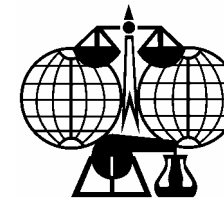




Chemistry and Human Health

Division VII Within The International Union of Pure and Applied Chemistry (IUPAC)



Mission

Division VII's mission is to focus specifically upon aspects of the chemical sciences that impact upon human health.

- Promote and engage in activities that can enhance either basic and applied research directed toward prevention, diagnosis and treatment of human disease.
- Encourage and develop initiatives that enhance the free exchange of health-related chemistry information, including that of participating directly in educational programs at all levels of instruction.
- Address chemical-related issues relevant to human health on both a global basis and a local basis, the latter applying, in particular, to the less-developed nations.

Organization

In addition to the Division Committee itself, 3 Technical Subcommittees and 1 Standing Subcommittee manage Division VII's projects

1. Subcommittee on Medicinal Chemistry and Drug Development
2. Subcommittee on Toxicology and Risk Assessment
3. Subcommittee on Nomenclature, Properties, and Units in Laboratory Medicine (Diagnostics)
4. Subcommittee on Membership and Elections.

Specific names for many of the participants are listed below



www.iupac.org
Connect with IUPAC

- Σ Current IUPAC projects
- Σ Reports and recommendations
- Σ *Chemistry International*
- Σ Conference Calendar
- Σ E-news
- Σ Nomenclature and terminology
- Σ Book Orders (also from Amazon.com)

E-mail: secretariat@iupac.org

Division VII Committee

Titular Members

Prof. Paul W. Erhardt (2002-2007)
President
Dr. Birger Heinzow (2000-2005)
Secretary
Dr. Anders Kallner (1996-2005)
Past President
Dr. Mukund S. Chorghade
Dr. Jytte Molin Christensen
Prof. Pedro Soares de Araujo
Dr. John Duffus
Dr. Janos Fischer
Prof. Urban Forsum
Prof. Henk Timmerman

National Representatives

Dr. Pierre-Etienne Bost, France
Prof. Abraham J. Domb, Israel
Dr. Giovanni Gaviraghi, Italy
Prof. Masayuki Totani, Japan
Prof. Nikolay E. Nifantiev, Russia

Subcommittee on Nomenclature, Properties and Units in Laboratory Medicine

Prof. Urban Forsum, Chairman
Dr. René Dybkaer
Dr. Antonin Jabor
Prof. Wolf R. Kulpmann
Dr. Gunnar Nordin
Dr. Huib Storm

Subcommittee On Medicinal Chemistry and Drug Development

Prof. C. Robin Ganellin, Chairman
Dr. John Proudfoot, Secretary
Dr. Pierre-Etienne Bost
Prof. John Bremner
Prof. Eli Breuer
Dr. Mukund S. Chorghade
Prof. Gerhard Ecker
Prof. Paul W. Erhardt
Dr. Janos Fischer
Dr. Giovanni Gaviraghi
Dr. Stefan Jaroch
Dr. Osama Abdel Wareth Kebir
Dr. Toshi-hiko Kobayashi
Dr. Kaofumi Koga
Prof. Michael Liebman
Dr. Per Lindberg
Dr. Derek Maclean
Prof. Antonio Monge Vega
Prof. Nikolay E. Nifantiev
Dr. Thomas Perun
Dr. Joerg Senn-Bilfinger
Prof. Henk Timmerman
Prof. John G. Topliss
Prof. Camille-Georges Wermuth

Subcommittee On Toxicology and Risk Assessment

Dr. John Duffus , Chairman
Dr. Rita Cornelis
Dr. Birger Heinzow
Prof. Monica Nordberg
Prof. Wayne A. Temple
Prof. Douglas M. Templeton
Dr. Philip Wexler
Dr. Howard G. J. Worth

Publications

- *Pure and Applied Chemistry*
IUPAC recommendations and reports, special topic articles, and lectures from symposia.
- *Chemistry International*
Bimonthly news magazine
- **Book series**, includes
 - *Medicinal Chemistry for the 21st Century*
 - *Drug Metabolism: Databases and High Throughput Testing During Drug Design and Development*
 - *Handbook of Pharmaceutical Salts: Properties, Selection and Use*
 - and many others!

Ongoing Activities

Projects are listed chronologically based upon the date of their initiation. Although several international experts are assembled to participate in each of these interdisciplinary projects, additional membership and input from interested scientists is always welcome (Project Leaders are indicated within parentheses, and their e-mail address can be found by clicking to the Projects section of the IUPAC Homepage on the Web at <http://www.iupac.org/divisions/VII/>).

- Immunochemistry of metal sensitization (D.M. Templeton)
- Recommendations for the use of nanotechnology in clinical laboratories (P. Wilding)
- Metabolism terms (P.W. Erhardt)
- Human drug metabolism database (P.W. Erhardt)
- Global use of the C-NPU concept system for properties in toxicology (W.R. Kulpmann)
- Properties and units for function examinations (A. Jabor)
- Properties and units for urinary calculi (A. Jabor)
- Research and training in medicinal chemistry in India, Pakistan and Sri Lanka: A comprehensive survey to ascertain status and sophistication of faculties, doctorate programs, etc.)-Recommendations for a standardized curriculum (M.S. Chorghade)
- Glossary of terms used in process chemistry /manufacturing of active pharmaceutical ingredients, and pharmaceuticals (M.S. Chorghade and E. Breuer)
- Chemical, pharmacological aspects of natural products with Medicinal and Nutritive Value (M.S. Chorghade)
- Concepts and structure for requests in clinical laboratories (U. Forsum)
- IUPAC compendium of terms for chemists applied to drug development (R. Ganellin)
- Analogue-based drug discovery (J. Fischer)
- Fundamental Toxicology for Chemists (J.H. Duffus)
- Glossary for chemists of terms used in toxicology - Revision and updating (J.H. Duffus)
- Explanatory dictionary of concepts in toxicokinetics (M. Nordberg)
- Quantifying the effects of compound combinations (J. Lehar)
- Glossary of terms used in biomolecular screening (J. Proudfoot)
- Glossary of terms used in combinatorial chemistry (D. Maclean)
- Compendium of targets of the top 100 commercially important drugs (J. Proudfoot)
- Internationally agreed terminology for observations in scientific communication (F. Pontet)
- Practical studies for Medicinal Chemistry. An integrating approach for developing countries (A. Monge)

Projects Pending Division VII

- C-NPU concepts and traceability of measurements
- Molecular gastronomy
- Training of school children on pesticides and health

Proposals for Projects

Anyone with a good idea can submit a proposal.

IUPAC projects address issues of significance to the global chemistry community; Projects relevant to human health can be entered through Division VII in particular. Funding to assist in accomplishing approved projects typically runs at about \$5K. Projects generally take about two years. General themes include:

- Nomenclature, terminology and symbols
- Validated and compiled data
- Standard methods and procedures
- Education and public understanding of chemistry
- Any subject that requires development of consensus among chemists worldwide

The IUPAC Richter Prize in Medicinal Chemistry

- Established to acknowledge the key role that medicinal chemistry plays toward improving human health.
- Awarded once every two years to an established scientist whose track-record demonstrates an outstanding level of contribution to the field of medicinal chemistry.



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