

## Foreword:

After the 1st edition of the "Geneva Chemistry and Biochemistry Days" which was organised in June 2011, the Section de chimie et biochimie, University of Geneva, makes it a permanent event with its 2nd edition.

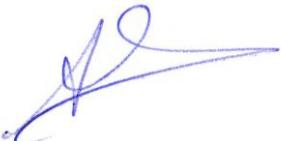
This event is aimed at giving our students who are close to finishing their PhD studies the opportunity to present their research to a large audience from academia and industry.

Four distinguished lecturers will enrich the programme. They have been invited by the Departments of our School (Département de chimie minérale, analytique et appliquée, Département de chimie organique, Département de chimie physique, Département de biochimie) and will seek to illustrate the breadth and quality of chemical and biochemical research in the world today.

This 2-day symposium is now becoming the annual *Geneva rendez-vous* between chemists and biochemists from academia and the industry. The event will help stimulate fruitful discussions between young and advanced researchers, and give our students the opportunity to further prepare their professional careers.

We believe that it will give our guests an opportunity to appreciate the high quality of the different aspects of fundamental research performed in our School.

We hope that you will enjoy the lectures and interactions!



Prof. Alexandre Alexakis  
Président de la Section de chimie et biochimie

## Steering and organising committee:

<b>Prof. Alexandre Alexakis</b>	alexandre.alexakis@unige.ch Président de la Section de chimie et biochimie
<b>Prof. Alan F. Williams</b>	alan.williams@unige.ch Directeur du Département de chimie minérale, analytique et appliquée
<b>Prof. Stefan Matile</b>	stefan.matile@unige.ch Directeur du Département de chimie organique
<b>Prof. Eric Vauthey</b>	eric.vauthey@unige.ch Directeur du Département de chimie physique
<b>Prof. Marcos González-Gaitán</b>	marcos.gonzalez@unige.ch Directeur du Département de biochimie

**PROGRAMME – THURSDAY 19 JANUARY 2012:**

<b>Session 1 – Morning</b>		
Chairmen: <b>Prof. E. Peter Kündig + Dr Hans Hagemann</b>		
09:00- -09:15	<b>Prof. Alexandre Alexakis</b>	Welcome message Introduction
09:15- -10:15	<b>Prof. Dr Manfred T. Reetz</b> Philipps-Universität Marburg	Laboratory Evolution of Stereoselective Enzymes: A Prolific Source of Catalysts for Asymmetric Reactions
10:15- -10:30	Coffee break	Main hall of Sciences III
10:30- -10:50	<b>Mr Daniel Emery</b>	DFT Study of Anion- $\pi$ Interactions in Context of Anion Transport and Organocatalysis
10:50- -11:10	<b>Mr Alastair Cunningham</b>	Bottom-Up Fabrication and Optical Properties of Metallic Nanoparticle Structures
11:10- -11:30	<b>Ms Chrystelle Montagne</b>	Endocytosis and Cell Fate Decision in <i>Drosophila</i> Intestinal Stem Cells
11:30- -11:50	<b>Mr Chandan Dey</b>	Synthesis of Oxindoles and Aza-Oxindoles
11:50- -12:10	<b>Ms Vincenza D'Anna</b>	Vibrational and Structural Characterization of Borohydrides
12:10- -14:00	Lunch (invited lecturers + PhD students of day 1)	Restaurant-pizzeria Sole Mio, boulevard Carl-Vogt
<b>Session 2 – Afternoon</b>		
Chairmen: <b>Prof. Jean Gruenberg + Prof. Corinne Vebert</b>		
14:00- -14:20	<b>Mr Daniel Müller</b>	Asymmetric Conjugate Additions of Alkenyl-Alanes to 2,3-Dehydro-4-Piperidones
14:20- -14:40	<b>Mr Pradip Chakraborty</b>	Spin Switching Dynamics in the Mixed Crystals of 2D Polymers $[Zn_{1-x}Fe_x(bbtr)_3](ClO_4)_2$ and $[Fe(bbtr)_3](BF_4)_2$
14:40- -15:00	<b>Ms Charlotte Gehin</b>	Screening of Dynamic Amphiphiles as siRNA Delivery System in Mammalian Cells
15:00- -15:20	<b>Mr Andrea Fin</b>	Synthesis of Responsive Fluorescent Probes and Dynamic Amphiphiles for Biological Applications
15:20- -15:40	<b>Mr William Herzog</b>	3-Components Systems for Proton-Coupled Electron Transfer
15:40- -16:00	Coffee break	Main hall of Sciences III
16:00- -16:20	<b>Ms Lilit Aboshyan Sorgo</b>	Energy Transfer Up-Conversion (ETU) of Light at the Molecular Level
16:20- -16:40	<b>Mr Hailing Li</b>	Enyne Chlorides: New Substrates for Copper-Catalyzed Asymmetric Allylic Alkylation
16:40- -17:40	<b>Prof. Dr Ari Helenius</b> ETH Zürich	How Viruses Enter their Host Cells
17:40- -19:00	Verre de l'amitié	Main hall of Sciences III
19:00-	Banquet (speakers + chairmen + organisers)	

## PROGRAMME – FRIDAY 20 JANUARY 2012:

<b>Session 3 – Morning</b>		
Chairmen: <b>Prof. Alan F. Williams + Prof. Reika Watanabe</b>		
09:00- -10:00	<b>Prof. Dr Hansjörg Grützmacher</b> ETH Zürich	Metal Ligand Cooperativity: From Hydrogen Transfer Reactions to Organometallic Fuel Cells
10:00- -10:20	Coffee break	Main hall of Sciences III
10:20- -10:40	<b>Ms Dipshikha Banerjee</b>	Chiral N-Heterocyclic Carbenes in Asymmetric Gold Catalysis and in Synthesis of NHC-Borane Complexes
10:40- -11:00	<b>Mr Giovanni Li Manni</b>	Split-CAS: A Strategy to Enlarge the Orbital Space in Multiconfigurational Calculations
11:00- -11:20	<b>Mr Mohammadali Foroozandeh</b>	HSQC with Broadband Homonuclear Decoupling in the Carbon Dimension for Uniformly <sup>13</sup> C-Enriched Samples
11:20- -11:40	<b>Mr César Beuchat</b>	Using Quantum Chemical and Molecular Dynamics Methods to Study Highly Charged Species in Solution
11:40- -12:00	<b>Mr Dmitry Katayev</b>	Indoline Synthesis via Catalytic Asymmetric Coupling of an Unactivated Methylene Group
12:00- -14:00	Lunch (invited lecturers + PhD students of day 2)	Restaurant-pizzeria Sole Mio, boulevard Carl-Vogt

<b>Session 4 – Afternoon</b>		
Chairmen: <b>Prof. Thomas Bürgi + Dr Andreas Zumbuehl</b>		
14:00- -14:20	<b>Ms Natascha Sattler</b>	Scavenger Receptor are Important for Uptake and Digestion of Bacteria in <i>Dictyostelium</i>
14:20- -14:40	<b>Ms Vesna Markovic</b>	Two-Dimensional Electronic Spectroscopy: Concept, Development and Applications
14:40- -15:00	<b>Mr Pierre Zaffalon</b>	Study of Hydrogen Bond Influence on the Assembly and Packing of the Derivatives of Acylethanolamide
15:00- -15:20	Coffee break	Main hall of Sciences III
15:20- -15:40	<b>Mr Stefan Knoppe</b>	Synthesis, Isolation and Characterization of Thiolate-Protected Chiral Gold Clusters
15:40- -16:00	<b>Ms Jezabel Praz</b>	Evaluation of the Chiral DIANANE Backbone as Ligand for Organolithium Reageant
16:00- -17:00	<b>Prof. Laurence A. Nafie</b> Syracuse University	Vibrational Optical Activity: A New Spectroscopic Tool for Stereo-Molecular Structure Determination
17:00-	<b>Prof. Alexandre Alexakis</b>	Concluding remarks



UNIVERSITÉ  
DE GENÈVE

FACULTÉ DES SCIENCES

Section de chimie et biochimie

Geneva chemistry and biochemistry days

TH 19 – FR 20 January 2012

Sciences II – auditoire A150

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