10º Boletim Informativo
Divisão de Química Orgânica
Sociedade Brasileira de Química

1º trimestre/2017

Diretor: Mauricio Moraes Victor (UFBA)
Vice-Diretor: Cristiano Raminelli (UNIFESP-Diadema)
Tesoureiro: Giovanni Wilson Amarante (UFJF)

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1) Editorial: 10º Boletim da DQO

Prezados Sócios da SBQ e Membros da Divisão de Química Orgânica!

Iniciou o ano da IUPAC 2017. Junto com a esperança de tempos melhores, com melhoras na situação de agências de fomento e órgãos financiadores, vemos cristalizado o esforço de anos de dedicação da SBQ e de seus representantes. Falta pouco para o início do evento mundial de química: o maior já realizado no Brasil. Já temos 4 recebedores de prêmios Nobel confirmados, e uma oportunidade única de participar de um evento de altíssimo nível. Preparem seus trabalhos, organizem seus alunos, incentivem seus colegas.

Como forma de incentivar e divulgar o evento, teremos este boletim especial, totalmente direcionado ao evento. Esperamos assim estar colaborando com a SBQ e seus associados. Até o evento.

Quaisquer dúvidas, questionamentos, sugestões e matérias para este boletim devem ser enviados para o email quimicaorganica.sbq@gmail.com

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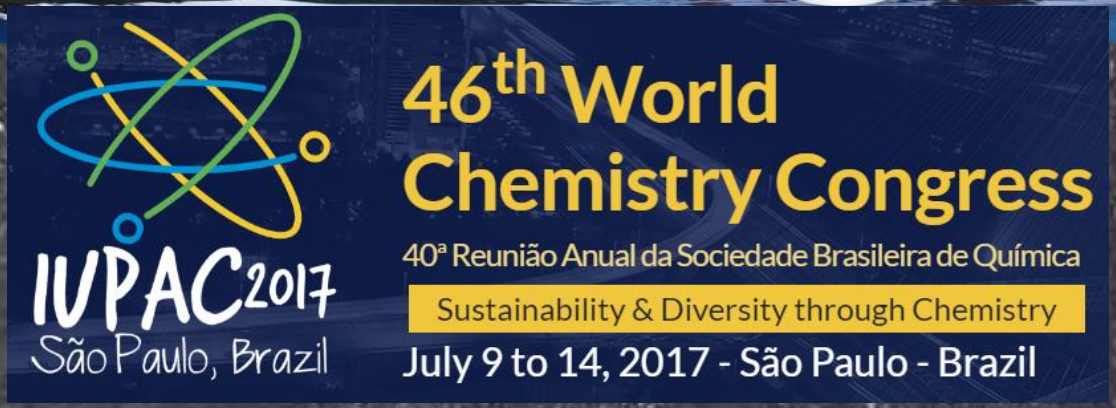
2) Informes:



http://www.iupac2017.org/

Datas importantes

Março/17 (em andamento)
resultados da submissão
Até 26/03/17
término pagamento com desconto
09/07/17
início IUPAC 2017, São Paulo

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Chemical Synthesis (CS)

Chemistry is an enabling science. No material of any type can be studied or utilized in a larger context unless it can be prepared, and thus Chemical Synthesis plays a central role in science, technology, and society, broadly defined. There is a constant demand in all quarters of society for new molecules in diverse arenas – from therapeutics to agrochemicals to functional materials of every description. Although it is probably true that, given enough resources and time, any reasonable molecule can be synthesized, substantial advances are still necessary to furnish a specific molecule in appropriate amounts under the modern constraints of time, economics, and environmental sustainability. The Chemical Synthesis symposium plans to cover the following four topics, which address many of the modern challenges of the discipline. Synthetic method; total synthesis of biologically active natural products; catalysis and structure, function, mechanisms and processes.

Symposium Organizers: Luiz F. Silva Jr (Universidade de São Paulo, São Paulo, SP, Brazil - luizfsjr@iq.usp.br) and Gary Molander (University of Pennsylvania, Philadelphia, PA, EUA - gmolandr@sas.upenn.edu)

Topics

4.1 Total Synthesis of Biologically Active Natural Products
4.2 Catalysis
4.3 Structure, Function, Mechanisms and Processes
4.4 Synthetic Methods

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IUPAC2017 São Paulo, Brazil

46th World Chemistry Congress

40ª Reunião Anual da Sociedade Brasileira de Química

Sustainability & Diversity through Chemistry

July 9 to 14, 2017 - São Paulo - Brazil

Keynote Lectures Accepted Invitations

Karl-Anker Jorgesen - organocatalysis **9º Boletim DQO**
Aarhus University, Denmark

Ilan Marek - Stereo and enantioselective strategies for organic synthesis **9º Boletim DQO**
Technion-Israel Institute of Technology, Israel

Mike Krische - Synthetic Methods & Natural Products Synthesis **10º Boletim DQO**
University of Textas at Austin (USA)

Carsten Bolm - Synthesis, Asymmetric metal catalysis, Organocatalysis **10º Boletim DQO**
RWTH Aachen University (Germany)

Matthew Sigman - Organic Synthesis & Asymmetric Catalysis **10º Boletim DQO**
The University of Utah (USA)

André Charette - Synthetic Organic Chemistry
University of Montreal (Canada)

Gary A. Molander - Synthetic Methods Development
University of Pennsylvania (USA)

Ronaldo Pilli - Organic & Natural Products Synthesis **10º Boletim DQO**
University of Campinas (Brazil)

Magnus Rueping - Organocatalysis, Metal Catalysis, Synthesis of Natural Products and Analogues
Institute of Organic Chemistry - RWTH Aachen University - Aachen (Germany)

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Yujiro Hayashi - new catalytic asymmetric reactions by the use of organic catalysis
Tohoku University, Japan **9º Boletim DQO**

Antonio Echavarren - new synthetic methods based on the catalytic use of electrophilic metal complexes of gold and other transition metals.
Institute of Chemical Research of Catalonia (ICIQ), Tarragona, Spain **9º Boletim DQO**

Magnus Rueping - Organocatalysis, Metal Catalysis, Synthesis of Natural Products and Analogues
Aachen University, Germany **10º Boletim DQO**

Geraldine Masson - catalytic behavior of Brønsted acids as well as alkali metal and alkaline earth metal complexes in diverse reactions
University of Paris-Saclay, ICSN, France. **10º Boletim DQO**

Olivier Baudoin - Transition-metal Catalyzed Methods and Synthesis
University of Basel (Switzerland) **10º Boletim DQO**

Young Ho Rhee - Organic, Bioorganic, Organometallic Chemistry
Pohang University of Science and Technology (Korea) **10º Boletim DQO**

David Nicewicz - Synthetic Organic Chemistry, Catalysis, Natural Product Synthesis
University of North Carolina at Chapel Hill, USA **10º Boletim DQO**

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Sarah Trice - Catalysis, Synthetic Organic Chemistry
Head of Innovation and Thought Leadership, Chemical Synthesis, Sigma-Aldrich **10º Boletim DQO**

Mary P. Watson - Metal Catalysis of Cationic Intermediates and Cross Coupling Reactions of Non-Traditional Substrates
University of Delaware, USA

Eric Meggers - Organometallics For Asymmetric Catalysis And The Life Sciences
Philipps-Universität Marburg, Germany

Kálmán Szabó - Synthesis of Organoboronates, C-H borylation, C-H trifluoromethylation, and Fluorination and trifluoromethylation reactions
Stockholm University, Sweden

Gwilherm Evano - Natural/bioactive products synthesis, New processes in Copper Catalysis, Copper Organometallic Chemistry, Chemistry of Ynamides, and Polymers
Université libre de Bruxelles, Belgium

John Montgomery- Organic synthesis
Department of Chemistry, University of Michigan, Ann Arbor (USA)

3) Palestrantes IUPAC 2017:

Keynote Lecture: Prof. Mike Krische

Research:

- ✓ **Development of new synthetic methods:**
  - **(a) hydrogen-mediated C-C bond formation,**
  - **(b) nucleophilic catalysis via phosphine conjugate addition,**
  - **(c) catalytic tandem conjugate addition-electrophilic trapping,**
  - **(d) metal-catalyzed [2+2]cycloaddition.**
- ✓ **Applications in natural product synthesis**
- ✓ **Identification of new reactivity patterns**
- ✓ **Evolution of related catalytic processes**
- ✓ **Development of new synthetic strategies**

The Department of Chemistry and Biochemistry
The University of Texas at Austin
Welch Hall Room 5.146, Austin, TX 78751
United States of America
Contact: mkrische@mail.utexas.edu

Keynote Lecture: Prof. Carsten Bolm

Research:

- ✓ **Enantioselective catalysis**
- ✓ **Asymmetric synthesis**
- ✓ **Bioactive compounds**
- ✓ **Mechanochemistry**
- ✓ **Biomass Conversion**
- ✓ **Sulfur and fluorine chemistry**

RWTH Aachen University
Lehrstuhl für Organische Chemie II
Landoltweg 1, 52074 Aachen
Germany
Contact: carsten.bolm@oc.rwth-aachen.de

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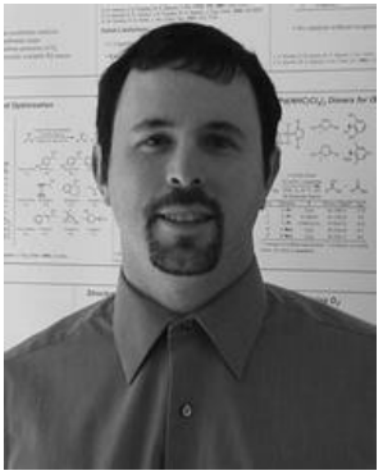
Keynote Lecture: Prof. Matthew Sigman



Research:

- ✓ **Pd-catalyzed alkene oxidations**
- ✓ **enantioselective Heck-type reactions enantioselective catalysis and ligand design**
- ✓ **novel diarylmethines as lead compounds for breast cancer therapy**
- ✓ **studies member of the center for stereoselective C-H functionalization**

The University of Utah
Department of Chemistry
315 S 1400 E, Rm 2020, Salt Lake City, Ut 84112
United States of America
Contact: sigman@chem.utah.edu

Keynote Lecture: Prof. Ronaldo Pilli

Research:

- ✓ **Organic synthesis**
- ✓ **Synthesis of natural products**
- ✓ **Asymmetric synthesis of pharmacologically active substances**
- ✓ **Studies of structure *vs* biological activity**

Universidade Estadual de Campinas
Department of Chemistry
PO Box 6154, Campinas/SP, 13083-970
Brazil
Contact: pilli@iqm.unicamp.br

Invited Lecture: Prof. Magnus Rueping

Research:
- ✓ **Organocatalysis**
- ✓ **Metal catalysis**
- ✓ Synthesis of Natural Products and Analogues
- ✓ Flow chemistry
- ✓ Photochemistry
- ✓ Materials chemistry

Institute of Organic Chemistry
RWTH Aachen University
Landoltweg 1, 52074 Aachen
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Contact: Magnus.Rueping@rwth-aachen.de

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Invited Lecture: Prof. Olivier Baudoin

Research:

- ✓ **Transition metal-catalyzed functionalization of non-activated C(sp3)–H bonds:**
  - **(a) intramolecular C–H activation triggered by the oxidative addition of a carbon–halogen bond,**
  - **(b) migrative cross-couplings involving metal 'chain-walking' along a linear alkyl chain.**
- ✓ **Total synthesis of natural products and APIs,**
- ✓ **Asymmetric catalysis,**
- ✓ **Mechanistic studies.**

Department of Chemistry
University of Basel
St. Johanns-Ring 19
CH-4056 Basel,
Switzerland
Contact: olivier.baudoin@unibas.ch

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Invited Lecture: Prof. Géraldine Masson

Research:
- ✓ **New reaction methodologies**
- ✓ **Enantioselective organocatalysis**
- ✓ Photoredox catalysis
- ✓ Hypervalent iodine
- ✓ Multistep synthesis

Institut de Chimie des Substances Naturelles
ICSN-CNRS,
1 Av. de la Terrasse, Bât 27,
91198 Gif-sur-Yvette
France
Contact: geraldine.masson@cnrs.fr

Invited Lecture: Prof. Young Ho Rhee

Research:

✓ **Development of new methodologies**

(a) C-C bond and C-heteroatom bond formation initiated by C-H bond activation

(b) Transition metal-catalyzed C-C bond formation

✓ **Synthetic chemical biology**

(a) Exploration of biological processes using natural products and their analogs as chemical probes

✓ **Total synthesis of natural products**

(a) Synthesis of compounds with anticancer biological activities

Pohang University of Science and Technology
Department of Chemistry
San 31 Hyoja-dong, Pohang 790-784
Republic of Korea
Contact: yhrhee@postech.ac.kr

Invited Lecture: Prof. David Nicewicz

Research:

✓ **Development of new methods**

(a) Enantioselective catalysis

(b) Redox processes

✓ **Total synthesis of natural products**

(a) New strategies and methodologies

(b) Biologically active and structurally complex molecules

University of North Carolina at Chapel Hill
Department of Chemistry
Murray Hall 2202G, Chapel Hill, NC 27599
United States of America
Contact: nicewicz@unc.edu

Invited Lecture: Dr. Sarah Trice

Research:

✓ **Commercially available reagents and catalysts used for useful transformations:**

(a) Fluorine incorporation
(b) Cross-coupling
(c) C-H functionalization
(d) Photocatalysis

Sigma-Aldrich Corporation
6000 North Teutonia Avenue, Milwaukee, WI 53209
United States of America
Contact: sarah.trice@sial.com