

INFORMATION

News

New COST Chemistry Actions open for participation

COST (Cooperation in the field of scientific and technical research) is again presenting five new COST Actions to the scientific community. Participation in these Actions is open to scientists based in Switzerland and willing to cooperate in a Europe-wide network according to the rules of COST. The basic principles of COST are a 'bottom up' mechanism, à la carte participation of COST member states and national financing of research projects.

COST has seen major changes during the last months and is still in a process of reform to be able to cope best with new demands of the European Research and Innovation Area (ERA). After a COST Ministerial Conference in May 2003, which confirmed and renewed the political will of COST member States to continue to support COST in the future, COST is undergoing a process of further improvement of its working methods and has set up a new scientific secretariat. This new 'COST Office', located in Brussels, is run by the European Science Foundation (ESF) as implementing agent and opened on January 5, 2004. The governance and the decision making of COST is fully in the hands of the Committee of Senior Officials (CSO), the highest decision-making body in COST. The co-operation with ESF will allow both partners to use synergies between the two organisations.

Switzerland, a founding member of COST, is a key player within COST also today and participates in about 80% of all COST Actions. Since January 1, 2004 Switzerland is associated to the EU-Framework Programme and has, therefore, the same working conditions in COST as the EU States. The Federal Office for Education and Science (OFES) is responsible for all aspects of COST in Switzerland and for the representation of the country on the international level of COST.

General information about COST is available from the homepage of OFES/COST www.admin.ch/bbw or via e-mail cost@bbw.admin.ch and from the COST Office in Brussels under <http://cost.cordis.lu>. Details about the COST Chemistry Actions, which are described below, are available from the contacts given with each Action description and under <http://costchemistry.epfl.ch/>.

PD Dr. Eva M. Klaper
National COST Coordinator

COST Action D28: Natural Products as a Source for Discovery, Synthesis and Application of Pharmaceuticals

The first objective of the action is the target-orientated discovery of new natural products with an important biological profile based on new and unusual sources, e.g. secondary metabolites of bacteria or marine organisms (only 4% of known bacteria have been analysed).

The second objective is the development of new strategies and methods to synthesize complex natural products and to give access to a broad range of analogues that will be screened for biological activity. Structure-activity data will then be used to further refine the pharmacophore model, enabling the rational design and synthesis of more focused active compounds.

The following specific themes will be investigated:

- Isolation of natural products
- Discovery of new lead compounds
- Structure determination
- New strategies for total synthesis
- New synthetic methods and new reagents
- Semi-synthesis of biologically active compounds from easily available natural products
- Total synthesis in chemical development

Contact in Switzerland: Philippe Renaud, Department of Chemistry and Biochemistry, Freiestrasse 3, 3012 Bern, Tel.: +41 31 631 43 59, Fax: +41 31 631 34 26, E-Mail: philippe.renaud@ioc.unibe.ch

COST Action D29: Sustainable/Green Chemistry and Chemical Technology

The main objective of the Action is to develop sustainable industrial chemicals and chemical-based consumer products utilising sustainable and environmentally friendly processes. The main objective will be achieved by (1) providing a mechanism to establish a common understanding of the current status and the future research, development, and educational needs of Sustainable/Green Chemistry and Chemical Technology for Europe; (2) establishing and managing a selection process for identifying potential industrial chemicals and chemical based consumer products that could be considered sustainable/green according to information available at the time of the selection; and (3) co-ordinating new joint research efforts for designing and developing environmentally friendly processes for the production of such sustainable/green products. This Action will also address key issues concerning the development of an integrated European education program on Sustainable/Green Chemistry and Chemical Technology.

Contact in Switzerland: Gabor Laurency, EPFL, FSB/ISIC – LCCO, 1015 Lausanne, Tel.: +41 21 693 98 58, Fax: +41 21 693 98 65, E-Mail: gabor.laurency@epfl.ch

COST Action D30: High Pressure Tuning of Chemical and Biochemical Processes

The main objective of the Action is to stimulate the tuning of chemical and biochemical processes through the application of high pressure as a physical variable, in order to achieve lower energy consumption, less pollution and higher selectivity in chemical and biochemical transformations, and production of new materials with better properties. The Action will build on existing knowledge on the effect of pressure on chemical and biochemical processes, in order to systematically tune the desired properties of such systems for selective applications in industrial, environmental and biological processes. It is envisaged that multi-disciplinary teams will be formed to develop specific activities in areas of common interest, with the goal to investigate and further develop the application of pressure tuning technology. Such an approach will strengthen the overall output of the COST Action and especially promote the ability to handle topics of multi-disciplinary interest.

Contact in Switzerland: André E. Merbach, EPFL, FSB/ISIC – LCIB, 1015 Lausanne, Tel.: +41 21 693 98 71, Fax: +41 21 693 98 75, E-Mail: andre.merbach@epfl.ch

COST Action D31: Organising Chemical Systems with Selected Functions

Organising chemical systems to perform specific tasks is a key issue in many fundamental processes involved both in life and material sciences. In particular, mastering chemical organisation at the molecular level is of prime importance in bioorganic, bioinorganic and supramolecular chemistry, as well as in nanosciences and technology.

The main objective of this COST Action is thus to stimulate interdisciplinary research activities in the promising area of supramolecular synthesis of organised and/or self-organised chemical systems in order to master organizational complexity starting from simplicity and then perform specifically targeted functions.

The Action is divided in the following subtopics:

- Directed tools and methods: high yield synthesis by template effects, structural methodology for building functional molecular organised systems.
- Specific concepts and strategy: tectonics, molecular organisations on surface and confined space, low molecular weight organogelators, control of mechanical bonding.
- Selected functions: reactivity, electronic and ionic conduction, optical, chiroptical and electronic signalling and transduction, magnetic coupling.

These additional topics are also considered: generation of diversity, receptor based functional architectures, chirality generation and amplification through self-assembly, conformational control of self-assembled structures by external stimuli, biomimetic functional molecular assemblies, channel formation through supramolecular organisation.

Contact in Switzerland: Jérôme Lacour, Department of Organic Chemistry, University of Geneva, Quai Ernest-Ansermet 30, CH-1211 Genève 4, Tel.: +41 (0)22 379 6062, Fax: +41 (0)22 379 3215, E-Mail: Jerome.lacour@chiorg.unige.ch

COST Action D32: Chemistry in High-Energy Micro environments (CHEM)

The main objectives will be to build on existing knowledge on chemical and biochemical processes in high-energy localised reaction microenvironments, in order to systematically tune the desired properties of such systems for selective applications in industrial, environmental, synthetic and analytical systems. *Sonochemistry* and *microwave-enhanced* chemistry will be employed, *singly* and *in combination* with each other or with *electrochemistry* and/or *photochemistry*. It is envisaged that multi-disciplinary teams will be formed to develop specific activities in areas of common interest, with the goal to investigate and further develop applications for these methodologies, which all possess various degrees of novelty within chemistry.

Contact in Switzerland: André E. Merbach, EPFL, FSB/ISIC – LCIB, 1015 Lausanne, Tel.: +41 21 693 98 71, Fax: +41 21 693 98 75, E-Mail: andre.merbach@epfl.ch.

Novartis Venture Fund unterstützt innovative Jungunternehmen in schwierigem Geschäftsumfeld

Basel, 16. Januar 2004. – Der Novartis Venture Fund hat im siebten Jahr seit seiner Gründung trotz schwierigem Umfeld seine Rolle als langfristiger Investor in vielversprechende Jungunternehmen weiter verstärkt.

Gemäss seinem Jahresbericht 2003 (www.venturefund.novartis.com) konzentrierte sich der Novartis Venture Fund vor allem auf die Unterstützung von Unternehmen, die sich bereits in seinem Portfolio befanden, indem 25 Unternehmen eine weitere Finanzierung erhielten. Daneben unterstützte der Fonds acht neue Unternehmen und erweiterte damit sein Portfolio auf insgesamt 74 Unternehmen. Der Fonds investierte im vergangenen Jahr USD 35 Millionen, was seine Gesamtinvestitionen seit 1996 auf USD 215 Millionen ansteigen liess. Diese entscheidenden Investitionen haben zur Gründung von 217 Jungunternehmen beigetragen.

Der Novartis Venture Fund basiert auf der Überzeugung, dass wirtschaftliches Wachstum und die Schaffung neuer Arbeitsplätze langfristig nur erreicht werden können, wenn sich neue unternehmerische Initiativen entwickeln und vielversprechende Ideen wirtschaftliche Realität werden. Mit einer Kapitalausstattung von CHF 220 Millionen unterstützt der Fonds neue Geschäftsprojekte, die in zukunftsorientierten Bereichen, vor allem im Bereich der Gesundheitswissenschaften, von einem beispielhaften Unternehmens- und Innovationsgeist zeugen.

Dies ist eine spezifische Nische, in welcher der Fonds im vergangenen Jahr jenen Portfolio-Unternehmen etwas Entscheidendes bieten konnte, die aufgrund der verringerten IPO-Möglichkeiten im gegenwärtigen Konjunkturmilieu Private-Equity-Folgeinvestitionen benötigten.

Die Tätigkeit des Novartis Venture Fund geht jedoch über finanzielle Investitionen hinaus: Das erfahrene Management-Team steht den Jungunternehmen auch mit Rat und Tat aktiv zur Seite, damit sie zusätzliche Investoren finden und leichter Kollaborationen und strategische Allianzen eingehen können.

Neben den Investitionen in US-Unternehmen spielt der Novartis Venture Fund auch eine wichtige Rolle für die Unterstützung von Jungunternehmen im Gebiet des BioValley in der Region Basel. So hat der Fonds in den vergangenen sieben Jahren mehr als CHF 50 Millionen in 42 neue Unternehmen des BioValley investiert, was seinerseits zur Schaffung von insgesamt rund 700 Arbeitsplätzen und zu einem Umsatz von CHF 90 Millionen pro Jahr geführt hat.

Congresses – Conferences – Workshops

Scientific Conference: 10th Anniversary of CCS

June 17/18, 2004, CCS-ETH, Technopark, Zurich, Switzerland

Celebrating the Decennial of CCS (The Centre for Chemical Sensors and Chemical Information Technology) founded by Prof. Ursula E. Spichiger-Keller.

For more information, please contact our homepage: <http://www.chemsens.pharma.ethz.ch>

E-mail: info@chemsens.pharma.ethz.ch

Lectures

Basler Chemische Gesellschaft

Donnerstag, 17.30 Uhr
Institut für Organische Chemie, St. Johannis-Ring 19, Kleiner Hörsaal

22. April 2004 Prof. *M. Malacria*
Université Pierre et Marie Curie Paris,
Dept. de Chimie
Titel to be announced

Berner Chemische Gesellschaft

Mittwoch, 16.30 Uhr
Hörsaal EG 16, Departement für Chemie und Biochemie, Freiestr. 3
(Kaffee um 16.10 Uhr vor dem Hörsaal)

7. April 2004 Prof. *William Martin*
Institut für Botanik III, Heinrich-Heine Universität
Düsseldorf, Germany
'On the Role of FeS in the Origin of Cells'

14. April 2004 Prof. *Matthew Shair*
Harvard University, Department of Chemistry and
Chemical Biology, Cambridge, MA, USA
'Using Lessons from Nature in Organic Synthesis'

Département de Chimie Organique, Université de Genève

Sciences II, Auditoire A-100, 16h30
30, quai Ernest Ansermet, Genève

Jeudi Prof. *Keith A. Woerpel*
1er avril 2004 Department of Chemistry, University of California,
Irvine, CA
'Stereoselective Synthesis Based on the Reactions
of Strained-Ring Silanes'

Vendredi Prof. *Keith A. Woerpel*
2 avril 2004 Department of Chemistry, University of California,
Irvine, CA
'Electronic and Stereoelectronic Effects in the
Reactions of Oxocarbenium and Iminium Ions'

Jeudi Prof. *Matthew Shair*
15 avril 2004 Department of Chemistry and Chemical Biology,
Harvard University, Cambridge, MA, USA
'Using Lessons from Nature in Organic Synthesis'

Lundi Prof. *Roeland J. M. Nolte*
26 avril 2004 Department of Organic Chemistry,
University of Nijmegen, the Netherlands
Title to be announced

Institut de Chimie, Université de Neuchâtel

Mercredi Colloque du 3e cycle
21 avril 2004 Prof. *Mallayan Palaniandavar*
10h30 University of Bharathidasan, India
Petit Auditoire Le titre sera annoncé plus tard

Jeudi Gastronomie Moléculaire
22 avril 2004 Prof. *Hubert Richard*
17h00 ENS, Massy, France
Petit Auditoire 'Les arômes'

Mercredi Colloque du 3e cycle
28 avril 2004 Prof. *Roeland Nolte*
10h30 University of Nijmegen, Pays-Bas
Petit Auditoire Le titre sera annoncé plus tard

Anorganisch-Chemisches Institut der Universität Zürich

Freitag, 17.00 Uhr
Hörsaal 34 F 48, Winterthurerstrasse 190, Zürich-Irchel

2. April 2004 Prof. *Asif Karim*
Universität Hamburg
'Molecules Built from Air'

16. April 2004 Prof. *Werner T. Bantli*
AMROP HEVER, Zumikon
Title to be announced

23. April 2004 Prof. *Peter Bäuerle*
University of Ulm
'C-C Bond Formation through Oxidatively
Induced Elimination of Platinum Complexes –
A Novel Approach towards Conjugated
Macrocycles'

30. April 2004 Prof. *Ulrich Simon*
Technische Hochschule Aachen
'Charge Transport in Nanostructured Materi-
als – From Fundamentals to Applications'

Novartis Chemistry Lectureship 2003/2004

Location: Novartis Pharma AG,
Auditorium Horburg, WKL-430.3.20
Müllheimerstrasse 195, CH-4057 Basel

Time: 10.30 am ('Get Together': 10.00 am)

April 7, 2004 Prof. *Jean-Pierre Genêt*
ENSC, Paris
'Asymmetric Catalysis. Fundamental Studies
and Practical Applications'