

EFMC



European Federation for
Medicinal Chemistry

Medicinal Chemistry in Europe

EFMC

2005 - 2006



XIXth International Symposium
on Medicinal Chemistry
ISMC 2006

August 29 - September 2, 2006,
Istanbul, Turkey
(details page 10-11)

www.ismc2006.org

YEARBOOK

This is the last time that I have the privilege of being the author of the Editorial of the EFMC Yearbook as President of the Federation since, in agreement with the regulations, I will leave this position on December 31th. During the three years that I have had the great honour of chairing the Federation, I have had the opportunity of taking part in different actions that I would like to summarise as a short report of this period within the already long life of our Federation.

The elaboration and approval of the new regulations of the Federation represented an important milestone for the organisational consolidation of our institution. An increased communication with the member societies has been another objective of the last years. A greater frequency of the Council meetings and the enhanced correspondence from the EC, as well as the development of the EFMC web site and the consolidation of the Yearbook have been instruments for such an increased communication.

The scientific events are the most important outcomes of the EFMC. Among them, we are especially proud of the International Symposia on Medicinal Chemistry (ISMC), the most important world-wide series of events in the field. We are introducing an increased direct involvement of the Federation in their organisation. Other new series of events have been established in collaboration with the EFMC member societies, such as the Symposia on Advances in Synthetic, Combinatorial and Medicinal Chemistry (ASCMC) in collaboration with the Russian colleagues, or the Polish-Austrian-German-Hungarian-Italian Joint Meetings on Medicinal Chemistry. Many other scientific events organised by our member societies are currently sponsored by the EFMC.

Another novelty in the Federation's actions is its involvement in activities related to the European Commission R&D framework programme. In particular, we have been partners in a Specific Support Action entitled "How to Establish a European Technology Platform for Innovative Medicines".

The EFMC Awards are increasing in number and visibility. The UCB Award for young scientists and the Prous Award for innovative technologies in drug discovery have been added to the prestigious Nauta Award. On the other hand, travel grants for young scientists with the sponsorship of Bentham Publishers have been established for the next ISMC. The support of the EFMC corporate members is crucial for the funding of many EFMC activities and deserves to be particularly acknowledged.

Finally, we have an open opportunity of establishing a physical office of the Federation in Barcelona by means of a generous sponsorship of the Catalan Government. This is a possibility that is being submitted to intense analysis in the Executive Committee since, on one side it offers an appealing occasion for having a more professional secretariat of our federation but, on the other hand, its financial sustainability beyond the sponsorship, as well as the relationships of the professional staff with the elected bodies require a careful consideration.

I would like to finish this communication by expressing my gratitude to the members of the Executive Committee and the Council, as well as to all the members of the European Medicinal Chemistry community that, by means of their opinions and unselfish dedication, made possible the activity and progress of the Federation as an instrument serving the Medicinal Chemistry community at the European level and promoting the collaboration between the national organisations that represents the cornerstones of such a community. I am fully convinced that the progress of the Federation will continue under the presidency of our prestigious colleague, Prof. Roberto Pellicciari. He can count on my collaboration and I kindly ask you to support him in the same way that you did with me.

Ferran Sanz
President 2003-2005



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the Yearbook of the European Federation for Medicinal
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2006

President Elect till 31.12.2005 - **President** 01.01.2006 – 31.12.2008

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President till 31.12.2005 - **Past-President** 01.01.2006 - 31.12.2007

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fsanz@imim.es



Secretary/Treasurer

elected 01.01.2005 – 31.12.2006, 2nd term
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Member

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davidalker@btinternet.com



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Head of Department, Department of Organic Chemistry, Semmelweis University
Hogyes u. 7, Budapest, H-1085, Hungary
matypet@szerves.sote.hu



Council

The Council consists of the members of the EC and one delegate of each Adhering Organisation.
The details of each delegate can be found within the National Organisations' pages.
The complete list of the members of the council is available on page 33.

EFMC OBJECTIVES

The **European Federation for Medicinal Chemistry (EFMC)** is an independent association founded in 1970. Free from any political convictions, it represents the scientific organisations from 20 European countries and covers a geographical area, the size of the USA with a similar scientific population. Its objective is to advance the science of medicinal chemistry by promoting cooperation and encouraging strong links between the national adhering organisations, in order to promote contacts and exchanges between medicinal chemists in Europe and around the World.

Moreover, it offers medicinal chemists an opportunity to publish their work internationally by organising the biennial International Symposium on Medicinal Chemistry (ISMC). ISMC meetings have been held in many different European countries since 1970: Israel, Italy, Germany, Spain, Sweden, France, UK, The Netherlands, Switzerland, Hungary, Denmark and even Canada. These symposia, with an average attendance of 1,400 delegates, are highly international with a broad range of speakers and attendees representing well in excess of 40 countries.

The EFMC has very strong links with the Medicinal Chemistry Division of the American Chemical Society. Not only does the EFMC have a permanent representative from this division, who attends its management meetings, but also the EFMC now has a permanent representative on the Long Range Planning Committee of The ACS Medicinal Chemistry Division. Through this collaboration the ACS convenes sessions for the biennial ISMC Symposia, the flagship symposia of the EFMC, and conversely the EFMC convenes sessions for ACS National meetings. This relationship is being continually strengthened.

European scientists are currently contributing some 40% of the total published manuscripts of The Journal of Medicinal Chemistry. Indeed, the EFMC has a specific representative on the Editorial Advisory Board of the Journal of Medicinal Chemistry. Thus demonstrating the quality of European science and its scientists.

Strong links are also established with the Asian Federation of Medicinal Chemistry: participating in meetings organised by the AFMC and vice versa. This collaboration gives the EFMC a strong international flavour.

Another important part of the EFMC activities is conferring its sponsorship on national scientific meetings. There are a number of scientific meetings organised between two or more countries for which the EFMC confers its sponsorship. More recently it has also awarded bursaries for younger scientists to attend meetings that the EFMC has sponsored.

The EFMC also acknowledges the excellence of medicinal chemists' work, it confers three major awards: the Nauta Award, the UCB Award and the Prous Award. They are given every two years for outstanding achievements in the field of Medicinal Chemistry.

The EFMC homepage is now hot-wired to the web sites of many national organisations, thus facilitating the flow of information, and the new yearbook "Medicinal Chemistry in Europe" should help to further develop cooperation between member organisations as well as their industrial partners and therefore advance medicinal chemistry in Europe, and by extension around the globe.



EFMC Awards 2006

CALL FOR NOMINATIONS

> NAUTA AWARD ON PHARMACOCHEMISTRY

for the advancement of Medicinal Chemistry in general, and the development of international organizational structures in Medicinal Chemistry. The Award will be given for outstanding achievements in the field of Medicinal Chemistry.

> UCB AWARD FOR EXCELLENCE IN MEDICINAL CHEMISTRY

to acknowledge and recognize outstanding research in the field of Medicinal Chemistry in its broadest sense. This Award, established by UCB S.A., will be given to a young scientist without restrictions regarding nationality.

> PROUS AWARD FOR NEW TECHNOLOGIES IN DRUG DISCOVERY

to encourage innovation and investigation in technological developments related to drug discovery. This Award, established by Prous Institute for Biomedical Research, will be given to a scientist, without restrictions regarding nationality, to acknowledge the discovery, evaluation or use of new technologies.

The Awards will be conferred on the occasion of the
XIXth EFMC International Symposium on Medicinal Chemistry
to be held in Istanbul, Turkey on August 29 – September 2, 2006.

Nominations for the Awards should consist of a letter proposing the candidate, a brief biographical sketch with a list of selected publications, and two supporting letters. The nominations should be submitted to the Chairman of the Juries, Prof. Dr. Ferran Sanz, President of the EFMC, Research Unit on Biomedical Informatics (GRIB), IMIM, Universitat Pompeu Fabra, Passeig Marítim de la Barceloneta, 37-49, 08003 Barcelona, Spain. Fax: +34 932 240 875, e-mail: fsanz@imim.es, not later than December 31, 2005. Electronic submissions are deeply encouraged. For details of the regulations please visit the Activities/Awards section of the EFMC web site www.efmc.info



"Where the continents meet"

XIXth International Symposium on Medicinal Chemistry ISMC 2006

August 29 - September 2, 2006
Istanbul, Turkey

EFMC Travel Grants

sponsored by Bentham

The EFMC has reached an agreement with Bentham Science Publishers (www.bentham.org) for the establishment of the EFMC-Bentham Travel Grants with the aim of supporting the participation of young scientists in the ISMC2006.

Bentham is funding such travel grants with the sum of 5000 Euros. The grants will be offered to ten young scientists (500 Euros each), not older than 30 years, who will be nominated by the ISMC2006 Organizing Committee.

Applications have to be sent by e-mail to info@ismc2006.org including the CV of the candidate, a supporting letter of a senior scientist and the abstract of the communication. The deadline for the submissions is April 1st, 2006. The awardees will be announced in May 2006.



⇒ HOME ⇒

⇒ EXECUTIVE COMMITTEE ⇒

⇒ ADHERING ORGANISATIONS ⇒

⇒ ACTIVITIES ⇒

Information about EFMC will be updated regularly on our website:

www.efmc.info

CORPORATE *members*

EFMC offers the opportunity to become corporate sponsor to all those companies which contribute more than 2.500 EUR per year to EFMC.

The contribution might be:

- advertising
- sponsoring one of the three EFMC awards
- sponsoring EFMC grants for attending ISMCs
- paying travelling costs for EC-members
- or any other contribution which supports the activities of the Federation.

Corporate Members will be acknowledged by the Federation in its primary literature and website and, more importantly, they will have the opportunity to actively contribute to the long range planning of EFMC activities. Thus, Corporate Members will be invited to nominate a scientist from their organization to liaise directly with appropriate members of the Federation's Executive Committee. In this manner they will have an opportunity to suggest topics, and even individual speakers, for forthcoming EFMC-ISMC Symposia.

Those who are interested in becoming a Corporate Member should contact the EFMC Secretariat.

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"Where the continents meet"

**European Federation for
Medicinal Chemistry**

XIXth International Symposium on Medicinal Chemistry **ISMC - 2006**

**August 29 - September 2, 2006
Istanbul, Turkey**

www.ismc2006.org

"Second circular and call for papers"



**Turkish Association of
Pharmaceutical and
Medicinal Chemistry**



EFMC
European Federation
for Medicinal Chemistry

SCIENTIFIC SECRETARIAT

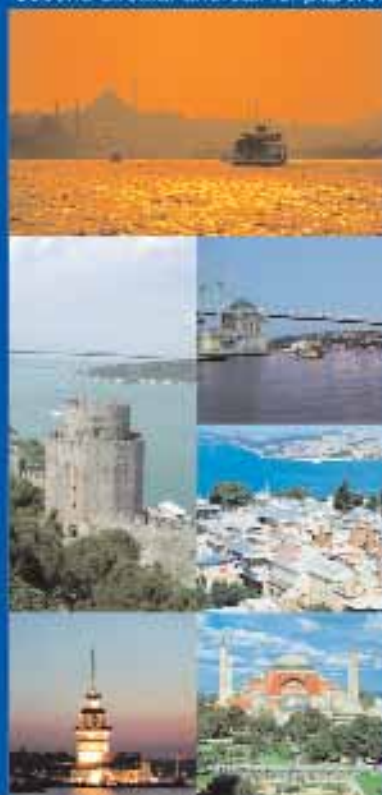
Prof. Dr. Feriye ÖZGENER

ORGANIZATION SECRETARIAT



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Gerhard Ecker (Austria)
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Sevim Holias (Turkey)
Ismi Harun (USA)
Hakan Güler (Turkey)

Preliminary Programme

SESSIONS AND SESSION COORDINATORS

Gerhard Ecker (U of Vienna, Austria)
- Modulation of Multiple Drug Resistance
Klaus Bøgesø (University of Denmark)
- New Trends in Antipsychotic Drug Discovery
Toshi Kobayashi (PRIMA, Japan)
- Recent Developments in Anticancer Medicine (APMC Session)
Roberto Pelliccion (U of Perugia, Italy)
- Adopted Orphan Nuclear Receptors as Therapeutic Targets for Metabolic and Liver Diseases
Gerhard Ecker (U of Vienna, Germany)
- New Approaches in Pain Treatment
Chris Kruse (Ralph, The Netherlands)
- Screening Technologies in Medicinal Chemistry
Giovanni Gaviraghi (Gensciotech, Italy)
- Neurodegeneration: Combining Chemistry and Biology to Harness the Genome
Fatem Al-Jasser and Ismail Helga (Amman U, Jordan)
- Computer Assisted Drug Discovery and Optimization
Eric De Clercq (Katholieke U Leuven, Belgium)
- New Values in Anticancer Research
William Greenlee (Schering-Plough, USA)
- GPCRs I: Structure and Ligands
Arndt Heemken (U of Arnhem, Germany)
- Tropical Diseases
Edmond Delford (UCS Pharma, Belgium)
- Antibodies, Drugs and Tools
Koen Van Emselen (Amman U, Jordan, Belgium)
- Epigenetics and Drug Discovery
Philip Portoghese (U of Minnesota, USA)
- GPCR II - Molecular Mechanisms
John Ellingboe (Wyeth, USA)
- In vitro ADME screening technologies in lead identification and optimization
Henk Timmerman (Mérieux, USA)
- New Antibiotics for Infectious Diseases
Han van de Waterbeemd (UK)
- In vivo and in silico ADME strategies in drug discovery
Theodor Leck (Göteborg, Sweden, UK)
- Process R&D Issues
Eric Hoekstra (Bachinger Institute, Austria)
- Membrane Proteins and Drug Design
Berno Clement (U of Kiel, Germany)
- New Strategies in Protein Design (EUFERS Session)
Paul W. Munday (Newcastle, Scotland)
- Kinases-Where are we?
Serge Halazy (Geneva, Switzerland)
- Phosphatases-Where to go?
Gösta Höglund (Uppsala, Sweden)
- Virtual Screening and Data Mining in Drug Selection Procedures
Zhaojin Wang (Black Forest, Canada)
- New Cardiovascular Drugs
Erden Banoglu (Istanbul, Turkey)
- Revival of Natural Products in Drug Discovery
Poul Krosgaard-Larsen (The Danish U, Denmark)
- Ionotropic Neurotransmitter Receptors as Targets for Rational Drug Design
Daniel Flynn (Duchess, USA)
- Protein Conformational Flexibility in Drug Discovery (ACS Session-1)
- Chemical Genomics (ACS Session-II)
Henk Timmerman (Vrije U, The Netherlands)
- Teaching and Learning in Medicinal Chemistry

INAUGURAL LECTURE
Theodor M. Jones CBE (Málaga, UK)
- Meeting the Global Challenge of Better Health for all... Are we winning?

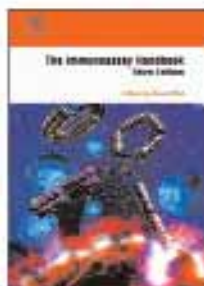
CONFIRMED PLENARY LECTURES
Kevin Shokat (ACS, USA)
- Structural Biology in Small Molecules
Graeme Milligan (U of Glasgow, UK)
- Protein-protein interactions and the control of GPCR-mediated signal transduction
Jörn van der Greef (Vrije U, The Netherlands)
- How can or should the medicinal chemist use the progress in the field of systems biology in his approaches

PLenary VIST www.ams2005.org FOR DETAILED PRELIMINARY PROGRAM and ONLINE REGISTRATION



MEDICINAL CHEMISTRY PUBLICATIONS...

The Immunoassay Handbook, 3rd Edition



Edited By
David Wild, *Director of Design Engineering, ConvaTec, Wound Care and Prevention, UK*

The Immunoassay Handbook provides an excellent guide to this fast-growing industry. Revised and updated, this third edition offers a balanced review of practical information and clinical applications in the field of immunoassay technology.

- ISBN: 0-08-044526-8 ■ Hardbound ■ 930 pages
- Publication date: 2005
- Price: EUR 185 / GBP 127.50 / USD 205

Comprehensive Medicinal Chemistry II



Edited by:
David Trigg, *School of Pharmacy and Pharmaceutical Sciences, The State University of New York, Buffalo, USA*
John Taylor, *Former Senior Vice President Rhone-Poulenc Rorer, Worldwide, UK*

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- Increasing citations – ranked amongst the top ten most cited journals in Medicinal Chemistry*

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- New Regional Editor for Europe: Professor Stephen Noelle, University of London, UK
- Publishes many cutting edge discoveries from leading pharmaceutical companies – including one of the first reported disclosures of Viagra™
- #1 most requested article for the first quarter of 2005, as recognised by CAS Science Spotlight
- #2 highest cited journal in Medicinal Chemistry*

European Journal of Medicinal Chemistry

- The European publication for all aspects of Medicinal Chemistry
- Published under the auspices of the French Société de Chimie Thérapeutique (SCT)
- Publishing leading research in Medicinal Chemistry for over 35 years
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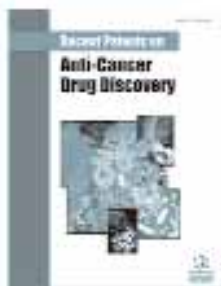
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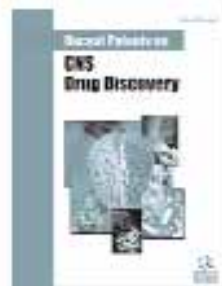
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CALENDAR of Events

organised by the National Adhering Organisations 2005/2006

EFMC sponsored events highlighted in orange

IFMC events highlighted in green

Targeting the Brain: Successes and Pitfalls. Joint meeting of SRC & KVCV, Medicinal Chemistry Divisions

November 25, 2005 Namur, Belgium

Organizing committee: SRC & KVCV, Medicinal Chemistry Divisions

Contact person: LD Organisation
Tel : +32 10 45 47 77 Fax: +32 10 45 97 19
secretariat@ldorganisation.com
www.medchem.be

Organised by : Medicinal and Bioorganic Chemistry Division of Royal Flemish Chemical Society (KVCV) (Belgium) and Société Royale de Chimie (SRC), Medicinal Chemistry Division (Belgium)

Two-Day Conference on Polymeric Drugs and Drug Conjugates

December 1-2, 2005,

Hebrew University of Jerusalem, Jerusalem

Organizing committee :

A.J. Domb, J. Sterling, M. Firdkin, E. Touitou

Contact person: Avi Domb

Tel : 972 2 6757573 or 972 50 7987427

Fax: 972 2 6757076

adomb@md.huji.ac.il

www.EnterSymposium.com/MedChem/2005

Organised by : The Medicinal Chemistry Section of the Israel Chemical Society (Israel)

New Drugs for Unmet Medical Needs December 7-8, 2005

Comwell Roskilde, Roskilde, Denmark

Organizing committee :

Michael Mulvany, Jørgen Matz, Kristian Strømgaard

Contact person: Inger Marie Bro

Tel : +45 89 42 17 26 Fax: +45 8612 8804

imb@farm.au.dk

www.dsft.dk/index.php/60th_Anniversary_meeting/50/0/

Organised by : The Danish Society for Pharmacology and Toxicology (Denmark)

Case Histories in Drug Discovery and Design

December 8, 2005

National Heart and Lung Institute, Kensington, London, UK

Organizing committee: SMR

Contact person: SMR Secretariat

Tel : +44 870 833 2431 Fax: +44 870 833 2434

secretariat@smr.org.uk

www.smr.org.uk

Organised by : Society for Medicines Research (United Kingdom)

Danish Pharmacology 2006

January 18, 2006

University of Southern Denmark, Odense, Denmark

Organizing committee :

Contact person: Inger Marie Bro

Tel : +45 89 42 17 26 Fax: +45 8612 8804

imb@farm.au.dk

www.dsft.dk

Organised by : The Danish Society for Pharmacology and Toxicology (Denmark)

12th Panhellenic Symposium on Medicinal Chemistry

January 27-28, 2006

Patras, Greece

Organizing committee : HSMC in co-operation with the Division of Organic and Pharmaceutical Chemistry of the Association of Greek Chemists

Organised by : Hellenic Society of Medicinal Chemistry (Greece)

Organic Chemistry at the Interface to Biology**January 27-28, 2006**

Radisson/SAS Falconer Hotel, Copenhagen, Denmark

Organizing committee : Povl Krogsgaard-Larsen (chairman), Kim Andersen, Ole Hindsgaul, Karl Anker Jørgensen, Kristian Strømgaard, David Tanner

Contact person: Lila Leffland

Tel : +45 45 96 08 14 Fax: +45 4588 1351

ll@atv.dkwww.atv.dk/a/KLL.html

Organised by : The Danish Academy of Technical Sciences (Denmark)

Young Research Fellows Meeting**January 30 2006**

Faculté de Pharmacie, Paris, France

Organised by :

Société de Chimie Thérapeutique (France)

Nanotechnology in Drug Research**March 2, 2006**

The Danish University of Pharmaceutical Sciences, Copenhagen, Denmark

Organizing committee :

Ulf Simonsen, Steffen Loft, Kristian Strømgaard

Contact person: Kristian Strømgaard

Tel : (+45) 35306114 Fax: (+45) 35306040

krst@dfuni.dk

Organised by : The Danish Society for Pharmacology and Toxicology (Denmark) in co-operation with The Drug Research Academy, The Danish University of Pharmaceutical Sciences

Cancer Treatments for the New Millennium**March 9, 2006**

National Heart & Lung Institute, London, UK

Organizing committee : SMR

Contact person: SMR Secretariat

Tel : +44 870 833 2431 Fax: +44 870 833 2434

secretariat@smr.org.ukwww.smr.org.uk

Organised by : Society for Medicines Research (United Kingdom)

Frontiers in Medicinal Chemistry**March 12 -15, 2006**

Frankfurt, Germany

Organised by :

Division of Medicinal Chemistry of the German Chemical Society (GDCh) (Germany)

Virtual Discovery**March 21, 2006**

London, UK

Organizing committee : RSC Biological and Medicinal Chemistry Sector and Molecular Modelling Group

Contact person: Elaine Wellingham

Tel : + 44 1275 853311 Fax: + 44 1275 853311

esw@confsec.co.ukwww.rsc.org/BMCS and www.confsec.co.uk

Organised by : The Biological and Medicinal Chemistry Sector (BMCS) of the Royal Society of Chemistry (RSC) (United Kingdom)

Annual Meeting of the Medicinal Chemistry Section of the Israel Chemical Society**March 30, 2006**

The Weizmann Institute, Rehovot, Israel

Organizing committee : E. Gazit, A. Shurky

Contact person: Avi Domb

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Hatfield, UK

Organizing committee : RSC BMCS

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**Vth Multidisciplinary Conference
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and the Danish Society of Pharmacology
and Toxicology****May 18-19, 2006**
KolleKolle Hotel, Værløse, DenmarkOrganised by :
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(Denmark)**"Imaging in Biomedical Research"**
May 18, 2006Institute for Organic Chemistry
University of Basel, BaselOrganizing committee :
Contact person: Dr Hans Peter Maerki
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www.swiss-chem-soc.ch/smc/Organised by : Division for Medicinal Chemistry
(DMC), Swiss Chemical Society (SCS) (Switzerland)**Challenges in Medicinal Chemistry:
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London, UKOrganizing committee : RSC BMCS and SCI Fine
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Chemistry Sector (BMCS) of the Royal Society of
Chemistry (RSC) (United Kingdom)**Translating from Discovery Molecule
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www.smr.org.ukOrganised by : Society for Medicines Research
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Prof. Balansard, Dr Crozet, Prof.Dumesnil, Dr Gellis,
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Contact person: Prof. Patrice Vanelle
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Organised by :
Société de Chimie Thérapeutique (France)**XIXth International Symposium on Medicinal
Chemistry****August 29 - September 2, 2006**
Istanbul, TurkeyOrganizing committee: Turkish Association of
Pharmaceutical and Medicinal Chemistry
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banoglu@gazi.edu.tr
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secretariat@smr.org.uk
www.smr.org.uk

Organised by : Society for Medicines Research
 (United Kingdom)

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Sitges, Barcelona

Organizing committee : David Andreu, Carles Puig,
 Manuel Pastor, Fernando Albericio, Ricardo Gutiérrez
 Gallego Contact person: David Andreu
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david.andreu@upf.edu
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Organised by : Sociedad Española de Química
 Terapéutica (Spain)

1st Coast to Coast Medicinal and Synthetic Chemistry Symposium**October 1-3, 2006**

Riviera Conference Centre, Torquay, UK

Organizing committee : RSC BMCS
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esw@confsec.co.uk
www.rsc.org/BMCS and www.confsec.co.uk

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 Chemistry (RSC) (United Kingdom)

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 Chemistry Divisions
 Contact person: LD Organisation
 Tel : +32 10 45 47 77 Fax: +32 10 45 97 19
secretariat@ldorganisation.com
www.medchem.be

Organised by : Medicinal and Bioorganic Chemistry
 Division of Royal Flemish Chemical Society (KVCV)
 (Belgium) and Société Royale de Chimie (SRC),
 Medicinal Chemistry Division (Belgium)

Case Histories and SMR Award 40th Anniversary Meeting**December 7, 2006**

National Heart & Lung Institute, London, UK

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 Contact person: SMR Secretariat
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secretariat@smr.org.uk
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Organised by :
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Faculté de Pharmacie de Lille, France

Organizing committee : Prof. Benoit Déprez
 Contact person: Prof. Benoit Déprez
 Tel : 03-20-87-71-65 Fax : 03-20-87-72-68

carole.desruelle@pasteur-lille.fr
www.sct.asso.fr

Organised by :
 Société de Chimie Thérapeutique (France)

XXth International Symposium on Medicinal Chemistry**August 31 - September 4, 2008**

Vienna, Austria

Organizing committee:
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 Tel : +43 1 86634 378 Fax: +43 1 86634 383
gerhard.f.ecker@univie.ac.at

Organised by :
 Austrian Chemical Society,
 Medicinal Chemistry Section (Austria)

XXIst International Symposium on Medicinal Chemistry**August, 2010**

Brussels, Belgium

Organizing committee: SRC & KVCV, Medicinal
 Chemistry Divisions
 Contact person: Dr Edmond Differding
 Tel : +32 2 386 27 30 Fax: +32 2 386 36 69
edmond.differding@ucb-group.com

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Educating Chemists for Medicinal Chemistry

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Medicinal chemists for drug discovery research

Medicinal chemistry has been defined¹ as: "a chemistry-based discipline, also involving aspects of biological, medical and pharmaceutical sciences. It is concerned with the invention, discovery, design, identification and preparation of biologically active compounds, the study of their metabolism, the interpretation of their mode of action at the molecular level and the construction of structure-activity relationship."

The above definition from the Medicinal Chemistry Section of the International Union of Pure and Applied Chemistry (IUPAC) in 1998, aims to cover the many varied activities of medicinal chemists. The purpose of this article, however, is to concentrate on the major employment of practising medicinal chemists outside of academia. This is surely in the pharmaceutical industry where medicinal chemists are mainly concerned with the design and synthesis of novel organic compounds for biological evaluation in the discovery phase of researching for potential new drug therapies. They have to be excellent organic chemists, able to converse with biochemists and biolo-

gists, and able to use the tools available for relating chemical structure and properties to biological activities. This probably represents the core of their requisite abilities. It does not represent the limit of their functions, however. Medicinal chemists must be conversant with the requirements for patents in order to protect their inventions; they should appreciate the needs of chemical development to assist the scale up of their products; they ought to understand the drug development process, to communicate effectively and work efficiently in a team composed of scientists with different training and backgrounds.

This composite of abilities represents a mixture of what was imparted during the formal education in university, what has since been learned "on the job" or acquired by experience, and the chemist's own character. In terms of the latter, for example, some will hardly need to be told how to communicate whereas others may have to work very hard to learn to do this. Obviously too, they must be excellent scientists. The question arises as to what should be provided as formal education and training in a university setting.

The views of pharmaceutical companies

Some years ago, the IUPAC Medicinal Chemistry Section (now part of Division VII, Chemistry and Human health) canvassed the views of industry for their preference in hiring the new employees who will become their medicinal chemists. A questionnaire was sent out in 1996 and 1997 to leading medicinal chemists and research directors in the major international pharmaceutical companies engaged in research and development. The responses were very similar and over 90% of the replies indicated a preference for well trained synthetic organic chemists rather than medicinal chemists. The results were reported in a series of publications relating to different countries²⁻⁴.

The very strongly expressed opinion was that the most important educational background required of the new chemists was excellent training in synthetic organic chemistry. Preferably they should possess a PhD and postdoctoral experience from laboratories of well known synthetic organic chemists. Little interest was expressed for having chemists with formal academic training in medicinal chemistry, or for chemists trained in organic synthesis but also having knowledge of biological subjects. The industrial view was that most of the medicinal chemistry aspects, other than organic synthesis, could be learned on the job or through short courses during employment. In contrast, synthesis cannot be learned effectively in a practical sense through short courses during employment although, of course, short courses are a valuable way of extending knowledge and, particularly of keeping abreast of recent developments.

It is surprising to find that such little value is attached to chemists having received some formal education in a biological topic. It seems logical to employ such chemists since it should help them to be effective as medicinal chemists from the outset, instead of having to spend quite a few years acquiring the additional understanding necessary to enable them to be effectively involved in drug design as well as in drug synthesis.

The foregoing certainly accords with my personal experience. I trained as an organic chemist and entered the pharmaceutical industry with no knowledge of medicinal chemistry or pharmacology. It took me many years to learn about these disciplines even though I had studied biology at school and for one year at university as part of my undergraduate course. The knowledge of some biology at least made me receptive to the subsequent research discussions with pharmacologists, but I had to undertake a considerable amount of private study to learn what was needed for drug discovery research.

A bachelor degree in medicinal chemistry – a proposition

The above observations are relevant to a discussion I once had when I was employed as a medicinal chemist at SmithKline & French Laboratories (SK&F) with James Black (later Sir James Black, Nobel laureate for Medicine or Physiology) seeking to define histamine H₂ receptors and to design a suitable antagonist as a useful drug (the work which led to the anti-ulcer drug, cimetidine). During this particular conversation he was very critical of some of the chemists with whom he had previously collaborated.

To him, they were hidebound in their thinking and also too ready to treat biological results as if they were precise numbers. He felt that they did not appreciate the problem of biological variation and the need to understand the statistical nature of bioassays. For him, the chemists wanted to treat values from bioassay in the manner in which they considered melting points, that is as invariant numbers. Unfortunately he felt unable to change this situation by dialogue with the chemists because, as he saw it, they were no longer flexible in their thinking. Therefore, he saw that a possible solution would be to get at the chemists in their early training, during the period in which they were undergoing mental imprinting. His solution was to have chemists study medicinal chemistry at university for their first degree.

James Black left SK&F in 1973 to take the Chair of Pharmacology at University College London (UCL), as Head of Department, from which Professor Heinz Schild had just retired. Whilst at UCL, he tried out his idea of training medicinal chemists on the Chemistry Department. He found that Professor Charles Vernon, a biological chemist, was receptive to this proposal and between them they initiated a B.Sc. in medicinal chemistry. It was an opportune time to start a new degree in chemistry because the number of students applying to study "pure" chemistry was falling and medicinal chemistry sounded attractive to some students leaving school who wished to combine their chemistry with an interest in a medicine-related subject. James Black was only at UCL for four years but, like all great men, he left his mark on the place.

Degrees in medicinal chemistry

The medicinal chemistry degree at UCL has endured and, over thirty years later, it still continues as a three-year B.Sc. or four-year M.Sci. (Master of Science). The number of students varies each year but this degree course has provided 20-30% of the annual undergraduate entrants to the Chemistry Department. The students take the same core lectures for chemistry as do the chemists except for the more advanced inorganic chemistry. Thus, they are given the same physical chemistry and organic chemistry; indeed they take the courses together.

Table 1.

The non-chemical subjects studied by students taking the medicinal chemistry degree in University College London

Year 1:	Mammalian physiology; Cellular and Molecular Biology.
Year 2:	Statistics; General and Systematic Pharmacology; Topics in Biochemistry.
Year 3:	Principles of Drug Design; Molecular Pharmacology; Receptor Mechanisms. Optional subject.

In addition to the chemistry topics, the medicinal chemists take the subjects outlined in Table 1 for the first three years, which are taught by the corresponding departments. They do this at the expense of being able to select other optional topics but this is acceptable because they have opted to take a medicinal chemistry degree course. In the fourth year, the students undertake a research project, which involves 50% of their course, and can choose to also study four optional subjects. The latter can be selected from, for example: natural products chemistry, biological chemistry, advanced spec-

troscopy, more-advanced organic synthesis, chemical computation, or a specialist biological topic. The organic chemistry content of this course is very high since, in the second and third years, 25% of the teaching time involves organic synthesis and in the fourth year, it is possible to again spend 25% of the time on organic lecture courses, and 50% of the time on a synthetic organic research project.

Table 2.

The third year course of 30 lectures (at 45 minutes each) on "the principles of drug design" for medicinal chemistry students at University College London

One lecture on:

Introduction to drug development.

Ten lectures on:

Structure-Activity Relationships:

Hammett equation, QSAR, the Hansch equation, bioisosterism, the Topliss tree, prodrugs, steric interactions, pK_a 's and structure-activity analysis.

Six lectures on:

Enzyme inhibitors:

Basis of enzyme inhibition. Transition state analogues. Irreversible, active-site directed and suicide inhibitors. Pyridoxal phosphate dependent enzymes: inhibitors of aminoacid decarboxylases, transaminases, and monoamine oxidase.

Five lectures on:

Anti-bacterial and anti-fungal chemotherapy:

Bacterial infections, an historical view. Sulfa drugs. Penicillin, discovery and mechanism of action. Semi-synthetic penicillins. Other antibiotics, anti-bacterials. The development of resistance. Fungal infections and treatments. Fluconazole.

Eight lectures on:

Anti-viral and anti-cancer chemotherapy:

Viral replication. DNA-containing viruses: herpes simplex virus. Intervention in the viral life-cycle: penetration, antimetabolites, replication, and transcription inhibitors. Retroviruses: HIV. Life cycle, anti-HIV drugs. Biology of cancer: tumour suppressor and promoter genes. DNA as a target: alkylating, intercalating, and strand-cleavage agents, minor groove binders. Antimetabolites, natural products.

In the third year of the medicinal chemistry degree course, the lectures on the principles of drug design are particularly relevant to a future medicinal chemist; the stated objectives of these lectures are: "to understand how to relate chemical structure to biological activity and how to conduct a structure-activity analysis", and "to appreciate the various approaches to drug discovery and be able to exemplify them". The structure of this lecture course is given in Table 2. In the fourth year, approximately six case histories of drug discovery are also presented (generally by one of the respective inventors) by industrial lecturers.

To enhance the standing of the medicinal chemistry degree the Provost at UCL at that time (Sir James Lighthill) agreed to make a Professorial appointment at the research level. I found myself being invited for discussions. Negotiations followed and I accepted to become the SmithKline and French Professor of Medicinal Chemistry in 1986. Another lecturer was also appointed who was very active in research and this really did ensure that the Chemistry Department had a pronounced research presence in medicinal chemistry.

There are now at least fifteen other University Chemistry departments in the U.K. which offer degrees in medicinal chemistry or a closely related subject such as "Chemistry for Drug Discovery", "Biological Chemistry", or "Pharmaceutical Chemistry". Another pioneering Chemistry Department was the one at Loughborough where Professor Ken W. Bentley, initiated a medicinal chemistry degree course in the 1970's which is still active; Bentley had left Reckitt and Colman laboratories after inventing the very potent opiate class of morphine-like anal-

gesics (Diels-Alder adducts derived from thebaine) one of which is buprenorphine.

Employment for medicinal chemists in big pharma

If bright students with first class degrees from these courses continue their studies by completing PhD's with well known outstanding and highly regarded synthetic organic chemists then they will surely be able to win employment as research medicinal chemists in the pharmaceutical industry, and they will have conformed to Sir James Black's ideal.

Of course, medicinal chemistry graduates can pursue their PhD studies in other chemical specialities such as computing, or physical-organic chemistry topics, or in drug delivery, or drug metabolism etc. The nature of the topic will generally determine the area of research in which they may seek employment.

Many medicinal chemistry graduates may choose not to continue in university for a research qualification but go into teaching or directly into industry. They will most probably not work as medicinal chemists in drug discovery. There are many other suitable types of positions for medicinal chemists available in the industry, for example: as Clinical Research Assistants or Clinical Trials Coordinators, or in Regulatory Affairs, in Information Retrieval or Patents, in Process Development, as Sales Representatives or in Marketing etc.

The highly sophisticated organisation of discovery research in big pharma depends upon the integration of many different specialities. Their greatest need for chemists is in chemi-

cal synthesis and presumably that is the reason why they seek for the best synthetic organic chemists. When it comes to the decision taking of which types of structures to synthesise, or what properties to be aiming for, however, the companies probably only need a few medicinal chemists to interface with the biochemists and biologists, and to take the main decisions about which chemical structures to pursue.

This has become even more evident with the further separation of chemist functions into library synthesis for lead generation, lead development, optimisation of drug candidate structures with respect to drug disposition and unwanted toxic or side effects, and scale-up synthesis for development. There are also many other chemists involved in various functions, for example, in the measurement of chemical properties relevant to drug discovery and development, or as computational chemists for conformational analysis and structure-activity analysis, or in information technology, spectroscopy and substance analysis and so on. With so many interconnecting specialities it is, after all, not surprising that there is only a minor proportion of medicinal chemists required to provide the leadership in drug design.

Employment for medicinal chemists in small pharma

There is a considerable contrast between big pharma as described above and the small research companies or biotech companies which do not possess large teams of chemists. In the small companies, individual scientists may have to fulfil many functions, that is they have to act as generalists rather than as specialists. Under these circumstances the medicinal chemistry

graduate is probably extremely well prepared for the interaction that must occur with the various biologically based activities.

Small biotech companies, of which there are many, often have severe limitations in the number of scientists that they can afford to employ and they require people who are able to contribute in a multifunctional manner. They are certainly not able to train their own medicinal chemists; therefore they seek personnel who have already developed medicinal chemistry skills and are capable of immediately interacting productively with scientists from other disciplines, especially from the biological sciences.

One way of getting trained medicinal chemists is to attract experienced scientists away from the big research based companies. Sometimes they become available as a consequence of a merger taking place between big companies to form even larger companies but with fewer total staff, e.g. as occurred during a decade in which GlaxoSmithKline was formed from the four large research companies, Glaxo, Wellcome, SmithKline and French, and Beecham Products. The supply of such trained professional medicinal chemists is clearly limited and, presumably, small companies cannot just wait until an appropriate merger takes place between big companies. Therefore in this sector there should be many opportunities for employment available to recently qualified medicinal chemists.

Short courses in medicinal chemistry

To assist organic chemists to appreciate what is required of a medicinal chemist, short courses have been

mounted. My interest in medicinal chemistry as a scientific discipline also led me to become involved with the Royal Society of Chemistry (RSC) Summer School when I was at SK&F. My colleague, Dr AM Roe, was Chairman of the RSC Education Committee which advised the RSC on the various courses mounted for post graduate chemists on specialist topics. These were usually residential and each lasted for approximately one week. One such course had started in 1979 as a week's summer school in medicinal chemistry but it had not attracted enough chemists from the pharmaceutical industry, possibly because it appeared to be overly dependent on techniques of structure determination and chemical analysis. Anthony Roe invited me to think up a suitable syllabus.

Our aim was to provide a rapid and concentrated conversion course for recently hired postdoctoral research chemists in the pharmaceutical industry; in the main these were organic chemists who needed to know what was required to become a practising medicinal chemist. My past experience had shown me that such courses usually dealt with diseases and their test models but I decided to avoid this approach. I felt that one should aim to introduce, as well as possible, the principles of the subject. It seemed to me that the basic discipline for medicinal chemists was to understand structure-activity analysis and the interface with the other disciplines involved in drug discovery. Thus the core lectures would be on physico-chemical properties (octanol-water partition, pK_a and hydrogen-bonding, conformational analysis), multi-parameter correlation analysis and computation, biological targets and

Table 3.

Syllabus for a one-week school as an introduction to medicinal chemistry. The published⁵ syllabus compared with the recent RSC school in Nottingham University, U.K., 4 - 8 July 2005. The lectures from the latter are asterisked.

I Introduction:	* 1.	Research strategy
II Biological targets:	* 2.	Lead generation/sources for drugs
	* 3.	Receptors and drug-receptor interactions
	* 4.	Enzymes and design inhibitors
	5.	Ion channels, membranes and transporters
	* 6.	Second messengers
III Bioassay:	T 7.	Screening methods and the information that they provide
	T 8.	Determining activity: principles of pharmacological assay, biological variation (and the need for statistics), in vitro and in vivo methods
IV Structure-activity methods:	* 9.	Physicochemical concepts, including pK_a , solvent partition, Hammett, H-bonding, steric parameters
	* 10.	QSAR, parameterization and computer assisted lead optimization, statistical methods
	* 11.	Molecular modeling, energy calculations and molecular graphics
	12.	Operational strategies in molecular modification, pharmacophore identification, conformational restriction, isosterism, lipophilicity control, solubilisation
	T 13.	Development of a lead compound (a tutorial exercise)
V Biodisposition and implications:	* 14.	Pharmacokinetics, concepts, parameters and modeling
	* 15.	Drug metabolism
	16.	Prodrugs
	* 17.	Molecular toxicology and avoidance of toxic intermediates
VI Case studies:	*	3 or 4 case studies of drug discovery
VII Special topics selected from the following possibilities:		Bio-organic chemistry
		Chirality in drug action
		Clinical pharmacology
		Combinatorial chemistry
	*	Drug delivery
		Ethical considerations
	* †	Historical: approaches to discovering drugs
	*	Molecular biology: role in drug discovery
		Nucleotides
	*	Patents
		Peptidomimetics
		Regulatory procedures
	* †	Structure-guided drug design

T = Tutorial † new, not in ref.5

bioassay, receptors and enzymes, ion channels and transporters, drug disposition (dmpk) and the drug development process. We would also include several case histories of drug discovery (something which I had previously encountered in a Society for Drug Research Symposium). Lecturers were mainly industrial, and the number of participants was limited to around 100 to foster a more intimate and informal atmosphere.

The first "summer school" of this

type was mounted in 1981 and the result was a resounding success. It has since been repeated in alternate years, always oversubscribed and with a healthy participation of delegates from continental Europe. It has received further accolade by providing the model for the annual course put on in the USA since 1987 at Drew University, Madison, N.J.

An early example⁵ for a week-long syllabus is indicated in Table 3. This is compared with the most

recent RSC summer school held on Nottingham University campus, U.K. on 4-8 July 2005. Some special topics have been included (indicated by *) in place of lectures on ion channels (N°5), operational strategies (N°12), and prodrugs (N°16). Three other lecture topics (N° 7, 8 and 13) are presented as optional tutorials. The drug delivery topic was on "computational approaches to pre-formulation and formulation design". Some of the lecture subject matter or emphasis has probably changed somewhat but generally, the philosophy of the approach has been retained.

Other short courses are also available in other countries, for example: at the Leiden-Amsterdam Center for Drug Research in Noordwijkerhout in the Netherlands, the Swiss Course on Medicinal Chemistry, Leysin, Switzerland, at the Danish University of Pharmaceutical Sciences in Copenhagen Denmark, and the Italian Advanced School of Medicinal Chemistry for Ph.D. students and young researchers which is held annually in Urbino, Italy. Some of these courses tend to be "extension courses" in that they aim to extend the knowledge of medicinal chemistry students or researchers rather than being "conversion courses" aimed at non-medicinal organic chemists. Many other courses exist, run commercially or by universities, and these are usually mounted locally and focus on a specialized area of medicinal chemistry or its application. Many of the big research-based pharmaceutical companies also run their own in-house training courses of both types i.e. conversion courses and extension courses. Naturally, these are not

usually open to non-employees to attend.

Schools of Pharmacy

The title of this short article "Educating Chemists for Medicinal Chemistry" is meant to convey that it is aimed at the education of real practising research oriented medicinal chemists. It has not been discussing the teaching of medicinal chemistry per se. It is an expansion of thoughts expressed earlier, e.g. in reference 6. Traditionally, the formal university teaching of medicinal chemistry takes place in the faculties or schools of pharmacy. There, medicinal chemistry is only one of a variety of subjects taught at the undergraduate level where the focus is on education of future practising pharmacists. Presumably the aim is to give pharmacists some understanding of how new medicinally useful drugs are discovered. The combined results of the responses to a questionnaire sent to schools of pharmacy have been published.⁷⁻⁹

Undergraduate medicinal chemistry is usually taught by academic staff who are practising medicinal chemists working at the research level in some aspect of drug design. These academics are usually also involved in supervising postgraduate students and/or postdoctoral researchers. The interesting question arises as to where the postgraduate students had spent their undergraduate education. Did they graduate from a pharmacy course or a chemistry course?

If students obtain both of their qualifications (i.e. bachelors degree and doctorate) from a school of pharmacy then the issue which arises for an employer seeking chemists for drug discovery is whether the prospective

employee has had sufficient exposure to chemistry and, especially, to synthetic organic chemistry. For the latter, there is a marked contrast in the organic chemistry training for a PhD degree if the student has been involved in new method development, or synthesis of a complex target molecule, in comparison with a student who has synthesized a series of structurally similar molecules using a repetitive synthesis procedure. Departments of Pharmacy vary considerably at the postgraduate level and what they teach depends very much on the specialisms of the academic teaching staff. Some Departments may specialise in drug delivery or drug formulation, others might be more involved in drug safety or biochemistry. Some are undoubtedly distinguished in chemical synthesis and new drug design and one would hope that this

would be appreciated by a prospective employer. The extent of chemical training and chemical achievement demonstrated by a student will provide the basis for an employer to judge whether they wish to offer a job to a prospective employee, presenting themselves as a medicinal chemist.

Summary

This article discusses the education of medicinal chemists who will be active in drug discovery research in the pharmaceutical industry. The main theme is the combination of education in synthetic organic chemistry with other subjects relevant to medicinal chemistry. It is anticipated that such chemists will be acceptable for employment in the major R&D-active pharmaceutical companies.

References

- 1 C.G. Wermuth, C.R. Ganellin, P. Lindberg and L.A. Mitscher. Glossary of Terms used in Medicinal Chemistry. *Pure & Appl. Chem.* 1998, 70, 1129-1143. also in *Ann. Rep. of Med. Chem.* 1998, 34, Chapt. 36, pp 385-395. <http://www.chem.qmul.ac.uk/iupac/medchem>
- 2 C.R. Ganellin and W.D. Busse. Views from Industry on the Medicinal Chemistry Curriculum: Answers to a Questionnaire. in "Trends in Receptor Research" Ed. V.Claassen, *Pharmacochemistry Library*, Vol.20, Elsevier, Amsterdam, 1993, pp 305-315.
- 3 C.R. Ganellin, L.A. Mitscher and J.G. Topliss. Educating Medicinal Chemists. *Ann. Rep. Med. Chem.* 1995, 30, Chapt. 33, pp 329-338.
- 4 W.D. Busse, C.R. Ganellin and L.A. Mitscher. Vocational Training for Medicinal Chemists: Views from Industry. *Eur.J.Med.Chem.* 1996, 31, 747-760.
- 5 C.R. Ganellin. Syllabus for a Short Postgraduate Course in Medicinal Chemistry. *Chem. International*, 1995, 17, 212-214.
- 6 C.R. Ganellin. Two Routes to Becoming a Medicinal Chemist. *Chem. International*, 2001, 23, 43-45.
- 7 C.R. Ganellin, L.A. Mitscher, B. Clement, T.H. Kobayashi, E. Kyburz, A. Marcincal, A. Monge, G. Tarzia and J. Topliss. University Education of Medicinal Chemists: Comparison of Eight Countries. *Eur. J. Med. Chem.* 2000, 35, 163-174.
- 8 C.R. Ganellin, L.A. Mitscher and J.G. Topliss. Education of Medicinal Chemists in Departments of Medicinal Chemistry (USA). *Medicinal Research Reviews*, 1998, 18, 121-137.
- 9 T.-H. Kobayashi and C.R. Ganellin. Medicinal Chemistry Graduate School Curriculum and Contribution to Pharmaceutical Industry in Japan. *Med. Chem. News*, 1998, 8 (4), 21-28



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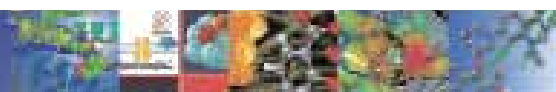
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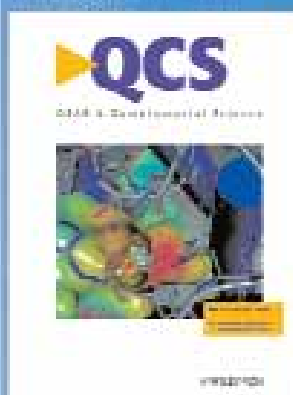
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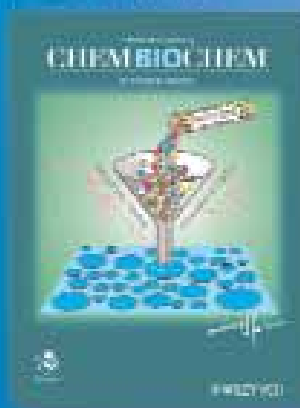
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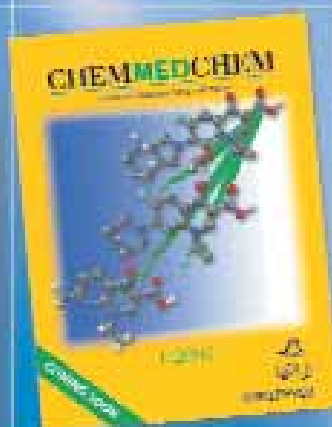
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The Council consists of the members of the EC and one delegate of each Adhering Organisation.

According to the new statutes, the voting rights are allotted according to the following rules: members of the EC: 1 vote, countries with up to 99 members: 2 votes, countries with 100-199 members: 3 votes, countries with 200-399 members: 4 votes, countries with 400-599 members: 5 votes, countries with 600-899 members: 6 votes, countries with more than 899 members: 7 votes. As for countries with more than one Adhering Organisation, votes will be proportionally distributed among them, taking into account their respective memberships. The resulting number will be rounded off to the closest digit.

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Executive Committee

Dr Richard Armer, Oxagen Ltd
Society for Medicines Research, United Kingdom

Prof. Koen Augustyns, Universiteit Antwerpen
Medicinal and Bioorganic Chemistry Division of
Royal Flemish Chemical Society (KVCV), Belgium

Dr Derek Buckle, DRB Associates
The Biological and Medicinal Chemistry Sector
(BMCS) of the Royal Society of Chemistry (RSC),
United Kingdom

Dr Edmond Differding, UCB SA
Soci t  Royale de Chimie (SRC), Medicinal
Chemistry Division, Belgium

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Hebrew University of Jerusalem
The Medicinal Chemistry Section of the Israel
Chemical Society, Israel

Prof. Gunars Duburs,
Latvian Institute of Organic Synthesis
Latvian Association for Medicinal Chemistry, Latvia

Prof. Gerhard Ecker, University of Vienna
Executive Committee

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Austrian Chemical Society, Medicinal Chemistry
Section, Austria

Dr Anders Karlen, Uppsala University
Swedish Pharmaceutical Society, Section for
Medicinal Chemistry, Sweden

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Pharmaceutical Society, Slovenia

Prof. Panos N. Kourounakis,
Hellenic Society of Medicinal Chemistry
Hellenic Society of Medicinal Chemistry, Greece

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Soci t  de Chimie Th rapeutique, France

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Section of Pharmacochimistry, Royal Netherlands
Chemical Society (KNCV), The Netherlands

Dr J nos W fling, University of Szeged
Organic and Medicinal Chemistry Division (OMCD)
of the Hungarian Chemical Society (HCS),
Hungary

Prof. Nikolay S. Zefirov,
Moscow State University
The D.I. Mendeleev Russian Chemical Society,
Medicinal Chemistry Section, Russia

Delegate to be elected,
Sociedad Espa ola de Qu mica Terap utica, Spain



Name **Austrian Chemical Society, Medicinal Chemistry Section**

Mission To foster medicinal chemistry in Austria by jointly organizing and hosting national and international summerschools, minisymposia and workshops together with the Austrian Pharmaceutical Society.

Founded 1999
Members 100

Member profile

Trade and Industry:	27%
Research Institute and University:	46%
Others:	27%

Postal address Nibelungengasse 11/6
AT-1010 Vienna
Austria

Telephone +43 1 587 42 49 or +43 1 587 39 80
Fax +43 1 587 89 66
E-mail office@GOECH.at
Website <http://www.goech.at>

Recent & upcoming events

- Joint Meeting on Medicinal Chemistry (June 20-23, 2005), Vienna, Austria
- Summer School Drug Design (September 11-16, 2005), Austria
- XXth International Symposium on Medicinal Chemistry (August 31 - September 4, 2008), Vienna, Austria

President Dr Eric HAAKSMA (AUSTRIAN CHEMICAL SOCIETY, Medicinal Chemistry Section)
Secretary Mrs Gabriela EBNER (AUSTRIAN CHEMICAL SOCIETY)
EFMC-Delegate Dr Peter ETTMAYER (BOEHRINGER INGELHEIM AUSTRIA GmbH)

Medicinal and Bioorganic Chemistry Division of Royal Flemish Chemical Society (KVCV)

Name

2002
120

Founded
Members

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+32 16 22 68 92
info@kvcv.be
<http://www.kvcv.be>

Postal address

Telephone
Fax
E-mail
Website

Organisation of symposia and activities.
Promotion of contacts between industry and academia.
Promotion of contacts with other national
and international organisations.
Every 2 years the "Dr. Paul Janssen Price of Medicinal Chemistry"
is awarded to an outstanding Ph.D. thesis in the field.

Activities

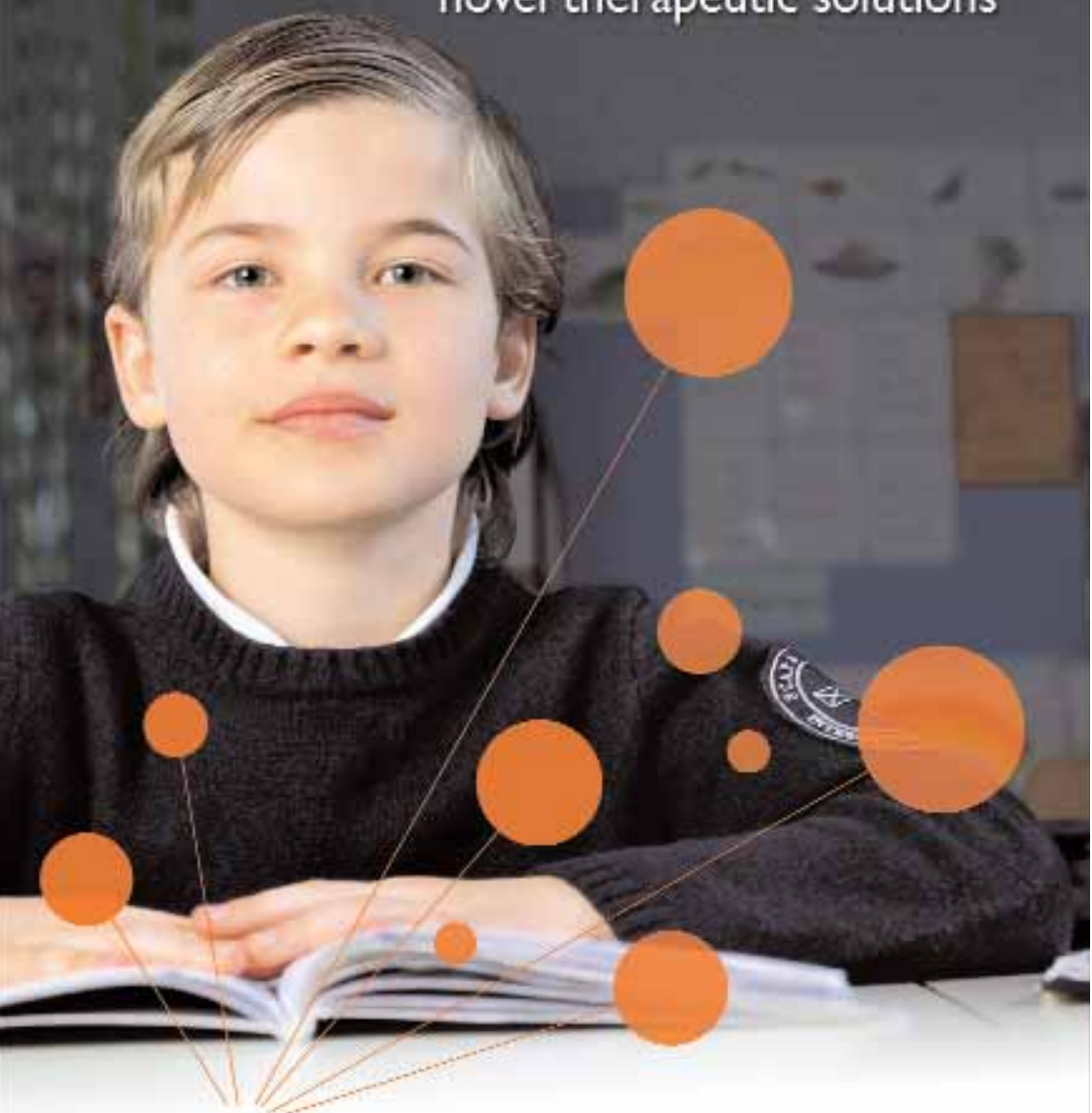
Recent & upcoming events

- 4th Johnson and Johnson PRD Symposium on Drug Discovery (April 7-8, 2005), University of Antwerp, Belgium
- Targeting the Brain: Successes and Pitfalls. Joint meeting of SRC & KVCV, Medicinal Chemistry Divisions (November 25, 2005), Namur, Belgium
- Annual One-Day Meeting on Medicinal Chemistry of SRC & KVCV, Medicinal Chemistry Divisions (November, 2006),
- XXist International Symposium on Medicinal Chemistry (August, 2010), Brussels, Belgium

Prof. Koen AUGUSTYNS (UNIVERSITEIT ANTWERPEN)
Dr Peter TEN HOLTE (I&J PRD)
Prof. Koen AUGUSTYNS (UNIVERSITEIT ANTWERPEN)

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Société Royale de Chimie (SRC), Medicinal Chemistry Division

Name

The Division of Medicinal Chemistry of the SRC provides a forum for scientists interested in medicinal chemistry and related areas in pharmaceutical research. The Division's activities intend to bring together its members and to foster contacts in a European context.

Mission

1973

Founded

174

Members

ULB, CP 160/07
Avenue F. Roosevelt, 50
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Belgium

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+32 2 650 52 08

Telephone

+32 2 650 51 84

Fax

src@ulb.ac.be

E-mail

<http://www.src.be>

Website

The DMC organises annually a Symposium aimed at updating interested participants on particularly rapidly evolving areas of pharmaceutical research, by specialists in their respective field.

Activities

The DMC confers, every 2 years, the "Paul Janssen Prize" to acknowledge an outstanding Ph.D. thesis work.

Recent & upcoming events

- Targeting the Brain: Successes and Pitfalls. Joint meeting of SRC & KVCV, Medicinal Chemistry Divisions (November 25, 2005), Namur, Belgium
- Annual One-Day Meeting on Medicinal Chemistry of SRC & KVCV, Medicinal Chemistry Divisions (November, 2006),
- XX1st International Symposium on Medicinal Chemistry (August, 2010), Brussels, Belgium

Dr Edmond DIFFERDING (UCB S.A.)

**President &
EFMC-Delegate**



Name	The Danish Society for Pharmacology and Toxicology		
Mission	To advance the development of pharmacology, toxicology and medicinal chemistry.		
Members	338 members of which 86 are members of the medicinal chemistry section.		
Member profile	Trade and Industry:	50%	
	Research Institute and University:	50%	
Postal address	Faellessekretariatet Att. Werni Lindegaard Esplanaden 8 C, 3 - DK-1263 Copenhagen K Denmark		
Telephone	+45 35 44 84 06		
Fax	+45 35 44 83 70		
E-mail	w@dadl.dk		
Website	http://www.dsft.dk		
Activities	5-10 yearly seminars on current topics in pharmacology, toxicology and medicinal chemistry.		
	Recent & upcoming events		
	<ul style="list-style-type: none">- New Drugs for Unmet Medical Needs (December 7-8, 2005), Comwell Roskilde, Roskilde, Denmark- Danish Pharmacology 2006 (January 18, 2006), University of Southern Denmark, Odense, Denmark- Organic Chemistry at the Interface to Biology (January 27-28, 2006), Radisson/SAS Falconer Hotel, Copenhagen, Denmark- Nanotechnology in Drug Research (March 2, 2006), The Danish University of Pharmaceutical Sciences, Copenhagen, Denmark- Joint Meeting of the Dutch Pharmacological Society and the Danish Society of Pharmacology and Toxicology (May 18-19, 2006), KolleKolle Hotel, Værløse, Denmark		
President	Prof. Michael J. MULVANY (UNIVERSITY OF AARHUS, Department of Pharmacology)		
Secretary	Dr Jørgen MATZ (H. LUNDBECK A/S)		
EFMC-Delegate	Assoc. Prof. Kristian STRØMGAAARD (THE DANISH UNIVERSITY OF PHARMACEUTICAL SCIENCES)		

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THE DANISH UNIVERSITY OF PHARMACEUTICAL SCIENCES
Copenhagen, Denmark

DRUG RESEARCH ACADEMY

11 Danish established pharma companies including 3 biotech companies and the Danish Medicines Agency participate at this research training initiative during the period 2002–2009.

The graduate school, which is linked to a Marie Curie Training Site, is co-financed by

- The Danish Ministry of Science and Technology.
- The Danish Drug Company Association (LIF)
- The Danish Medicines Agency and
- The Danish University of Pharmaceutical Sciences (DFU)

with a total budget of 14.6 mio EURO.

In addition to a number of mini-symposia, lectures and study circles organised within the frame of Drug Research Academy, the budget covers a total of 50 Ph.D. grants and about 11 three-year post doc. grants. The Ph.D. projects and the post doc. positions are being announced internationally, reflecting the high international level of the activities at Drug Research Academy.

The research projects are focused around four strategic focus-areas recently defined by DFU:

- Metabonomics
- Drug Delivery and Formulation Design
- Structure-Based Drug Research
- Rational Pharmacotherapy.

The Ph.D. study programmes are characterized by

- integrated drug research training
- research at a drug company for at least 3 months
- participation at Ph.D. courses upon key elements of drug research
- main supervisor from the DFU and a co-supervisor from the external partners.

The Drug Research Academy Leadership:

- Associate Professor Ulf Madsen, School Director
- Professor Sven Frøkjær, Chairman of the Board
- Professor Povl Krosgaard-Larsen, Vice-Chairman of the Board
- The 9-membered Board comprises 4 industrial research vice presidents.

For more information, please check www.dfuni.dk/dra



	Name	Société de Chimie Thérapeutique
	Mission	To gather medicinal chemists in order to promote progress in Medicinal Chemistry by organizing meetings, distributing awards and grants, encouraging junior scientists and publishing medicinal chemistry journals or series.
	Founded	1966
	Members	302
	Member profile	Trade and Industry: 17% Research Institute: 8% University: 70% Other: 5%
	Postal address	5, rue Jean-Baptiste Clément FR-92296 Chatenay-Malabry cedex France
	Telephone	+33 1 46 83 56 84
	Fax	+33 1 46 83 53 23
	E-mail	Joelle.Mayrargue@cep.psud.fr
	Website	http://www.sct.asso.fr
	Activities	Organisation of meetings and conferences. Awards: Every two-year: *Prix Charles Mentzer, rewarding a fruitful career in Medicinal Chemistry. Every year: *Prix d'encouragement à la recherche en Chimie Thérapeutique, for junior scientists. Paul Ehrlich Lecture, attributed every year during the annual meeting. Prix de la vocation en Chimie Thérapeutique, attributed to students during the annual meeting. Publishing activities: Scientific editing of The European Journal of Medicinal Chemistry, Elsevier, 1 issue per month. Actualités de Chimie Thérapeutique, on the website. Recent & upcoming events <ul style="list-style-type: none">- Autumn Meeting (November 23, 2005), Faculté de Pharmacie, Paris, France- Young Research Fellows Meeting (January 30, 2006), Faculté de Pharmacie, Paris, France- Rencontres Internationales de Chimie Thérapeutique (July 5-7, 2006), Faculté de Pharmacie de Marseille, France- Rencontres Internationales de Chimie Thérapeutique (July, 2007), Faculté de Pharmacie de Lille, France
	President	Prof. Michel KOCH (UNIVERSITE PARIS V)
	Secretary	Prof. Joëlle MAYRARGUE (UNIVERSITE PARIS SUD)
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Division of Medicinal Chemistry of the German Chemical Society

Name

To foster the whole area of Medicinal Chemistry in University and Pharmaceutical Industry. The Division builds an interdisciplinary bridge between Chemistry, Biology, Medicine and Pharmacy.

Mission

1971 at Karlsruhe, Germany
700

Founded Members

Trade and Industry: 60%
Research Institute and University: 35%
Other: 5%

Member profile

Varrentrappstr. 40-42
D-60486 Frankfurt am Main
Germany
+49 69 7917 363
+49 69 7917 450
U.Bechler@gdch.de
<http://www.medchem.de>

Postal address

Telephone

Fax

E-mail

Website

Annual meetings, interdisciplinary symposia,
scientific publications, award.

Activities

Recent & upcoming events

- Joint Meeting on Medicinal Chemistry
(June 20-23, 2005), Vienna, Austria
- Frontiers in Medicinal Chemistry
(March 12 -15, 2006), Frankfurt, Germany

Dr Hans-Ulrich STILZ (AVENTIS PHARMA DEUTSCHLAND GMBH)
Prof. Dr Gerd SCHNORRENBURG (BOEHRINGER INGELHEIM PHARMA KG)

President

EFMC-Delegate



Name Hellenic Society of Medicinal Chemistry

Mission Advancement of research in Medicinal Chemistry and Drug Design, promotion of cooperation between scientists of related fields and consulting on relevant subjects.

Founded 1980
Members 107

Member profile

Trade and Industry:	20%
Research Institute:	30%
University:	40%
Other:	10%

Postal address School of Pharmacy , Department of Pharmaceutical Chemistry,
University of Athens
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157 71 Athens
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E-mail tsantili@pharm.uoa.gr, snikolar@upatras.gr

Website <http://amorgos.pharm.auth.gr/HelSocMedChem/home.html>

Activities Symposia, seminars, consulting.

Recent & upcoming events

- 9th Conference in Advanced Medicinal Chemistry (May, 2005), Thessaloniki, Greece
- 12th Panhellenic Symposium on Medicinal Chemistry (January 27-28, 2006), Patras, Greece

President Assoc. Prof. Dr Anna TSANTILI-KAKOULIDOU
(UNIVERSITY OF ATHENS)

Secretary Assoc. Prof. Dr Sotiris NIKOLAROPOULOS
(HELLENIC SOCIETY OF MEDICINAL CHEMISTRY)

EFMC-Delegate Prof. Dr Panos N. KOUROUNAKIS
(HELLENIC SOCIETY OF MEDICINAL CHEMISTRY)

Organic and Medicinal Chemistry Division (OMCD) of the Hungarian Chemical Society (HCS)

Name

The dissemination of results and particularly of new trends in organic and medicinal chemistry among Hungarian scientists.

Mission

1907 (HCS)
300 (Medicinal Chemistry oriented members of the OMCD)

Founded
Members

Trade and Industry: 40%
Research Institute: 20%
University: 30%
Others: 10%

Member profile

HU-1027 Budapest, Fő u. 68
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+36 1 201 6883
+36 1 201 8056
mail.mke@mtesz.hu
<http://www.mke.mtesz.hu>

Postal address

Telephone
Fax
E-mail
Website

Activities Regular organisation of conferences, seminars and lectures in various fields of medicinal chemistry. Encouragement and initiating the development of new generations of scientists working in this field. Bimonthly seminars by invited scientists in the field of medicinal chemistry.

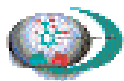
Activities

Recent & upcoming events

- XXXth Colouristic Symposium
(May, 2005), Eger, Hungary
- Joint Meeting on Medicinal Chemistry
(June 20-23, 2005), Vienna, Austria
- The Role of Chemistry in Molecular Medicine
(June 25-26-27, 2005), Szeged, Hungary
- Vegyészkonferencia (Org. and Med. Chem. Symp.)
(June 28-29-30, 2005), Hajduszoboszló, Hungary
- XVI. Fechem Conference on Organometallic Chemistry
(September 3-8, 2005), Budapest, Hungary
- 11th Conference on Total Reflection X-Ray Fluorescence
Analysis and Related Methods
(September 18-21, 2005), Budapest, Hungary

Prof. Péter MÁTYUS (SEMMELEWIS UNIVERSITY)
Dr János WÖLFING (UNIVERSITY OF SZEGED)

President,
Secretary &
EFMC-Delegate

**Name Israel Association for Medicinal Chemistry****Mission**

To organize and to foster the interaction between medicinal chemists in academia, industry and drug dispensing institutions, in an independent Association devoted to education, research and development of Medicinal Chemistry through meetings and workshops, and to represent the Association at the national level, at the EFMC, and at related international levels. IAMC is open for membership to molecular biologists, pharmacologists and pharmacists.

**Founded
Members**

1991, 2004 - united with the Israel Association for Medicinal Chemistry 200

Member profile

Trade and Industry:	35%
Research Institute and University:	60%
Other:	5%

Postal address

Department of Medicinal Chemistry and Natural Products
School of Pharmacy - Faculty of Medicine
Hebrew University of Jerusalem
PO Box 12065 Jerusalem IL-91120
Israel

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E-mail

adomb@md.huji.ac.il

Website

<http://www.weizmann.ac.il/conferences/medchem/>

Activities

The Association holds symposia and annual scientific meetings. Promotion of one-day symposia on new vistas in drug research and a workshop on progress in instrumental drug analysis, and representation of the Association at the EFMC and related international bodies.

Recent & upcoming events

- Two-Day Conference on Polymeric Drugs and Drug Conjugates (December 1-2, 2005), Hebrew University of Jerusalem, Jerusalem
- Annual meeting of the Medicinal Chemistry Section of the Israel Chemical Society (March 30, 2006), The Weizmann Institute, Rehovot, Israel

**President &
EFMC-Delegate
Secretary**

Prof. Abraham DOMB J. (HEBREW UNIVERSITY OF JERUSALEM)

Dr Jeffrey STERLING (TEVA PHARMACEUTICAL IND.)



**Division of Medicinal Chemistry
of the Italian Chemical Society (Società Chimica Italiana)**

Name

The Division of Medicinal Chemistry is a section of the Italian Chemical Society (a non-profit association with about 6,000 adhering members), which has the aim to diffuse the knowledge of chemistry and medicinal chemistry in particular.

Mission

644

Members

Trade and Industry:	13%
Research Institute:	0,5%
University:	86%
Other:	0,5%

Member profile

Divisione di Chimica Farmaceutica (S.C.I.)
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Università degli Studi di Catania
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Postal address

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**E-mail
Website**

Promotion and stimulation of the development of research and training in medicinal chemistry. Organisation of national and international symposia and meetings. Organisation of advanced schools in medicinal chemistry, analytical chemistry and organic synthesis in medicinal chemistry.

Activities

Recent & upcoming events

- Joint Meeting on Medicinal Chemistry
(June 20-23, 2005), Vienna, Austria
- Second Joint Italian Swiss Meeting on Medicinal Chemistry
(September 12 - 16, 2005), Modena, Italy
 - GPCRs in Medicinal Chemistry
(September 18-20, 2006), Verona, Italy

Prof. Dr Giuseppe RONSISVALLE (UNIVERSITÀ DEGLI STUDI DI CATANIA)
Prof. Dr Antonello MAI (UNIVERSITÀ DEGLI STUDI DI CATANIA)
Prof. Dr Giuseppe RONSISVALLE (UNIVERSITÀ DEGLI STUDI DI CATANIA)

**President
Secretary
EFMC-Delegate**

Name	Latvian Association for Medicinal Chemistry	
Founded	1992	
Members	12	
Member profile	Research Institute and University:	83%
	Other:	17%
Postal address	Latvian University Institute of Microbiology and Biotechnology 4-402 Kronvalda Boulevard LV-1586 Riga Latvia	
Telephone	+371 7034890	
Fax	+371 7323065	
E-mail	vina@lanet.lv	
Activities	Promotion of medicinal chemistry	
President	Dr Ilmara VINA (LATVIAN UNIVERSITY)	
EFMC-Delegate	Prof. Dr Gunars DUBURS (LATVIAN INSTITUTE OF ORGANIC SYNTHESIS)	

**Medicinal Chemistry Section of the Polish Chemical Society****Name**

Basis for mutual contacts and integration for scientists who represent different profile of their activity in the following areas: organic and bioorganic synthesis, analytical chemistry, computational chemistry, biochemistry, molecular biology, biotechnology, pharmacy and medicine.

Mission

1975

Founded

100

Members

Technical University
Institute of General and Ecological Chemistry
Żeromskiego 116
90-024 Łódź
Poland

Postal address

+48 42 631 31 22

Telephone

+48 42 631 31 28

Faxjkarolak@mail.p.lodz.pl**E-mail**<http://www.ptchem.lodz.pl/en>**Website**

Organization of bimonthly as well occasional gatherings where various theoretical and practical topics of drug research and development are discussed. Organization of experts groups in the field of medicinal chemistry and drug development. Participation in organization of national and international conferences on medicinal chemistry. Organization of the Medicinal Chemistry Section during yearly meetings of the Polish Chemical Society.

Activities**Recent & upcoming events**

- Joint Meeting on Medicinal Chemistry (June 20-23, 2005), Vienna, Austria
- Vth Multidisciplinary Conference on Drug Research (May 15-17, 2006), Darlowko Wschodnie, Poland

Prof. Janina KAROLAK-ŹŹCIECHOWSKA
(TECHNICAL UNIVERSITY, INSTITUTE OF GENERAL AND ECOLOGICAL CHEMISTRY)
Prof. Katarzyna KIEC-KONONOWICZ
(JAGIELLONIAN UNIVERSITY, MEDICAL COLLEGE)

President**EFMC-Delegate**



Name	The D.I. Mendeleev Russian Chemical Society, Medicinal Chemistry Section		
Mission	Education in medicinal chemistry. Organisation of regular scientific seminars.		
Founded	2000		
Members	150		
Member profile	Research Institute:	67%	
	University:	26%	
	Other:	7%	
Postal address	RU-119899 Moscow Russia		
Telephone	+ 7 095 939 1620		
Fax	+ 7-095-939-0290		
E-mail	zefirov@org.chem.msu.ru		
Activities	Organising regular and specific seminars in medicinal chemistry. Assisting in the organisation of regular courses for undergraduate students of Moscow State University in medicinal chemistry. Providing interaction between Russian academician research in the field of medicinal chemistry and industrial institutions.		
President & EFMC Delegate	Prof. Dr Nikolay S. ZEFIROV (MOSCOW STATE UNIVERSITY)		



7-095-939-0290

**Section for Medicinal Chemistry of the Slovenian
Pharmaceutical Society****Name**

The mission of the Section for Medicinal Chemistry of the Slovenian society is the advancement and promotion of medicinal chemistry in Slovenia and Europe. It will pursue its mission by organizing scientific meetings, schools and working-group in order to encourage discussions and exchange of ideas in the field of medicinal chemistry. This section will cooperate with similar associations in the country and abroad.

Mission

23 February 2004
21

**Founded
Members**

Trade and Industry:	20 %
Research Institute:	15 %
University:	60 %
Others:	5 %

Member profile

University of Ljubljana, Faculty of Pharmacy
Aškerčeva 7
SI- 1000 Ljubljana
Slovenia
+386 1 4769561
+386 1 4258031

Postal address

danijel.kikelj@ffa.uni-lj.si
<http://www.farmacevtsko-drustvo.si>

Telephone**Fax****E-mail****Website**

Dr Lucija PETERLIN MAŠIČ (UNIVERSITY OF LJUBLJANA)
Prof. Danijel KIKELJ (UNIVERSITY OF LJUBLJANA)

President**EFMC-Delegate**



Name	Sociedad Española de Química Terapéutica		
Mission	To assist in the development and improvement of research and training in the different areas of Medicinal Chemistry throughout Spain.		
Founded	1977		
Members	300		
Member profile	Trade & Industry:	25%	
	Research Institute:	30%	
	University:	35%	
	Other	10%	
Postal address	SEQT Juan de la Cierva,3 ES-28006-Madrid Spain		
Telephone	+34 91 56 22 900		
Fax	+34 91 56 44 853		
E-mail	seqt@iqm.csic.es		
Website	http://www.seqt.org		
Activities	Supporting the participation of young researchers at meetings and other educational events. Organizing symposia on topics related with research and education towards the discovery of new drugs. Sponsoring the Spanish Society of Medicinal Chemistry Award. Administrating five Awards addressed to young scientists to acknowledge outstanding research in the field of Medicinal Chemistry.		
	Recent & upcoming events		
	- Joint Meeting on Medicinal Chemistry (June 20-23, 2005), Vienna, Austria		
	- XIV Congreso Nacional de la SEQT (September 13-16, 2005), Bilbao, Spain		
	- VII Jornadas Monográficas de la SEQT (October 2006), Sitges, Barcelona		
President	Dr M. José CAMARASA-RIUS (SEQT)		
Secretary	Dr Rosario GONZALEZ-MUNIZ (SEQT)		
EFMC-Delegate	to be elected		

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Name Swedish Pharmaceutical Society, Section for Medicinal Chemistry

Mission To strengthen the Medicinal Chemistry Discipline through the arrangement of conferences, seminars and other educational initiatives.

Founded 1972
Members 310

Member profile

Trade & Industry:	70%
Research Institute:	1%
University:	19%
Other:	10%

Postal address Wallingatan 26A
SE Stockholm
Sweden

Telephone +46 8 723 50 00
Fax +46 8 20 55 11
E-mail marit.johansson@swepharm.se
Website <http://www.swepharm.se>

Activities Symposia, seminars, courses

President Dr Anders KARLEN (UPPSALA UNIVERSITY)
Secretary Klaus URBAHNS (ASTRA DRACO AB)
EFMC-Delegate Dr Anders KARLEN (UPPSALA UNIVERSITY)

**Division for Medicinal Chemistry (DMC),
Swiss Chemical Society (SCS)****Name**

The DMC provides a forum for scientists interested in medicinal chemistry and related fields by organising symposia, seminars, presentations and courses.

Mission

1990

**Founded
Members**

630

Trade & Industry:

78%

Research Institute:

3%

University:

11%

Other:

8%

Member profile

Schwarztorstrasse 9

CH-3007 BERN

Switzerland

+41 31 310 40 90

+41 31 312 16 78

hans_p.maerki@roche.com<http://www.swiss-chem-soc.ch/smc/>**Postal address****Telephone****Fax****E-mail****Website****Recent & upcoming events**

- Second Joint Italian Swiss Meeting on Medicinal Chemistry
(September 12 - 16, 2005), Modena, Italy
- Fall Meeting of Swiss Chemical Society
(October 13, 2005), Ecole Polytechnique fédérale de Lausanne,
Switzerland
- "Imaging in Biomedical Research"
(May 18, 2006), Institute for Organic Chemistry,
University of Basel, Basel, Switzerland

Dr Hans Peter MAERKI (HOFFMANN-LA ROCHE AG)

Dr Peter MOHR (HOFFMANN-LA ROCHE AG)

**President
Secretary &
EFMC-Delegate**

Novartis is pleased to announce the 2004
recipients of the

Novartis European Young Investigator Award in Chemistry

Prof. J Stephen Clark
University of Nottingham
Nottingham, UK

Prof. Jonathan P Clayden
University of Manchester
Manchester, UK

*for his outstanding contribution to
the development of new carbenoid-
and metathesis-based synthetic
methodologies, and to the applica-
tion to natural product synthesis*

*for his outstanding contribution to
the development and application of
new synthetic methodologies based
on dearomatisation reactions, and
on non-biaryl atropisomers*

The Novartis European Young Investigator Award in Chemistry was created in 2002 to mark Novartis' commitment to science and innovation. The award, carrying an unrestricted research grant of CHF 100,000, is presented annually to an outstanding scientist under the age of 40 who is a European resident and is active in the areas of organic or bioorganic chemistry in the broadest sense.

Past winners:

Prof. Berndt Hrad, University of Fribourg (2003)

Prof. Thomas Carell, Philipps University, Marburg (2002)

Prof. Thorsten Rieck, Technische Universität München (2001)

 **NOVARTIS**



**Section of Pharmacochimistry,
Royal Netherlands Chemical Society (KNCV)**

Name

To promote scientific research and education in the area of pharmacochimistry. To bring together scientists in the field and to offer them a platform for discussion and exchange of ideas.
To identify talent in the field. To organize meetings in the field.

Mission

28th August 1970
450 (including student members)

**Founded
Members**

Trade & Industry: 20%
Research Institute: 10%
University: 40%
Other: 30%

Member profile

Dr C.M. Timmers
Organon International
Department of Medicinal Chemistry, Room Number RK 3225
P.O. Box 20,
5340 BH Oss
The Netherlands
+31 412 662874
+31 412 662546
Marco.timmers@organon.com
<http://www.kncv.nl>

Postal address

Telephone
Fax
E-mail
Website

Organisation of one annual scientific meeting (1 day).
Co-organisation of Dutch Medicine Days (FIGON) (2 days).
Co-organisation of annual NWO platform meeting (2 days).
Co-organisation of sessions at KNCV Winter/Summer Congress.
Participation in KNCV, NWO, FIGON and EFMC platforms.
Dutch Pharmacochimistry Award every 2 years for the best Dutch
Ph.D. thesis in the field.

Activities

Recent & upcoming events

- 15th Noordwijkerhout-Camerino Symposium :
Trends in Drug Research
(May 8-13, 2005)

Prof. Dr N. P. E. VERMEULEN
(VRIJE UNIVERSITEIT CENTER FOR DRUG RESEARCH LACDR)
Dr Marco TIMMERS
(ORGANON)
Henk TIMMERMAN
(VRIJE UNIVERSITEIT LACDR)

President

Secretary

EFMC-Delegate



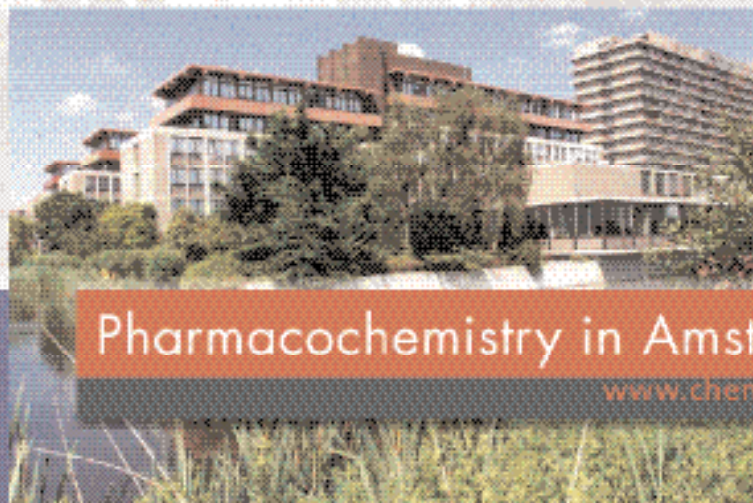
vrije Universiteit amsterdam

At the Vrije Universiteit the word " Pharmacochemistry " was invented and introduced in the 1960's. The department is now a partner of the Leiden Amsterdam Center for Drug Research (LACDR).

The LACDR took also the initiative for the European Consortium in Pharmaceutical Sciences (UPLA).

The department of pharmacochemistry offers masterprogrammes in different fields :

- drug design and synthesis
- computational medicinal chemistry and toxicology
- drug discovery and target finding
- drug disposition and safety
- biomolecular and drug analysis



Pharmacology in Amsterdam

www.chem.vu.nl/far

Current fields of research:

- G-protein coupled receptors
- ligands for histamine and chemokine receptors
- cytochrome P450 structures
- activities and affinities
- bioactivation mechanisms and biomarkers
- bio-analytical technologies

full professors :

Prof. Dr Hubertus Irth

Prof. Dr Rob Leurs

Prof. Dr Henk Timmerman (Prof. em.)

Prof. Dr Nico Vermeulen

**Turkish Association of Medicinal and Pharmaceutical Chemistry****Name**

Establish communication and cooperation between the members.
Establish policies in medicinal chemistry teaching and research in the country. Organize scientific meetings and conferences, get in touch with international related bodies.

Mission

1994

Founded

100

Members

Academics:

100%

Member profile

Assoc. Prof. Dr. Serdar Unlu
Gazi University
Faculty of Pharmacy
Hipodrom
TR-06330 Ankara
Turkey

Postal address

+90 312 222 72 25

Telephone

+90 312 223 50 18

Faxmfsahin@gazi.edu.tr**E-mail**<http://www.medchem.org>**Website**

Organizing meetings and conferences.

Activities**Recent & upcoming events**

- XIXth International Symposium on Medicinal Chemistry
(August 29 - September 2, 2006), Istanbul, Turkey

Prof. Dr M. Fethi SAHIN (GAZI UNIVERSITY)

President

Prof. Dr Serdar UNLU (GAZI UNIVERSITY)

Secretary

Prof. Dr M. Fethi SAHIN (GAZI UNIVERSITY)

EFMC-Delegate

Name **The Biological and Medicinal Chemistry Sector (BMCS)
 of the Royal Society of Chemistry (RSC)**

Mission The BMCS aims to further the interests of all members of the RSC, both industrial and academic, involved in the pursuit and understanding of biologically active molecules. It also acts to promote public awareness of the crucial role played by chemistry in the modern industrial environment

Founded 1995 (Formerly Fine Chemicals & Medicinals Group)

Members 1129 in total; 600 of whom are medicinal chemists

Member profile Predominantly industry

Postal address Royal Society of Chemistry, Burlington House, Piccadilly
 W1J 0BA London
 United Kingdom

Telephone +44 207 437 8656

Fax +44 207 4937 8883

Website <http://www.rsc.org>

Activities The Biological and Medicinal Chemistry Sector (BMCS) is a Sector of the Industrial Affairs Division of the Royal Society of Chemistry (RSC) in the UK. The annually elected committee is primarily responsible for the organisation of scientific meetings and symposia, supporting educational activities in the UK, and advising the Society on policies that directly affect the BMCS. Specifically, the BMCS aims to further the interests of all members of the RSC, both industrial and academic, involved in the pursuit and understanding of biologically active molecules. The predominant areas thus include pharmaceuticals, agrochemicals, flavours and fragrances. It also acts to promote public awareness of the crucial role played by chemistry in the modern industrial environment. The BMCS is particularly active in the organisation of scientific meetings and does so in collaboration with a wide variety of other groups both within and external to the RSC. The BMCS also administers annual awards that acknowledge major scientific achievements in both academia and industry that have been carried out within the UK. The BMCS provides a significant input into Royal Society of Chemistry strategic initiatives.

Recent & upcoming events

- Virtual Discovery
(March 21, 2006), London, UK
- 17th East of England Medicinal Chemistry Symposium
(April 27, 2006), Hatfield, UK
- Challenges in Medicinal Chemistry: Proteinase 2006
(May 22-23, 2006), London, UK
- GPCRs in Medicinal Chemistry
(September 18-20, 2006), Verona, Italy
- 1st Coast to Coast Medicinal and Synthetic Chemistry Symposium
(October 1-3, 2006), Riviera Conference Centre, Torquay, UK

President Dr David ALKER
Secretary Dr Karl SWIFT (MAYBRIDGE LTD)
EFMC-Delegate Dr Derek BUCKLE (DRB ASSOCIATES)

Society for Medicines Research

Name

A multidisciplinary society with the object of advancing science relating to all aspects of medicines research, providing a common meeting ground for all those interested or involved in such research, and to further the education of such persons.

Mission

	1966
	500-550
Trade & Industry:	70%
Research Institute:	5%
University:	11%
Other:	4%

Founded

Members

Member profile

SMR Secretariat
Triangle House, Broomhill Road, SW18 4HX London

Postal address

United Kingdom
+44 (0)870 833 2431
+44 (0)870 833 2434

Telephone

Fax

E-mail

secretariat@smr.org.uk

Website

<http://www.smr.org.uk>

Activities

The SMR organises four one-day scientific meetings per year in the UK. Examples of meeting topics: Improving medicines through drug delivery; The role of sodium channels in disease; Case histories in drug discovery; Trends in medicinal chemistry (More details are available on the SMR web site).

Recent & upcoming events

- The Therapeutic Potential of Tissue Engineering and Regeneration (June 16, 2005), National Heart and Lung Institute, Kensington, London, UK
- Cardiovascular Medicine (September 30, 2005), Organon Research Laboratories, Scotland, UK
- Case Histories in Drug Discovery and Design (December 8, 2005), National Heart and Lung Institute, Kensington, London, UK
- Cancer treatments for the new millennium (March 9, 2006), National Heart & Lung Institute, London, UK
- Translating from discovery molecule to development drug: the right dose for the right time to the right patient (June 15, 2006), GSK, UK
- Drugs for Gastrointestinal disease (September 21, 2006), National Heart & Lung Institute, London
- Case histories and SMR award- 40th anniversary meeting (December 7, 2006), National Heart & Lung Institute, London, UK

Dr Geoffrey STEMP (GLAXOSMITHKLINE)
Dr Richard ARMER (OXAGEN LTD)

President

EFMC-Delegate



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Directory of Companies

An alphabetical list of pharmaceutical companies, as well as manufacturers and suppliers of products and services for medicinal chemistry in Europe

A

3M	3M Center Corporate Headquarters	US ST PAUL MN 55144	
4SC AG	Am Klopferspitz 19a	DE 82152 MARTINSRIED	+ 49 89 700763 0
A & D INSTRUMENTS LTD	Abingdon Science Park	GB ABINGDON OX14 3YX	+44 1235 550 420
AAF INTERNATIONAL BV	Eggenburg 2	NL 1081GK AMSTERDAM	+31 20 549 44 11
ABBOTT LABORATORIES	100 Abbott Park Rd.	US ABBOTT PARK IL 60064	
ABCR GmbH & Co. KG	Im Schleiert 10	DE 76187 KARLSRUHE	+49 721 95061 80
ABGENE HOUSE	Blenheim Road	GB EPSOM SURREY KT19 PA	+44 1372 72 34 56
ABSORPTION SYSTEMS	440 Creamery Way Suite 300	US EXTON PA 19341	+1 610 280 7300
ACADIA PHARMACEUTICALS A/S	Fabriksparken 58	DK 2600 GLOSTRUP	+45 4329 3000
ACB BLOCKS LTD	Po Box 10	RU 121609 MOSCOW	+7 095 761 4365
ACCELRYLS	334 Cambridge Science Park	GB CAMBRIDGE CB4 0WN	+44 1223 228 500
ACM MACHINERY LTD	Old Kiln House Silchester Road	GB TADLEY RG26 3PX	+44 118 981 1671
ACROS ORGANICS	Janssen Pharmaceuticaalaan 3A Geel West Zone 2	BE 2440 GEEL	+32 14 57 52 11
ACTELION	Gewerbestrasse 16	CH 4123 ALLSCHILL	+41 61 487 45 45
ACTIVE MOTIF	Avenue Franklin Roosevelt 104 Box 25	BE 1330 RIXENSART	+32 2 653 00 01
ACTIVECYTE INC.	1220 Washington Street	US NEWTON MA 02465	+1 617 244 39 31
ADAMS HEALTHCARE	Lotherton Way Garforth	GB LEEDS LS25 2JY	+44 1132 320 066
ADELPHI MANUFACTURING CO.LTD	Olympus House Mil Green Road	GB HAYWARDS HEATH RH16 1XQ	+44 1444 440 091
ADHESIVES RESEARCH INC	400 Seaks Run Road PO BOX 100	GB GLEN ROCK PENNSYLVANIA 17327	+44 7172 357 979
ADPAK MACHINERY SYSTEMS LTD	3 Pendleside Lomeshaye Industrial Estate	GB NELSON BB9 6RY	+44 1282 601 444
ADVANCED CHEMISTRY DEV.	90 Adelaide Street W. Suite 600	CA TORONTO M5H 3V9	
AERNI-LEUCH AG/KLOCKNER	Sportweg 38	CH 3097 LIEBEFELD/BERNE	+41 31 978 88 88
AEROMATIC-FIELDER LTD	PO BOX 15	GB EASTLEIGH SO53 4ZD	+44 2380 267 131
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ALERT PRODUCTS	Hollins Lane Tilstock	GB WHITCHURCH SY13 3NU	+44 1948 880 627
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ALL-FILL INTERNATIONAL LTD	Unit 5 Gateshead Close- Sunderland Road	GB SANDY SG19 1RS	+44 1767 691 100
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ALLERGAN INC.	P.O. Box 19534	US IRVINE CA 92623	+1 714 246 4500
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Laser House Doman Road
7 Ryhill Way
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121 High Street
De Brauwweg 13 PO BOX 149
54 Route de Sartrouville
8/9 Spire Green Centre Flex Meadow
Molly Millars Bridge
Bridge House West Street
Sambersstraat 7
19 Presidential Way
Dammstrasse 36
3200 Walnut Street
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8223 Cloverleaf Drive
6 Schukinskaya ulitsa
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15 Stanhope Gate
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GB EARLEY RG6 RAZ
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NL 3100 ACSCHIEDAM
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