japan

[PA-40] CHIRALITY CONVERSION AND ENANTIOSELECTIVE EXTRACTION OF AMINO ACIDS BY IMIDAZOLIUM - BASED BINOL-ALDEHYDE

RiLa Joo[1], Hye Rim Ga[2], Kwan Mook Kim[3]
Bio-Chiral Lab, Department of Chemistry and Division of Nano Sciences, Ewha Womans University, Korea

[PA-41] HIERARCHICAL RECOGNITION OF INCLUSION CRYSTALS OF 3,7,12,24-TETRAHYDROXYCHOLANE

Wen-Tzu Liu, Ichiro Hisaki, Norimitsu Tohnai, Mikiji Miyata
Department of Material and life science, Graduate School of Engineering, Osaka University, Japan

[PA-42] INCLUSION ABILITIES AND MOLECULAR RECOGNITION OF 23-SULFONOCHOLIC ACID

Hirohide Yabuguchi, Ichiro Hisaki, Norimitsu Tohnai, Mikiji Miyata
Department of Material and Life Science, Graduate School of Engineering, Osaka University, Japan

[PA-43] **SYNTHESIS, CRYSTAL STRUCTURE, CIRCULAR DICHROISM, AND MAGNETIC PROPERTIES OF CHIRAL DINUCLEAR AND POLYNUCLEAR NICKEL(II) COMPOUNDS WITH OXALATE AND CHROMATE**

Jong Won Shin[1], **Ju Eun Lee**[1], Hong In Lee[1], Kil Sik Min[2]
[1]*Department of Chemistry, Kyungpook National University, Korea*
[2]*Department of Chemistry Education, Kyungpook National University, Korea*

[PA-44] **ABSOLUTE CONTROL OF HELICAL MOLECULAR ARRANGEMENT OF CYTOSINE CRYSTAL BY THE CRYSTAL FACE SELECTIVE DEHYDRATION OF CRYSTAL WATER**

Hiroko Mineki, Kenta Suzuki, Yuko Hakoda, Tsuneomi Kawasaki and Kenso Soai
Department of Applied Chemistry and Chiral Material Research Center, Research Institute for Science and Technology, Tokyo University of Science, Japan

[PA-45] **APPLICATION OF SUPRAMOLECULAR TILT CHIRALITY TO 2_1 HELICAL ASSEMBLIES OF VARIOUS ORGANIC MOLECULES**

Kazuaki Sakaguchi, Ichiro Hisaki, Norimitsu Tohnai, Mikiji Miyata
Department of Material and Life science, Graduate School of Engineering, Osaka University, Japan

[PA-46] **CHIRAL OPTICAL PROPERTIES OF SUPRAMOLECULAR ORGANIC FLUOROPHORE CONSISTING OF 4-(2-ARYLETHYNYL)-BENZOIC ACID IN SOLID STATE**

Yoshitane Imai[1], Noriaki Nishiguchi[1], Yoko Nakano[2], Takunori Harada[3], Nobuo Tajima[4], Tomohiro Sato[1], Michiya Fujiki[2], Reiko Kuroda[3], Yoshio Matsubara[1]
[1]*Department of Applied Chemistry, Faculty of Science and Engineering, Kinki University, Japan*
[2]*Graduate School of Materials Science, Nara Institute of School and Technology, Japan*
[3]*Department of Life Sciences, Graduate School of Arts and Sciences, The University of Tokyo, Japan*
[4]*Graduate School of Pure and Applied Sciences, Tsukuba University, Japan*

[PA-47] **SUPRAMOLECULAR CHIRALITY IN CRYSTALS OF PRIMARY AMMONIUM CARBOXYLATES AND THEIR RIGHT- AND LEFT-HANDEDNESS**

Toshiyuki Sasaki, Norimitsu Tohnai, Ichiro Hisaki, Mikiji Miyata
Department of Material and Life Science, Graduate School of Engineering, Osaka University, Japan

[PA-48] **SOLID-STATE CHIRAL OPTICAL PROPERTIES OF BRIDGED-TYPE BIPHENYL AND BINAPHTHYL COMPOUNDS WITH AXIAL CHIRALITY**

Takafumi Kinuta[1], Yoko Nakano[2], Takunori Harada[3], Hayato Tokutome[3], Tomohiro Sato[1], Michiya Fujiki[2], Reiko Kuroda[3], Yoshio Matsubara[1], Yoshitane Imai[1]
[1]*Department of Applied Chemistry, Faculty of Science and Engineering, Kinki University, Japan*
[2]*Graduate School of Materials Science, Nara Institute of School and Technology, Japan*
[3]*Department of Life Sciences, Graduate School of Arts and Sciences, The University of Tokyo, Japan*

[PA-49] **GENERATION OF CHIRALITY IN COBALOXIME COMPLEX SINGLE CRYSTALS**

Akiko Sekine, Tsuyoshi Nitami, Kazutaka Sasaki, Hidehiro Uekusa, Yuji Ohashi
Department of Chemistry and Materials Science, Graduate School of Science and Engineering, Japan

[PA-50] **CRYSTALLIZATION-BASED OPTICAL RESOLUTION OF 1,1'-BINAPHTHALENE-2,2'-DICARBOXYLIC ACID VIA 1-PHENYLETHYLAMIDE: CONTROL BY THE DIELECTRIC PROPERTY OF SOLVENT AND CRYSTALLIZATION TEMPERATURE**

Yuichi Kitamoto, Kazuaki Yamane, Naoya Morohashi, and Tetsutaro Hattori
Department of Biomolecular Engineering, Graduate School of Engineering, Tohoku University, Japan

[PA-51] **HOMOCHIRAL DIMER IN (S)-THALIDOMIDE CRYSTAL AND HETEROCHIRAL DIMER IN (RS)-THALIDOMIDE CRYSTAL**

Toshiya Suzuki[1], Masahito Tanaka[2], Motoo Shiro[3], Norio Shibata[4], Tetsuya Osaka[5,6], Toru Asahi[1,6]
[1]*Department of Life Science and Medical Bioscience, Graduate School of Advanced Science and Engineering, Waseda University, Japan*
[2]*Research Institute of Instrumentation Frontier, National Institute of Advanced Industrial Science and Technology (AIST), Japan*
[3]*X-ray Research Laboratory, Rigaku Corporation, Japan*
[4]*Department of Frontier Materials, Graduate School of Engineering, Nagare College, Nagoya Institute of Technology, Japan*
[5]*Department of Applied Chemistry, Graduate School of Advanced Science and Engineering, Waseda University, Japan*
[6]*Consolidated Research Institute for Advanced Science and Medical Care, Waseda University (ASMeW), Japan*

[PA-52] **SINGLE CRYSTAL STRUCTURES OF ASYMMETRIC AUTOCATALYST. ISOPROPYLZINC ALKOXIDE OF PYRIMIDYL ALKANOL**
Tsuneomi Kawasaki, Takayuki Tobita, Taisuke Sasagawa, Kenso Soai
Department of Applied Chemistry and Chiral Material Research Center, Research Institute for Science and Technology, Tokyo University of Science, Japan

[PA-53] **MOLECULAR ORIGIN FOR HELICAL WINDING OF FIBRILS IN A GEL AS REVEALED BY VIBRATIONAL CIRCULAR DICHROISM SPECTRA**
Hisako Sato[1], Tomoko Yajima[2], Kayako Hori[2], Akihiko Yamgishi[3]
[1]*Department of Chemistry and Biology, Graduate School of Science and Engineering, Ehime University, Japan*
[2]*Department of Chemistry, Graduate School of Humanities and Sciences, Ochanomizu University, Japan*
[3]*Department of Chemistry, Faculty of Science, Toho University, Japan*

[PA-54] **CHIROPTICAL ANALYSIS OF CARBOHYDRATES AND LIPIDS BY VIBRATIONAL CIRCULAR DICHROISM**
Tohru Taniguchi, Masataka Shibata, Masumi Fukuzawa, Atsufumi Nakahashi, Kenji Monde
Graduate School of Advanced Life Science, Frontier Research Center for Post-Genome Science and Technology, Hokkaido University, Japan

[PA-55] **VIBRATIONAL CD SPECTROSCOPY AS A POWERFUL TOOL FOR STEREOCHEMICAL STUDY OF CYCLOPHYNES IN SOLUTION**
De Lie An[1], Qiang Chen[1], Jingkun Fang[1], Hong Yan[1], Akihiro Orita[2], Nobuaki Miura[3], **Atsufumi Nakahashi**[3], Kenji Monde[3], Junzo Otera[2]
[1]*State Key Laboratory of Chemo/Biosensing and Chemometrics, Department of Chemistry, College of Chemistry and Chemical Engineering, Hunan University, China*
[2]*Department of Applied Chemistry, Okayama University of Science, Japan*
[3]*Graduate School of Advanced Life Science, Frontier Research Center for Post-Genome Science and Technology, Hokkaido University, Japan*

[PA-56] **NATURAL CIRCULAR DICHROISM IN THE VACUUM ULTRAVIOLET AND SOFT X-RAY REGIONS BY USING POLARIZING UNDULATOR**
Masahito Tanaka[1], Kazutoshi Yagi-Watanabe[1], Fusae Kaneko[1], Yudai Izumi[2], Maiko Tanabe[2], Akane Agui[3], Takayuki Muro[4], Hiroshi Sakurai[5], Yusuke Kenmochi[6], Yasushi Honda[6], Masahiko Hada[6], Kazumichi Nakagawa[2]
[1]*National Institute of Advanced Industrial Science and Technology (AIST), Japan*
[2]*Graduate School of Human Development and Environment, Kobe University, Japan*
[3]*Japan Atomic Energy Agency (JAEA), Japan*
[4]*Japan Synchrotron Radiation Research Institute (JASRI), Japan*
[5]*Department of Electronic Engineering, Gunma University, Japan*
[6]*Graduate School of Science and Engineering, Tokyo Metropolitan University, Japan*

[PA-57] **AN UPDATE OF THEORY FOR FLUORESCENCE-DETECTED CIRCULAR DICHROISM (FDCD)**
Tatsuo Nehira[1], Masayuki Watanabe[2]
[1]*Graduate School of Integrated Arts and Sciences, Hiroshima University, Japan*
[2]*JASCO Corporation, Japan*

[PA-58] **EXPERIMENTAL AND THEORETICAL STUDIES ON VACUUM-ULTRAVIOLET CIRCULAR DICHROISM OF HYDROXY ACIDS IN AQUEOUS SOLUTION**
Takayuki Fukuyama[1], Koichi Matsuo[2], Kuhihiko Gekko[2,3]
[1]*Pharmaceutical Research Department, CMC Research Center, Mitsubishi Tanabe Pharma Corporation, Japan*
[2]*Hiroshima Synchrotron Radiation Center, Hiroshima University, Japan*
[3]*Department of Mathematical and Life Sciences, Graduate School of Science, Hiroshima University, Japan*

[PA-59] **TAKNIG INTO ACCOUNT CONFORMATIONAL EFFECTS IN THE CALCULATION OF CIRCULAR DICHROISM SPECTRA**
Mathieu Linares, Hans Ågren
Department of Theoretical Chemistry, Royal Institute of Technology, Sweden

[PA-60] **ENANTIOSELECTIVE DETERMINATION OF MODAFINIL IN PHARMACEUTICAL FORMULATIONS BY CAPILLARY ELECTROPHORESIS AND COMPUTATIONAL CALCULATION OF THEIR INCLUSION COMPLEXES**
Khaldun M. Al Azzam, Bahruddin Saad, Rohana Adnan
School of Chemical Sciences, Universiti Sains Malaysia, Malaysia

[PA-61] **A HIGHLY RELIABLE CDA METHOD FOR NMR DETERMINATION OF ABSOLUTE CONFIGURATION OF PRIMARY AMINES: CFTA METHOD BASED ON THE PREFERRED CONFORMATION CONFIRMED FOR EACH INDIVIDUAL DERIVATIVE BY IR SPECTROSCOPY**
Kenji Omata[1], Shion Ando[1], Kuninobu Kabuto[1], Tomoya Fujiwara[2], Yoshio Takeuchi[2]
[1]*Department of Chemistry, Graduate School of Tohoku University, Japan*
[2]*Graduate School of Medicine and Pharmaceutical Sciences for Research, University of Toyama, Japan*

[PA-62] **ENANTIOMER DISCRIMINATION WITH TERAHERTZ SPECTROSCOPY VIA FORMATION OF A DIASTEREOMER SALT**
Takenori Tanno, Norie Tanno, Toru Kurabayashi
Terahertz Waves Laboratory, Iwate Prefectural University, Japan

[PA-63] **RAMAN OPTICAL ACTIVITY OF INSULIN AMYLOID**
Shigeki Yamamoto[1, 2], Hitoshi Watarai[2]
[1]*Institute of Organic Chemistry and Biochemistry, Academy of Sciences of Czech Republic, Czech Republic*
[2]*Department of Chemistry, Graduate School of Science, Osaka University, Japan*

[PA-64] **CARBOHYDRATE PART OF INTACT GLYCOPROTEINS STUDIED BY RAMAN OPTICAL ACTIVITY (ROA)**
Vladimír Kopecký Jr.[1], Kateřina Hofbauerová[1,2], Vladimír Baumruk[1]
[1]*Institute of Physics, Faculty of Mathematics and Physics, Charles University in Prague, Czech Republic*
[2]*Institute of Microbiology of the Academy of Sciences of the Czech Republic, v.v.i., Czech Republic*

[PA-65] **2D CORRELATION ANALYSIS OF LYSOZYME FIBRILLATION STUDIED BY RAMAN SPECTROSCOPY AND RAMAN OPTICAL ACTIVITY**
Tomáš Pazderka[1], Vladimír Kopecký Jr.[1], **Kateřina Hofbauerová**[1,2], Vladimír Baumruk[1]
[1]*Institute of Physics, Faculty of Mathematics and Physics, Charles University in Prague, Czech Republic*
[2]*Institute of Microbiology of the Academy of Sciences of the Czech Republic, v.v.i., Czech Republic*

[PA-66] **SYNTHESIS OF POLYPEPTIDE HAVING DEFINED TERMINAL STRUCTURES BASED ON POLYMERIZATION OF ACTIVATED URETHANE-DERIVATIVES OF α-AMINO ACIDS**
Yasutaka Kamei, Atsushi Sudo, Takeshi Endo
Molecular Engineering Institute, Kinki University, Japan

[PA-67] **ASSYMMETRIC ANIONIC POLYMERIZATION OF QUINONE METHIDES WITH AMIDE SUBSTITUENTS**
Takahiro Uno, Satoshi Hosokawa, Masataka Kubo, Takahito Itoh
Department of Chemistry for Materials, Graduate School of Engineering, Mie University, Japan

[PA-68] **CONTROLLED RADICAL COPOLYMERIZATION OF CHIRAL TERPENES: SYNTHESIS OF AAB-SEQUENCE-ORDERED OPTICALLY ACTIVE COPOLYMERS**
Masaru Matsuda, Kanji Nagai, Kotaro Satoh, Masami Kamigaito
Department of Applied Chemistry, Graduate School of Engineering, Nagoya University, Japan

[PA-69] **CATIONIC POLYMERIZATION OF NATURALLY-OCCURRING OPTICALLY ACTIVE β-PINENE AND CHIROPTICAL PROPERTIES**
Kanji Nagai[1], Kazunori Mukunoki[1], Kotaro Satoh[1], Masami Kamigaito[1]
[1]*Department of Applied Chemistry, Graduate School of Engineering, Nagoya University, Japan*

[PA-70] **SYNTHESIS OF MALEIMIDE POLYMER INITIATED WITH ACHIRAL AND CHIRAL AMINES**
Motohisa Azechi, Kazuhiro Yamabuki, Kenjiro Onimura, Tsutomu Oishi
Graduate School of Science and Engineering, Yamaguchi University, Japan

[PA-71] **RING-OPENING METATHESIS POLYMERIZATION OF BIFUNCTIONAL NORBORNENE DERIVATIVES BEARING AMINO ACID ESTERS**
Satoko Fukutomi, Yusuke Tanaka, Kenichi Mizuta, Kazuhiro Yamabuki, Kenjiro Onimura, Tsutomu Oishi
Graduate school of Science and Engineering, Yamaguchi University, Japan

[PA-72] **RING-OPENING METATHESIS POLYMERIZATION OF N-SUBSTITUTED-5-NORBORNENE-2,3-DICARBOXIMIDES IN THE PRESENCE OF CHIRAL ADDITIVE**
Kenichi Mizuta, Satoko Fukutomi, Kazuhiro Yamabuki, Kenjiro Onimura, Tsutomu Oishi
Graduate School of Science and Engineering, Yamaguchi University, Japan

[PA-73] **SYNTHESIS OF OPTICALLY ACTIVE MALEIMIDE POLYMERS HAVING AMINO ACID AMIDE**
Yasuko Wada, Kazuhiro Yamabuki, Kenjiro Onimura, Tsutomu Oishi
Graduate School of Science and Engineering, Yamaguchi University, Japan

[PA-74] **OPTICALLY ACTIVE HELICAL VINYL BIPHENYL POLYMER : SYNTHESIS AND CHIROPTICAL PROPERTIES**
Yijun Zheng, 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

[PA-75] **SYNTHESIS AND PHOTO-INDUCED STEREOMUTATION OF A SINGLE-HANDED HELICAL, OPTICALLY ACTIVE POLYACRYLATE**
Takeshi Sakamoto, Shin-ichiro Sato, and Tamaki Nakano
Division of Biotechnology and Macromolecular Chemistry, Faculty of Engineering, Hokkaido University, Japan

[PA-76] **ASYMMETRIC ANIONIC POLYMERRIZATION OF BULKY SILYL METHACRYLATES**
Kenji Ishitake[1], Kanji Nagai[1], Kotaro Satoh[1], Masami Kamigaito[1], Yoshio Okamoto[2,3]
[1]*Department of Applied Chemistry, Nagoya University, Japan*
[2]*Nagoya University, Japan*
[3]*College of Material and Chemical Engineering, Harbin Engineering University, China*

[PA-77] **CONTROLLED POLYMERIZATION OF ARYLISOCYANIDE INITIATED BY NUCLEOPHILE-ADDUCTS OF NICKEL ISOCYANIDE COMPLEX**
Sadayuki Asaoka[1,2], Ayako Joza[2], Sakiko Minagawa[2], Tomokazu Iyoda[2]
[1]*Department of Biomolecular Engineering, Kyoto Institute of Technology, Japan*
[2]*Chemical Resources Laboratory, Tokyo Institute of Technology, Japan*

[PA-78] **PALLADIUM-CATALYZED ASYMMETRIC SUZUKI-MIYAURA COUPLING USING POLYMER-BASED CHIRAL LIGAND**
Takeshi Yamamoto, **Yuto Akai**, Yuuya Nagata, Michinori Suginome
Department of Synthetic Chemistry and Biological Chemistry, Graduate School of Engineering, Kyoto University, Japan

[PA-79] **SYNTHESIS AND OPTICAL PROPERTIES OF POLY(QUINOXALINE-2,3-DIYL)S BEARING IMIDAZOLIUM SALT PENDANTS**
Yuuya Nagata, Michinori Suginome
Department of Synthetic Chemistry and Biological Chemistry, Graduate School of Engineering, Kyoto University, Japan

[PA-80] **CHIRAL AMPRIFICATION OF POLY(NAPHTHALENECARBOXAMIDE)S**
Koichiro Mikami, Akihiro Yokoyama, Tsutomu Yokozawa
Department of Material and Life Chemistry, Kanagawa University, Japan

[PA-81] **SOLVOPHOBICALLY INDUCED HELICAL CONFORMATION OF POLY(*p*-BENZ-AMIDE) WITH CHIRAL N-SUBSTITUENT BRANCHING AT THE α POSITION**
Akihiro Yokoyama, Tomoaki Saiki, Tsutomu Yokozawa
Department of Material and Life Chemistry, Kanagawa University, Japan

[PA-82] **SYNTHESIS AND CHIRALITY SENSING PROPERTIES OF POLYACETYLENE DERIVATIVES WITH DYNAMIC AXIAL CHIRALITY IN THE SIDE CHAINS**
Kouhei Shimomura[1], Katsuhiro Maeda[1], Tomoyuki Ikai[1], Shigeyoshi Kanoh[1], Eiji Yashima[2]
[1]*Graduate School of Natural Science and Technology, Kanazawa University, Japan*
[2]*Department of Molecular Design and Engineering, Graduate School of Engineering, Nagoya University, Japan*

[PA-83] **HIGHRY SENSITIVE ANION RECOGNITION BASED ON AMIDE RECEPTOR ORGANAIZED ON POLY(PHENYLACETYLENE) BACKBONE**
Erika Terada[1], Yasuyuki Tago[1], Ryosuke Sakai[2], Toshifumi Satoh[1], Toyoji Kakuchi[1]
[1]*Division of Biotechnology and Macromolecular Chemistry, Graduate School of Engineering, Hokkaido University, Japan*
[2]*Asahikawa National College of Technology, Japan*

[PA-84] **COLORIMETRIC ANION DETECTION ABILITY OF POLY(PHENYLACETYLENE)S BEARING AMINO ACID-DERIVED AMIDE RECEPTOR**
Takuya Shibasaki[1], Ryotaro Shimada[2], Tatsuro Kodama[2], Yasuyuki Tago[2], Ryosuke Sakai[3], Toshifumi Satoh[2], Toyoji Kakuchi[2]
[1]*Graduate School of Chemical Sciences and Engineering, Hokkaido University, Japan*
[2]*Graduate School of Engineering, Hokkaido University, Japan*
[3]*Asahikawa National College of Technology, Japan*

[PA-85] **ANION SENSING PROPERTY FOR SULFONAMIDE-FUNCTIONALIZED POLY(PHENYLACETYLENE)S BEARING α-AMINO ACIDS AS PENDANT**
Ryotaro Shimada, Tatsuro Kodama, Yasuyuki Tago, Ryohei Kakuchi, Ryosuke Sakai, Toshifumi Satoh, Toyoji Kakuchi
Division of Biotechnology and Macromolecular Chemistry, Graduate School of Engineering, Hokkaido University, Japan

[PA-86] **SYNTHESIS AND HELIX-SENSE-SELECTIVE POLYMERIZATION OF A NOVEL PHENYLACETYLENE HAVING AN OLIGOSILOXANYL GROUP AND TWO HYDROXYL GROUPS: EFFECT OF THE OLIGOSILOXANYL GROUP ON POLYMERIZATION, HELIX STABILITY AND MEMBRANE PERFORMANCES OF THE RESULTING POLYMERS**
Lijia Liu[1], Yoshiyuki Oniyama[1], Yu Zang[1], Shingo Hadano[3,4], Toshiki Aoki[1-4], Masahiro Teraguchi[1-3], Takashi Kaneko[2,3], Takeshi Namikoshi[3,4]
[1]*Graduate School of Science and Technology, Niigata University, Japan*
[2]*Center for Education and Research on Environmental Technology, Materials Engineering, and Nanochemistry, Niigata University, Japan*
[3]*Center for Transdisciplinary Research, Niigata University, Japan*
[4]*Venture Business Laboratory, Niigata University, Japan*

[PA-87] **PREPARATION OF CHIRAL SUPRAMOLECULAR SELF-SUPPORTING MEMBRANE BY HIGHLY SELECTIVE CYCLOAROMATIZATION OF HELICAL POLY(PHENYLACETYLENE) MEMBRANE SYNTHESIZED BY ASYMMETRIC-INDUCED POLYMERIZATION**
Yunosuke Abe[1], Takeshi Namikoshi[3,4], Masahiro Teraguchi[1-3], Takashi Kaneko[2,3], Toshiki Aoki[1-4]
[1]*Graduate School of Science and Technology, Niigata University, Japan*
[2]*Center for Education and Research on Environmental Technology, Materials Engineering, and Nanochemistry, Niigata University, Japan*
[3]*Center for Transdisciplinary Research, Niigata University, Japan*
[4]*Venture Business Laboratory, Niigata University, Japan*

[PA-88] **HIGHLY SELECTIVE CYCLOAROMATIZATION OF POLYMERS PREPARED BY HELIX-SENSE-SELECTIVE POLYMERIZATION BY LIGHT IRRADIATION**
Takeshi Namikoshi[3,4], Lijia Liu[1], Yunosuke Abe, Yoshiyuki Oniyama[1], Nobuyuki Nahata[1], Edy Marwanta[3,4], Masahiro Teraguchi[1-3], Takashi Kaneko[2,3], Toshiki Aoki[1-4]
[1]*Graduate School of Science and Technology, Japan*
[2]*Center for Education and Research on Environmental Technology, Materials Engineering, and Nanochemistry, Japan*
[3]*Center for Transdisciplinary Research, Japan*
[4]*Venture Business Laboratory, Niigata University, Japan*

[PA-89] **ASYMMETRIC POLYMERIZATIONS OF CHIRAL 4-BENZYL-2-ETHYNYLOXAZOLINE WITH RHODIUM CATALYST**
Kenjiro Onimura, **Poompat Rattanatraicharoen**, Keiko Shintaku, Kazuhiro Yamabuki, Tsutomu Oishi
Department of Applied Chemistry, Graduate School of Science and Engineering, Yamaguchi University, Japan

[PA-90] **SWITCHABLE INDUCTION OF ONE-HANDED HELIX BASED ON STRUCTURAL CONTROL OF POLYACETYLENE BEARING PLANAR CHIRAL ROTAXANE MOIETY ON THE SIDE CHAIN**
Fumitaka Ishiwari, Kazuko Nakazono, Yasuhito Koyama, Toshikazu Takata
Department of Organic and Polymeric Materials, Tokyo Institute of Technology, Japan

[PA-91] **INTERCALATION USING POLYDIACETYLENES AS THE HOST POLYMERS WITH CHIRAL GUEST AMINES**
Tomoyo Shimogaki, **Akikazu Matsumoto**
Department of Applied Chemistry and Bioengineering, Graduate School of Engineering
Osaka City University, Japan

[PA-92] **PREPARATION OF CHIRAL POLYDIACETYLENE FILMS USING TWO-PHOTON POLYMERIZATION**
Takaaki Manaka, Hideki Kohn, Mitsumasa Iwamoto
Department of Physical Electronics, Tokyo Institute of Technology, Japan

[PA-93] **OPTICAL AND ELECTICAL PROPERTIES OF CHIRAL POLY(DIACETYLENE) FILM PREPARED BY USING CIRCULARLY POLARIZED LIGHT**
Hideki Kohn, Tatsunori Shino, Yuki Ohshima, Takaaki Manaka, Mitsumasa Iwamoto
Department of Physical Electronics, Graduate School of Science and Engineering, Tokyo Institute of Technology, Japan

[PA-94] **SYNTHESIS OF AMPHIPHILIC DIBLOCK COPOLYMERS BEARING AN HELICAL POLYISOCYANATE CHAIN AND THEIR CHIROPTICAL PROPERTIES**
Megumi Arakawa, Katsuhiro Maeda, Tomoyuki Ikai, Shigeyoshi Kanoh
Graduate School of Natural Science and Technology, Kanazawa University, Japan

[PA-95] **CHIRALITY IN POLYISOCYANATE BY COVALENT DOMINO EFFECT**
Priyank N. Shah, Joon-Keun Min, Jae-Suk Lee
Department of Nanobio Materials and Electronics and Department of Materials Science and Engineering, Gwangju Institute of Science and Technology (GIST), Korea

[PA-96] **CHIRAL RECOGNITION BEHAVIOR OF POLYTHIOPHENES MODIFIED WITH OPTICALLY ACTIVE BINDING SITES**
Gaku Fukuhara, Yoshihisa Inoue
Department of Applied Chemistry, Osaka University, Japan

[PA-97] **CHIRALITY INDUCTION IN OPTICALLY INACTIVE WATER-SOLUBLE POLYTHIOPHENES**
Chiaki Ichikawa, Katsuhiro Maeda, Tomoyuki Ikai, Shigeyoshi Kanoh
Graduate School of Natural Science and Technology, Kanazawa University, Japan

[PA-98] **SYNTHESIS OF AMPHIPHILIC BLOCK COPOLYMERS BEARING AN POLYTHIOPHENE CHAIN AND CHIROPTICAL PROPERTIES OF THEIR MICELLES**
Katsuhiro Maeda, Satoru Nozaki, Tomoyuki Ikai, Shigeyoshi Kanoh
Graduate School of Natural Science and Technology, Kanazawa University, Japan

[PA-99] **DESIGN AND SYNTHESIS OF STABLE HELICAL POLYMER USING OPTICALLY ACTIVE SPIROBIFLUORENE**
Ryota Seto, Kazuko Nakazono, Yasuhito Koyama, Toshikazu Takata
Department of Organic and Polymeric Materials, Tokyo Institute of Technology, Japan

[PA-100] **AMBIDEXTROUS CIRCULARLY POLARIZED LUMINESCENCE IN UV REGION FROM POLYSILANE AGGREGATES: SOLVENT CHIRALITY TRANSFER BY NONCOVALENT INTERACTION**
Yoko Nakano[1,2], **Michiya Fujiki**[1]
[1]*Graduate School of Materials Science, Nara Institute of Science and Technology, Japan*
[2]*Laboratory of Macromolecular and Organic Chemistry, Eindhoven University of Technology, Netherlands*

[PA-101] **SYNTHESIS OF POLY(PHENYLENEETHYNYLENE)S WITH AXIAL CHIRALITY IN THE PENDANTS AND THEIR APPLICATION**
Daiki Fujiwara, **Yuka Ota**, Katsuhiro Maeda, Tomoyuki Ikai, Shigeyoshi Kanoh
Graduate School of Natural Science and Technology, Kanazawa University, Japan

[PA-102] **SYNTHESIS OF POLY(*P*-PHENYLENE-VINYLENE)S WITH CHIRAL HIGHER-ORDER STRUCTURE BY THREE-COMPONENT COUPLING POLYMERIZATION**
Ikuyoshi Tomita, Kojiro Nakagawa
Department of Electronic Chemistry, Interdisciplinary Graduate School of Science and Engineering, Tokyo Institute of Technology, Japan

[PA-103] **CHIROPTICAL SWITCHING OF POLYFLUORENE INDUCED BY *N*-OCTANE/*N*-OCTANOL COSOLVENT SYSTEM**
Makoto Taguchi[1], Hong-Zhi Tang[2], Michiya Fujiki[1]
[1]*Graduate School of Materials Science, Nara Institute of Science and Technology, Japan*
[2]*CREST-JST, Japan*

[PA-104] **SYNTHESIS AND CHARACTERIZATION OF PHOTOISOMERIZABLE POLYMERS CONTAINING CHIRAL GROUPS DERIVED FROM BORNANE**
Chien-Chih Chen[1], Jui-Hsiang Liu[1], Norimitsu Tohnai[2], Ichiro Hisaki[2], Mikiji Miyata[2]
[1]*Department of Chemical Engineering, National Cheng Kung University, Taiwan, ROC*
[2]*Department of Material and Life Science, Graduate School of Engineering, Osaka University, Japan*

[PA-105] **SYNTHESES OF STEREOREGULAR DIBLOCK COPOLYMERS VIA THE METALLOCENE-CATALYST-MEDIATED SELECTIVE CHAIN TRANSFER REACTIONS**
Jing-Cherng Tsai[1], Rong Ming Ho[2]
[1]*Department of Chemical Engineering, National Chung Cheng University, Taiwan*
[2]*Department of Chemical Engineering, National Tsing Hua University, Taiwan*

[PA-106] **ALTERNATING COPOLYMERIZATION OF 3,4-DIHYDROCOUMARIN AND OPTICALLY ACTIVE EPOXIDE**
Kazuya Uenishi, Atsushi Sudo, Takeshi Endo
Molecular Engineering Institute, Kinki University, Japan

[PA-107] **SINGLE HELIX TO DOUBLE GYROID IN CHIRAL BLOCK COPOLYMERS**
Han-Yu Hsueh[1], Chun-Ku Chen[1], Yeo-Wan Chiang[1], Rong-Ming Ho[1], Satoshi Akasaka[2], Hirokazu Hasegawa[2]
[1]*Department of Chemical Engineering, Nationsal Tsing-Hua University, Taiwan*
[2]*Department of Polymer Chemistry, Graduate School of Engineering, Kyoto University, Japan*

[PA-108] SYNTHESIS, CHIRALITY AND GELATION PROPERTIES OF AMINO ACIDS-BASED DENDRONIZED POLYMERS
Min Gao, Yan Li, Hai He, Xinru Jia
Beijing National Laboratory for Molecular Sciences, Key Laboratory of Polymer Chemistry and Physics of the Ministry of Education, College of Chemistry and Molecular Engineering, Peking University, China

[PA-109] ELUCIDATION OF THE MICROSTRUCTURE OF NANOSHEETS OF POLY-L-LACTIC ACID
Eriko Ohmori, Toshinori Fujie, Naoya Sawamura, Shinji Takeoka, Toru Asahi
Faculty of Advanced Science and Engineering, Waseda University, Japan

[PA-110] SYNTHESIS OF CELLULOSE PHENYLCARBAMATE DERIVATIVES THROUGH EXCHANGE REACTION BETWEEN CARBAMATES AND PHENYL ISOCYANATES
Junqing Li[1], Haitao Qu[1], Xiande Shen[1], Jun Shen[1], Guangshun Wu[1], Yoshio Okamoto[1, 2]
[1]*School of Material Science and Chemical Engineering, Harbin Engineering University, China*
[2]*Nagoya University, Japan*

[PA-111] DEVELOPMENT OF CELLULOSE-BASED CHIRAL LIGANDS BEARING PYRIDYL GROUPS FOR ENANTIOSELECTIVE ALLYLIC OXIDATION
Yuri Hara[1], Yasutaka Tsujimoto[2], Tomoyuki Ikai[1], Katsuhiro Maeda[1], Shigeyoshi Kanoh[1], Masami Kamigaito[2], Yoshio Okamoto[3]
[1]*Graduate School of Natural Science and Technology, Kanazawa University, Japan*
[2]*Department of Applied Chemistry, Graduate School of Engineering, Nagoya University, Japan*
[3]*College of Material Science and Chemical Engineering, Harbin Engineering University, China*

[PA-112] SYNTHESIS OF CELLULOSE DERIVATIVES BEARING *N*-OXIDE GROUPS AND THEIR APPLICATION TO ASYMMETRIC ORGANOCATALYSTS
Tomoyuki Ikai, Munetsugu Moro, Katsuhiro Maeda, Shigeyoshi Kanoh
Graduate School of Natural Science and Technology, Kanazawa University, Japan

[PA-113] HELICITY INDUCTION IN SYNDIOTACTIC POLY(METHYL METHACRYLATE) WITH VARIOUS OPTICALLY ACTIVE ADDITIVES AND ENCAPSULATION OF GUEST MOLECULES
Atsushi Kitaura[1], Iida Hiroki[1], Takehiro Kawauchi[2], Eiji Yashima[1]
[1]*Department of Molecular Design and Engineering, Graduate School of Engineering, Nagoya University, Japan*
[2]*School of Materials Science, Toyohashi University of Technology, Japan*

[PA-114] VISUALIZATION OF BILAYER SMECTIC ORDERING OF ROD-ROD HELICAL DIBLOCK POLYISOCYANIDES BY HIGH-RESOLUTION ATOMIC FORCE MICROSCOPY
Motonori Banno[1], Wu Zong-Quan[1], Kanji Nagai[1], Shin-ichiro Sakurai[2], Kento Okoshi[2], Eiji Yashima[1,2]
[1]*Department of Molecular Design and Engineering, Graduate School of Engineering, Nagoya University, Japan*
[2]*Yashima Super-structured Helix Project, ERATO, JST, Japan*

[PA-115] SYNTHESIS OF A CORE CROSS-LINKED HELICAL POLYISOCYANIDE AND ITS CHIRAL RECOGNITION ABILITY
Toshitaka Miyabe, Hiroki Iida, Eiji Yashima
Department of Molecular Design and Engineering, Graduate School of Engineering, Nagoya University, Japan

[PA-116] ENANTIOSEPARATION BY HPLC USING HELICAL BLOCK COPOLYISOCYANIDES AS CHIRAL STATIONARY PHASES
Kazumi Tamura, Toshitaka Miyabe, Hiroki Iida, Eiji Yashima
Department of Molecular Design and Engineering, Graduate School of Engineering, Nagoya University, Japan

[PA-117] SIMULTANEOUS DETERMINATION OF DOXORUBICIN AND EPIRUBICIN IN PLASMA BY FIELD AMPLIFIED SAMPLE INJECTION CAPILLARY INJECTION
Su-Hwei Chen, Hwang-Shang Kou
School of Pharmacy, College of Pharmacy, Kaohsiung Medical University, Kaohsiung, Taiwan

Wednesday, July 14, 2010

Poster Session 2 (Hall C)

13:10 – 14:40

[PB-1] ***syn*-SELECTIVE CATALYTIC ASYMMETRIC 1,4-ADDITION OF α-KETOANILIDES TO NITROALKENES UNDER DINUCLEAR NICKEL CATALYSIS**
Yingjie Xu[1], Shigeki Matsunaga[1], Masakatsu Shibasaki[1, 2]
[1]*Graduate School of Pharmaceutical Sciences, The University of Tokyo, Japan*
[2]*Institute of Microbial Chemistry, Japan*

[PB-2] **ASYMMETRIC CONJUGATE ADITTION OF α-KETOESTERS TO NITROOLEFINS CATALYZED BY CHIRAL NICKEL-DIAMINE COMPLEXES**
Yoshitaka Hamashima[1,2], Ayako Nakamura[1], Sylvain Lectard[1], Daisuke Hashizume[1], Mikiko Sodeoka[1]
[1]*RIKEN, Advanced Science Institute, Japan*
[2]*School of Pharmaceutical Sciences, University of Shizuoka, Japan*

[PB-3] **Ni-CATALYZED ASYMMETRIC ARYLATION AND ALKENYLATION OF AROMATIC ALDEHYDE DERIVATIVES**
Kazuhiro Kondo, Toyohiko Aoyama
Graduate School of Pharmaceutical Sciences, Nagoya City University, Japan

[PB-4] **CHIRAL BISIMIDAZOLINE-COPPER(I) CATALYZED THREE-COMPONENT REACTION OF ALDEHYDES, AMINES AND ALKYNES**
Mutsuyo Ohara, Shuichi Nakamura, Yuko Nakamura, Norio Shibata, Takeshi Toru
Department of Frontier Materials, Graduate School of Engineering, Nagoya Institute of Technology, Japan

[PB-5] **STEREOSELECTIVE ALDOL REACTIONS USING CHIRAL CATALYSTS DUALLY FUNCTIONALLIZED WITH AMINO ACIDS AND ZINC(II) COMPLEX INSPIRED BY NATURAL ALDOLASES**
Shin Aoki[1,2], Toshinari Itakura[1], Susumu Itoh[1], Sei-ichi Tsukamoto[3], Masamichi Ikeguchi[3], Masanori Kitamura[1,2]
[1]*Faculty of Pharmaceutical Sciences, Tokyo University of Science, Japan*
[2]*Center for Technologies against Cancer, Tokyo University of Science, Japan*
[3]*Faculty of Engineering, Soka University, Japan*

[PB-6] **CHIRAL SQUARE CONFORMATION OF $Rh_2(nttl)_4$: ASYMMETRIC CYCLOPROPANATION OF OLEFINS *VIA* IN *SITU* GENERATED PHENYLIODONIUM YLIDES**
A. Ghanem[1,2], M. Gardiner[2]
[1]*Department of Biomolecular Engineering, Graduate School of Science and Technology, Kyoto Institute of Technology, Japan*
[2]*School of Chemistry, University of Tasmania, Australia*

[PB-7] **REGIO- AND ENANTIOSELECTIVE ALLYLATION CATALYZED BY PLANAR-CHIRAL CYCLOPENTADIENYL-RUTHENIUM COMPLEX**
Naoya Kanbayashi, Kiyotaka Onitsuka
Department of Macromolecular Science, Graduate School of Science, Osaka University, Japan

[PB-8] **ASYMMETRIC HYDROGENATION OF ACYLSILANES AND BICYCLIC KETONES CATALYZED BY DIPHOSPHINE/PICOLYL AMINE–Ru(II) COMPLEXES**
Noriyoshi Arai[1], Ken Suzuki[1], Kunihiko Tsutsumi[2], Kunihiko Murata[2], Takeshi Ohkuma[1]
[1]*Department of Chemical Process Engineering, Faculty of Engineering, Hokkaido University, Japan*
[2]*Central Research Laboratory, Technology and Development Division, Kanto Chemical Co., Inc., Japan*

[PB-9] **LEWIS ACID-CATALYZED IODINATION OF BINAPHTHOL DIMETHYL ETHER WITH *N*,*N*'-DIIODO-5,5-DIMETHYLHYDANTOIN**
Makoto Sako[1], Hiroshi Shibaguchi[1], Toshiyuki Kamei[1,2], Toyoshi Shimada[1,2]
[1]*Department of Chemical Engineering, Nara National College of Technology, Japan*
[2]*Core Research for Evolutional Science and Technology (CREST), JST Agency, Japan*

[PB-10] **CHIRAL AMPLIFICATION IN ENANTIOSELECTIVE FLUORINATIONS USING DBFOX-Ph/METAL SALTS**
Satoru Suzuki, Dhande Sudhakar Reddy, Etsuko Tokunaga, Shuichi Nakamura, Norio Shibata
Department of Frontier Materials, Graduate School of Engineering, Nagoya Institute of Technology, Japan

[PB-11] **COPPER(I)-CATALYZED REGIO- AND ENANTIOSELECTIVE MONOBORYLATION OF 1,3-DIENES**
Yusuke Sasaki[1], Hajime Ito[1, 2], Masaya Sawamura[1]
[1]*Department of Chemistry, Graduate School of Science, Hokkaido University, Japan*
[2]*Science and Technology Agency (JST), Honcho, Kawaguchi, Saitama 332-0012, Japan*

[PB-12] **A FLEXIBLE CATALYST FOR ASYMMETRIC AMINATION**
Tomoyuki Mashiko[1, 2], Naoya Kumagai[1], Masakatsu Shibasaki[1]
[1]*Institute of Microbial Chemistry, Japan*
[2]*Graduate School of Pharmaceutical Sciences, The University of Tokyo, Japan*

[PB-13] **ENANTIOSELECTIVE AMINATION REACTIONS CATALYZED BY DIRHODIUM(II) CARBOXYLATES**
Masahiro Anada, Masahiko Tanaka, Yasunobu Kurosaki, **Shunichi Hashimoto**
Faculty of Pharmaceutical Sciences, Hokkaido University, Japan

[PB-14] **ASYMMETRIC EPOXIDATION OF ALLYLIC ALCOHOLS USING HYDROGEN PEROXIDE: UNPRECEDENTED CATALYSIS BY NIOBIUM COMPLEX**
Hiromichi Egami, **Takuya Oguma**, Tsutomu Katsuki
Department of Chemistry, Faculty of Science, Graduate School, Kyushu University, Japan

[PB-15] **IRIDIUM-CATALYZED ENANTIOSELECTIVE Si-H INSERTION REACTION AND CONSTRUCTION OF AN ENANTIOENRICHED SILICON CENTER**
Yoichi Yasutomi, Hidehiro, Suematsu, Tsutomu, Katsuki
Department of Chemistry, Faculty of Science, Graduate School, Kyushu University, Japan

[PB-16] **ASYMMETRIC CYANOSILYLATION OF α-KETO ESTERS CATALYZED BY THE $[Ru(phgly)_2(BINAP)]–C_6H_5OLi$ SYSTEM**
Masato Uemura, Nobuhito Kurono, Takeshi Ohkuma
Division of Chemical Process Engineering, Faculty of Engineering, Hokkaido University, Japan

[PB-17] **CONTROL OF CINCHONA ALKALOID ADSORPTION ON PALLADIUM-ON-CARBON FOR ENANTIOSELECTIVE HYDROGENATION**
Hiroyuki Ogawa, Satoshi Tomatsuri, Takashi Sugimura
Graduate Scholl of Material Science, University of Hyogo, Japan

[PB-18] **SOLVENT-DEPENDENT ENANTIODIVERGENT MANNICH-TYPE REACTION UTILIZING CONFORMANTIONALLY FLEXIBLE GUANIDINE/BISTHIOUREA ORGANOCATALYST**
Yoshihiro Sohtome, Shinji Tanaka, Kazuo Nagasawa
Department of Biotechnology and Life Science, Faculty of Technology, Tokyo University of Agriculture and Technology (TUAT), Japan

[PB-19] **CINCHONA ALKALOIDS CATALYEZED FIRST ENANTIOSELECTIVE HYDROPHOSPHONYLATION OF KETIMINES**
Masashi Hayashi, Shuichi Nakamura, Yuichi Hiramatsu, Norio Shibata, Takeshi Toru
Department of Frontier Materials, Graduate School of Engineering, Nagoya Institute of Technology, Japan

[PB-20] **ENANTIOSELECTIVE DECARBOXYLATION OF 2-METHYL-2-AMINOMALONATE CATALYZED BY (*S*)-2-HYDROXY-2'-(3-PHENYLURYL-BENZYL)-1,1'-BINAPHTHYL-3-CARBOXALDEHYDE**
Sunmin Lee[1], Kwan Mook Kim[2]
Department of Chemistry & Division of Nano Sciences, Ewha Womans University, Korea

[PB-21] **ENANTIOSELECTIVE ALDOL REACTION USING RECYCLABLE MONTMORILLONITE-ENTRAPPED *N*-(2-THIOPHENESULFONYL)PROLINAMIDE**
Noriyuki Hara, Shuichi Nakamura, Norio Shibata, Takeshi Toru
Graduate School of Engineering, Nagoya Institute of Technology, Japan

[PB-22] **STEREOSELECTIVE SYNTHESIS OF BICYCLIC TERTIARY ALCOHOLS WITH QUATERNARY STEREOCENTERS VIA INTRAMOLECULAR CROSSED BENZOIN REACTIONS CATALYZED BY *N*-HETEROCYCLIC CARBENES**
Tadashi Ema, Kumiko Akihara, Yoshitaka Oue, Yuki Miyazaki, Toshinobu Korenaga, Takashi Sakai
Division of Chemistry and Biochemistry, Graduate School of Natural Science and Technology, Okayama University, Japan

[PB-23] **CATALYTIC ASYMMETRIC DIRECT HENRY REACTION OF YNALS: SHORT SYNTHESIS OF (+)-XESTOAMINOL C AND (–)-2-*EPI*- AND (–)-CODONOPSININES**
Shinji Nakamura, Daisuke Uraguchi, Takashi Ooi
Department of Applied Chemistry, Graduate School of Engineering, Nagoya University, Japan

[PB-24] **ASYMMETRIC PROTONATION OF α-AMINO ACID-DERIVED KETENE DISILYL ACETALS USING ENANTIOMERICALLY PURE *P*-SPIRO AMINOPHOSPHONIUM BARFATE AS CHIRAL PROTON**
Natsuko Kinoshita, Daisuke Uraguchi, Takashi Ooi
Department of Applied Chemistry, Graduate School of Engineering, Nagoya University, Japan

[PB-25] **NEW ASPECTS OF ACID-CATALYZED REACTIONS USING α-DIAZOCARBONYL COMPOUNDS**
Takuya Hashimoto, Keiji Maruoka
Department of Chemistry, Graduate School of Science, Kyoto University, Japan

[PB-26] **ASYMMETRIC AUTOCATALYSIS USING CHIRAL CRYSTAL OF ACHIRAL PYRIMIDINE-5-CARBALDEHYDE AS THE SUBSTRATE AND SOURCE OF CHIRALITY**
Sayaka Kamimura, Kenta Suzuki, Tsuneomi Kawasaki, Kenso Soai
Department of Applied Chemistry and Chiral Material Research Center, Research Institute for Science and Technology, Tokyo University of Science, Japan

[PB-27] **ASYMMETRIC AMPLIFICATION INDUCED BY CHIRALLY CRYSTALLIZED RACEMIC SERINE IN CONJUNCTION WITH ASYMMETRIC AUTOCATALYSIS**
Taisuke Sasagawa, Kenta Suzuki, Tsuneomi Kawasaki, Kenso Soai
Department of Applied Chemistry and Chiral Material Research Center, Research Institute for Science and Technology, Tokyo University of Science, Japan

[PB-28] **REVERSAL OF ENANTIOFACE SELECTIVITY BY COMBINATION OF TWO CHIRAL CATALYSTS OF THE SAME ENANTIOFACE SELECTIVITY**
Yuki Wakushima, Kazuya Shiozawa, Mai Asahina, Tomoyuki Kinoshita, Lutz François, Tsuneomi Kawasaki, Kenso Soai
Department of Applied Chemistry and Chiral Material Research Center, Research Institute for Science and Technology, Tokyo University of Science, Japan

[PB-29] **ASYMMETRIC INDUCTION BY STATIC ELECTRIC FIELD USING FERROELECTRIC TRIGLYCINE SULFATE IN CONJUNCTION WITH ASYMMETRIC AUTOCATALYSIS**
Susumu Sato[1], Kenta Suzuki[1], Nobuhiro Kaito[1], Tsuneomi Kawasaki[1], Toru Asahi[2], Kenso Soai[1]
[1]*Department of Applied Chemistry and Chiral Material Research Center, Research Institute for Science and Technology, Tokyo University of Science, Japan*
[2]*Department of Life Science and Medical Bioscience, Waseda University (TWIns), Japan*

[PB-30] **SYNTHESIS OF OPTICALLY ACTIVE AMINO ACID DERIVATIVES VIA DYNAMIC KINETIC RESOLUTION**
Eunjeong Choi, Yoon Kyung Choi, Jaiwook Park, Mahn-Joo Kim
Department of Chemistry, Pohang University of Science and Technology, Korea

[PB-31] **SYNTHESIS OF CHIRAL ALLYLSILANES BY PALLADIUM-CATALYZED ALLYL–ARYL COUPLING**
Dong Li, Hirohisa Ohmiya, Masaya Sawamura
Department of Chemistry, Faculty of Science, Hokkaido University, Sapporo, Japan

[PB-32] **ENANTIOSELECTIVE SYNTHESIS OF SILOXYALLENES FROM ALKYNYLACYLSILANES VIA TANDEM ENANTIOSELECTIVE REDUCTION/BROOK REARRANGEMENT**
Michiko Sasaki, **Yasuhiro Kondo**, Kei Takeda
Department of Synthetic Organic Chemistry, Graduate School of Medical Sciences, Hiroshima University, Japan

[PB-33] **SELF-DISPROPORTIONATION OF ENANTIOMERS OF THE FLUORINATED COMPOUNDS ON CHROMATOGRAPHY WITH A NON-CHIRAL SYSTEM**
Takayuki Nishimine, Shinichi Ogawa, Etsuko Tokunaga, Shuichi Nakamura, Norio Shibata
Department of Frontier Materials, Graduate School of Engineering, Nagoya Institute of Technology, Japan

[PB-34] **ENANTIOSELECTIVE INCLUSION OF CHIRAL ALCOHOLS WITH BINARY CHIRAL HOST SYSTEMS**
Koichi Kodama, Eriko Sekine, Ayaka Kanno, Takuji Hirose
Department of Applied Chemistry, Graduate School of Engineering, Saitama University, Japan

[PB-35] **OXIDATIVE SUBSTITUTION REACTIONS WITH POOR NUCLEOPHILES TO BINAPHTHYL DIALDEHYDE IN THE PRESENCE OF *N,N'*-DIIODO-5,5-DIMETHYLHYDANTOIN**
Yusuke Mizutani[1], Hiroshi Shibaguchi[1], Toshiyuki Kamei[1, 2], Toyoshi Shimada[1, 2]
[1]*Department of Chemical Engineering, Nara National College of Technology, Japan*
[2]*Core Research for Evolutional Science and Technology (CREST), JST Agency, Japan*

[PB-36] **PHOSGENE-FREE SYNTHESIS OF α-AMINO ACID *N*-CARBOXYANHYDRIDES (NCAs) BY USING DIPHENYLCARBONATE**
Koichi Koga, Atsushi Sudo, Takeshi Endo
Molecular Engineering Institute, Kinki University, Japan

[PB-37] **SYNTHESIS OF OPTICALLY ACTIVE CONFORMATIONALLY RESTRICTED 2-CYANOPYRROLIDINES AND PIPERIDINES AND THEIR APPLICATION IN SYNTHESIS OF NEW AMINO ACIDS**
Natalia A. Kopylova[1,2], Igor V. Komarov[2], Ulrich M. Groth[1]
[1]*Department of Chemistry, Konstanz Research School Chemical Biology, University of Konstanz, Germany*
[2]*Department of Chemistry, Taras Shevchenko National University of Kyiv, Ukraine*

[PB-38] **ENVIRONMENT-FRIENDLY SYNTHESIS OF CHIRAL FLUOROUS SPHINGOLIPIDS FOR METABOLIC ANALYSIS**
Shota Saito, Masafumi Yoshida, Atsufumi Nakahashi, Mostafa A. S. Hammam, Tohru Taniguchi, Susumu Mitsutake, Yasuyuki Igarashi, and Kenji Monde
Graduate School of Advanced Life Science, Frontier Research Center for Post-Genome Science and Technology, Hokkaido University, Japan

[PB-39] **SYNTHESES OF CERAMIDE ANALOGUES "A BIOLOGICAL STUDY"**
Mostafa A. S. Hammam, Atsufumi Nakahashi, Shota Saito, Tohru Taniguchi, Susumu Mitsutake, Yasuyuki Igarashi, Kenji Monde
Laboratory of Chemical Biology, Graduate School of Life Science, Frontier Research Centre for Post-genome Science and Technology, Hokkaido University, Japan

[PB-40] **SOLVENT EFFECTS ON THE CONFIGURATIONAL STABILITY OF CHIRAL CARBANIONS**
Hidaka Ikemoto, Michiko Sasaki, Kei Takeda
Department of Synthetic Organic Chemistry, Graduate School of Medical Sciences Hiroshima University, Japan

[PB-41] ***BIJVOET* IN SOLUTION REVEALS AN UNEXPECTED STEREOSELECTION IN A MICHAEL ADDITION**
Han Sun[1], Rafael Oliveira Rocha[2], Edward James d'Auvergne[1], Uwe Michael Reinscheid[1], Luiz Carlos Dias[3], Carlos Kleber Z. Andrade[2], Christian Griesinger[1]
[1]*Department of NMR-based Structural Biology, Max Planck Institute for Biophysical Chemistry, Germany*
[2]*Laboratório de Química Metodológica e Orgânica Sintética, Instituto de Química, Universidaade de Brasília, Brazil*
[3]*Laboratório de Síntese Orgânica, Instituto de Química, C.P. 6154, Universidade Estadual de Campinas, Brazil*

[PB-42] **ANHYDROSUGAR FORMATION FROM GLYCOSIDE BY MICROWAVE-ASSISTED HEATING**
Nguyen To Hoai[1, 2], Akiyoshi Sasaki[1], Masahide Sasaki[1], Toshifumi Satoh[2], Toyoji Kakuchi[2], Harumi Kaga[1]
[1]*National Institute of Advanced Industrial Science and Technology (AIST), Japan*
[2]*Graduate School of Engineering, Hokkaido University, Japan*

[PB-43] **CATALYTIC ASYMMETRIC SYNTHESIS OF DIHYDROBENZOFURAN NATURAL PRODUCTS VIA INTRAMOLECULAR C–H INSERTION REACTION USING CHIRAL DIRHODIUM(II) CARBOXYLATES**
Yoshihiro Natori, **Hisanori Nambu**, Shunichi Hashimoto
Faculty of Pharmaceutical Sciences, Hokkaido University, Japan

[PB-44] **SYNTHETIC STUDIES OF NON-EPIMERIZABLE, FLUORINATED ANALOGS FOR 3-ARYL-2-OXYPROPIONIC ACIDS**
Shungo Azuma, Tomoya Fujiwara, Miho Ishibiki, Yoshio Takeuchi
Graduate School of Medicine and Pharmaceutical Sciences for Research, University of Toyama, Japan

[PB-45] **DESIGN AND SYNTHESIS OF RESIN-CONJUGATED TAMIFLU ANALOGS FOR AFFINITY CHROMATOGRAPHY**
Yasuaki Kimura[1], Kenta Saito[1], Kenzo Yamatsugu[2], Motomu Kanai[1], Noriko Echigo[3], Takashi Kuzuhara[3], Masakatsu Shibasaki[2]
[1]*Graduate School of Pharmaceutical Sciences, The University of Tokyo, Japan*
[2]*Institute of Microbial Chemistry, Japan*
[3]*Faculty of Pharmaceutical Sciences, Tokushima Bunri University, Japan*

[PB-46] **RENEWABLE RESOURCES FOR THE SYNTHESES OF ENANTIOMERICALLY PURE MOLECULES RELATED TO CHIRAL 2-HYDROXY CITRIC ACIDS**
I.Ibnusaud, Simimole H, Divya S Nair, Deenamma Habel, Rubiyah M H.
School of Chemical Sciences, Mahatma Gandhi University, India

[PB-47] **SHORT-STEP SYNTHESIS OF AZASPIRENE ANALOGUES AND THEIR ANTI-ANGIOGENETIC ACTIVITIES**
Nobuhiro Kanomata[1], **Shinnosuke Sakai**[1], Shinnosuke Wakamori[1], Batsuren Choijamts[2], Yasuko Naganuma[2], Makoto Emoto[2]
[1]*Department of Chemistry and Biochemistry, Waseda University, Japan*
[2]*Department of Obstetrics and Gynecology, Fukuoka University, Japan*

[PB-48] **SYNTHESIS AND BIOLOGICAL EVALUATION OF OPTICALLY PURE ANALOGS FOR MINOR TAUTOMERS OF *N*^{b}-ACETYL-5-HALOTRYPTAMINES**
Tomoya Fujiwara, Takayuki Seki, Yoshio Takeuchi
Graduate School of Medicine and Pharmaceutical Sciences for Research, University of Toyama, Japan

[PB-49] **NATURAL PERICOSINES B AND C AS ENANTIOMERIC MIXTURES: DIRECT EVIDENCE BY CHIRAL HPLC ANALYSIS**
Yoshihide Usami[1], Takeshi Yamada[2]
[1]*Laboratory of Pharmaceutical Organic Chemistry, Osaka University of Pharmaceutical Scieneces, Japan*
[2]*Laboratory of Medicinal Chemistry, Osaka University of Pharmaceutical Scieneces, Japan*

[PB-50] **CONFIGURATIONAL AND CONFORMATIONAL ANALYSIS OF A NATURAL PRODUCT USING A COMBINATION OF MD AND A NEW NMR TECHNIQUE**
Han Sun[1], Uwe Reinscheid[1], Armando Navarro Vazquéz[2], Christian Griesinger[1]
[1]*Department of NMR-based Structural Biology, Max Planck Institute for Biophysical Chemistry, Germany*
[2]*Organic Chemistry Department, Universidade de Vigo, Spain*

[PB-51] **TEMPERATURE AND PH DEPENDENCE OF THALIDOMIDE HYDROLYSIS BY CHIROPTICAL SPECTROSCOPY**
Yoshiyuki Ogino[1], Toshiya Suzuki[1], Masahito Tanaka[2], Toru Asahi[1]
[1]*Department of Life Science and Medical Bioscience, Waseda University (TWIns), Japan*
[2]*National Institute of Advanced Industrial Science and Technology, Japan*

[PB-52] **DETERMINATION OF AMISULPRIDE ENANTIOMERS IN SMALL VOLUMES OF RAT PLASMA BY CAPILLARY ELECTROPHORESIS WITH UV DETECTION**
Chen-Hsi Chou[1, 2], Tse-Hui Lee[1], Ching-Ling Cheng[3]
[1]*Institute of Clinical Pharmacy, College of Medicine, National Cheng Kung University, Taiwan*
[2]*Department of Pharmacy, National Cheng Kung University Hospital, Taiwan*
[3]*Department of Pharmacy, Chia-Nan University of Pharmacy and Science, Taiwan*

[PB-53] **COMPARATIVE STUDY ON THE KYNURENIC ACID PRODUCTION IN RAT BETWEEN TRYPTOPHAN ENANTIOMERS**
Takeshi Fukushima, **Kana Ishii**, Tadahiro Ogaya, Ziyu Song
Department of Analytical Chemistry, Faculty of Pharmaceutical Sciences, Toho University, Japan

[PB-54] **STEREOSELECTIVE TRANSPORT AND METABOLISM OF (±)- PRAERUPTORINA AND (+)-PRAERUPTORINA IN CACO-2 CELL MONOLAYERS**
Wang-Hui Jing, Yue-Lin Song, Ru Yan, Yi-Tao Wang
Institute of Chinese Medical Sciences, University of Macau

[PB-55] **OXIDATIVE STABILITY OF TUNA OIL PRIMARY EMULSION DOPED WITH ISOFLAVONOID**
Phetcharat Yongbut[1], Luxsana Dubas[2]
[1]*Program of Petrochemistry and Polymer Science, Faculty of Science, Chulalongkorn University, Thailand*
[2]*Department of Chemistry, Faculty of Science, Chulalongkorn University, Thailand*

[PB-56] **COMPARISON OF STEREOSELECTIVE OXIDATION OF PROPRANOLOL ENANTIOMERS BY RECOMBINANT CYP2D ENZYMES AMONG HUMANS, CYNOMOLGUS AND MARMOSET MONKEYS**
Takeshi Shimizudani[1], Toshiyuki Nakata[1], Nobumitsu Hanioka[1], Shinsaku Naito[2], Akiko Koeda[3], Kazufumi Masuda[4], Takashi Katsu[1], Atsuro Miyata[5], Shizuo Narimatsu[1]
[1]*Grad. Sch. of Med., Dent. & Pharmac. Sci., Okayama Univ., Japan,*
[2]*Otsuka Pharmac. Fact., Inc., Japan,*
[3]*Ina Research Co., Ltd., Japan,*
[4]*Sch. of Pharm., Shujitsu Univ., Japan,*
[5]*Kagoshima Univ. Grad. Sch. of Med. & Dent. Sci., Japan*

[PB-57] **STRUCTURAL HOMOLOGY ANALYSIS OF ANTIBODIES USING CONFORMATIONAL CODE**
Hiroshi Izumi[1], Atsushi Ogata[1], Laurence A Nafie[2,3], Rina K. Dukor[3]
[1]*National Institute of Advanced Industrial Science and Technology (AIST), Japan*
[2]*Department of Chemistry, Syracuse University, USA*
[3]*BioTools Inc., USA*

[PB-58] **THE NEUROPROTECTIVE EFFECT OF THALIDOMIDE AND ITS ENANTIOMERS**
Naoya Sawamura, Haruka Yamada, Toru Asahi
Faculty of Science and Engineering, Waseda University, TWIns, Japan

[PB-59] **A MOLECULAR BRAKE FOR THE SHUTTLING MOTION BETWEEN ENANTIOMERIC ROTAXANES**
Keiji Hirose, **Hajime Furutani**, Yoshito Tobe
Division of Frontier Materials Science, Graduate School of Engineering Science, Osaka University, Japan

[PB-60] **NITROGEN CHIRAL CENTER STABILIZED BY ROTAXANE STRUCTURE**
Kazuko Nakazono, Sakiko Suzuki, Fumitaka Ishiwari, Tomonori Ishino, Toshikazu Takata
Department Organic and Polymeric Materials, Tokyo Institute of Technology, Japan

[PB-61] **GRADUATED-TWIST π-CONJUGATION OF MULTIBRIDGED CHIRAL NAPHTHALENE OLIGOMERS**
Kazuto Takaishi[1], Masuki Kawamoto[1], Kazunori Tsubaki[2]
[1]*Supramolecular Science Laboratory, RIKEN, Japan*
[2]*Graduate School of Life and Environmental Science, Kyoto Prefectural University, Japan*

[PB-62] **SYNTHESIS AND CONFORMATIONAL ANALYSIS OF HELICAL AROMATIC MULTILAYERED UREAS**
Mayumi Kudo[1], Takayuki Hanashima[2], Atsuya Muranaka[3], Hisako Sato[4], Masanobu Uchiyama[3], Hiroyuki Kagechika[2], Aya Tanatani[1]
[1]*Department of Chemistry, Faculty of Science, Ochanomizu University, Japan*
[2]*School of Biomedical Science, Institute of Biomaterials and Bioengineering, Tokyo Medical and Dental University, Japan*
[3]*Advanced Elements Chemistry Laboratory, RIKEN, Japan*
[4]*Graduate School of Science and Engineering, Ehime University, Japan*

[PB-63] **FIXATION OF CHIRAL HELICAL STRUCTURE OF SACCHARIDE-RECOGNIZING POLYMER**
Hajime Abe, Fumihiro Kayamori, Masahiko Inouye
Graduate School of Pharmaceutical Sciences, University of Toyama, Japan

[PB-64] **CHIRAL CONFLICT BETWEEN SIDE-CHAIN AND MAIN-CHAIN CHIRALITY IN AN OPTICALLY ACTIVE 3_{10}-HELICAL PEPTIDE: HELIX-SENSE INVERSION BY A SIDE-CHAIN CHIRAL BRIDGE**
Morihiko Fukuda[1], Naoki Ousaka[2], Reiko Kuroda[1, 2, 3]
[1]*Department of Biophysics and Biochemistry, Graduate School of Science, The University of Tokyo, Japan*
[2]*Japan Science and Technology Agency, ERATO-SORST Kuroda Chiromorphology Team, Japan*
[3]*Department of Life Science, Graduate School of Arts and Sciences, The University of Tokyo, Japan*

[PB-65] **EXPERIMENTAL AND THEORETICAL INVESTIGATION OF ELECTRONIC CIRCULAR DICHROISM OF AZA[6]HELICENES**
Yoshito Nakai, Tadashi Mori, Cheng Yang, Gaku Fukuhara, Yoshihisa Inoue
Department of Applied Chemistry, Osaka University, Japan

[PB-66] **SYNTHESIS AND PROPERTIES OF PHOSPHA- AND PHOSPHORA[7]HELICENE**
Hiromi Oyama[1], Satoshi Nakasako[1], Yoshio Nishimura[1], Koji Nakano[1,2], Kyoko Nozaki[1]
[1]*Department of Chemistry and Biotechnology, Graduate School of Engineering, The University of Tokyo, Japan.*
[2]*PRESTO, Japan Science and Technology Agency, Japan*

[PB-67] **SYNTHESIS, STRUCTURE, AND SUPRAMOLECULAR COMPLEX FORMATION OF A CYCLIC URETHANE COMPOUND CONSISTING OF TWO (R)-1,1'-BI(2-NAPHTHOL) MOIETIES**
Xiao Nao[1], Takeshi Sakamoto[1], Yukatsu Shichibu[2], Katsuaki Konishi[2], Shin-ichiro Sato[1], Toyoji Kakuchi[1], Tamaki Nakano[1]
[1]*Division of Biotechnology and Macromolecular Chemistry, Faculty of Engineering, Hokkaido University, Japan*
[2]*Faculty of Environmental Earth Sciences, Hokkaido Univeristy, Japan*

[PB-68] **CHIRAL SPHERICAL AROMATIC AMIDES: SYNTHESIS AND CRYSTAL STRUCTURE**
Hyuma Masu[1], Kosuke Katagiri[1], Masahide Tominaga[1], Hiroyuki Kagechika[2], Isao Azumaya[1]
[1]*Faculty of Pharmaceutical Sciences at Kagawa Campus, Tokushima Bunri University, Japan*
[2]*School of Biomedical Science, Tokyo Medical and Dental University, Japan*

[PB-69] **CHIRAL BOWL-SHAPED STRUCTURE OF CYCLIC PEPTIDES COMPOSED OF ANTHRANILIC ACID AND LEUCINE**
Motohiro Akazome, Masashi Enzu, Yohei Goto, Shoji Matsumoto
Department of Applied Chemistry and Biotechnology, Graduate School of Engineering, Chiba University, Japan

[PB-70] **EXPERIMENTAL AND THEORETICAL INVESTIGATIONS ON THE CHIROPTICAL PROPERTIES OF DONOR-ACCEPTOR BINAPHTHYLS. DYNAMIC CONFORMER POPULATION STUDIED BY CIRCULAR DICHROISM**
Masaki Nishizaka, **Tadashi Mori**, Yoshihisa Inoue
Department of Applied Chemistry, Osaka University, Japan

[PB-71] **PHOTOSWITCHING OF BENZENE ROTOR AND INDUCTION OF MOLECULAR CHIRALITY BY CIRCULAR POLARIZED LIGHT IN CYCLIC AZOBENZENOPHANE**
P.K Hashim, Nobuyuki Tamaoki
Research Institute for Electronic Science, Hokkaido University, Japan

[PB-72] **DUAL-SUPRAMOLECULAR DIASTEREODIFFERENTIATING PHOTOCYCLODIMERIZATION OF 2-ANTHRACENECARBOXYLATE TETHERED TO AMYLOSE SCAFFOLD**
Tomohiro Nakamura, Gaku Fukuhara, Cheng Yang, Tadashi Mori, Yoshihisa Inoue
Department of Applied Chemistry, Osaka University, Japan

[PB-73] **CATALYTIC BIO-SUPRAMOLECULAR PHOTOCYCLODIMERIZATION 2-ANTHRACENECARBOXYLATE MEDIATED BY SERUM ALBUMIN**
Hanako Kato[1], Masaki Nishijima[2], Gaku Fukuhara[1], Cheng Yang[1], Tadashi Mori[1], Yoshihisa Inoue[1]
[1]*Department of Applied Chemistry, Osaka University, Japan*
[2]*Center for Advanced Science and Innovation, Osaka University, Japan*

[PB-74] **ENANTIODIFFERENTIATING PHOTOCYCLODIMERIZATION OF 2-ANTHRACENECARBOXYLATE MEDIATED BY HUMAN SERUM ALBUMIN IN THE PRESENCE OF INHIBITOR**
Masaki Nishijima[1], Tamara C. S. Pace[4], Takehiko Wada[3], Tadashi Mori[2], Bohne Cornelia[4], Yoshihisa Inoue[2]
[1]*Center for Advanced Science and Innovation, Osaka University, Japan*
[2]*Department of Applied Chemistry, Osaka University, Japan*
[3]*IMRAM, Tohoku University, Japan*
[4]*University of Victoria, Canada*

[PB-75] **ENANTIODIFFERENTIATING PHOTOCYCLODIMERIZATION OF 2-HYDROXYANTHRACENE MEDIATED BY CHIRAL SUPRAMOLECULAR HOSTS**
Hiroaki Umehara, Gaku Fukuhara, Cheng Yang, Masaki Nishijima, Tadashi Mori, Yoshihisa Inoue
Department of Applied Chemistry, Osaka University, Japan

[PB-76] **DUAL-SUPRAMOLECULAR PHOTOCYCLODIMERIZATION OF 6^A, 6^X-DIANTHROYL-α-CYCLODEXTRINS WITH γ-CYCLODEXTRIN**
Cheng Yang, Yoshihisa Inoue
Department of Applied Chemistry, Osaka University, Japan

[PB-77] **SUPRAMOLECULAR ENANTIODIFFERENTIATING PHOTOISOMERIZATION OF CYCLOOCTENE INCLUDED AND SENSITIZED BY CHROMOPHORE-MODIFIED β-CYCLODEXTRINS**
Wenting Liang, Cheng Yang, Gaku Fukuhara, Tadashi Mori, Yoshihisa Inoue
Center for Department of Applied Chemistry, Faculty of Engineering, Osaka University, Japan

[PB-78] **CHIRAL RECOGNITION BY CYCLODEXTRIN DERIVATIVES IN NONPOLAR MEDIA**
Toshiyuki Kida, Takuya Iwamoto, Yoshinori Fujino, Mitsuru Akashi
Department of Applied Chemistry, Graduate School of Engineering, Osaka University, Japan

[PB-79] **STUDY OF THE β-CYCLODEXTRIN-RESVERATROL COMPLEX BY NMR TECHNIQUES AND CIRCULAR DICHROISM SPECTROSCOPY**
Eduardo Troche Pesqueira, José-Lorenzo Alonso-Gómez, Armando Navarro-Vázquez, **María Magdalena Cid**
Departamento de Química Orgánica, Universidade de Vigo, Edificio Ciencias Experimentais, Spain

[PB-80] **OPTICAL RESOLUTION OF C2-SYMMETRIC CHIRAL CROWN DIOL BY LIPASE-CATALYZED ACETYLATION AND CHIRAL DISCRIMINATION ABILITY OF THE DERIVATIVE IN 1H NMR**
Misako Nakamura, Masahiro Muraoka, Yohji Nakatsuji
Department of Applied Chemistry, Faculty of Engineering, Osaka Institute of Technology, Japan

[PB-81] **COMBINATORIAL OPTIMIZATION OF LANTHANIDE COMPLEXES AS CD PROBES FOR AMINO ACIDS**
Satoshi Shinoda[1,2], **Keiko Yano**[1], Hiroshi Tsukube[1,2]
[1]*Department of Chemistry, Graduate School of Science, Osaka City University, Japan*
[2]*JST, CREST, Osaka City University, Japan*

[PB-82] **CONTROL OF EXTENSION/CONTRACTION MOTION OF BORON HELICATE CONSISTING OF OLIGOPHENOL STRANDS**
Kazuhiro Miwa, Yoshio Furusho, and Eiji Yashima
Department of Molecular Design and Engineering, Graduate School of Engineering, Nagoya University, Japan

[PB-83] **SYNTHESIS AND OPTICAL RESOLUTION OF THE BORON HELICATE CONSISTING OF OLIGOPHENOL STRANDS BEARING BIPYRIDINE UNITS**
Ryo Asai, Kazuhiro Miwa, Yoshio Furusho, Eiji Yashima
Department of Molecular Design and Engineering, Graduate School of Engineering, Nagoya University, Japan

[PB-84] **DETECTION OF CHIRAL CARBOXYLATES WITH UREA-SUBSTITUTED ACHIRAL POLY(PHENYLACETYLENE)**
Shota Okade[1], Tatsuro Kodama[1], Yasuyuki Tago[1], Ryohei Kakuchi[1], Ryosuke Sakai[2], Toshifumi Satoh[1], Toyoji Kakuchi[1]
[1]*Graduate School of Engineering, Hokkaido University, Japan*
[2]*Asahikawa National College of Technology, Japan*

[PB-85] **SYNTHESIS AND ANION DETECTION ABILITY OF POLY(PHENYLACETYLENE) BEARING L-LYSINE-DERIVED DENDRONS AS PENDANTS**
Naoya Sakai[1], Ryosuke Sakai[2], Toshifumi Satoh[3], Afang Zhang[4], Toyoji Kakuchi[3]
[1]*Graduate School of Chemical Sciences and Engineering, Hokkaido University, Japan*
[2]*Asahikawa National College of Technology, Japan*
[3]*Graduate School of Engineering, Hokkaido University, Japan*
[4]*Department of Polymer Materials, Shanghai University, China*

[PB-86] **NOVEL STERICALLY ENCUMBERED Zn-PORPHYRIN TWEEZER AS AN EFFECTIVE CHIRALITY PROBE OF CHIRAL DIAMINES**
Ana G. Petrovic[1], Ghislaine Vantomme[1], Elisa Lubian[2], Roselynn Cordero[3], Gloria Proni[3], Tommaso Carofiglio[2], Nina Berova[1]
[1]*Department of Chemistry, Columbia University, USA*
[2]*Dipartimento di Scienze Chimiche and ITM-CNR, Università di Padova, Italy*
[3]*John Jay College, Science Department, USA*

[PB-87] **SELECTIVE AXIAL COORDINATION INDUCED VERSATILE CHIROPTICS OF L-GLUTAMIDE-FUNCTIONALIZED ZINC PORPHYRIN**
Makoto Takafuji[1], Hirokuni Jintoku[1], Takashi Sagawa[2], Hirotaka Ihara[1]
[1]*Department of Applied Chemistry & Biochemistry, Kumamoto University, Japan*
[2]*Institute of Advanced Energy, Kyoto University, Japan*

[PB-88] **MULTIPLE MOLECULAR MOTIONS IN CHIRAL COBALT COMPLEXES TRIGGERED BY REDOX STIMULI**
Janusz Gregoliński, Hiroshi Tsukube, Hiroyuki Miyake
Department of Chemistry, Graduate School of Science, Osaka City University, Japan

[PB-89] **SYNTHESIS AND OPTICAL RESOLUTION OF NOVEL METAL COMPLEXES WITH PLANAR CHIRALITY AND THEIR ISOMERIZATION BEHAVIOR**
Hidetoshi Goto, Teppei Hayakawa, Kanako Furutachi, Hiroshi, Sugimoto, Shohei Inoue
Department of Industrial Chemistry, Faculty of Engineering, Tokyo University of Science, Japan

[PB-90] **SYNTHESIS, STRUCTURE, AND CIRCULAR DICHROISM OF ENANTIOPURE COPPER(II) COMPOUNDS CONTAINING CHIRAL BIDENTATE LIGANDS**
Kil Sik Min[1], A Hyun Park[2], Jong Won Shin[3], Sankara Rao Rowthu[3], Hyun Jung Cho[1]
[1]*Department of Chemistry Education, Kyungpook National University, Korea*
[2]*Gyeongnam Science High School, Korea*
[3]*Department of Chemistry, Kyungpook National University, Korea*

[PB-91] **SELF-ASSEMBLY OF HEXANUCLEAR CAGE MOLECULES FROM CHIRAL DINUCLEAR MACROCYCLIC COPPER(II) COMPLEXES AND ORGANIC BUILDING BLOCKS**
Jong Won Shin[1], Sankara Rao Rowthu[1], Yu Rim Seo[2], Jung Jae Yoo[2], Jae Jeong Ryoo[2], Kil Sik Min[2]
[1]*Department of Chemistry, Kyungpook National University, Korea*
[2]*Department of Chemistry Education, Kyungpook National University, Korea*

[PB-92] **NON-VOLATILE CHIRAL MEMORY IN ORGANIC NANOTUBES**
Wei Zhang[1], Wusong Jin[2], Takanori Fukushima[3], Noriyuki Ishii[4], Takuzo Aida[1,2]
[1]*Bioengineering Department, School of Engineering, The University of Tokyo, Japan*
[2]*ERATO–SORST, Nanospace Project, Japan Science and Technology Agency, National Museum of Emerging Science and Innovation, Japan*
[3]*Advanced Science Institute, RIKEN, Japan*
[4]*Institute for Biological Resources and Functions, National Institute of Advanced Industrial Science and Technology, Japan*

[PB-93] **SYNTHESIS AND PROPERTIES OF AMINO ACID-DERIVED OPTICALLY ACTIVE PHOTO-RESPONSIVE SUPRAMOLECULES**
Hiromitsu Sogawa[1], Kayo Terada[1], Masashi Shiotsuki[1], Toshio Masuda[2], Fumio Sanda[1]
[1]*Department of Polymer Chemistry, Graduate School of Engineering, Kyoto University, Japan*
[2]*Department of Environmental and Biological Chemistry, Faculty of Engineering, Fukui University of Technology, Japan*

[PB-94] **SUPRAMOLECULAR HELICAL STRUCTURES SELF-ASSEMBLED FROM C_{3V}-SYMMETRIC TRIS(PHENYLETHYNYLPHENYL)ADAMANTANE MOLECULES WITH AMINO ACID MOIETIES**
Masahide Tominaga, Isao Azumaya
Faculty of Pharmaceutical Sciences at Kagawa Campus, Tokushima Bunri University, Japan

[PB-95] **SUPRAMOLECULAR ASSEMBLY OF FUNCTIONALIZED HELICENES**
Takahiro Kaseyama[1,2], Seiichi Furumi[2], Ken Tanaka[3], Masayuki Takeuchi[1,2]
[1]*Graduated School of Pure and Applied Science, University of Tsukuba, Japan*
[2]*Organic Nanomaterials Center, National Institute for Materials Science (NIMS), Japan*
[3]*Department of Applied Chemistry, Tokyo University of Agriculture and Technology, Japan*

[PB-96] **HIERARCHICAL SUPERSTRUCTURES WITH HELICAL SENSE CONTROL FROM SELF-ASSEMBLY OF CHIRAL BENT-CORE MOLECULES**
Shih-Chieh Lin[1], Rong-Ming Ho[1], Chin-Yen Chang[2], Chain-Shu Hsu[2]
[1]*Department of Chemical Engineering, National Tsing Hua University, Taiwan*
[2]*Department of Applied Chemistry, National Chiao Tung University, Taiwan*

[PB-97] **PROGRAMMED METHOD FOR PREPARING OPTICALLY ACTIVE M(II) (Cu, Ni) PHTHALOCYANINE SUPRAMOLECULES INDUCED BY CHIRAL DIAMINES**
Wei Zhang[1,2], Michiya Fujiki[1]
[1]*Graduate School of Materials Science, Nara Institute of Science and Technology, Japan*
[2]*College of Chemistry, Chemical Engineering and Materials Science of Soochow (Suzhou) University, China*

[PB-98] **SELF-ASSEMBLED ARCHITECTURE OF SEQUENTIAL PEPTIDE AS A CHIRAL RECOGNIZING TEMPLATE**
Masayoshi Tanaka[1], Ying Zhao[1], Naokiyo Koshikawa[2], Takatoshi Kinoshita[1]
[1]*Department of Frontier Materials, Graduate School of Engineering, Nagoya Institute of Technology, Japan*
[2]*Space Environment Utilization Center, Japan Aerospace Exploration Agent, Japan*

[PB-99] **MECHANICAL REINFORCEMENT OF SUPRAMOLECULAR HYDROGEL BY INTRODUCING CHIRAL AMINO ACID AS HYDROPHILIC MODULE OF HYDROGELATOR**
Harunobu Komatsu[1], Shinya Tsukiji[1], Masato Ikeda[1], Itaru Hamachi[1]
[1]*Department of Synthetic Chemistry & Biological Chemistry, Graduate School of Engineering, Kyoto University, Japan*

[PB-100] **CONTROL OF FLUORESCENCE EMISSION THROUGH CHIRAL SUPRAMOLECULAR STRUCTURE BASED ON LOW-MOLECULAR-WEIGHT THIOPHENE DERIVATIVES**
Koji Miyamoto[1], Hirokuni Jintoku[1], Tsuyoshi Sagawa[1], Makoto Takafuji[1], Takashi Sagawa[2], Hirotaka Ihara[1]
[1]*Department of Applied Chemistry & Biochemistry, Kumamoto University, Japan*
[2]*Institute of Advanced Energy, Kyoto University, Japan*

[PB-101] **PHOTOINDUCED CHIRAL MODULATION OF LIQUID CRYSTALLINE HELICAL STRUCTURES USING DYNAMIC MOLECULAR TWISTING MOTIONS**
Masuki Kawamoto, Natsuki Shiga, Takuya Aoki
Supramolecular Science Laboratory, RIKEN, 2-1 Hirosawa, Wako, Japan

[PB-102] **A NEW CLASS OF LIQUID-CRYSTALLINE MATERIALS COMPOSED OF A CYLINDRICAL HELIX**
Takashi Kajitani[1], Yuki Suna[1], Atsuko Kosaka[1], Shigenori Fujikawa[1]
Takanori Fukushima[1], Takuzo Aida[1,2]
[1]*Advanced Science Institute, RIKEN, Japan*
[2]*Department of Chemistry and Biotechnology, School of Engineering, The University of Tokyo, Japan*

[PB-103] **THERMOTROPIC LIQUID CRYSTALLINE ANTHRAQUINONE IMIDE DIMMERS WITH SILOXANE LINKAGES: SYNTHESIS, LIQUID CRYSTALLINE BEHAVIOR AND NEAR-INFRARED ELECTROCHROMIC PROPERTIES**
Fengkun Chen, Xinhua Wan[1]
[1]*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*

[PB-104] **FABRICATION OF METALLIC MICROCOILS THROUGH BIOTEMPLE PROCESS AND THEIR ELECTROMAGNETIC RESPONSE**
Soichiro Suzuki, Kaori Ito, **Tomokazu Iyoda**
Chemical Resources Laboratory, Tokyo Institute of Technology, Japan

[PB-105] **STRUCTURAL EVOLUTION OF THE Cu-Ni COATINGS FORMED BY MECHANICAL ALLOYING METHOD**
Iman Farahbakhsh[1], Alireza Zakeri[1], Hukamoto Kazuyuki[2]
[1]*Faculty of Materials Engineering & Metallurgy, Iran University of science & Technology, IRAN*
[2]*Shock wave & Condensed Matter Research Center, Kumamoto University, Japan*

[PB-106] **DEVELOPMENT OF A 2D-HPLC SYSTEM FOR THE DETERMINATION OF CYSTINE ENANTIOMERS**
Kei Masuyama[1], Kyoko Ueno[1], Yurika Miyoshi[1,] Yusuke Ito[1], Yukiko Shimizu[2], Tadashi Okamura[2], Masashi Mita[3], Kenji Hamase[1]
[1]*Graduate School of Pharmaceutical Sciences, Kyushu University, Japan*
[2]*Division of Animal Models, Department of Infectious Diseases, Research Institute, National Center for Global Health and Medicine (NCGM),Japan*
[3]*Innovative Science Research and Development Center, Shiseido Co., Ltd., Japan*

[PB-107] **SPECTROSCOPIIC INVESIGATION OF COLLGEN SHEETS WITH VERY HIGH PREFEERD ORIENTATION**
Toru Asahi[1, 2], Toshiya Suzuki[1], Yoshiyuki Ogino[1], Yuji Tanaka[3], Masayuki Yamato[2, 3], Naoya Sawamura[1, 2]
[1]*Faculty of Science and Engineering, Waseda University(TWIns), Tokyo, Japan*
[2]*Consolidated Research Institute of Advanced Science and Medical Care, Waseda University(ASMeW), Japan*
[3]*Advanced Biomedical Science Center, Tokyo Women's Medical University*

[PB-108] **TIME-RESOLVED CIRCULAR DICHROISM STUDY OF BINDING DYNAMICS OF H_2TMPYP WITH DNA IN MICROSECOND TO MILLISECOND TIME-SCALE**
Yasuyuki Araki, Makoto Murakami, Seiji Sakamoto, Takehiko Wada
Institute of Multidisciplinary Research for Advanced Materials, Tohoku University, Japan

[PB-109] **RESOLUTION OF BENZYL VALINATE BY PREFERENTIAL CRYSTALLIZAION**
Toratane Munegumi, Aiko Wakatsuki, Yutaro Takahashi
Department of Materials Chemistry and Bioengineering, Oyama Nation al College of Technology, Japan

[PB-110] **DETERMINATION OF ABSOLUTE STRUCTURE AND OPTICAL ROTATORY DISPERSION OF γ-GLYCINE**
Kazuhiko Ishikawa[1], Toshiya Suzuki[1], Masahito Tanaka[2, 3], Tsuneomi Kawaseki[4], Kenso soai[4], Motoo Shiro[5], Toru Asahi[1, 3]
[1]*Department of Life Science and Medical Bioscience, Waseda University (TWIns), Japan*
[2]*National Institute of Advanced Industrial Science and Technology, Tukuba, Japan*
[3]*Consolidated Research Institute of Advanced Science and Medical Care, Waseda University (ASMeW), Japan*
[4]*Ressearch Institute for Science and Technology, Tokyo University of Science, Tokyo, Japan*
[5]*Rigaku corporation, Japan*

[PB-111] **STRATEGY TO MEASURE α-HELIX GYRATION TENSOR OF TROPOMYOSIN IN SOLUTIONS ORIENTED BY ELECTRIC FIELD**
Hiroshi Asai[1] and Toru Asahi[2, 3]
[1]*Advanced Research Institute for Science and Engineering, Waseda University, Japan*
[2]*Department of Life Science and Medical Bioscience, Waseda University (TWIns), Japan*
[3]*Consolidated Research Institute of Advanced Science and Medical Care, Waseda University, (ASMeW), Japan*

[PB-112] **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
→**Moved to Oral Presentation** [**OA-12**]

[PB-113] **OPTICALLY ACTIVE COMPLEMENTARY DOUBLE HELIX FORMATION THROUGH TEMPLATE SYNTHESIS**
Hidekazu Yamada[1], Hiroshi Ito[2], Yoshio Furusho[1, 2], Eiji Yashima[1, 2]
[1]*Department of Molecular Design and Engineering, Graduate School of Engineering, Nagoya University, Japan*
[2]*Yashima Super-Structured Helix Project, ERATO, JST, Japan*

[PB-114] **CHIRALITY INDUCTION ON A *m*-TERPHENYL-BASED CONJUGATED POLYMER BEARING CARBOXYLIC GROUPS**
Shinzo Kobayashi, Yoshio Furusho, Eiji Yashima
Department of Molecular Design and Engineering, Graduate School of Engineering, Nagoya University, Japan

[PB-115] **CHIRAL AMPLIFICATION IN COMPLEMENTARY DOUBLE HELICAL POLYMERS**
Wataru Makiguchi, Shinzo Kobayashi, Yoshio Furusho, Eiji Yashima
Department of Molecular Design and Engineering, Graduate School of Engineering, Nagoya University, Japan

[PB-116] **ENANTIOSELECTIVE OXIDATIVE ESTERIFICATION OF ALDEHYDES BY A TWO-COMPONENT ORGANOCATALYST SYSTEM USING CHIRAL N-HETEROCYCLIC CARBENE AND RIBOFLAVIN**
Soichiro Iwahana, Hiroki Iida, Eiji Yashima
Department of Molecular Design and Engineering, Graduate School of Engineering, Nagoya University, Japan