



## 環太平洋国際化学会議 PACIFICHEM 2015

### —講演募集のお知らせ—

2015 環太平洋国際化学会議 実行委員会

標記国際会議の講演募集を下記のとおり開始いたしますので、ご準備をお進め下さいますようお願い申し上げます。

PACIFICHEM は、1984年に第1回目を開催し、今回で第7回目となります。前回(2010年)の会議では、約70ヶ国から13,644件(うち日本から約6,430件)の講演と、約12,700名の参加がありました。今回の会議では、環太平洋諸国を中心とした世界的な化学の祭典として、前回以上の規模が期待されています。

先に皆さまからご提案いただいた多数のシンポジウムについて、プログラム委員会で審議を重ね、345件が採択されました。化学の広範な分野から重要かつ最先端のテーマが取り上げられております。詳細は下記 URL をご覧下さい

■Preliminary Program <http://www.pacificchem.org/symposiadesc2015/>

本国際会議に是非ご参加されますようここにご案内申し上げます。下記事項をご一読の上、奮ってお申込み下さい。会員の皆様のお申し込みをお待ちいたしております。

#### 1. 会議の名称

和名: 2015 環太平洋国際化学会議

欧名: The 2015 International Chemical Congress of Pacific Basin Societies (PACIFICHEM 2015)

#### 2. 目的とテーマ

環太平洋化学会に属する科学者及び技術者の間で化学に関する情報の伝達交流を促進するため、これら科学者及び技術者が一堂に会して、化学及び工業化学の分野における最新の研究成果を発表討議する場として本国際会議を開催し、これら諸国の学術ならびに工業の発展と国民の福祉に資することを目的とする。

■テーマ: Building Bridges across the Asia/Pacific Region

#### 3. 会期

2015年12月15日(火)～20日(日)

#### 4. 場所

米国ハワイ州、ホノルル市

#### 5. 主催団体

日本、アメリカ、カナダ、オーストラリア、ニュージーランド、韓国、中国の7化学会

(共催団体: 環太平洋地域各国化学会、後援団体: 国内化学関係学協会、化学系団体)

#### 6. 使用言語: 英語

#### 7. 講演の種類・形式

■招待講演 (Invited Paper): シンポジウムが招待した講演

■一般講演 (Contributed Paper): 講演募集に応募し採用された講演。口頭発表 (Oral) のほか、ポスター発表 (Poster Presentation) がある。

#### 8. 分野及び部門責任者

##### I. The Core Areas of Chemistry

1. Analytical 鈴木孝治(慶應大)

2. Inorganic 北川 宏(京大)\*

3. Macromolecular 高原 淳(九大)\*

4. Organic 中村栄一 (東大) \*

5. Physical, Theoretical & Computational 山内 薫 (東大)

## II. Multidisciplinary or Cross-Disciplinary Areas of Chemistry

6. Agrochemistry, Environmental, and Geochemistry 長田裕之 (理研)

7. Biological 中村 聡 (東工大)

8. Materials & Nanoscience 山下正廣 (東北大)

## III. Chemistry Solutions to Global Challenges

9. Chemistry of Clean Energy Conversion, Storage, and Production 江口浩一 (京大)

10. Bench to Bedside: Chemistry of Health Care 中村 聡 (東工大)

11. Connecting Chemistry to Society 山下正廣 (東北大)

\*は Topic Chairs; 各分野調整の長、PACIFICHEM 2015 組織委員。  
それ以外は Topic Reviewers; 各分野の各国調整役。

## 9. 講演申込/アブストラクト提出 申込方法

講演申込及びアブストラクトの提出はホームページ掲載の手順で行って下さい。下記にシンポジウム一覧を掲載いたしますが、最新情報はホームページでご確認下さい。

URL: <http://www.pacificchem.org/>

受付開始: 2015 年 1 月 1 日(木)

受付締切: 2015 年 4 月 15 日(水)

### ■ご注意

招待講演は一人 2 件まで。

講演は一人 3 件まで。(招待/一般を含めて) ⇒ポスターも一般講演に含まれます

共同研究者 (coauthor) の場合、数に制限はありません。

### ■採否通知

採否は 2015 年夏頃お知らせする予定です。

## 10. 学生ポスター賞 (Student Poster Competition)

ポスター発表を行った学生の中で特に優れた発表を行った学生に対する褒賞です。応募希望者は、講演申込の下記 URL から講演申し込を行う際、Step3 の画面で学生ポスター賞への応募欄をチェックしてください。

URL: <http://www.pacificchem.org/education-programs/student-poster-competition/>

応募受付開始: 2015 年 1 月 1 日(木)

応募締切: 2015 年 4 月 15 日 (水)

7 月の一次選考の結果、受賞候補として 240 件が選定され、選考結果は電子メールで通知されます。なお、一次選考を通過した 240 件は、通常のポスター発表とは別に、会期初日の 12 月 15 日 (火)に、審査会場において同一のポスターにより改めて発表と討論を行っていただき、最終選考として 40 件が選定されます。受賞者は、12 月 18 日 (金)に予定される学生ポスター賞受賞者のための昼食会に招待される予定です。

### 【注意】

- 採用されたポスター発表は、指定された場所、日時に学生ポスター賞選考のためのプレゼンテーションを行う必要があります。
- ポスターではなく、口頭発表として申し込んだ講演が学生ポスター賞としてノミネートされた場合には、ポスター発表用のプレゼンを別に用意してください。
- ポスドク、研究員、および学生外の場合は、学生ポスター賞の選考対象とはなりません。
- 選考基準: 新規性と研究の重要性、申込みを行った抄録のクオリティの高さ。

### ■選定の流れ

7 月: 学生ポスター賞候補の事前スクリーニング。

9 月: 240 名の受賞候補者の選定。選定結果は応募者全員に電子メールで送信。

12 月 15 日 (火): 240 名の受賞候補者によるポスター賞選考コンペ。最終選考として 40 名を定

12 月 18 日 (金): 学生ポスター賞受賞者 40 名による Award Luncheon 開催。

## 11. 参加登録費

	事前登録	直前及び当日 (USドル)
主催・共催・後援団体の会員	725	825
非会員	850	950
学生	250	250
同伴者	90	90

- ・ 円建ての参加登録費は7月頃決定いたします。
- ・ 日本国内の参加登録手続きは2015年7月下旬(予定)より開始いたします。
- ・ 事前登録は11月1日までを予定しています。
- ・ 下記の「項目12」の旅行申込みも国内参加登録と同時期に開始いたします。
- ・ 詳細及び最新情報はホームページでご確認下さい。

URL: <http://www.pacificchem.org/registration>

## 12. 旅行申込みについて

本会の公式指定旅行代理店は、公開入札の結果、(株)日本旅行に決定しました。

標記旅行代理店の協力により、航空券及び PACIFICHEM 公式ホテルをパッケージにしたツアーをリーズナブルな価格にて提供いたします。

### ■お願い

PACIFICHEM 2015 ではワイキキの下記の主要ホテルと事前に契約を結び、PACIFICHEM 2015 の公式ホテルとしております。これらの公式ホテルを一定量以上の宿泊予約することを条件に、リーズナブルな料金でホテル客室を提供してもらっています。さらに、宿泊数に応じてシンポジウムの会場利用費用の優遇措置などが用意されております。

日本化学会では、会員の皆様に PACIFICHEM 公式ホテルのご利用をお願いしております。上記の指定旅行代理店を通じ、下記公式ホテルへのご宿泊申込みにご協力いただけますようお願いいたします。

なお、指定旅行代理店を介さず同ホテルへ宿泊予約された場合には、公式ホテルの利用と見なされません。そのため指定旅行代理店である(株)日本旅行を通じ申込みいただけますよう重ねてお願いいたします。

参加登録・旅行申込みの詳細については、登録開始時期に先立ち、本会ホームページ及び本誌にて別途ご案内いたします。

なお、講演申込みの結果、採択となった講演の参加登録は旅行申込みの有無にかかわらず、必ず必要となりますのであらかじめご注意ください。

### - PACIFICHEM 2015 公式ホテル -

Ala Moana Hotel, DoubleTree by Hilton Alana Waikiki, Hilton Hawaiian Village, Hilton Waikiki Beach, Ramada Plaza Waikiki, Hyatt Regency Waikiki, The Royal Hawaiian, Sheraton Princess Kaiulani, Sheraton Waikiki, Waikiki Beach Marriott

## 13. 連絡先・問合せ先

### ■アメリカ化学会

#### PACIFICHEM 2015 Congress Secretariat:

c/o American Chemical Society

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### ■日本化学会

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**Pacifichem 2015  
Technical Symposia**

Area - ID	Symposium	Corresponding Organizer(先頭太字), Co-organizers	Country
<b>Area 1: Analytical</b>			
15	New Tools and Methodologies for the Characterization of Biomolecular Interactions	<b>Sergey Krylov</b> (CSC CA), Derek Wilson, Wenwan Zhong, Hailin Wang	Canada
24	Development and Applications of Techniques for Electrochemical Analysis	<b>Jingyuan Chen</b> (CSJ JP), Damien Arrigan, Chi-Chang Hu, Baohong Liu, Kohji Maeda	Japan
38	Current Issues in Teaching Analytical Chemistry	<b>Thomas Wenzel</b> (ACS US), Chuck Lucy, Greg Dicinoski	United States
45	Frontiers in Flow Injection Analysis and Related Techniques	<b>Toshihiko Imato</b> (CSJ JP), Gary Christian, Kate Grupan, Spas Dimitrov Kolev, Akhmad Sabarudin	Japan
53	Supercritical Fluid Chromatography (SFC) for Analysis and Purification	<b>Larry Miller</b> (ACS US), Arvind Rajendran, Takeshi Bamba	United States
61	Advances in Analytical Ion Mobility Separations	<b>Alexandre Shvartsburg</b> (ACS US), Fuminori Misaizu, Tara Pukala	United States
88	On-site and In-vivo Instrumentation and Applications	<b>Janusz Pawliszyn</b> (CSC CA), Gangfeng Ouyang, Milton Lee	Canada
89	Direct and Mediated Bioelectrocatalysis for Biosensors and Energy Conversion Applications	<b>Shelley Minteer</b> (ACS US), Lanqun Mao, Jungbae Kim	United States
90	Comprehensive Multidimensional Separations	<b>Tadeusz Gorecki</b> (CSC CA), Frank Dorman, Paul Haddad	Canada
94	Immunoanalysis: Applications and Trends for Environmental Monitoring and Human Health	<b>Shirley Gee</b> (ACS US), Ivan Kennedy, Hideo Ohkawa, Ting Xu, Tippawan Prapamontol	United States
115	Novel Analytical Probes for In Vivo Optical Functional Imaging	<b>Yasuteru Urano</b> (CSJ JP), Takeaki Ozawa, Young-Tae Chang, Matthew McCarroll	Japan
129	Micro- and Nano-fabricated Analytical Devices for Chemical, Biochemical and Biomedical Platforms	<b>Yoshinobu Baba</b> (CSJ JP), H. John Crabtree, Stephen C. Jacobson, J. Michael Ramsey, Koji Otsuka, Doo Soo Chung	Japan
138	Marine and Freshwater Toxins: Detection, Structure, and Pharmacology	<b>Takeshi Tsumuraya</b> (CSJ JP), James Hungerford, Richard J. Lewis	Japan
159	Innovation in Chemical Sensing and Separation Systems toward Advanced Chemical Analysis	<b>Takashi Hayashita</b> (CSJ JP), Purnendu Dasgupta, Bong Rae Cho, Aijun Tong, Tetsuo Okada, Wenwan Zhong, Hung-Wing Li, Huan-Tsung Chang	Japan
160	Fundamentals and Applications of Atomic Spectrometry	<b>Naoki Furuta</b> (CSJ JP), Gary M. Hieftje, Ralph Sturgeon	Japan
164	Optical Waveguide Techniques for the Analyses of Materials and Interfaces	<b>Naoki MATSUDA</b> (CSJ JP), Sergio MENDES, Kin-ichi TSUNODA, Zhimei QI, Li-xian SUN, Paul Van Tassel	Japan
213	Paper-Based Analytical Devices for Point of Need Measurements	<b>Daniel Citterio</b> (CSJ JP), Charles S. Henry, John D. Brennan	Japan
247	Symposium on Petroleomics: Molecular Level Understanding of Petroleum for	<b>Sunghwan Kim</b> (KCS KR), Yarranton Harvey, Amy McKenna	Korea

	Environmental Science and Petroleum Engineering		
274	Laser Ionization Mass Spectrometry	<b>Totaro Imasaka</b> (CSJ JP), Richard N. Zare, King-Chuen Lin	Japan
287	Ultrasensitive Assays for Proteins and Protein Modifications	<b>Chris Le</b> (CSC CA), Hanfa Zou, Norman Dovichi	Canada
303	Advanced Analytical Applications and Technical Developments of Soft X-Ray Spectroscopy	<b>Yasuji Muramatsu</b> (CSJ JP), Shinjiro Hayakawa, Clemens Heske, Anthony Van Buuren, Alexander Moewes	Japan
315	Advances in FTIR Microspectroscopy: 3D Tomography to Nanoscale Imaging	<b>Kathleen Gough</b> (CSC CA), Michael Martin, Min Chen	Canada
320	Magnetoanalytical Science: Separation, Characterization and Imaging	<b>Hitoshi Watarai</b> (CSJ JP), Ingrid Fritsch, C. Bor Fuh	Japan
353	Harmonized Strategy of New UHPLC Implementation in Pharmaceutical R & D and CRO/CMO QC Laboratories	<b>Naijun Wu</b> (ACS US), Wayne Mullett, Eugene Gong	United States
375	Vibrational Spectroscopy: New Developments and Applications in Biological and Medical Sciences	<b>Michael Blades</b> (CCS CA), Hidetoshi Sato, Bayden Wood	Canada
379	Analytical Laser-Induced Breakdown Spectroscopy (LIBS) for Hazards Analysis, Forensics, and Health	<b>Jose Almirall</b> (ACS US), Jose Almirall, Yoshihiro Deguchi, Andrzej Miziolek, Steven Rehse, Zhe Wang	United States
389	Bacterial Identification by Mass Spectrometry	<b>Kent Voorhees</b> (ACS US), Joseph Banoub, Kanae Teramoto	United States
394	Advances in Analytical Techniques for Effective Food Allergen Management	<b>N. Alice Lee</b> (RACI AU), Samuel Godefroy, Stephen Taylor, Hiroshi Akiyama, Joseph Baumert, Masahiro Shoji	Australia
413	Advances in Terahertz Spectroscopy and Imaging	<b>Anis Rahman</b> (ACS US), Choonho Kim, Wolfgang Jaeger, Sing Kiong Nguang	United States
417	(Bio-)Chemical / Electrochemical Sensors and Sensing Materials	<b>Koji Suzuki</b> (CSJ JP), Philippe Buhlmann, Daniel Citterio, Osamu Niwa, Mitchell Winnik, Kohji Mitsubayashi	Japan
450	Plasmonic Materials for Chemical Analysis	<b>Denis Boudreau</b> (CSC CA), Jean-François Masson, Amanda Haes, Jennifer Shumaker-Parry, Meikun Fan	Canada
457	Organized Surfactant Assemblies in Chemical Analysis and Separation Science: Fifty Years Later	<b>Willie Hinze</b> (ACS US), Tohru Saitoh, Guibin Jiang, Jingfu Liu	United States
<b>Area 2: Inorganic</b>			
16	Organo-Main Group Avenues toward Advanced Materials	<b>Thomas Baumgartner</b> (CSC CA), Shih-Yuan Liu, Shigehiro Yamaguchi	Canada
17	Fundamentals and Applications of Solvent Extraction in the Recovery of Strategic Metals	<b>Alexandre Chagnes</b> (ACS FR), Jae-Chun Lee, Nicholas Welham, Benjamin HAY	France
42	Experimental and Theoretical Actinide Chemistry: From Fundamental Systems to Practical Applications	<b>John Gibson</b> (ACS US), Georg Schreckenbach, Tsuyoshi Yaita, Jun Li, Ping Yang	United States
50	Metal-Organic Frameworks: Synthesis, Properties and Applications	<b>George Shimizu</b> (CSC CA), Jeff Long, Myunghyun Suh, Qiang Xu, Xiao-Ming Chen	Canada
62	From Pnictides to Perovskites: Impact of Local Structure in Solid State Chemistry	<b>Hiroshi Kageyama</b> (CSJ JP), Brendan Kennedy, John Wiley	Japan

65	Lewis Acid/Base Pair Chemistry in Molecular Transformations, Catalysis and Energy Storage	<b>Tom Autrey</b> (ACS US), Doug Stephan, zhixiang Wang	United States
73	Functional Nanomaterials Based on Coordination Chemistry	<b>Takashi Uemura</b> (CSJ JP), Mark MacLachlan, Hiroshi Matsui	Japan
76	Molecular Catalysis of Water Splitting Reactions	<b>Ken Sakai</b> (CSJ JP), Licheng Sun, Gary Brudvig, Leone Spiccia	Japan
87	Accessing the Full Potential of Redox-Active Ligands: Reactivity and Applications	<b>Tim Storr</b> (CSC CA), Craig Grapperhaus, Hiroshi Fujii	Canada
93	Recent Discoveries in the Chemistry of Bismuth and Related Elements: the Green Alternative	<b>Kenton Whitmire</b> (ACS US), Hongzhe Sun, Phil Andrews	United States
97	Coordination and Supramolecular Chemistry for Aqueous Metal Ion Separations	<b>Ross Ellis</b> (ACS US), Dave Robinson, Ryuhei Motokawa	United States
109	Frontiers of Molecular Magnetism	<b>Hiroki Oshio</b> (CSJ JP), Joel Miller, Richard Oakley, Sally Brooker, Song Gao, Masaaki Ohba	Japan
125	Frontiers of Organo-f-element Chemistry	<b>Frank T. Edelmann</b> (ACS DE), Paula Diaconescu, Yaofeng Chen, David Emslie, Peter Junk	Germany
126	Electron Transfer and Electrochemistry of Inorganic and Organometallic Materials	<b>Hiroshi Nishihara</b> (CSJ JP), Pierre D. Harvey, Wai-Yeung Wong	Japan
152	Chemistry and Application of Boron Clusters	<b>Sang Ook Kang</b> (KCS KR), Narayan Hosmane, David Schubert, Hiroyuki Nakamura, Zuowei Xie	Korea
156	Current Trends and Interconnectivities Among Fundamental and Applied Inorganic Fluorine Chemistry	<b>Kazuhiko Matsumoto</b> (CSJ JP), Rika Hagiwara, Gary Schrobilgen, Helene Mercier, Robert Syvret	Japan
161	Non-covalent Interactions in Coordination Systems	<b>Takumi Konno</b> (CSJ JP), Kuang-Lieh Lu, Andy Hor	Japan
170	Activation and Transformation of Small Molecules Mediated by Early Transition Metal Complexes	<b>Klaus Theopold</b> (ACS US), Kazushi Mashima, Zuowei Xie	United States
186	Innovative Approaches in Bond-Cleavage and Bond-Forming Reactions at Late Transition-Metal Centres	<b>Masafumi Hirano</b> (CSJ JP), Deryn Fogg, Adam Veige	Japan
195	Transition Metal Complexes of N-Heterocyclic and Mesoionic Carbenes: Structure, Materials and Catalytic Applications.	<b>Cathleen Crudden</b> (CSC CA), Sukbok Chang, Martin Albrecht, Daryl Allen, Use edit to Complete	Canada
226	Advances in Phosphorus Chemistry: Materials, Reactivity at Phosphorus, and Synthesis	<b>Rory Waterman</b> (ACS US), Fumiyuki Ozawa, Derek Gates, Pak-Hing Leung	United States
234	The Expanding Periodic Table: New Discoveries and Chemistry of the Heaviest Elements	<b>Yuichiro Nagame</b> (CSJ JP), Heino Nitsche, Zhi Qin, Peter Schwerdtfeger, Christoph Duellmann, Andreas Tuerler	Japan
239	Photofunctional Chemistry Based on Metal Complexes and/or Supramolecules	<b>Kazuyuki Ishii</b> (CSJ JP), Zhong-Ning Chen, Peter Ford, Hanan Garry	Japan
254	Nuclear Probes in Nanoscale Characterization	<b>Masashi Takahashi</b> (CSJ JP), Anita Hill, Virender Sharma, Junhu Wang, Masashi Takahashi, Masashi Takahashi, Kiyoshi Nomura, Yasuhiro Yamada	Japan
255	Advances in the Medicinal Applications of N-Heterocyclic Carbene Metal Complexes and Azolium Cations	<b>Wiley Youngs</b> (ACS US), Murray Baker, Chi-Ming Che, Ivan Lin, Matthew Panzner	United States



256	Inorganic Complexes for Solar Energy Harvesting	<b>Michael Wolf</b> (CSC CA), Ken Sakai, Fred MacDonnell	Canada
269	Metal-containing $\pi$ -Conjugated Systems: Syntheses, Properties, Applications	<b>Mark Humphrey</b> (RACI AU), Vivian Yam, Munetaka Akita	Australia
292	Metal Mediated Polymerization	<b>Paul Hayes</b> (CSC CA), Rory Waterman, Tsutomu Mizuta, Yong Tang, Preeyanuch Sangtrirutnugul	Canada
304	S-block Metal Chemistry	<b>Karin Ruhlandt-Senge</b> (ACS US), Phil Andrews, Chunming Cui	United States
305	Novel Heme Proteins and Model Systems	<b>John Dawson</b> (ACS US), Takashi Hayashi, Martin Stillman	United States
318	Metal Coordination Sphere Design for Challenging Bond Transformations	<b>Kenneth Caulton</b> (ACS US), Anthony Hill, Samuel Johnson, Makoto Yamashita	United States
339	Dioxygen Activation Chemistry of Metalloenzymes and Models	<b>Amy Rosenzweig</b> (ACS US), Shinobu Itoh, Wonwoo Nam	United States
356	New Frontiers in Bioinorganic Chemistry	<b>Motowo Yamaguchi</b> (CSJ JP), Seth Cohen, Xavier Ottenwaelder	Japan
363	Isotope Production--Providing Important Materials for Research and Applications	<b>Dennis Phillips</b> (US), Katherine Gagnon, Yuichi Hatsukawa	United States
371	The Bio-Coordination Chemistry of Nitric Oxide and Its Derivatives: Mechanisms of NO <sub>x</sub> Generation, Signaling and Reduction in Biological Systems	<b>Nicolai Lehnert</b> (ACS US), George Richter-Addo, Fabio Doctorovich, Kiyoshi Fujisawa	United States
376	Dynamic Aspects of Solid Materials: From Equilibrium to Non-equilibrium Systems	<b>Masaki Kawano</b> (KCS KR), Brendan Abrahams, Miguel Garcia-Garibay, Limin Zheng	Korea
380	Activation of Small Molecules by Electropositive Metals Related to Chemical Energy Conversion	<b>Daniel Mendiola</b> (ACS US), Hiroyuki Kawaguchi, Laurel Schafer, Karsten Meyer, Adam Veige, Michael Reynolds	United States
424	New Directions for Sensing Metals in Biology	<b>Elizabeth New</b> (RACI AU), Emily Que, Tasuku Hirayama	Australia
459	Telomeres and other G-quadruplex Structures as Targets for Metallodrugs	<b>Janice Aldrich-Wright</b> (RACI AU), Naoki Sugimoto, Jonathan Brad Chaires, Stephen Ralph	Australia
<b>Area 3: Macromolecular</b>			
12	NMR Spectroscopy of Polymers and Biobased Materials	<b>H.N. Cheng</b> (ACS US), Alan English, Hironori Kaji, Seiichi Kawahara, Andrew Whittaker, Jeffery White, Louis Madsen, Kay Saalwachter, Ye-Feng Yao, John Battiste	United States
37	Synthetic Biopolymers	<b>Timothy Deming</b> (ACS US), Zhibo Li, Tatsuo Kaneko	United States
57	New Perspectives of Synthetic and Biological Soft Matter	<b>Ferenc Horkay</b> (ACS US), Jack Douglas, Namita Choudhury, Hiroshi Jinnai	United States
64	Dynamic, Reversible, and Self-healing Materials	<b>Will Skene</b> (CSC CA), Hideyuki Otsuka, Stuart Rowan	Canada
83	Polymer Gels as Advanced Soft Materials	<b>Ryo Yoshida</b> (CSJ JP), Takashi Miyata, Françoise Winnik, Joanna Aizenberg	Japan
92	Radical Polymerization Kinetics and Process Modeling	<b>Robin Hutchinson</b> (CSC CA), Greg Russell, Per Zetterlund, Enrique Saldivar-Guerra	Canada
96	New Frontiers in Polymer Crystallization	<b>Wenbing Hu</b> (CCS CN), Akihiko Toda, Christopher Li	China
110	Simulation of Polymers	<b>Yuichi Masubuchi</b> (CSJ JP), Sachin Shanbhag,	Japan

		Visit Vao-soongnern, Chunggi Baig	
112	Controlled Macromolecular and Supramolecular Architectures for Sustainability	<b>Masami Kamigaito</b> (CSJ JP), Craig Hawker, Greg Qiao, Karen Wooley, Eiji Yashima	Japan
133	Current Polyurethane Science	<b>Ken Kojio</b> (CSJ JP), Shaw Ling Hsu, Kenneth Wynne, Zhiyong Ren, Satoshi Yamasaki, Guangzhao Zhang	Japan
158	Monomer Sequence Control: Using Nature's Strategy to Create 21st Century Polymers	<b>Tara Meyer</b> (ACS US), Makoto Ouchi, Hanadi Sleiman, Zi-Chen Li	United States
172	Characterization of Polymers and Polymer Assemblies in Solution	<b>Takahiro Sato</b> (CSJ JP), Takenao Yoshizaki, Taihyun Chang, Jimmy W. Mays, Chi Wu	Japan
194	Polymer Interfaces: Design, Structure, Physical Properties and Applications	<b>Keiji Tanaka</b> (CSJ JP), Alfred J. Crosby, Sang Ouk Kim, Kari Dalnoki-Veress	Japan
196	Macromolecular Self-Assembly for Smart Biomaterials	<b>S. Thayumanavan</b> (ACS US), Lizong Dai, Ja-Hyoung Ryu	United States
221	Functional Materials Based on Organic-inorganic Hybrid Polymers	<b>Kensuke Naka</b> (CSJ JP), Frieder Jaekle, Chang-Sik Ha, Joji Ohshita	Japan
248	Cyclic and Topological Polymers	<b>Yasuyuki Tezuka</b> (CSJ JP), Scott Grayson, Michael Monteiro	Japan
262	Advanced Membrane Separations	<b>Ranil Wickramasinghe</b> (ACS US), Kuo-Lun Tung, Huanlin Chen, Scott Husson	United States
281	Polymers from Renewable Sources and Sustainable Polymer Synthesis	<b>Michael Cunningham</b> (CSC CA), Mitsuo Sawamoto, Pascale Chamagne, James Rawlins	Canada
294	Fusion Materials: Functional Self-Organized Materials Consisting of Fused Organic and Inorganic Components	<b>Takashi Kato</b> (CSJ JP), Michael Aizenberg, Hirotsugu Kikuchi, Shu-Hong Yu, Hiroaki Imai, Chikara Otsuki, Cassandra Fraser, Sang Ouk Kim	Japan
319	Sustainable Conversion of Lignin to Value-Added Products and Green Chemicals	<b>Xiao Zhang</b> (ACS US), Qing-Xiang Guo, Wensheng Qin, Thomas Hu, Karthi Ramasamy	United States
361	Polymers for Energy and Optoelectronic Devices	<b>Kenichi Oyaizu</b> (CSJ JP), Rigoberto Advincula, Dong Hoon Choi	Japan
369	Polymer Materials Performance, Degradation and Optimization	<b>Mathew C Celina</b> (ACS US), Tim Dargaville, Hisaaki Kudo, James Lewicki	United States
396	New Perspectives of Bioplastics for Environmental Benign Materials	<b>Uyama Hiroshi</b> (CSJ JP), In-Joo Chin, Tadahisa Iwata, Jun Li, Patrick B. Smith	Japan
401	Advances in Precision Polymer Synthesis Using Reversible Deactivation Radical Polymerization	<b>Daniel Keddie</b> (RACI AU), Nicolay Tsarevsky, Graeme Moad, Shigeru Yamago	Australia
444	Aggregation Induced Emission: Materials and Applications	<b>Michiya Fujiki</b> (CSJ JP), Ben Zhong Tang, Bin Liu	Japan
<b>Area 4: Organic</b>			
7	Reactive Intermediates and Unusual Molecules	<b>Robert Sheridan</b> (ACS US), Manabu Abe, William Leigh	United States
25	Designed pi-Electronic Systems: Synthesis, Properties, Theory and Function	<b>Takashi Kubo</b> (CSJ JP), Yoshito Tobe, Michael M. Haley, Graham J. Bodwell, Ken-Tsung Wong	Japan
29	Prospects for Flow Chemistry	<b>Jun-ichi Yoshida</b> (CSJ JP), Timothy Jamison, Dong-Pyo Kim, Michael Organ	Japan
31	Anion Receptors	<b>Benjamin Hay</b> (ACS US), Fred Pfeffer, Biao Wu, Chuandong Jia, Radu Custelcean	United States
41	Chemistry of Nanocarbons: Fullerenes, Carbon Nanotubes, Nanographenes and	<b>Takeshi Akasaka</b> (CSJ JP), Fred Wudl, Luis Echegoyen, Xing Lu, Chun-ru Wang	Japan



	Related Materials		
66	Natural Product-based Drug Discovery	<b>Rongshi Li</b> (ACS US), Bill Baker, Yong Qin, Daisuke Uemura, Bruce Littlefield, Russell Kerr	United States
71	Molecular and Supramolecular Photochemistry	<b>Jayaraman Sivaguru</b> (ACS US), Wen-Sheng Chung, Cornelia Bohne, chen-Ho Tung, Masami Sakamoto, Vaidhyanathan Ramamurthy	United States
74	Innovative Strategies for the Synthesis of Nitrogen Heterocycles	<b>Rick Danheiser</b> (ACS US), Tohru Fukuyama, Mark Lautens	United States
99	Molecular Containers	<b>Shionoya Mitsuhiko</b> (CSJ JP), Lyle Isaacs, Hai-Bo Yang	Japan
100	Organoboron Chemistry: Applications in Organic Synthesis, Biology, and Materials	<b>Dennis Hall</b> (CSC CA), Binghe Wang, Peter Duggan, Michinori Suginome	Canada
104	Electrochemical Reactions and Mechanisms in Organic Chemistry	<b>Kazuhiro Chiba</b> (ACS JP), Seiji Suga, Kevin Moeller, Carlos Frontana	Japan
122	Recent Trends in Organocatalysis	<b>Masahiro Terada</b> (CSJ JP), Min Shi, Jon Antilla, Keiji Maruoka	Japan
131	Organic Reactions in Aqueous Media	<b>Shu Kobayashi</b> (CSJ JP), Bruce Lipshutz, Chun Cai	Japan
136	Practical Application of Basic Research on Molecular Recognition	<b>Koji Kano</b> (CSJ JP), Chieu Tran, Chris Easton	Japan
148	New Green Techniques for Medicinal Chemistry	<b>Wei Zhang</b> (ACS US), Ilhyong Ryu, Patrick Toy	United States
169	Applications of C-H Functionalization	<b>Petr Vachal</b> (ACS US), Zhang-Jie Shi, Chao-Jun Li, Huw Davies, Kenichiro Itami, Helene Lebel	United States
174	Strategies and Tactics for Complex Molecule Synthesis	<b>Craig Forsyth</b> (ACS US), Chi-Sing Lee, Louis Barriault, Jin Cha	United States
192	Homogeneous Gold Catalysis: Methods, Theories and Applications	<b>Liming Zhang</b> (ACS US), Hiroaki Ohno, Rai-Shung Liu	United States
237	Molecular Function of Natural Products: Advances towards Chemical Biology	<b>Minoru Ueda</b> (CSJ JP), Benjamin Miller, Kazuhiro Irie, Benjamin Miller, Benjamin Miller, Chun-Cheng Lin, Tohru Oishi, Craig Forsyth, Hee Yoon Lee	Japan
242	The Science and Strategy of Pharmaceutical Process Chemistry: Adapting to Global Regulatory Development Guidance on Process Impurities	<b>Haruhiro Okuda</b> (CSJ JP), Timothy J.N. Watson, Gyu-han CHAE	Japan
263	Molecular Self-Assembly and Functional Organic Nanostructures	<b>Jon Parquette</b> (ACS US), Myongsoo Lee, Jovica Badjic, Feihe Huang	United States
270	Cooperative Cocatalysis with Two Different Metals	<b>Suzanne Blum</b> (ACS US), Yoshiaki Nakao, Sukbok Chang	United States
280	Molecular Probes and Fluorophores for Biological Imaging	<b>Christoph Fahrni</b> (ACS US), Christopher Cairo, Christopher Yip, Yuichiro Hori	United States
286	Frontiers of Chirality in Organic Chemistry	<b>James Canary</b> (ACS US), Nina Berova, Eiji Yashima, Myung Ho Hyun, Takanori Shibata, Toru Asahi, Christopher Welch, Shu-Li You	United States
300	Supramolecular Chemistry at the Interface of Materials, Biology, and Medicine	<b>Steven Zimmerman</b> (ACS US), Zhan-ting Li, Kimoon Kim	United States
306	Chemical Glycosylation: Methods and Mechanisms	<b>Todd Lowary</b> (CSC CA), Xuefei Huang, Shang-Cheng Hung, Katsunori Tanaka	Canada
310	Fluorinations and Fluoroalkylations	<b>Surya Prakash</b> (ACS US), Tobias Ritter, Koichi	United

		Mikami, Santos Fustero, Jinbo Hu	States
313	Nanomaterials as Catalysts for Green Chemistry	<b>Audrey Moores</b> (CSC CA), Yasuhiro Uozumi, Chao-Jun, Rajender S. Varma	Canada
322	Mechanochemistry and Solvent-free Synthesis	<b>Tomislav Friscic</b> (CSC CA), Eusebio Juaristi, Colin Raston	Canada
362	Carbenes and Carbenoids in Organic Synthesis	<b>Karl Scheidt</b> (ACS US), Masahiro Murakami, Robin Younggwei Chi	United States
398	Organic Solid-State Chemistry: Structure, Property & Reactivity	<b>Masami Sakamoto</b> (CSJ JP), Leonard R MacGillivray, Jagadese J Vittal	Japan
415	Cognizance of Endangered Elements for Organic Synthesis	<b>Hayato Tsuji</b> (CSJ JP), Shou-Fei Zhu, Gen-ichi Konishi, Christine Luscombe, Louis-Charles Campeau	Japan
426	New Horizon of Process Chemistry by Scalable Reactions and Technologies	<b>Kiyoshi Tomioka</b> (CSJ JP), Robert M. Williams, Reuben Jih-Ru Hwu, Hironao Sajiki, Takayuki Shioiri, Nobuyoshi Yasuda	Japan
436	New Organosulfur Chemistry	<b>Eric Block</b> (ACS US), Eusebio Juaristi, Adrian Schwan, Xuefeng Jiang, Chin-Fa Lee	United States
440	Photoredox Catalysis in Organic Synthesis	<b>David Nicewicz</b> (ACS US), Shunichi Fukuzumi, Wen-Jing Xiao	United States
451	Asymmetric Supramolecular Catalysis	<b>James Takacs</b> (ACS US), Shin Moteki, James Green	United States
455	Catalytic Multicomponent, Tandem and Cascade Reactions	<b>Bruce Arndtsen</b> (CSC CA), John Montgomery, Kyoko Nozaki	Canada
461	Synthetic Modulators of Protein-Protein Interactions	<b>Paramjit Arora</b> (ACS US), David Fairlie, Alan Kennan, Krishna Kumar, Sachdev Sidhu, ,	United States
<b>Area 5: Physical, Theoretical &amp; Computational</b>			
9	Synergistic Relationships between Computational Chemistry and Experiment	<b>Stacey Wetmore</b> (CSC CA), Henry F Schaefer III, Leo Radom, Peter Schwerdtfeger, Richard Wong Ming Wah, Hiromi Nakai, Kwang S. Kim	Canada
30	Coarse Grained Modeling and its Integration with Experiments	<b>Roland Faller</b> (ACS US), David Huang, Mikko Karttunen	United States
35	Ultrafast Intense Laser Chemistry	<b>Kaoru Yamanouchi</b> (CSJ JP), Robert Levis, Francois Legare, Qihuang Gong	Japan
44	Modeling and Analyzing Exciton and Charge Dynamics in Molecules and Clusters	<b>Sergei Tretiak</b> (ACS US), Guanhua Chen, Yoshitaka Tanimura	United States
56	Chemistry of Atmospheric Aerosols	<b>Alexander Laskin</b> (ACS US), Sergey Nizkorodov, Allan Bertram, Xin Yang, Chul-Un Ro, Evan Bieske	United States
60	Multiscale Couplings of Molecular Theory of Solvation: Fundamentals and Applications	<b>Andriy Kovalenko</b> (ACS CA), B. Montgomery Pettitt, Fumio Hirata	Canada
80	Advances in Quantum Monte Carlo	<b>Shigenori Tanaka</b> (CSJ JP), Lubos Mitas, Pierre-Nicholas Roy	Japan
84	New Insights from Quantum Dynamics and ab initio Potentials in High Dimensional Systems	<b>Tucker Carrington</b> (CSC CA), Joel Bowman, Donghui Zhang	Canada
98	Conformational Dynamics of Biomolecules and the Biomolecule-Solvent Interface	<b>Masataka Nagaoka</b> (CSJ JP), David Leitner, John Straub, Yiqin Gao	Japan
121	Deciphering Molecular Complexity from Single Molecules to Cellular Networks	<b>Tamiki Komatsuzaki</b> (CSJ JP), Jin Wang, Jianlan Wu	Japan
123	Recent Advances in Dynamics of Confined	<b>Alenka Luzar</b> (ACS US), Gren Patey, Masahiro	United

	Liquids	Kinoshita	States
130	Computational Modeling of d- and f-Block Chemistry: Challenges and Opportunities	<b>Angela Wilson</b> (ACS US), Peter Schwerdtfeger, Kwang S. Kim, Zhenyang Lin, Tom Cundari	United States
134	Chemical Imaging: Frontiers of Spatio-Temporal Resolution	<b>Piotr Piotrowiak</b> (ACS US), Masaaki Fujii, Jau Tang, Bing Zhang	United States
142	Recent Progress in Molecular Theory for Excited-state Electronic Structure and Dynamics	<b>Jun-ya Hasegawa</b> (CSJ JP), Michael Collins, Mark Gordon, Piotr Piecuch, Tetsuya Taketsugu	Japan
165	Self-organization in Chemistry	<b>Satoshi Nakata</b> (CSJ JP), John Pojman, Oliver Steinbock, Qingyu Gao, Jichang Wang, Tomohiko Yamaguchi, Ryo Yoshida, Seiichiro Nakabayashi	Japan
168	Frontiers of Metal Clusters and Nanostructures: From Fundamental Properties to Functionalities	<b>Akira Terasaki</b> (CSJ JP), Scott Anderson, Nicola Gaston	Japan
176	Challenges in Plasmonic Photochemistry	<b>Hiroaki Misawa</b> (CSJ JP), P. V. Kamat, Hong-Bo Sun, Shangjr Gwo	Japan
183	Theory of Main Group Chemistry Beyond First Row	<b>Thom Dunning</b> (ACS US), Mark Gordon, Peter Schwerdtfeger, Cheol Ho Choi	United States
184	Challenges and Opportunities for Exascale Computational Chemistry	<b>Julia Rice</b> (ACS US), William Swope, Alistair Rendell, Yuko Okamoto	United States
187	Latest Development of Advanced Vibrational Spectroscopy	<b>Koichi Iwata</b> (CSJ JP), Sanford A. Asher, David Lee Phillips, Yukio Furukawa	Japan
199	Recent Progress in Matrix Isolated Species	<b>Takamasa Momose</b> (CSC CA), Yuan-Pern Lee, David Anderson	Canada
202	Metal Ions and Protein Functions: Theoretical Models and Applications	<b>Qiang Cui</b> (ACS US), Markus Meuwly, Toby Allen, Yiqin Gao	United States
203	Quantum Fluid Clusters	<b>Takamasa Momose</b> (CSC CA), Andrey Vilesov, Myong Yong Choi	Canada
208	Single-molecule Fluorescence Imaging	<b>Peng Chen</b> (ACS US), Tetsuro Majima, Gonzalo Cosa	United States
218	Molecular Perspectives on Interfacial Electrochemistry and Electrocatalysis	<b>Michael Eikerling</b> (CSC CA), Gregory Jerkiewicz, Shigenori Mitsushima, Andrew Gewirth	Canada
228	Fundamental Science of Photon and Electron Induced Surface Processes	<b>Hrvoje Petek</b> (ACS US), Jin Zhao, Yoshiyasu Matsumoto	United States
277	Interplay between Theory and Experiment in Catalytic Research	<b>Masahiro Ehara</b> (CSJ JP), Christopher Cramer, Sheng Dai, Christopher W. Jones, Tom Ziegler, Tatsuya Tsukuda	Japan
297	Quantum Coherence in Energy Transfer	<b>Jianshu Cao</b> (ACS US), Paul Brumer, Jianlan Wu	United States
307	Dynamical Intermolecular Interactions for Biological Functions	<b>Dongping Zhong</b> (ACS US), Masahide Terazima, Qing-Bin Lu	United States
340	Science with Beams of Radioactive Isotopes	<b>Sherry Yennello</b> (ACS US), Krzysztof Starosta, Yuliang Zhao, Hiromitso Haba	United States
344	Photocatalysis and Charge Transfer at Interfaces and Nanomaterials	<b>Dmitri Kilin</b> (ACS US), Svetlana Kilina, Irene Burghardt, Gregory Scholes, Ulrike Diebold, Annabella Selloni, Xueqing Gong, Qiang Sun, Ryoji Asahi, Kazunari Donmen	United States
352	Dissociation of Biomolecules in the Gas Phase for Structural Characterization	<b>Seung Koo Shin</b> (KCS KR), Ryan Julian, Kenji Honma, K. W. Michael Siu, Stephen Blanksby	Korea

370	Applications of Coherent Multidimensional Spectroscopy to Chemistry, Biology, and Materials	<b>Wei Zhao</b> (ACS US), Wei Zhuang, Minhaeng Cho, Greg Sholes	United States
372	Practical Strategies for Modeling Non-Covalent Interactions	<b>Gregory Beran</b> (ACS US), Yousung Jung, Hiromi Nakai, J.R. Schmidt	United States
384	Advances in Quantum Dynamics from Spectroscopy to Reactions	<b>Hua Guo</b> (ACS US), Daiqian Xie, Alex Brown	United States
403	Interfacial Phenomena for Bubbles, Droplets, Films and Soft Matter	<b>Alidad Amirfazli</b> (ACS CA), Yi Zuo, Junbai Li	Canada
414	Frontier Chemical Applications Using Accelerator Based Photon Sources	<b>Kiyotaka Asakura</b> (CSJ JP), TK Sham, Lin X. Chen	Japan
419	Reactive Intermediates in Combustion and Atmospheric Chemistry	<b>David Osborn</b> (ACS US), Scott Kable, Kopin Liu, Joeseeph Lane, Yoshizumi Kajii, Xiaoqing You	United States
420	Frontiers of Photon Upconversion Based on Triplet-triplet Annihilation	<b>Peng Zhang</b> (ACS US), Yoichi Murakami, Jianzhang Zhao	United States
423	Computational Modeling of Magnetic Materials and Magnetic Properties	<b>Juan Peralta</b> (ACS US), Alessandro Soncini, Takahito Nakajima	United States
428	Frontiers of Plasmon Enhanced Spectroscopy	<b>Yukihiro Ozaki</b> (CSJ JP), Zhong-Qun Tian, Bin Ren, Naomi Halas, Alexandre Brolo, Tamitake Itoh, Martin Moskovits	Japan
437	Recent Experimental and Theoretical Advances in Studies of Liquid Interfaces	<b>Tahei Tahara</b> (CSJ JP), Akihiro Morita, Robert Walker, Liem Dang, Heon Kang, Shoichi Yamaguchi, Julianne Gibbs-Davis	Japan
438	Developments in Spectroscopic Investigation of Intermolecular Interactions and Dynamics of Molecular Clusters	<b>Hiroshi Sekiya</b> (CSJ JP), Timothy Zwier, Masaaki Fujii, Evan Bieske, Nam Kim	Japan
441	Interplay between Chemistry and Dynamics in Biomolecular Machines	<b>Shigehiko Hayashi</b> (JP), Akio Kitao, Young Min Rhee, Emad Tajkhorshid	Japan
456	Structure and Spectroscopy of Linear Polyenes: Finite and Infinite	<b>Bruce Hudson</b> (ACS US), Noel Hush, Takayoshi Kobayashi, Yuxiang Weng, Josef Paldus, Ronald Christensen	United States
<b>Area 6: Agrochemistry, Environmental, and Geochemistry</b>			
13	Ferrites and Ferrates: Chemistry and Applications in Sustainable Energy and Environmental Remediation	<b>Virender Sharma</b> (ACS US), Ruey-An Doong, Hyunook Kim	United States
19	Chemicals of Emerging Environmental Concern: A Global Perspective	<b>George Cobb</b> (ACS US), John Giesy, Margaret Murphy	United States
20	Pectin Chemistry and Technology	<b>Brett J. Savary</b> (ACS US), M.A.K., Shengmin Lu, Sang-Ho Yoo, Randall G. Cameron	United States
26	Human Exposure to Environmental Contaminants	<b>Jonathan Martin</b> (CSC CA), Kurunthachalam Kannan, Lingyan Zhu, Hyobang Moon	Canada
36	Recycling of Polymeric Materials: Challenges and Perspectives	<b>Toshiaki Yoshioka</b> (CSJ JP), Kim Joo-Sik, Veena Sahajwalla, Bhaskar Thallada	Japan
58	Analysis of Flavors in Specialty Asian Foods	<b>Feng Chen</b> (ACS US), Fuping Zheng, James Kwang-Geun Lee	United States
70	Advanced Products from Lignin and Micro- or Nano-fibrillated Cellulose	<b>Thomas Hu</b> (ACS CA), Art Ragauskas, Hyoe Hatakeyama	Canada
72	Application of Mass Spectrometry to Agrochemical Challenges	<b>Michael Thurman</b> (ACS US), Yongning Wu, Philip Marriott	United States
86	Nanointerfaces and their Role in	<b>Dionysios Dionysiou</b> (ACS US), Jorge	United

	Environmental Systems and Processes	Gardea-Torresdey, Woojin Lee, X. S., Bingcai Pan, Marta I. Litter	States
103	Sustainable Chemistry: Beyond the Bench	<b>Martin Abraham</b> (ACS US), Michael Gonzalez, Philip Jessop, Milton Hearn	United States
105	Chemical Ecology Applied to Sustainable Agriculture	<b>Coralia Osorio</b> (ACS CO), Jose Mauricio Simões Bento, Tetsuo Ando, Xin Chen	Colombia
107	Chemistry and Biology of Auxin, Strigolactone and their Interactions	<b>Tadao Asami</b> (ACS JP), Yunde Zhao, Christine Beveridge	Japan
204	UV Photochemistry for Water: Implications for Safe Water Disinfection and Oxidation Treatment Applications	<b>Gordon Knight</b> (CSC CA), Wenjun Liu, Kati Bell, Madjid Mohseni, Karl Linden, Gwy-AM Shin, Kumiko Oguma	Canada
219	Enzymes Essential to Biosphere Health: Bioremediation and Biogeochemical Cycling	<b>Lindsay Eltis</b> (ACS CA), Masao Fukuda, Larry Wackett	Canada
220	Fate and Risks of Nanoparticles in Aquatic and Terrestrial Environments	<b>Jason Kirby</b> (RACI AU), James Ranville, Yibing Ma	Australia
225	Complex Mineral Growth and Dissolution Reactions: Collaborative Experimental and Computational Perspectives	<b>Andrew Stack</b> (ACS US), Julian Gale, Paolo Raiteri, Lijun Wang	United States
264	Proteomics and Metabolomics in Agricultural, Environmental, and Public Health Sciences	<b>John Johnston</b> (ACS US), Qing X. Li, Jeanette M. Van Emon, Jie Chen, Sung-Eun Lee, Chunyi Zhang	United States
267	Genomics and Metabolomics for Phytochemical Research	<b>Kazuki Saito</b> (CSJ JP), Eran Pichersky, Vincenzo De Luca	Japan
282	Opportunities and Advancements in Rice Research and Aquaculture Research	<b>John Johnston</b> (ACS US), Tomohito Arao, Jason Sandahl, Maria Estela, Sarah Beebout	United States
288	Analytical Development Relevant to Environmental Exposure and Effects	<b>Chris Le</b> (CSC CA), Xing-Fang Li, Guibin Jiang, Susan Richardson	Canada
329	Advances in Functional Foods and Flavor Chemistry Research	<b>Michael Qian</b> (ACS US), Zhen-Yu Chen, Markus Herderich, Chin-Kun Wang, Hirotohi Tamura, Kerry Wilkinson, Alyson Mitchell, Qing X. Li	United States
336	Environment and Gene Interaction	<b>George Cobb</b> (ACS US), Cole Matson, Marcus Hecker, Chris Wong	United States
358	Phytochemicals for Crop Protection: Discovery to Molecular Target	<b>Kazuhiko Matsuda</b> (ACS JP), Stephen Duke, Leslie Weston	Japan
374	Fukushima and Radiological Contaminated Environments World-wide: The Important Role of Environmental Chemistry and Radiochemistry in Remediation and Restoration	<b>Takayuki Sasaki</b> (CSJ JP), Heino Nitsche, Chunli Liu, Zenko Yoshida, Stepan Kalmykov, Linfeng Rao	Japan
390	Radioactive Contaminants and Waste Management in the Environment	<b>Wooyong Um</b> (KCS US), Min-Hoon Baik, Ohnuki Toshihiko, Arokiasamy Francis, Daniel Kaplan	United States
391	Sources, Fates and Risks from Consumer Product Ingredients in the Environment	<b>Paul DeLeo</b> (ACS US), Keith Solomon, Stephen Mudge, Claudio Bravo Linares	United States
400	Food Processing: Chemistry, Quality, Safety, Sustainability, and Value-added By-products	<b>Michael Tunick</b> (ACS US), LinShu Liu, Xiaojun Liao, Hiroshi Nabetani, Suk Hoo Yoon, Xiaofeng Dai	United States
402	Status and Trends of Persistent Organic Chemicals in the Environment	<b>Loganathan Bommanna</b> (ACS US), Shigeki Masunaga, Prasda Rao Kodavanti, Jong Seong Khim	United States
454	Chemistry of Integrated Water Treatment Systems for Halogenated Organics and	<b>Woojin Lee</b> (KCS KR), Hyungjun Kim, Henrik Anderson, Mamadou Diallo, David Waite	Korea



	Long-lived Radionuclides		
<b>Area 7: Biological</b>			
6	Advances in Peptide and Protein Chemistry	<b>William Lubell</b> (CSC CA), Jeffery W. Kelly, A. Ian Smith, Hiroaki Suga, Vikas Nanda, Jen-Tse Huang, Kazuaki Kudo, Richard Cheng, Ping-Chiang Lyu	Canada
10	Functional Nucleic Acids: Chemistry, Biology, and Materials Applications	<b>Scott Silverman</b> (ACS US), Zhen Huang, Yingfu Li, Yi Lu, Hiroaki Suga	United States
18	New Platforms for Natural Products Discovery	<b>Guy Carter</b> (ACS US), Raymond Andersen, Brent Copp, Shigeki Matsunaga	United States
27	Biosynthesis of Natural Products	<b>Ikuro Abe</b> (CSJ JP), Bradley Moore, Dae-Kyun Ro	Japan
47	Homeostasis of Transition Metal Ions in Biological Systems	<b>Shigetoshi Aono</b> (CSJ JP), David Giedroc, Jung-Hye Roe	Japan
59	Characterization and Applications of Food Enzymes	<b>Feng Chen</b> (ACS US), Feng Chen, Hui Ni, Young-chul Lee	United States
91	Heat Shock Proteins: The Next Target in the Disease Frontier	<b>Peter Wipf</b> (ACS US), Shelli McAlpine, Po-Shen Pan	United States
117	Low-Energy Photoexcited States in Photosynthesis	<b>Jeffrey Reimers</b> (RACI AU), Elmars Krausz, Arvi Freiberg, Doug Bruce, Alfred Holzwarth, Hideki Hashimoto, David Coker	Australia
120	Advances in Biological Solid-State NMR	<b>Akira Naito</b> (CSJ JP), Michele Auger, Ayyalusamy Ramamoorthy, Frances Separovic, Toshimichi Fujiwara, Yongae Kim, Ayyalusamy Ramamoorthy	Japan
137	Life at Small Copy Numbers	<b>Shige Yoshimura</b> (ACS JP), Jie Xiao, Peilin Chen	Japan
151	Frontiers in Chromatin Biology and Chemical Epigenetics/Epigenomics	<b>Y. George Zheng</b> (ACS US), Minoru Yoshida, Hening Lin, Hualiang Jiang, Arrowsmith Cheryl, YOICHI NAKAO, Phil Cole, Young-Tae Chang	United States
180	Fluorescent and Luminescent Proteins: New Chemistries and New Functions	<b>Michael Lin</b> (ACS US), Robert Campbell, Takeharu Nagai	United States
181	Biomolecular Structure and Dynamics: Recent Advances in NMR	<b>Ming-Daw Tsai</b> (ACS TW), Angela Gronenborn, Mitsuhiko Ikura, Weontae Lee, Gottfried Otting, Ichio Shimada	Taiwan
201	Strategies for Coupling and Decoupling Diverse Molecular Units in the Glycosciences	<b>Zbigniew J. Witczak</b> (ACS US), Margaret A. Brimble, Yoshiko Miura, Roman Bielski	United States
222	Enzyme Engineering and Biocatalysis Applications	<b>Joelle Pelletier</b> (CSC CA), Stefan Lutz, Byung-Gee Kim, Romas Kazlauskas, Nobuya Itoh	Canada
224	Bioorganic Reaction Mechanisms	<b>Richard John</b> (ACS US), Martin Tanner, Chris Easton	United States
249	Physiology and Metabolism of Extremophiles	<b>Haruyuki Atomi</b> (CSJ JP), John Reeve, Masahiro Ito, Sung Gyun Kang	Japan
257	Bio/chemical Approaches for Single Cell Biosensing Technologies	<b>Eiichi Tamiya</b> (CSJ JP), Kagan Kerman, Daniel T. Chiu, Guohua Zhou	Japan
268	Frontiers of Iron Chemistry in Biology	<b>Koichiro Ishimori</b> (CSJ JP), Stephan Sliger, Grant Mauk	Japan
273	Function, Chemistry, and Signaling of Glycolipids and Phospholipids	<b>Christopher Cairo</b> (CSC CA), Micheal D. Best, Wei-Chieh Cheng	Canada
326	Chemical Approaches to Astrobiology	<b>Hajime Mita</b> (CSJ JP), Henderson Clerves, Alicia Negron-Mendoza, Hikaru Yabuta	Japan



342	Carbohydrate Recognition in Health and Disease	<b>Geert-Jan Boons</b> (ACS US), Yoshihiro Ito, Alexei Demchenko, David Voadlo	United States
343	Bioorthogonal Chemistry: Tools and Applications in Chemical Biology	<b>John Pezacki</b> (ACS CA), Qing Lin, M.G. Finn, Itaru Hamachi, Peng Chen	Canada
395	Chemistry and Applications of Retinal Proteins: From Microbes to Humans	<b>Leonid Brown</b> (ACS CA), Hideki Kandori, Massimo Olivucci	Canada
410	Luciferin/Luciferase Engineering	<b>Michael Pirrung</b> (ACS US), Minyong Li, Miyabi Hiyama	United States
418	Small Molecule Interactions in Biomembranes	<b>Michio Murata</b> (CSJ JP), Martin Burke, Jaehoon Yu	Japan
421	Chemical Biology of Protein-Lipid Modification	<b>Mark Distefano</b> (ACS US), Junko Ohkanda, Yongxiang Chen	United States
449	The RNA World: From Prebiotic Chemistry to the Emergence of Complexity	<b>Nicholas Hud</b> (ACS US), Peter Unrau, Yoshihiro Furukawa	United States
<b>Area 8: Materials &amp; Nanoscience</b>			
23	Organic, Inorganic and Hybrid Nanoparticles: Synthesis, Characterization, and Applications	<b>Lyudmila Bronstein</b> (ACS US), Françoise Winnik, Kazunari Akiyoshi	United States
34	Nanocrystal Synthesis, Characterization, Assembly and Applications	<b>Richard Tilley</b> (NZIC NZ), Sara Skrabalak, Taeghwan Hyeon, Thomas Nann, Tadfumi Adshiri	New Zealand
39	Chemistry and Applications of Graphene	<b>Yongsheng Chen</b> (CCS CN), Robert Haddon, Kian Ping Loh	China
43	Conjugated Polymers for Biological Applications	<b>Hsiao-hua (Bruce) Yu</b> (CSJ JP), Shu Wang, John D. Tovar	Japan
51	Nanowires: Synthesis, Fundamental Properties and Novel Device Applications	<b>Tekashi Yanagida</b> (CSJ JP), Shinjiro Hara, Song Jin, Peidong Yang, Ritesh Agarwal, Lincoln Lauhon, Hu Zheng	Japan
79	Metal-oxo Clusters: Molecular Design from Monomers to Infinity	<b>May Nyman</b> (ACS US), Yang-Guang Li, Tomoji Ozeki, Chris Ritchie	United States
95	Two-dimensional Nanosheets and Nanosheet-Based Materials: Synthesis, Characterization, Functionalization and Applications	<b>Jun Kawamata</b> (CSJ JP), Jin-Ho Choy, Christian Detellier, Hua Zhang, Jiaying Huang, Lijun Wang	Japan
101	Luminescent Nanomaterials: Properties, Mechanisms, and Applications	<b>Fiorenzo Vetrone</b> (CSC CA), Soga Kohei, Dongling Ma, Wei Huang, Ling Huang, Xiaogang Peng	Canada
102	Molecular Adsorption on Metallic Interfaces: Beyond the Cartoons	<b>Dan Bizzotto</b> (CSC CA), Ian Burgess, Hogan Yu, Takamasa Sagara, Haesik Yang	Canada
111	Design, Synthesis and Applications of Advanced Porous Materials	<b>Christian Doonan</b> (RACI AU), Mircea Dinca, Shane Telfer, Shuhei Furukawa, Qiaowei Li	Australia
124	Development of Nano Devices and Nanotechnologies for Environmental Monitoring and Remediation	<b>Souhail Al-Abed</b> (ACS US), Dionysios Dionysiou, Hyeok Choi, Achintya Bezbaruah, Jorge Gardea-Torresdey, Wonyong Choi, Marta I. Litter, Teik-Thye Lim, Bingcai Pan	United States
127	Frontier and Perspectives in Molecular Spintronics	<b>Masahiro Yamashita</b> (CSJ JP), Bin Zhang, Hiroyuki Tajima, Bin Hu, Paul Lahti, Jun Gao	Japan
128	Functional Molecular Materials and Devices	<b>Reizo Kato</b> (CSJ JP), Hatsumi Mori, John Schlueter, Ben Powell, Shih-Chun Lo, Hiroshi Fujii, Takehiko Mori, Jun Takeya	Japan
150	Applications of Ultrasound to Nanoscience	<b>Kenneth Suslick</b> (ACS US), Franz Grieser,	United

		Mahito Atobe, Jimmy Chai-mei Yu, Soo-Hwan Jeong	States
153	Mechanically Responsive Materials	<b>Panche Naumov</b> (CSJ AE), Timothy J White, Bart Kahr, Yanlei Yu	United Arab Emirates
157	Specific Effect(s) in Chemical Reactions by Innovative Technologies	<b>Satoshi Horikoshi</b> (CSJ JP), Nick Serpone, Ram Gupta, Yamato Hayashi, Muthupandian Ashokkumar, Masaru Watanabe	Japan
162	Electrochemistry on Boron-doped Diamond (BDD) Electrodes	<b>Yasuaki Einaga</b> (CSJ JP), Soo-Gil Park, Orawon Chailapakul, Jinfang Zhi, Takeshi Kondo	Japan
177	Natural to Nanosphere Lithographies: Two Decades of Self-assembled Advanced Materials	<b>Anthony Morfa</b> (RACI DE), Michael Giersig, Krzysztof Kempa, Richard van Duyne, Linjie Zhi	Germany
197	Current and Future Applications of Nanotechnology in the Oil Industry	<b>Wei Wang</b> (ACS US), Lixin Cao, Kangtaek Lee, John-Richard Ordóñez-Varela, Mazen Kanj	United States
210	Janus Materials: Design, Fabrication and Properties	<b>Zhenzhong Yang</b> (CCS CN), Steve Granick, Eugenia Kumacheva	China
223	Frontiers of Organic Porous Materials: Structures, Properties and Applications	<b>Donglin Jiang</b> (CSJ JP), Wei Wang, Wei Zhang	Japan
227	Carbon Nanotubes: Preparation, Characterization and Applications	<b>Shigeo Maruyama</b> (CSJ JP), R. Bruce Weisman, Jie Liu, Young Hee Lee, Jin Zhang	Japan
245	Advances in Bioinspired and Biomedical Materials	<b>Kevin Healy</b> (ACS US), Yoshihiro Ito, Phillip Messersmith, Xuesi Chen, Inn-Kyu Kang	United States
259	Self-organization of Membrane Systems	<b>Darryl Sasaki</b> (ACS US), Kenichi Morigaki, Ingo Koeper	United States
289	Nanomaterials for Nanomedicine	<b>Atsushi Maruyama</b> (CSJ JP), Doo Sung Lee, Ravin Narain	Japan
291	Challenge for Rare Element-free Functional Materials	<b>Hideo Hosono</b> (CSJ JP), David Ginley, Younghee Lee	Japan
308	Advanced Materials for Photonics and Electronics: Fundamentals and Applications	<b>Roberto Morandotti</b> (CSC CA), David Moss, Fiorenzo Omenetto, Naoto Tsutsumi, Karim Alamgir, Kookheon Char, Antonio Facchetti	Canada
309	Nitroxide Radicals: Synthesis and Functional Bio-/Nanomaterials	<b>Alex Smirnov</b> (ACS US), Steven Bottle, Rui Tamura	United States
314	Data Mining and Machine Learning Meets Experiment and First-Principles Simulation for Materials Discovery	<b>Joshua Schrier</b> (ACS US), Carlos Amador-Bedolla, Shuichi Iwata, Tom Woo	United States
317	Membranes and Nanotechnologies for Energy and Environment Applications	<b>Ho Bum Park</b> (ACS KR), Benny Freeman, Bryan McCloskey, James McGrath, Anita Hill, Akon Higuchi, Young Moo Lee	Korea
341	Ceramic Materials and Processing for Advanced Applications	<b>Federico Rosei</b> (CSC CA), Alberto Vomiero, Yasuhiro Tachibana, Colin Raston, Hua Zhang	Canada
346	Supramolecular Assemblies at Surfaces: Nanopatterning, Functionality, Reactivity	<b>Dmitrii Peregichka</b> (ACS CA), Federico Rosei, Andrew Thye Shen Wee, Wang Chen, Paul Weiss	Canada
347	The Physical Structure, Function of Biological and Bioinspired Soft Matter	<b>Mohan Srinivasarao</b> (ACS US), Alejandro rey, Hee Tae Jung	United States
348	Fundamentals and Applications of Nanomaterials for Energy Technologies	<b>Song Jin</b> (ACS US), Guihua Yu, Tsutomu Minegishi, Stephen Maldonado, Jr-Hau	United States
357	Multi-scale & Synergistic Supramolecular Systems in Material and Biomedical Sciences	<b>Shin Aoki</b> (CSJ JP), Hsin-Cheng Chiu, Kohei Soga, Nathan Gianneschi, Xing Bengang	Japan

388	Materials for the Mitigation of Chemical Hazards	<b>Jared DeCoste</b> (ACS US), Gregory Peterson, Jennifer Becker, Mark Biggs, Lisa Croll, Krista Walton	United States
399	Design of Innovative Photochromic Applications	<b>Jiro Abe</b> (CSJ JP), Tsuyoshi Kawai, Yasushi Yokoyama, Neil Branda, Francisco Raymo, Weihong Zhu	Japan
404	Safety and Sustainability of Nanotechnology	<b>Yi Zuo</b> (US), James Ferri, Chunying Chen, Joachim Loo, Steven Mylon	United States
408	Single-Molecule Function and Measurements	<b>Takuji Ogawa</b> (CSJ JP), Hirokazu Tada, Soo Young Park, Paul Weiss	Japan
409	Advances in Organic Light-Emitting Diodes	<b>Jean-Luc Bredas</b> (ACS SA), Chihaya Adachi, Ken-Tsung Wong, Vivian Yam, Paul Burn, Jang-Joo Kim	Saudi Arabia
430	The Frontiers of Geometrically Frustrated Magnetic Materials	<b>Chris Wiebe</b> (ACS CA), Chris Ling, Jason Gardner, Haidong Zhou	Canada
432	Synthesis, Structure and Functionalities of Ferroelectrics and Multiferroics	<b>Zuo-guang Ye</b> (CSC CA), Craig Brown, Takanori Kiguchi	Canada
433	Self-assembled Biofunctional Nanomaterials	<b>Ramanathan Nagarajan</b> (ACS US), Kazuo Sakurai, Hsin-Lung Chen	United States
442	Application of Luminescent Materials for Radiation Detection	<b>Keisuke Asai</b> (CSJ JP), Jian Zhang, Takayuki Yanagida, Safa Kasap	Japan
447	Self-organization: Novel Mesogens and Applications	<b>Holger Eichhorn</b> (CSC CA), E-Joon Choi, Torsten Hegmann, Yo Shimizu, Ke-Qing Zhao	Canada
<b>Area 9: Chemistry of Clean Energy Conversion, Storage, and Production</b>			
21	Chemistry of Automotive Emission Control Catalysis: Current R&D and Future Challenges	<b>Charles Peden</b> (ACS US), Do Heui Kim, Meiqing Shen, William Epling	United States
54	Integrated Biomass Refinery by Precisely Designed Heterogeneous Catalysts	<b>Atsushi Fukuoka</b> (CSJ JP), Alexander Katz, Haichao Liu	Japan
81	Nano Catalysis for Clean Energy and Environmentally Friendly Chemical Production	<b>Ajay Dalai</b> (CSC CA), Nicolas Abatzoglou, Burtron Davis, Azhar Uddin, Jansuz Kozinski, G.D. Yadav, Ahmad Tavasoli	Canada
144	Progress Toward a Lignocellulosic Biorefinery	<b>Arthur Stipanovic</b> (ACS US), Anjani Varma, Yong Joo Sung	United States
163	Theory and Computation for Efficient Utilization of Energy and Resources	<b>Qingfeng Ge</b> (ACS US), Wei-xue Li, Hansong Cheng	United States
171	Nanostructured Oxides for Energy Harvesting and Water Splitting	<b>Federico Rosei</b> (CSC CA), Zhong-Lin Wang, Eric Diau, Alberto Vomiero, Xiaowei Sun	Canada
178	Dynamical Processes of Light Harvesting Surfaces	<b>Geoff Thornton</b> (ACS UK), Michael Henderson, Hiroshi Onishi, Can Li, Greg Herman	United Kingdom
182	Water-phase Catalysis for Energy and Chemicals Production	<b>Michael Wong</b> (ACS US), Conrad Zhang, Soon Yong Jeong	United States
188	Current Status and Future Prospect of Polymer Electrolyte Fuel Cells	<b>Kenji Miyatake</b> (CSJ JP), Mizuki Tada, Yung-Eun Sung, Bryan Pivovar, Michael Hickner	Japan
193	Artificial Photosynthesis: Photo-induced Water Splitting	<b>Ryu Abe</b> (CSJ JP), Kazunari Domen, Akihiko Kudo, Thomas J. Meyer, Jae Sung Lee	Japan
216	Energy Storage in Chemical Bonds: Advances in Chemistry and Materials for Hydrogen Storage	<b>Zhenguo Huang</b> (ACS AU), Ping Chen, Tom Autrey, Qiang Xu, Chang Won Yoon, Craig Jensen	Australia
250	New Generation of Electrochemical Energy Storage and Conversion System: Materials,	<b>Yong Yang</b> (CCS CN), Shirley Meng, Atsuo Yamada, Yang-Kook Sun	China

	Interface and In-situ Techniques		
266	Nanoporous Materials for Renewable Energy and Sustainability	<b>Tatsuya Okubo</b> (CSJ JP), Shilun Qiu, Kyung-Byung Yoon, Raul F. Lobo	Japan
271	Artificial Photosynthesis: Reduction of Carbon Dioxide	<b>Osamu Ishitani</b> (CSJ JP), Etsuko Fujita, Sang Ook Kang	Japan
278	Artificial Photosynthesis: Bio-inspired Chemistry for Solar Fuel Production	<b>Hideki Hashimoto</b> (CSJ JP), Yutaka Amao, Jiang-Ping Zhang, Tomas A. Moore, Bryan D. Koivisto	Japan
301	Homogeneous Catalysis Methodologies for the Upgrading of Biomass Derived Molecules	<b>John Gordon</b> (ACS US), R. Tom Baker, Takao Ikariya	United States
360	Advances in Microwave Green Chemistry	<b>Takeko Matsumura</b> (CSJ JP), Shozo Yanagida, Rajender S. Varma, Kim Yong Jin, Shokichi Ohuchi	Japan
378	Challenges in Second Generation Biofuels: Processing, Stability, and Usage	<b>Jinxia Fu</b> (ACS US), Jinwen Chen, Scott Turn, Zhiping Tao	United States
405	Bridging Homogeneous and Heterogeneous Catalysis in Biorefining of Lignin	<b>Feng Wang</b> (CN), F. Dean Toste, Haibo Xie, Dimitris S. Argyropoulos, Roberto Rinaldi, R. Tom Baker	China
407	Global Strategies for Algal Biomass for Bioenergy and Biorefinery	<b>Akihiko Kondo</b> (CSJ JP), Ji-Won Yang, Yasuo Yoshikuni	Japan
<b>Area 10: Bench to Bedside: Chemistry of Health Care</b>			
8	Oligonucleotide Therapeutics: From Base Pairs to Bedsides	<b>Muthaiah Manoharan</b> (ACS US), Masad Damha, Takeshi Wada	United States
11	Chemistry for Development of Theranostic Radiopharmaceuticals	<b>D Scott Wilbur</b> (ACS US), Michael Adam, Paul Donnelly, Yasushi Arano, Jae Min Jeong, Xianzhong Zhang	United States
28	De Novo Drug Design	<b>Gisbert Schneider</b> (ACS CH), David Winkler, Kimito Funatsu, Yasushi Okuno	Switzerland
52	Advances in Polymers for Medicine	<b>Jonathan Pokorski</b> (ACS US), Rigoberto Advincola, Takashi Miyata, Cyrille Boyer, Kazuhiko Ishihara	United States
69	Academic Drug Discovery	<b>James Leahy</b> (ACS US), Aubrey Mendonca, Sungwoo Hong, Hideaki Kakeya, Peter Scammells	United States
82	Translating Circulating Tumor Cells: Looking Beyond the Numbers	<b>Larry Nagahara</b> (ACS US), Thomas Thundat, Hsiao-hua	United States
145	Fragment-based Lead Discovery	<b>Daniel Erlanson</b> (ACS US), Jamie Simpson, Ke Ruan, Daisuke Tanaka, Joel Tyndall	United States
146	Small Molecule Epigenetic Modulators	<b>Chris Burns</b> (RACI AU), Peter Brown, Stephen Frye	Australia
212	In Vivo Chemical Strategies for Functional and Translation Studies of Biological Networks and Pathways	<b>Matthew Bogyo</b> (ACS US), Kazuya Kikuchi, Benjamin F Cravatt, Ho Jeong Kwon	United States
215	Chemistry of Molecular Imaging	<b>Henry VanBrocklin</b> (ACS US), Gilles Tamagnan, Yasuhisa Fujibayashi, Len Luyt, Andrew Katsifis, Yearn Choe, Neil Vasdev	United States
236	New Antibacterial Agents	<b>John Finn</b> (ACS US), Kazuhiru Tateda, Jim Palmer	United States
285	Nutraceuticals and Functional Food Ingredients: Chemistry and Health	<b>Fereidoon Shahidi</b> (CSC CA), ChiTang Ho, Ronald B. Pegg, Kazuo Miyashita	Canada

295	Molecular Design in Medicine: Concept to Commerce	<b>Jay Siegel</b> (CCS CN), Michael Martinelli, Margaret A. Brimble, Matthew Platz, Henry, Kim Baldrige	China
337	Non-canonical Approaches to <sup>18</sup> F-labeling: New Frontiers in Stable Non-carbon-fluorine Bonds	<b>David Perrin</b> (CSC CA), Francois Gabbai, Fuyou Li, Ralf Schirmmacher	Canada
385	Drug Conjugates: Approaches to Delivering Active Drugs to Where they are Needed	<b>Nathan Ihle</b> (ACS US), Bill Denny, Steven Roffler	United States
393	Cancer-Targeted Delivery of Therapeutics and Diagnostics	<b>Young Jik Kwon</b> (ACS US), Kamaljit Kaur, Won Jong Kim, Youqing Shen	United States
397	Spectroscopic Tools for the Treatment of Cancer	<b>Norio Miyoshi</b> (ACS JP), Brian Wilson, Woon-Shick Ahn, Murali K. Cherukuri	Japan
416	Recent Advances in Microfluidics for Radiochemical Synthesis	<b>Giancarlo Pascali</b> (ACS AU), Yuji Kuge, Robert Michael van Dam	Australia
<b>Area 11: Connecting Chemistry with Society</b>			
113	Connecting Ionic Liquids to Societal Issues: Materials, Medicines, Energy, and Water	<b>Robin D. Rogers</b> (ACS US), Douglas MacFarlane, Robin D. Rogers, Hiro Ohno	United States
132	Technology and Assessment Strategies for Improving Student Learning in Chemistry	<b>Thomas Holme</b> (ACS US), Peter Mahaffy, Madeleine Schultz	United States
149	Educational Approaches to Help Students Connect Chemistry to World Issues of Sustainability and Climate	<b>Thomas Holme</b> (ACS US), Peter Mahaffy, Mary Kirchhoff, Mei-Hung Chiu	United States
173	The Evolving Nature of Scholarly Communication: Connecting Scholars with Each Other and with Society	<b>Jennifer Maclachlan</b> (ACS US), Antony Williams, Kazuhiro Hayashi, David Martinsen, Brenna Arlyce Brown	United States
179	Effective Collaboration Strategies to Drive Innovation in Drug Discovery and Development	<b>MaryAnne Armstrong</b> (ACS US), Seong Heon Kim, Yan Zhu, Jennifer Blount	United States
185	Small Businesses Reaching Out for Market Share: Tool Kit and Success Stories	<b>Joseph Sabol</b> (ACS US), Daphne Lanson, Adam Blunn, Wilson Chung	United States
198	Historical Evolution of the Chemical Community in the Countries of the Pacific Rim	<b>Seth Rasmussen</b> (ACS US), Gary Patterson, Ian Rae, Yasu Furukawa, Trevor Levere	United States
230	Bioactive Natural Products and Public Health in the Pacific Rim: From Aquatic Dietary Supplements to Marine and Freshwater Toxins	<b>James Hungerford</b> (ACS US), Wade Rourke, PAUL McNabb, Joseph M. Betz	United States
325	The Increasing Influence of Openness in the Domain of Chemistry	<b>Antony Williams</b> (ACS US), David Wishart, Minoru Kanehisa, Leah Rae McEwen	United States
334	Green and Sustainable Chemistry Education for Tomorrow's Citizens of the World	<b>James Jackson</b> (ACS US), Fuping Zheng, Rui Resendes, Dalila Kovacs, James Jackson, Kei Saito	United States
335	Policies and Procedures Regarding Primary Research Data	<b>David Martinsen</b> (ACS US), Kazuhiro Hayashi, Nico Adams	United States
365	Chemistry Education: International and Multicultural Perspectives	<b>Santiago Sandi-Urena</b> (ACS US), David Salter, Choon H. Do	United States
382	Women in Chemistry: Changing the Face of Science	<b>Elizabeth Nalley</b> (ACS US), Kazue Kurihara, Vicki Chen, Linette Watkins	United States
383	Advancing Sustainability: Catalyzing Interdisciplinary Scholarship for Green Chemistry	<b>Robert Peoples</b> (ACS US), Steve Maguire, Milton Hearn	United States

443	Active and inquiry learning in the chemistry classroom and laboratory	<b>Mark Buntine</b> (RACI AU), Suzanne Boniface, Jennifer Lewis	Australia
453	University-Industry Collaboration, Regulatory Environments, and Commercialization of Emerging Technology	<b>Elsa Reichmanis</b> (ACS US), Steven Usselman, Hugh Slotten, Hyungsub Choi	United States
460	Safety in the Academic Research Laboratory	<b>Elsa Reichmanis</b> (ACS US), Hugh Horton, Danielle Kennedy	United States