

RESEARCH CONFERENCES

ESF-COST High-Level Research Conference

**Natural Products
Chemistry, Biology and
Medicine**

Hotel Villa del Mare, Acquafredda di Maratea • Italy
18-23 May 2008

Chair: **K.C. Nicolaou**, The Scripps Research Institute, US
Vice-Chair: **Dieter Schinzer**, University of Magdeburg, DE

Organising Committee: **Bruno Botta**, University "La Sapienza",
IT • **Veronique Gouverneur**, University of Oxford, UK • **David
Tanner**, Technical University, DK • **Nicolas Winssinger**,
Université Louis Pasteur, FR

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Final Programme

Sunday 18 May

Late afternoon / early evening	Registration at the ESF-COST desk
19.00	Welcome Drink
20.00	Supper

Monday 19 May

08.30-08.45	Javier Caldentey European Cooperation in the field of Scientific and Technical Research
08.45-09.00	K.C. Nicolaou The Scripps Research Institute, US

Session 1

Chair: Dieter Schinzer, University of Magdeburg, DE

09.00-9:50	Maurizio Botta Siena University, IT <i>The Fight Against Aids: New Avenues for Inhibiting RT, an Old Target</i>
09:50-10:40	Veronique Gouverneur University of Oxford, UK <i>Recent Advances in Fluorine Chemistry</i>
10:40-11:10	Coffee break
11:10-12:00	Giovanni Appendino University of Piemonte Orientale, IT <i>Natural Products as Molecular Probes to Investigate TRP Receptors</i>

Short Talks

12:00-12:15	Rebecca Goss University of East Anglia, UK <i>Increasing Biodiversity: Harnessing Biosynthesis to Enable Rapid Generation of Novel Halogenated Natural Products</i>
12:15-12:30	Karol Grela Polish Academy of Sciences, PL <i>A Modular Approach to Activated Olefin Metathesis Catalysts: Application in Synthesis of Hepatitis C Virus NS3 Protease Inhibitor BILN 2061</i>
12:30-14:30	Lunch

Session 2

Chair: Veronique Gouverneur, University of Oxford, UK

- 14:30-15:20 **Peter Somfai**
Royal Institute of Technology, SE
Assylsilanes Beyond Sakurai Allylations: Total Synthesis of (+)-Alexine Utilizing a Novel [3+2]-Annulation Reaction
- 15:20-16:10 **Scott Snyder**
Columbia University, US
Natural Products: Divine Inspiration for Chemistry
- 16.10-16:30 Coffee break
- 16:30-18:00 Poster session

Evening Lecture

- 18:00-19:00 **Duilio Arigoni**
ETH-Hönggerberg, CH
Chiral T-Butyl Groups as a Tool for the Investigation of Biosynthetic Reaction Steps
- 19.00 Dinner

Tuesday 20 May

Session 3

Chair: Ari Koskinen, Helsinki University, FI

- 09.00-9:50 **Janine Cossy**
École Supérieure de Physique et de Chimie Industrielles de la Ville de Paris (ESPCI), FR
Chemoselective Reactions. Synthesis of Biologically Active Natural Products
- 09:50-10:40 **David Tanner**
Technical University, DK
Studies on the Total Synthesis of Biologically Active Alkaloids
- 10:40-11:10 Coffee break
- 11:10-12:00 **Miguel Yus**
Universidad de Alicante, ES
Synthetic Applications of the Arene-Catalysed Lithiation

Short Talks

- 12:00-12:15 **Marco Bella**
University "La Sapienza", IT
Vicinal Amino Alcohols as Organocatalysts and Application in the Synthesis of Convolutamydine A
- 12:15-12:30 **Trond Vidar Hansen**
University of Oslo, NO
Synthetic Studies Towards Some Polyunsaturated Marine Natural Products
- 12:30-14:30 Lunch

Session 4

Chair: David Tanner, Technical University, DK

- 14:30-15:20 **David Chen**
Agency for Science, Technology and Research (A*STAR), SG
Total Synthesis of Natural Products: Strategies and Opportunities
- 15:20-16:10 **Ari Koskinen**
Helsinki University of Technology, FI
Conformational Control in Stereoselective Synthesis
- 16.10-16:30 Coffee break
- 16:30-18:00 Poster session

Evening Lecture

- 18:00-19:00 **Masakatsu Shibasaki**
The University of Tokyo, JP
Synthesis of Bioactive Molecules through Asymmetric Two-Center Catalysis
- 19.00 Dinner

Wednesday 21 May

Session 5

Chair: Dionisios Vourloumis, NCSR "Demokritos, EL

- 09.00-9:50 **Richard Taylor**
University of York, UK
Novel Cyclisation Processes to Prepare Bioactive Marine Natural Products
- 09:50-10:40 **Mark Rizzacasa**
The University of Melbourne, AU
Total Synthesis of Bioactive Natural Products
- 10:40-11:10 Coffee break
- 11:10-12:00 **Georgios Vasilikogiannakis**
University of Crete, EL
The Use of Singlet Oxygen in Natural Product Synthesis

Short Talks

- 12:00-12:15 **Srinivas Kalidindi**
University of Regensburg, DE
From Aromatics to Guaianolides: Enantioselective Total Synthesis Of (+)-Arglabin
- 12:15-12:30 **Jeremy Robertson**
University of Oxford, UK
Cascade and Sequenced Redox Reactions for Natural Products Synthesis
- 12:30 Lunch
- Afternoon Half-day excursion
- 19.00 Dinner

Thursday 22 May

Session 6

Chair: **Nicolas Winssinger**, Université Louis Pasteur, FR

- 09:00-9:50 **Athanassios Giannis**
Leipzig University, DE
Synthesis, Biological Investigations and Medical Perspectives of New Steroidal Alkaloids and their Analogues
- 09:50-10:40 **Floris Rutjes**
Radboud University Nijmegen, NL
Chemical Adventures into Biology Inspired by Natural Products
- 10:40-11:10 Coffee break
- 11:10-12:00 **Markus Kalesse**
Universität Hannover, DE
Synthesis and Biological Evaluation of Natural Products- Tedanolide, Chlorotonil and Chondramide

Short Talks

- 12:00-12:15 **Dionisios Vourloumis**
NCSR "Demokritos", EL
Chemical Biology of Small Molecules Interfering with Protein-Synthesis
- 12:15-12:30 **Martin Maier**
Universität Tübingen, DE
A Concise Total Synthesis of the Macrolide Neopeltolide
- 12:30-14:30 Lunch

Session 7

Chair: **Bruno Botta**, University "La Sapienza", IT

- 14:30-15:20 **M. Léon Ghosez**
Institut Européen de Chimie et Biologie, BE
Efficient Syntheses of Natural Products-like Scaffolds as Tools for Chemical Biology
- 15:20-16:10 **Nicolas Winssinger**
Université Louis Pasteur, FR
Resorcylic Acid Lactones: A Pluripotent Scaffold with Therapeutic Potential
- 16:10-16:40 Coffee break

Evening Lecture

- 16:40-17:40 **K.C. Nicolaou**
The Scripps Research Institute & University of California, US
Perspectives in Total Synthesis

Session 8 – Forward Look Plenary Discussion

Chair: K.C. Nicolaou, The Scripps Research Institute & University of California, US

17.40-17.43	Nicolas Winssinger Université Louis Pasteur, FR
17.43-17.46	Athanassios Giannis Leipzig University, DE
17.46-17.49	Scott Snyder Columbia University, US
17.49-17.52	Duilio Arigoni ETH-Hönggerberg, CH
17.52-18.10	Audience Discussion
20.00	Get-together & Conference Dinner

Friday 23 May

Breakfast & Departure