

As of August 7

Sunday, August 30

Opening Ceremony

16:30-16:40

Keynote Lecture

16:40-17:30

K01

Photochirogenesis in Molecular, Supramolecular, and Biomolecular Regimes
Yoshihisa Inoue

Chair: to be announced

Plenary

17:30-18:30

Akira Suzuki

Chair: to be announced:

Welcome Reception

19:00-

At Faculty House Trillium inside Hokkaido University

As of August 7

Monday, August 31

Invited

Chair: to be announced:

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|------------|------|--|
| 9:00-9:30 | IN01 | Modeling Peptide IR, Raman and VCD with Variation in Structure. Local and Extended Contributions
Timothy A. Keiderling, Jan Kubelka, Petr Bour, Yue Wei, Frank Vazquez |
| 9:30-10:00 | IN02 | β -Sheet-twist as a Clue for the Secondary Structure Determination and Fold Recognition from the CD Spectra of Proteins
Kardos József, Frank Wien, Linda Kernya, Young-Ho Lee, Yuji Goto, Matthieu Réfrégiers, András Micsonai |

Oral

Chair: to be announced:

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|-------------|-----|--|
| 10:00-10:20 | 001 | Tetra Spermine Porphyrin as Inducer, Stabilizer and Chiroptical Probe for DNA Conformations
Alessandro D'Urso, Chiara Gangemi, Nina Berova, Roberto Purrello |
| 10:20-10:40 | 002 | Synchrotron Radiation CD, What is Next? Diamond B23 Perspective
Giuliano Siligardi, Tamas Javorfi, Rohanah Hussain |

10:40-11:00

Coffee Break

Chair: to be announced:

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|-------------|-----|--|
| 11:00-11:15 | 003 | Conformations of Membrane-Bound Proteins Characterized by Vacuum-Ultraviolet Circular-Dichroism and Linear-Dichroism Spectroscopy
Koichi Matsuo, Yasuyuki Maki, Hirofumi Namatame, Masaki Taniguchi, Kunihiro Gekko |
| 11:15-11:30 | 004 | Comparative Analysis of CD Spectra and Secondary Structures of ZnO Binding Peptides
Monika Michaelis, Christian Perl, Robert Meißner, Susan Köppen, Lucio Colombi Ciacchi |
| 11:30-11:50 | 005 | Development of High Sensitive and High Time-Resolve Circular Dichroism Detection Method
- Toward the Analyses of Supramolecular Chirality and Dynamics -
Takehiko Wada, Makoto Kuronuma, Takehito Sato, Yutaka Sano, Seiji Sakamoto, Makoto Murakami, Katsuji Hasegawa, Tadashi Mori, Yoshihisa Inoue, Yasuyuki Araki |

Invited

Chair: to be announced:

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|-------------|------|--|
| 11:50-12:20 | IN03 | Refinements of the Active Site Structures in Photoreceptor Proteins by Raman Optical Activity
Masashi Unno |
|-------------|------|--|

As of August 7

10:40-11:00 *Lucheon*

Invited

Chair: to be announced:

14:30-15:00 IN04 Chirality in Electronically Excited States - Quantum Chemical Simulations
Magdalena Pecul, Anna Pikulska, Maciej Kamiński, Janusz Cukras, Sonia Coriani, Antonio Rizzo, Benedetta Mennucci

Oral

Chair: to be announced:

15:00-15:20 006 $C\equiv O$, $C=O$ and C-O Stretchings as Chirality Probes in VCD Spectra
Sergio Abbate, Giovanna Longhi, Giuseppe Mazzeo

15:20-15:40 007 Calculations of Magneto-Chiral Dichroism
Janusz Cukras, Joanna Kauczor, Patrick Norman, Antonio Rizzo, Geert L.J.A. Rikken, Sonia Coriani

15:40-16:00 *Coffee Break*

KN session

Chair: to be announced:

16:00-16:20 KN01 *In Celebration of Prof. Koji Nakanishi's 90th Birthday.*
Development of the CD Exciton Chirality Method in Sendai
Nobuyuki Harada

16:20-16:40 KN02 Koji Nakanshi's Enchanting Endeavor on Electronic Circular Dichroism for 45 Years at Columbia University
Nina Berova

16:40-17:00 KN03 Santonin and Related Compounds – Milestone Molecules in Terpenes Chemistry Seen through the Prism of Modern Analytical Techniques
Jadwiga Frelek

17:00-17:20 KN04 Progress in Absolute Stereochemical Determination of Organic Molecules via Exciton Coupled Circular Dichroism
Babak Borhan

17:20-17:40 KN05 Stereochemical Study of Natural Products by Electronic Circular Dichroism
Attila Mándi, Tibor Kurtán

17:40-18:00 KN06 The Role of Intrinsic Magnetic Moments in Exciton-coupled ECD Spectra: Apparent Exceptions to the Exciton Chirality Rule Explained
Gennaro Pescitelli, Torsten Bruhn, Sandro Jurinovich, Ciro A. Guido, Benedetta Mennucci

18:00-18:20 KN07 ECD Assisted Structural Analyses of *epi*-Cochlioquinone D
Masaru Hashimoto, Miki Arayama, Tatsuo Nehira, Hayato Maeda, Kazuaki Tanaka, Hisashi Miyagawa, Tamio Ueno, Seijiro Hosokawa

As of August 7

Young Scientists' Night

19:00-

As of August 7

Tuesday, September 1

Invited

Chair: to be announced:

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|------------|------|--|
| 9:00-9:30 | IN05 | Double-Stranded Helical Foldamers with Unique Chiroptical Properties
Eiji Yashima |
| 9:30-10:00 | IN06 | Chiroptical switches based on helicenic transition metal complexes
Jeanne Crassous |

Oral

Chair: to be announced:

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|-------------|-----|---|
| 10:00-10:20 | O08 | Experimental and Computational CPL Studies of Molecules Employed in Material and Biophysical Science
Giovanna Longhi, Ettore Castiglioni, Sergio Abbate, Giuseppe Mazzeo |
| 10:20-10:40 | O09 | Circularly Polarized Photon Energy Dependent Sign Inversion of π -Conjugated Polymer Aggregates in Tuned Optofluidic Medium
Michiya Fujiki, Yuri Donguri, Yin Zhao, Ayako Nakao, Nozomu Suzuki, Kana Yoshida, Wei Zhang |

10:40-11:00

Coffee Break

Chair: to be announced:

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|-------------|-----|--|
| 11:00-11:20 | O10 | Metal-centered Chirality-Inversion between Solid State and Solution
Steffen Lüdeke, Anne-Christine Chamayou, Gamall Makhoulfi, Laurence A. Nafie, Christoph Janiak |
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Invited

Chair: to be announced:

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|-------------|------|---|
| 11:20-11:50 | IN07 | Rotaxane's Molecular Chirality Studied Using Dynamic Helix Probe
Toshikazu Takata |
| 11:50-12:20 | IN08 | VCD Spectroscopy of Chiral Complexes and Carbohydrates: Solvent and Concentration Effects
Yunjie Xu |

12:30-13:30

Luceon

Invited

Chair: to be announced:

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|-------------|------|---|
| 14:30-15:00 | IN09 | Kinetic Assembly Leads to Chirality?
Masaki Kawano |
| 15:00-15:30 | IN10 | Biosensing with a Twist: Detection and Characterization of Biomaterials with Sculpted EM Fields |

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Malcolm Kadodwala

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Oral

Chair: to be announced:

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|-------------|-----|--|
| 15:30-15:50 | O11 | Near-field Imaging for Nanoscale Local Circular Dichroism
Tetsuya Narushima, Shun Hashiyada, Hiromi Okamoto |
| 15:50-16:10 | O12 | Raman Optical Activity on Surfaces, in Gases and Lanthanide Complexes
Jaroslav Šebestík, Vít Novák, Jana Hudecová, Tao Wu, Shigeki Yamamoto, Petr Bouř |

16:10-16:30

Coffee Break

Oral

Chair: to be announced:

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|-------------|-----|---|
| 16:30-16:50 | O13 | Orbital-Based Analysis of Molecular Optical Activity
Marco Caricato |
| 16:50-17:10 | O14 | Computation of Electronic Circular Dichroism Spectra and Optical Rotation by Simplified Time-Dependent Density Functional Theory
Christoph Bannwarth, Stefan Grimme |

Invited

Chair: to be announced:

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|-------------|------|--|
| 17:10-17:40 | IN11 | A Novel Fragment-Based Method for Evaluating the Vibrational Circular Dichroism Spectra of Large Molecules
Krishnan Raghavachari, Jovan J. K. Varghese |
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Keynote Lecture

Chair: to be announced:

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|-------------|-----|---|
| 17:40-18:20 | K02 | Chiroptical Spectroscopy: Triumphs, Traps and New Developments
Prasad L. Polavarapu |
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Banquet

19:00-

As of August 7

Wednesday, September 2

Oral

Chair: to be announced:

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|-------------|-----|--|
| 9:00-9:20 | 015 | Optical Activity in the X-ray Range.
Andrei Rogalev, Fabrice Wilhelm, Jose Goulon |
| 9:20-9:40 | 016 | THz Transmission Eigenpolarizations of Archimedean Spiral Arrays
Charles A. Schmuttenmaer, Daniel J. Aschaffenburg, Michael R. C. Williams |
| 9:40-10:00 | 017 | DichOS: An Optical Device for Absolute CD Calibration at Multiple Wavelengths
Nigel T. H. White, Lindsay J. Cole |
| 10:00-10:20 | 018 | Potential for Protein Conformational Analysis Provided by Fluorescence-detected Circular Dichroism (FDCD)
Tatsuo Nehira, Hirone Ito, Kaoru Ishihara, Keiko Masuda, Kazuyoshi Ukena, Koichi Matsuo, Shunsuke Izumi, Takeshi Yamazaki, Atsuhiko Ishida |

10:20-10:40

Coffee Break

Chair: to be announced:

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|-------------|-----|---|
| 10:40-10:55 | 019 | Understanding the Relative Magnitude of the Bands in VCD Spectra
Valentin Paul Nicu |
| 10:55-11:10 | 020 | A Versatile Tool for the Simulation and Interpretation of Chiroptical Spectroscopies
Julien Bloino, Alberto Baiardi |
| 11:10-11:25 | 021 | Recent Advances in the Use of Chiroptical Methods for Stereochemical Characterization of Natural Products
Joao M. Batista Jr. |

Excursion

11:25-

Thursday, September 3

Oral

Chair: to be announced:

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|-------------|-----|---|
| 9:00-9:15 | 022 | Chiroptical study on thalidomide in solid and solution state
Toru Asahi, Hiroki Toriyama, Yoshiyuki Ogino, Masahito Tanaka, Togo Shimozawa, Norio Shibata |
| 9:15-9:30 | 023 | Chirality Induction, Transfer and Inversion in Dendric Chiral Metal Complexes with Six Helical Branches
Hiroyuki Miyake, Tatsuya Sakamoto, Kazuaki Ohara, Kentaro Yamaguchi, Hiroshi Tsukube |
| 9:30-10:45 | 024 | Effects of Ion Pairing on Vibrational CD Spectra
Christian Merten, Corina Pollok |
| 9:45-10:00 | 025 | Chirality Sensing of Chiral Hydrocarbons Based on Helicity Induction and Memory Effect in a Polyacetylene Bearing 2,2'-Biphenol-Derived Pendants
Katsuhiko Maeda, Natsuki Okoshi, Kouhei Shimomura, Tomoyuki Ikai, Shigeyoshi Kanoh, Eiji Yashima |
| 10:00-10:15 | 026 | Synthesis and Complexation Behavior of Modified Amylose Containing Alkyl Spacer at a Regular Interval in the Main Chain
Yasuhito Koyama, Tamaki Nakano |

10:15-10:35

Coffee Break

Chair: to be announced:

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|-------------|-----|--|
| 10:35-10:50 | 027 | Advances in, and Applications of, Similarity Analysis of Dissymmetry Factor/ Circular Intensity Differential Spectra
Cody Covington, Prasad Polavarapu |
| 10:50-11:05 | 028 | Imine-Based Chiroptical Sensing for the Stereochemical Analysis of Chiral Primary Amines
Leo A. Joyce, Edward C. Sherer, Christopher J. Welch |
| 11:05-11:20 | 029 | Electronic and Vibrational Circular Dichroism in Solving Structural Problems – Partners or Competitors?
Magdalena Jawiczuk, Jadwiga Frelek |
| 11:20-12:35 | 030 | VCD Structural Analysis Using Program of Conformational Code for Organic Molecules (CCOM)
Hiroshi Izumi, Laurence A. Nafie, Rina K. Dukor |
| 11:35-11:50 | 031 | Homo- <i>C</i> Nucleoside Analogs IV. Synthesis, CD and NMR Assignment of Chiroptical Centers at 4 – (2,5 – anhydro- D- <i>altro</i> - pentitol- 1-yl)- 2- phenyl- 2 <i>H</i> - 1,2, 3- triazole Homo- <i>C</i> -Nucleoside Analog.
Mohammed A.E. Sallam |

As of August 7

Invited

Chair: to be announced:

11:50-12:20 IN12 Advances in the VCD Analysis of Protein Fibrils
Laurence A. Nafie, Rina K. Dukor

Closing Ceremony

12:20-