



SCHWEIZ. CHEMISCHE GESELLSCHAFT	SCG
SOCIETE SUISSE DE CHIMIE	SSC
SWISS CHEMICAL SOCIETY	SCS

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ILMAC^{///}

Scientific Forum, September 25–28, 2007

Energy and Raw Materials – The Contributions of Chemistry and Biochemistry in the Future

Messe Basel, Halle 1, Saal 'Luzern', entrance free

The Swiss Chemical Society (SCS) is holding a scientific forum to coincide with the chemical industry's exhibition ILMAC 2007. As the need for energy increases, this year's scientific forum will show how chemistry, as an interdisciplinary science, can make an important contribution in resolving key issues arising in Switzerland in the next 50 years in combination with other technological disciplines, commerce and industry. The event is aimed at managers and their employees from the fields of science, commerce, ecology, government, local authority and politics as well as interested members of the public. ILMAC, an industry exhibition for research and development and environmental and process technology in pharmaceuticals, chemicals and biotechnology, offers an appropriate setting for the forum.

The theme 'Energy and Raw Materials' is highly topical at present. Scarcely a day goes by without new media reports on the subject, which are often controversial in content. In the forum leading experts from Switzerland, other European countries and the United States will give their views on currently available alternative energy resources and primary materials for the chemical and pharmaceuticals industries on a generally comprehensible level. Technically and financially realizable solutions for today and in the future will be explained and discussed.

Die Schweizerische Chemische Gesellschaft (SCG) führt gleichzeitig mit der Chemie-Industriemesse ILMAC 2007 einen wissenschaftlichen Kongress (Scientific Forum) durch. Am diesjährigen Scientific Forum soll gezeigt werden, wie in der Schweiz in den nächsten 50 Jahren bei steigendem Energiebedarf die Chemie als fachübergreifende Wissenschaft für die Lösung wichtiger Zukunftsfragen in Verbindung mit anderen Disziplinen, Wirtschaft und Industrie einen wichtigen Beitrag leisten kann. Die Veranstaltung richtet sich sowohl an Führungskräfte und deren Mitarbeiter aus Wissenschaft, Wirtschaft, Ökologie, Verwaltung, Behörden, Politik als auch an die interessierte Öffentlichkeit. Die ILMAC als Industriemesse für Forschung, Entwicklung, Umwelt- und Verfahrenstechnik in Pharma-, Chemie- und Biotechnologie, bietet dazu das passende Umfeld.

Das Thema „Energie und Rohstoffe“ ist heute brandaktuell. Es vergeht kaum ein Tag, an dem die Medien nicht darüber, teilweise auch kontrovers, berichten. Führende Fachleute aus der Schweiz, weiteren europäischen Nationen und den USA nehmen zu den gegenwärtigen alternativen Energieressourcen und Grundstoffen für die Chemie- und Pharmaindustrie auf einem allgemein verständlichen Niveau Stellung. Technisch und wirtschaftlich realisierbare Lösungen für die Gegenwart mit einem Zeithorizont von etwa 50 Jahren sollen aufgezeigt und diskutiert werden.

Tuesday, September 25, 9.30–12.30**Energy Supply – Balancing Moderation and Innovation**

- Chairman Prof. *Georg Fráter*, President of the Swiss Chemical Society
- Opening Dr. *Walter Steinmann*, Director of the Federal Office of Energy, Bern
‘The Energy Challenge of Switzerland in the Future’
- Speakers Dr. *Fatih Birol*, Chief Economist and Head of the Economics Analysis Division, International Energy Agency, Paris, France
‘The IEA Annual Energy Outlook 2007’
- Prof. *Alexander Wokaun*, General Energy Research Department, Paul Scherrer Institut, Villigen
‘Efficiency and Fossil Fuel Substitution – The Contribution of Chemistry and Chemical Engineering’
- Prof. *David Pimentel*, College of Agricultural and Life Sciences, Cornell University, USA
‘Ethanol Fuels versus Environmental, Food, and Pollution Costs’
- Panel discussion with the speakers and additional experts
- Moderator Prof. *Dieter Imboden*, President of the Research Council of the Swiss National Science Foundation and Professor for Environmental Physics at ETH Zurich

Wednesday, September 26, 9.30–12.30**Eat it or Burn it? The Potential of Bio Fuels**

- Chairperson *Charlotte Opal*, Coordinator of the Global Alliance to Ensure Biofuels’ Sustainability, Energy Center, EPF Lausanne
- Speakers Dr. *Tim Kroenke*, Head of New Business Scouting, Syngenta, Basel
‘Biofuels and Plant-expressed Enzymes’
- Dr. *Gunter Festel*, Festel Capital, Hünenberg / Zug
‘Biofuels – Which One is the Most Economic One?’
- Dr. *Rainer Zah*, Modelling Technology and Society Laboratory, EMPA
‘Biofuels – Which One is the Most Ecological One?’
- Panel discussion with the speakers and additional experts
- Moderator *Helen Issler*, Schweizer Fernsehen DRS

Thursday, September 27, 9.30–12.30**White Biotechnology – Technology of the Future?**

- Chairman Dr. *Beat Wipf*, Head of Section Protein Science, F. Hoffmann-La Roche, Basel
- Speakers Prof. *Wim Soetaert*, Laboratory for Industrial Microbiology and Biocatalysis, Ghent University, Belgium
‘White Biotechnology: A Key Technology for Building the Biobased Economy’
- Prof. *Bärbel Hahn-Hägerdal*, Lund Institute of Technology, Sweden
‘Biotechnology Applied in the Traditional Process Industry’
- Dr. *Marco Oldiges* and Prof. *Christian Wandrey*, Institut of Biotechnology, Research Center, Jülich, Germany
‘White Biotechnology: Why Do We Need It Today?’
- Panel discussion with the speakers and additional experts
- Moderator Dr. *Christian Heuss*, Schweizer Radio DRS

Friday, September 28, 9.30–12.30**Sustainable Chemistry Thanks to Renewable Raw Materials**

- Chairman Prof. *Hans Björn Püttgen*, Director of the Energy Center, EPF Lausanne
- Speakers Prof. *Jürgen O. Metzger*, Department of Pure and Applied Chemistry, University of Oldenburg, Germany
‘Concepts on the Contribution of Chemistry to a Sustainable Development: Renewable Raw Materials’
- Dr. *Hans-Peter Meyer*, Assistant Vice-President of Lonza
‘White Biotechnology in Switzerland – Perspectives for a Sustainable Development’
- Prof. *J. P. M. Sanders*, Agrotechnology and Food Sciences Group, Wageningen University, The Netherlands
‘Biorefinery – The Bridge Between Agriculture and Chemistry’
- Prof. *Hans Björn Püttgen*, Director Energy Center, EPF Lausanne
‘The “Roundtable on Sustainable Biofuels”’: A Multi-Stakeholder Process’