What is COST?

COST was set up in 1971 to stimulate and give an intergovernmental framework for European **CO**-operation in the field of **S**cientific and **T**echnical Research, allowing the coordination of nationally funded research on a European level. COST Actions cover basic and pre-competitive research as well as activities of public utility. COST has developed into one of the largest frameworks for research cooperation in Europe and is a valuable mechanism coordinating national research activities. Today it has almost 200 Actions and involves nearly 30,000 scientists from 34 European Member States and more than 80 participating institutions from 11 non-COST Member States and Non Governmental Organizations.

COST activities currently cover the following areas: Agriculture and Biotechnology, Chemistry, Environment, Fluid dynamics, Food Sciences, Forests and Forestry Products, Materials, Medicine and Health, Meteorology, Miscellaneous, Physics, Social Sciences and Humanities, Telecommunications Information Science and Technology, Transport, Urban Civil Engineering.

COST Chemistry

Chemistry is a central science with distinguished history and recent success in Europe (six *Nobel*-prize winners between 1991 and now are European). The chemical industry is one of Europe's most international, competitive and successful industries and contributes to the prosperity and quality of life of modern European society. In order to maintain and even to improve this position, it was decided to use the COST forum to elaborate a strategic scientific scheme for basic research in chemistry in Europe. In this respect, a Technical Committee (TC) in chemistry was created in 1990 and has been active ever since. The success of this program is proved by (i) the increasing number of networks: 55 in 1993, 86 in 1994, 113 in 1995, 117 in 1996, 172 in 2002 involving the participation of 1180 research groups corresponding to collaborations between seven research groups on average per project from different European countries; (ii) the number of activities within the networks and the Action: scientific meetings, workshops, seminars, workshops for young scientists, exchanges of students (short-term scientific missions), *etc.*; (iii) the high quality of results and publications obtained.

The COST system is characterized by the bottom-up approach (the initiative comes from the researcher) and by the fact that the funding of the research is national. In Switzerland, the main source of funding for COST CHEMISTRY is the State Secretariat for Education and Research SER.

Why a Fourth Swiss COST Chemistry Symposium?

The goal of this symposium is to present the chemical research which is taking place in Switzerland and in Europe within the COST framework. By inviting nine prominent Swiss and non-Swiss scientists, we intend to present the different research fields covered by COST Actions. A poster session will also give the possibility to the Swiss and non-Swiss groups to present their recent results in the fields of COST actions D15 to D34.

Registration

Registration is free but necessary in order to get into the symposium. More information is available at the symposium web site (*http://scs-fallmeeting.epfl.ch/cost_admission.html*).

Scientific Program

'Centre Est', Room CE1

9.45 **Welcome** by Prof. *Jérôme Lacour*
Introduction by PD Dr. *Eva Klaper*,
State Secretariat for Education and Research SER

Morning Session – Chairman: Prof. *Philippe Renaud*

10.00 **Prof. *Andreas Pfaltz***
Universität Basel, Switzerland
(Action D24: Sustainable Chemical Processes: Stereoselective Transition Metal-Catalyzed Reactions)
'Mass Spectrometric Screening of Chiral Catalysts'
Abstract 1

10.30 **Prof. *David Parker***
University of Durham, UK
(Action D31: Organizing Non-Covalent Chemical Systems with Selected Function)
'Tuning the Properties of Emissive Lanthanide Probe Complexes'
Abstract 2

11.00 **Coffee Break,**
Poster Session, Salle Polyvalente

11.30 **Prof. *Hans-Peter Lüthi***
ETH Zürich, Switzerland
(Action D26: Integrative Computational Chemistry)
'"Measuring" Electron Delocalization in π-Conjugated Compounds'
Abstract 3

12.00 **Prof. *Ian Paterson***
Cambridge University, UK
(Action D28: Natural Products as a Source for Discovery, Synthesis and Application of Pharmaceuticals)
'Synthesis of Marine Polyketides as Promising Anticancer Agents'
Abstract 4

12.30 **Poster-Sandwich Session, Salle Polyvalente**

Action D15: Interfacial Chemistry and Catalysis
Abstract 10

Action D18: Lanthanide Chemistry for Diagnosis and Therapy
Abstracts 11–14

Action D20: Metal Compounds in the Treatment of Cancer and Viral Diseases
Abstracts 15, 16

Action D21: Metalloenzymes and Chemical Biomimetics
Abstracts 17–19