

19th Winter Fluorine Conference

Schedule At A Glance

		Morning	Lunch	Afternoon	Evening
Sunday 1/11	Registration 5:00 PM-8:00 PM				SCI-MIX Welcome-Social 7:00-9:00 PM Hospitality Suite
Monday 1/12	Registration 7:00 AM-5:30 PM	Session I Organic Synthetic Methods I 8:00 AM – 9:50 AM Session II Fluorous Methods 10:10 AM – 12:00 PM	12:00 PM – 1:30 PM (Free Time)	Session III Fluorine Chemistry Mechanisms 1:30 PM – 3:20 PM Session IV Fluorine in Inorganic Chemistry I 3:40 PM – 6:00 PM	Session V Fluorine in Medicines I 7:30 PM – 9:30 PM
Tuesday 1/13	Registration 7:00 AM-5:30 PM	Session VI Fluorine in Biology 8:00 AM – 9:50 AM Session VII Organic Synthetic Methods II 10:10 AM – 12:00 PM	12:00 PM – 1:30 PM (Free Time)	Session VIII Fluorine in Energy 1:30 PM – 3:10 PM Session IX Fluorine in Inorganic Chemistry II 3:40 PM – 6:00 PM	Session X Fluorine in PET Imaging 7:30 PM – 9:10 PM
Wednesday 1/14	Registration 5:00-8:00 PM	Technology Exhibit, Poster Session II & Breakfast 8:00 AM – 10:00 AM Session XI Industrial Fluorine in Chemistry 10:00 AM -12:00 PM			
Thursday 1/15	Registration 7:00 AM-5:30 PM	Session XII Organic Synthetic Methods III 8:00 AM – 10:00 AM Session XIII Organic IV 10:10 AM – 12:00 PM	12:00 PM – 1:30 PM (Free Time)	Session XIV Fluoropolymers and Materials 1:30 PM – 3:10 PM Session XV Fluorine in Inorganic Chemistry III 3:30 PM – 5:30 PM	Reception 6:30 PM – 7:30 PM Banquet 7:30 PM – 9:30 PM
Friday 1/16	Registration 7:30 AM-10:00 AM	Session XVI Organic Synthetic Methods V 8:00 AM – 9:50 AM Session XVII Organic Synthetic Methods VI 10:10 AM – 11:40 AM Conference Adjourned			

Sunday, January 11, 2009

Sunday, January 11, 2009

Welcome Social and Sci-Mix Poster Session I

7:00 PM - 9:00 PM

Long-Bird-Indian Key Rooms

Viacheslav A. Petrov, Presiding

- 1 Facile Carbon-Carbon Bond Formation with Radical Addition Reaction by the Aide of Fluorine Substituents. **Tadashi Narita**, Akihiro Hosoya and Hiroshi Hamana
- 2 Novel Fluorinated Pyrimidines and Pyridazines: Synthesis and Applications. **Olesya Kazakova**, Wissam Bentoumi, Yvan Ramondenc, Nelly Plé, Jean-Philippe Bouillon and Gerd-Volker Roeschenthaler
- 3 New Pathways in Synthesizing Fluorinated Ethers and Aminovinylketones. **Nataliya Kalinovich**, Katja Vlasov and Gerd-Volker Roeschenthaler
- 4 $\text{BF}_3\text{-H}_2\text{O}$, An Efficient Substitute for Non-Oxidizing Strong Protic Acids/Superacids. G. K. Surya Prakash, **Thomas Mathew**, Farzaneh Paknia, Chiradeep Panja, Sujith Chacko and George A. Olah
- 5 Highly Selective 1,4-Addition of Fluoroalkyl Phenyl Sulfones to α,β -Unsaturated Carbonyl Compounds. G. K. Surya Prakash, **Fang Wang**, Xiaoming Zhao, Thomas Mathew and George A. Olah
- 6 Degradation Mechanism of the Perfluorinated Sulfonic Acid Polymer in a Fuel Cell Environment. **Kengo Kawahara**, Satoru Hommura and Kiyoshi Yamamoto
- 7 Structure and Heats of Formation of Krypton, Iodine and Xenon Fluorides from CCSD(T) Electronic Structure Calculations. **Daniel J. Grant**, Tsang-Hsiu Wang, David A. Dixon, Kirk A. Peterson and Karl O. Christe
- 8 Benchmark Calculations of the Electron Affinities of 2nd and 3rd Row Transition Metal Hexafluorides. **Raluca Craciun**, Shenggang Li, Desiree Picone, Rebecca T. Long, Kirk A. Peterson and David A. Dixon
- 9 Stereoselective Cross-Coupling Reaction of 1,1-Dibromo-3,3,3-Trifluoro-2-Tosyloxypropene. **Youhei Takeda**, Masaki Shimizu and Tamejiro Hiyama
- 10 Asymmetric Synthesis of α -Fluoro- β -Amino Acids. **Taryn L. March**, Peter J. Duggan and Martin R. Johnston
- 11 Xenon Difluoride Mediated Ipso-Amidation of Arylboronic Acids Using Nitriles. **Matthew D. Moran**, Thomas Mathew, G. K. Surya Prakash and George A. Olah
- 12 Preparation, Structure, and Diels-Alder Reaction of Phenyl(3,3,3-trifluoropropynyl)(trifluoromethanesulfonate)- λ^3 -Iodane. **Masaki Shimizu**, Youhei Takeda and Tamejiro Hiyama
- 13 Synthesis of 3,3,3-Trifluoropropanic Acid Derivatives. **Kenji Hosoi**, Shinya Akiba, Ryo Nadano, Takashi Kume and Takeo Komata
- 14 SI Traceable Purities of Perfluorooctanic and Perfluorooctanesulfonic Acids by Freezing Point Depression Method Using a Differential Scanning Calorimeter with High-Pressure Crucible. **Nobuyasu Hanari**, Taichi Yamazaki, Nobuyasu Itoh, Ryoko Iwasawa, Keiichiro Ishikawa and Takashi Yurita
- 15 Efficient, Recoverable, Copper-Free Sonogashira Reaction Under FBS and Thermomorphic Mode. **Norman Lu**, Ter-Lin Chen, Yi-Chuan Chen, Wei-Shung Chen and S.J. Wu

- 16 Synthesis and Copolymerization of Sodium 2,2,2-Trifluoroethyl 3,6-Dioxa- Δ^7 -4-Trifluoromethylperfluorooctylphosphonate with Tetrafluoroethylene. **Li-Mei Jin**, Tom Hickman, Jung Min Oh, Dong-Qing Zhuang, Stephen Creager and Darryl DesMarteau
- 17 New Xenon(II) Cations Derived from Thiazyl Trifluoride. **Gregory L. Smith**, Helene P.A. Mercier and Gary J. Schrobilgen
- 18 X-Ray Crystal Structures of Halo-(Trifluoromethyl)-Substituted Pyridines. **John O. Hauptfleisch**, Matthew D. Hennek, Monica Khural, Ashley Casey, Alfred Waterfeld, Ashok Ganta, Timothy S. Snowden, Richard E. Fernandez and Joseph S. Thrasher
- 19 Proton Exchange Membrane for Fuel Cell. **Iqbal Sharif**, Wan Chao Jiang, Bing Liu, Darryl D. DesMarteau and Stephen Creager
- 20 Synthesis of (E)- and (Z)-4,4,-Difluoro-2-Pentenoates and 5,5-Difluoro-2-Pyranones Via Sequential Fluoroallylboration-Olefination. **Kaumba Sakavuyi**, Anamitra Chatterjee and P. Veeraraghavan Ramachandran

Monday, January 12, 2009

Monday, January 12, 2009

Organic Synthetic Methods I

7:50 AM-9:50 AM

Tarpon-Sawyer Rooms

G. K. Surya Prakash, Presiding

- 7:50 Welcome and Introduction. **P. V. Ramachandran**
- 8:00 21 Fluorinated Pyridines and Their Site Selective Electrophilic or Nucleophilic Substitution. **Manfred Schlosser (PL-1)**
- 8:30 22 Facile Preparation of Fluoroalkyl Sulfones *Via* Reaction of Fluoroalkyl Cadmium and Copper Reagents with Sulfur Dioxide and Allylic Halides. **Donald J. Burton (IL-1)** and Greg A. Hartgraves
- 8:50 23 Transformative Alkynylogation: Synthetic Applications in Organofluorine Chemistry and Its Biological Implications. **Gerald B. Hammond (IL-2)**, Bo Xu and Han Yang
- 9:10 24 Take off All of the Fluorines from a Trifluoromethyl Group; a Strategy for Organic Synthesis. **Kenji Uneyama (IL-3)**
- 9:30 25 Recent Advances in New Types of Fluorovinyl-Containing Aromatic and Heterocyclic Compounds. Lev M. Yagupolskii and **Yurii L. Yagupolskii (IL-4)**

Monday, January 12, 2009

Coffee Break

9:50 AM - 10:10 AM

Grand Palm Colonnade West

Monday, January 12, 2009

Fluorous Methods

10:10 AM-12:00 PM

Tarpon-Sawyer Rooms

Matteo Zanda, Presiding

- 10:10 26 Fluorine as An Enabling Element in Synthetic Method Developments: From Fluorous Separation to Organocatalysis. **Tibor Soós (PL-2)**
- 10:40 27 Chemical Sensors with Fluorous Membranes: From Fluorous Liquids to Fluorous Polymeric Phases. Chun-Ze Lai, Secil S. Koseoglu, Elizabeth C. Lugert, Paul G. Boswell and **Philippe Buhlmann (IL-5)**
- 11:00 28 Fluorous Ligands and Ionic Liquids Based on Polyfluoroalkylated Imidazolium Salts. Jaroslav Kvicala, Martin Skalicky, Marketa Rybackova, **Ondrej Kysilka (CL-1)**, Martin Schindler, Jana Paterova, Vendula Kelbichova and Laudine Ducrocq
- 11:20 29 Fluorous Paramagnetic Adducts Via Halogen Bonding Directed Recognition. **Giuseppe Resnati (IL-6)**, Pierangelo Metrangolo, Giancarlo Terraneo and Serena Biella
- 11:40 30 Automated Fluorous-Based Oligosaccharide Synthesis. **Nicola Pohl (IL-7)**

Monday, January 12, 2009

Lunch Break

12:00 PM - 1:30 PM

Monday, January 12, 2009

Fluorine Chemistry Mechanisms

1:30 PM-3:20 PM

Tarpon-Sawyer Rooms

Steven H. Strauss, Presiding

- 1:30 31 Fluoroalkylated Monocarbadodecaborate Anions and Their Uses. **Josef Michl (PL-3)**, Matthew G. Fete, B. Randall King and Michal Valášek
- 2:00 32 Prediction of Reliable Bond Energies and Molecular Properties for Fluorinated Compounds. **David A. Dixon (IL-8)**
- 2:20 33 C₆F₆⁺, a Case of Bond Stretch Isomerism. **Konrad Seppelt (CL-2)**, Hashem Shorafa and Paulus Beate
- 2:40 34 The Intramolecular, Blue-Shifting C-H•••F-C Hydrogen Bond in Solid State: Excellent Agreement Between Experimental and Calculated Data for Vibrational Spectra. **Norman Lu (CL-3)**, Hsi-Chun Hou, Chien-Ting Lin, Ling-Kang Liu and J.-C. Jiang
- 3:00 35 Synthesis and Chemistry of *Ortho*-Fluoranil, a Multifunctional Electrophile. Sudharsanam Ramanathan and **David M. Lemal (IL-9)**

Monday, January 12, 2009

Coffee Break

3:20 PM - 3:40 PM

Grand Palm Colonnade West

Monday, January 12, 2009

Fluorine in Inorganic Chemistry I

3:40 PM-6:00 PM

Tarpon-Sawyer Rooms

Gary J. Schrobilgen, Presiding

- 3:40 36 Organometallic Fluorides: Preparation, Characterization, and Application. **Herbert W. Roesky (PL-4)**
- 4:10 37 Structure and Physical-Chemical Properties of Functionalized Al-Based Nano-Fluorides and Hydroxyfluorides. **Alain Tressaud (IL-10)**, Damien Dambournet and Alain Demourgues
- 4:30 38 The First Examples of Barium Salts with Mixed-Polyfluoroanions: Ba(BF₄)(PF₆) and Ba₂(AsF₆)(BF₄)₂(H₃F₄). **Boris Zemva (IL-11)**, Evgeny Goreschnik, Melita Tramsek, Gasper Tavcar and Tina Bunic
- 4:50 39 Properties of Some Metal Fluoride Surfaces: a Comparative Study. **John M. Winfield (IL-12)**
- 5:10 40 Synthesis and Characterization of Tungsten and Molybdenum Sulfide Fluorides. **Michael Gerken (IL-13)**, Jared Nieboer and H el ene P.A. Mercier
- 5:30 41 C-F Activation and Derivatization of Fluorinated Molecules in the Coordination Sphere of Transition Metals. **Thomas Braun (PL-5)**, Kai Altenh oner, Daniel Noveski, Michael Teltewskoi and Falk Wehmeier

Monday, January 12, 2009

Fluorine in Medicines I

7:30 PM-9:30 PM

Tarpon-Sawyer Rooms

Kenneth L. Kirk, Presiding

- 7:30 42 Medicinal Chemistry and Chemical Biology of Fluorine-Containing Taxoid Anticancer Agents. **Iwao Ojima (PL-6)**
- 8:00 43 Fluorinated Nuclear Factor Kappab Inhibitors for Pancreatic Cancer Therapy. **C. Max Schmidt (PL-7)**, Michele Yip-Schneider and Huangbing Wu
- 8:30 44 The Importance of Fluorine in the Design of BACE Inhibitors. **James R. McCarthy (PL-8)**
- 9:00 45 Fluorinated Heterocycles in Cancer Chemotherapy. **Andrei A. Gakh (PL-9)**

Tuesday, January 13, 2009

Tuesday, January 13, 2009

Fluorine in Biology

8:00 AM - 9:50 AM

Tarpon-Sawyer Rooms

John T. Welch, Presiding

- 8:00 46 Synthetic Ways to Fluoro-Amino Acids from Kiev City. **Valery P. Kukhar (PL-10)**
- 8:30 47 Fluorinated Functionality in Enzyme Inhibitor Design - Dual Mechanistic and Analytical Roles. **David B. Berkowitz (IL-14)**
- 8:50 48 Fluorinated Matrix Metalloproteinases (MMPs) Inhibitors. **Matteo Zanda (IL-15)**
- 9:10 49 2,3,4,5 and 6 Contiguous Fluorines along An Alkane Chain. **David O'Hagan (IL-16)**, Luke Hunter and Alexandra M. Z. Slawin

9:30 50 Fluorinated Biogenic Amines and Amino Acids: a Review and Update. **Kenneth L. Kirk (IL-17)**

Tuesday, January 13, 2009

Coffee Break

9:50 AM - 10:10 AM

Grand Palm Colonnade West

Tuesday, January 13, 2009

Organic Synthetic Methods II

10:10 AM - 12:00 PM

Tarpon-Sawyer Rooms

R. Vaidyanathaswamy, Presiding

- 10:10 51 Imine-Mediated Syntheses of Fluorinated Functional Molecules. **Gerd-Volker Roeschenthaler (IL-18)**, Nikolay Shevchenko, Valentine Nenajdenko and Anton Gulevich
- 10:30 52 a Straightforward Access to 1-Trifluoromethyl-3-Cyclopenten-1-Carboxylic Acid (or ester), a New Versatile Building Block. **Charles Portella (IL-19)**, Vincent Kikelj and Fabienne Grellepois
- 10:50 53 Design and Synthesis of Trifluoroethoxy-Coated Phthalocyanines. **Norio Shibata (IL-20)**
- 11:10 54 Fluoro Alcohols Supported on Gold Nanoparticles: Synthesis and Applications. **Benoit Crousse (CL-4)**, Daniela Vuluga, Julien Legros and Daniele Bonnet-Delpon
- 11:30 55 Asymmetric Catalytic Methods for Fluoroalkylation. **Koichi Mikami (PL-11)**

Tuesday, January 13, 2009

Lunch Break

12:00 PM - 1:30 PM

Tuesday, January 13, 2009

Fluorine in Energy

1:30 PM - 3:10 PM

Tarpon-Sawyer Rooms

Josef Michl, Presiding

- 1:30 56 Forming Cylindrical, Viscosity-Enhancing Micelles in Dense CO₂ with Fluorinated Surfactants. **Robert Enick (CL-5)**, Dazun Xing, Yee Soong, Julian Eastoe and Kieran Trickett
- 1:50 57 Rechargeable Lithium Batteries Using Molten Alkali Bis(trifluoromethylsulfonyl)Amides. **Rika Hagiwara (IL-21)**, Tetsuya Fujimori, Toshiyuki Nohira, Takuya Goto, Koichi Ui and Naoaki Kumagai
- 2:10 58 Charge/Discharge Behavior of Graphite in Non-Flammable Fluoride Containing Solvents for Lithium Ion Battery. **Tsuyoshi Nakajima (IL-22)**, T. Achiha, Y. Ohzawa, M. Koh and H. Aoyama

- 2:30 59 Fluorinated Liquid Crystals: From Displays to Self-Organizing Organic Photovoltaics. **Quan Li (IL-23)**
- 2:50 60 Synthesis and Characterization of Perfluorinated Nitriles and the Corresponding 5 Perfluoroalkyltetrazolate Salts. **Thomas M. Klapötke (CL-6)**, Margaret-Jane Dr. Crawford, Hendrik Radies and Ernst-Christian Koch.

Tuesday, January 13, 2009

Coffee Break

3:10 PM - 3:40 PM

Grand Palm Colonnade West

Tuesday, January 13, 2009

Fluorine in Inorganic Chemistry II

3:40 PM - 6:00 PM

Tarpon-Sawyer Rooms

Alain Tressaud, Presiding

- 3:40 61 Quantitative Lewis Acidity Scale, a Progress Report. **Karl O. Christe (PL-12)** and David A. Dixon
- 4:10 62 Oxonium Salts in Cadmium Hexafluoroantimonate System. **Gasper Tavcar (CL-7)** and Zoran Mazej Mazej
- 4:30 63 Through-Space $^7J_{FF}$ Coupling up to 172 Hz for C(sp³)-F Atoms. Natalia B. Shustova, Igor V. Kuvychko, Alexey A. Popov, Ivan E. Kareev, Oren P. Anderson, Konrad Seppelt, Olga V. Boltalina and **Steven H. Strauss (IL-24)**
- 4:50 64 About the Existence of [Ti₂F₉]⁻ Anion. **Zoran Mazej (CL-8)** and Evgeny Goreshnik
- 5:10 65 On the Existence of NF₄[N(NO₂)₂] and NF₄NO₃ and Their Decomposition Reactions. **William W. Wilson (CL-9)**, Ralf Haiges and Karl O. Christe
- 5:30 66 Sulfur Nitrogen Fluoride Cations of Xe(II); The Syntheses and Structures of FXeOEO₂ (E = N, Cl); And New Xe(IV) and Xe(VI) Oxide Fluoride Anions and Cations. **Gary J. Schrobilgen (PL-13)**, David S. Brock, Kazuhiko Matsumoto, Helene P.A. Mercier, Matthew D. Moran, Jonathan P. Paxon and Gregory L. Smith

Tuesday, January 13, 2009

Fluorine in PET Imaging

7:30 PM - 9:10 PM

Tarpon-Sawyer Rooms

C. Max Schmidt, Presiding

- 7:30 67 Fluorine-18-Radiolabeled Targeted Molecular Imaging Agents for Functional Imaging in Oncology. **Dale O. Kiesewetter (PL-14)**
- 8:00 68 Fluorous Technology for 18F-Radiolabeling. **Veronique Gouverneur (PL-15)**
- 8:30 69 Semi-Metal-Catalyzed Fluorination. **Stephen G. DiMugno (IL-25)**
- 8:50 70 A New Method of Labeling Peptides with F-18 Via a Metal Ligand. **William J. McBride (CL-10)**, Habibe Karacay, Peter Laverman, Christopher D'Souza, Edmund A. Rossi, Robert M. Sharkey, Otto C. Boerman, Chien-Hsing Chang and David M. Goldenberg

Wednesday, January 14, 2009

Wednesday, January 14, 2009

Conference Breakfast and Poster Session II

8:00 AM - 10:00 AM

Pavilion

Greg Butler, Presiding

- 71 Systematic Synthesis of α -Trifluoromethyl- α -Amino Acids. **Mayuko Taeda**, Toshimasa Katagiri, Takanori Ooshima, Naomi Iguchi and Kenji Uneyama
- 72 The CO₂ and H₂ Permeability of Perfluoropolyether and Polyperfluoroacrylate Membranes. **Robert Enick**, Mary Barillas and Bryan Morreale
- 73 Self-Assembled Membrane Electrodes for Polymer Electrolyte Fuel Cells. **Huizhen Zhu**, Litao Bai, Shane C. Street, Richard E. Fernandez and Joseph S. Thrasher
- 74 Thermophysical Properties of Alternative Refrigerants for R-22. **Ismail Kul**
- 75 Preparation of Fluorous Ponytail Primary Phosphines Via Phthaloylphosphide Ion. Jason W. Schultz, **Brian A. O'Brien**, Alexander D. Burum and Karrie-Ann Kubatko
- 76 Fluoroalkylation of Imidazoles by Hypervalent Iodonium Salts. **Changqing Lu** and Darryl D. DesMarteau
- 77 Fluorine-Containing Allylboranes, -Boronates, and -Trifluoroborates: Convenient Reagents for the Preparation of Fluorinated Homoallyl Alcohols and Amines. **Kaumba Sakavuyi** and P. Veeraraghavan Ramachandran
- 78 Efficient Decagram-Scale Synthesis of the Superweak Anion B₁₂F₁₂²⁻ and the Structures of Its Alkali Metal and Transition Metal Salts. **Dmitry Peryshkov**, Alexey A. Popov and Steven H. Strauss
- 79 Chemistry of Perfluoraryl-Substituted Cyclopentadienones. **Paul A. Deck** and Brian S. Hickory
- 80 Synthesis of Fluorinated Naphtalene Derivatives by a Bergman Cyclization Approach. **Christopher M. Kane** and Markus Etzkorn
- 81 Synthesis of Fluoro-Cyclobutanes and Their Properties for Alternative Solvent. **Junji Mizukado**, Liang Chen, Kenji Takizawa, Masanori Tamura and Akira Sekiya
- 82 Synthesis of a Family of New Highly Fluorinated Ethers. **Dayong Sang**, Thomas Albers, Amit Tewari, David M. Lemal and Edmund I. Eger II
- 83 Preparation and Handling of Tetrafluoroethylene (TFE) in An Academic Laboratory. **Todd S. Saylor**, Amber Beg, Huizhen Zhu, Harsimran Singh, Nicole D. Gray, Alfred Waterfeld, Christian Schiel, Richard E. Fernandez and Joseph S. Thrasher
- 84 Proton Transport in Fluorinated Phosphonic Acid-Based Model Compounds at Low Hydration. **Mahesha B. Herath**, Alex Kitaygorodskiy, Stephen Creager and Darryl DesMarteau
- 85 Novel Fluorinated Anions-Derived Ionic Liquids for Li-Ion Batteries. **O.E. Geiculescu**, R. V. Rajagopal, J.M. Oh, S.E. Creager and D.D. DesMarteau
- 86 Asymmetric Aldol-Type Reactions Using Trifluoropyruvate Catalyzed by Cinchona Alkaloids. **Shinichi Ogawa**, Norio Shibata, Shuichi Nakamura and Takeshi Toru
- 87 Design and Synthesis of Novel Electrophilic Trifluoromethylating Reagents. **Shun Noritake**, Norio Shibata, Shuichi Nakamura and Takeshi Toru

- 88 Gas-Phase Synthesis of Trifluoromethylfluoroformate. **Marco Galimberti** and Vito Tortelli
- 89 Stereoselective Synthesis and Conformation of Five Vicinal Fluoroalkanes. **Daniel Farran**, Alexandra M. Z. Slawin, Peer Kirsch and David O'Hagan
- 90 The synthesis and TRPV-1 receptor activity of α -fluorinated capsaicin. **Thomas Moraux**, Margit Winkler and David O'Hagan

Wednesday, January 14, 2009

Industrial Fluorine Chemistry

10:00 AM - 12:00 PM

Pavilion

Robert G. Syvret, Presiding

- 10:00 91 Low Global Warming Fluorocarbons. **Ian R. Shankland (CL-11)**, Andrew Poss, Rajiv Singh and Harry Tung
- 10:20 92 New Route for 4-Methyl 2,3,5,6- Tetrafluorobenzyl Alcohol, a Tefluthrin Intermediate. **R. Vaidyanathaswamy (IL-26)**, S. Purushothaman, Samineni Ramesh and S. Rajalakshmi
- 10:40 93 Exciting Developments in the Field of Nanostructured CF_x for High Power Lithium Batteries and a Novel Method of Nondestructive Analysis. Dayal T. Meshri, F., Robert Adams, N.C. Mathur, Igor Barsukov, Gleb Yushin, A. Magasinski, **Elena Shembel (CL-12)**, J. Yen, Volodymyr Redko and Sanjay Meshri
- 11:00 94 Development of Low GWP Refrigerants. **Mario Nappa (CL-13)** and Barbara H. Minor
- 11:20 95 Halogen Exchange Reactions of Germanium Tetrafluoride. **Bamidele A. Omotowa (CL-14)**
- 11:40 96 Methodologies for Mild Substitution of Hydroxy Groups by Fluorinated Moieties: Recent Progress. **Alexander Kolomeitsev (CL-15)**

Thursday, January 15, 2009

Thursday, January 15, 2009

Organic Synthetic Methods III

8:00 AM - 10:00 AM

Tarpon-Sawyer Rooms

Koichi Mikami, Presiding

- 8:00 97 Perfluoro[2.2]Paracyclophane. Synthesis and Reactivity. **William R. Dolbier (PL-16)**, Puhui Xie and Lianhao Zhang
- 8:30 98 4-t-Butyl-2,6-Dimethylphenylsulfur Trifluoride: a New, Widely Applicable Fluorinating Agent with High Stability and Easy Handling. **Teruo Umemoto (CL-16)**, Rajendra P. Singh and Norimichi Saito
- 8:50 99 Perfluoroalkylated Phosphonium Salts and Dibenzo-18-Crown-6 Ethers; Recyclable Phase Transfer Catalysts. **Alison M. Stuart (IL-27)**, Jose A. Vidal, Benoit Gourdet, Kathleen M. Weber, Erwan Le Guludec and Stephen Gray
- 9:10 100 Synthesis of Trifluoromethylated Heterocyclic Compounds. **Viacheslav A. Petrov (IL-28)**

9:30 101 Electrophilic Activation of Electron-Deficient Fluoro Alkenes. **Junji Ichikawa (PL-17)**

Thursday, January 15, 2009

Coffee Break

9:50 AM - 10:10 AM

Grand Palm Colonnade West

Thursday, January 15, 2009

Organic IV

10:10 AM - 12:00 PM

Tarpon-Sawyer Rooms

Giuseppe Resnati, Presiding

10:10 102 Sulfur Based Fluoroalkylation Methods. **G. K. Surya Prakash (IL-29)**

10:30 103 Advances in the Preparation of Aliphatic Pentafluorosulfanyl Containing Compounds. **John T. Welch (IL-30)**, Silvana C. Ngo, Dan M. Brandt and Paul R. Savoie

10:50 104 SYNTHESIS of Fluorinated Unsaturated Lactams and Lactones. **Günter Haufe (IL-31)**, Christian Stillig and Michael Marhold

11:10 105 Selectively Fluorinated Amides Via Eschenmoser-Claisen Type Rearrangement. Justyna Walkowiak, Magdalena Tomas-Szwaczyk, Günter Haufe and **Henryk Koroniak (IL-32)**

11:30 106 Understanding the "Negative Fluorine Effect" in Nucleophilic Fluoroalkylation Reactions. **Jinbo Hu (PL-18)**

Thursday, January 15, 2009

Lunch Break

12:00 PM - 1:30 PM

Thursday, January 15, 2009

Fluoropolymers and Materials

1:30 PM - 3:10 PM

Tarpon-Sawyer Rooms

Charles W. Martin, Presiding

1:30 107 Initiation Reactivity of Anionic Polymerization of Fluorinated Acrylates and Methacrylates with Organoaluminum. **Tadashi Narita (CL-17)**, Youhei Umino and Hiroshi Hamana

1:50 108 "Characterization of Dendrimer-Modified Nafion and Other Triblock Copolymer Membranes for Their Perm-Selective Transmission of Water Vapor and Organic-Based Gases. **Kyle Felling (CL-18)**, Celia Proctor, Daniel Hall, Lindsay Read and David Dixon

2:10 109 Fluorinated Glycoluril-Derived Molecular Tweezers: Molecular Recognition and Self-Assembly. **Markus Etzkorn (CL-19)** and Christopher M. Kane

2:30 110 The Evaluation of CFCs Alternatives in Their Use by TWPG (Temperature) as New Global Warming Analysis Method. **Akira Sekiya (CL-20)** and Sayuri Okamoto

- 2:50 111 Dual Reactivity of Aromatic Trifluorovinyl Ethers towards Semi-Fluorinated Polymers. Scott T. Iacono, Stephen M. Budy, Rhett C. Smith, Andrew Neilson, John Ballato and **Dennis W. Smtih, Jr. (IL-33)**

Thursday, January 15, 2009

Coffee Break

3:10 PM - 3:30 PM

Grand Palm Colonnade West

Thursday, January 15, 2009

Fluorine in Inorganic Chemistry III

3:30 PM - 5:30 PM

Tarpon-Sawyer Rooms

Boris Zemva, Presiding

- 3:30 112 Spectroscopic Trends in Halo-(trifluoromethyl)-Substituted Pyridines. Monica Khural, Matthew D. Hennek, John O. Hauptfleisch, Ashley Casey, Alfred Waterfeld, Ashok Ganta, Timothy S. Snowden, Richard E. Fernandez and **Joseph S. Thrasher (IL-34)**
- 3:50 113 Enthalpies and Entropies of Fluorinated Species: Rules, Regularities and Realities. Carol A. Deakyne, H. Donald Brooke Jenkins, **Joel F. Liebman (IL-35)**, Maja Ponikvar and Lee S. Sunderlin
- 4:10 114 Sulfur-Nitrogen-Fluorine Chemistry: Past and Future (?). **Ruediger J. Mews (IL-36)**
- 4:30 115 Polyperfluoroalkylation of Endohedral Metallofullerenes. **Olga V. Boltalina (CL-21)**, Steven H. Strauss, Natalia B. Shustova, Steven A. Stevenson, Mary A. Mackey, Curtis E. Coumbe, J. Paige Phillips, Alexey A. Popov and Lothar Dunsch
- 4:50 116 Versatile Perfluoroalkylsulfonylimides in the Synthesis of Novel Fluorinated Compounds and Materials. **D.D. DesMarteau (IL-37)**
- 5:10 117 Synthesis of Transition Metal Oxofluorides and Novel Transition Metal Oxoazides. **Ralf Haiges (CL-22)**, William W. Wilson and Karl O. Christe

Thursday, January 15, 2009

Conference Reception, 6:30 PM-7:30 PM

Conference Banquet, 7:30 PM-9:30 PM

2009 ACS Fluorine Award Address, 8:30 PM

Pavilion

- 8:30 118 2009 ACS Fluorine Chemistry Award Address. **Henry Selig (PL-19)**

Friday, January 16, 2009

Friday, January 16, 2009

Organic Synthetic Methods V

8:00 AM - 9:50 AM

Tarpon-Sawyer Rooms

Vadim A. Soloshonok, Presiding

- 8:00 119 Tandem Reactions: New Synthetic Strategies. **Santos Fustero (PL-20)**
- 8:30 120 Where Did That Fluorine Come from? Production Vs. Properties of Rf(CH₂)_N_x Building Blocks, X = Halide. **Vittorio Montanari (CL-23)**
- 8:50 121 On the Syntheses of Perfluorinated Polymethylene Dimethyl Ethers. **Jamie L. Adcock (CL-24)**, and Andrew J. Colvin
- 9:10 122 Recent Chemistry of Compounds Containing SF₅ and OSF₅ Functional Groups. **Robert G. Syvret (IL-38)** and G. Sankar Lal
- 9:30 123 Trifluoromethyl Amino Alcohols as Chiral Ligands and Auxiliaries. **Toshimasa Katagiri (CL-25)**, Akinori Harada, Naomi Iguchi, Yasuyuki Fujiwara, Satoshi Takahashi, Tomomi Kawate and Kenji Uneyama

Friday, January 16, 2009

Coffee Break

9:50 AM-10:10 AM

Grand Palm Colonnade West

Friday, January 16, 2009

Organic Synthetic Methods VI

10:10 AM – 11:40 AM

Tarpon-Sawyer Rooms

Jinbo Hu, Presiding

- 10:10 124 Continuous-Flow Reaction Conditions for Biomimetic Reductive Amination of Fluorine-Containing Carbonyl Compounds. **Vadim A. Soloshonok (IL-39)**
- 10:30 125 Self-Assemblies Formed by Halogen-Bonding from Bipyridines and Mono- or Di-Perfluoroalkyl iodides. **Sylvie L. Boileau (CL-26)**
- 10:50 126 Reaction of Chlorosulfonyl Isocyanate with Fluorosubstituted Alkenes. **Dale F. Shellhamer (CL-27)**, Kevyn J. Davenport, Danielle M. Hassler, Jacob J. Thorpe and David J. Vandebroek
- 11:10 127 Towards the Synthesis of Trifluoromethyl Analogs of Dictyostatin Via Asymmetric Aldol Reaction. Debarshi Pratihar, **Pravin Gagare (IL-40)** and P. Veeraraghavan Ramachandran
- 11:30 Concluding Remarks. **David Dixon**

(PL)- Plenary, (IL)- Invited, and (CL)- Contributed