

IUPAC DIVISION VII : CHEMISTRY AND HUMAN HEALTH

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By Prof. Camille G. WERMUTH

The Division VII of IUPAC: « Chemistry and Human Health » results from a voluntary merge in 1997 of two communities: the former Division of Clinical Chemistry on one side, and the Section on Medicinal Chemistry on the other side. The so created Division of Chemistry and Human Health assembles two sub-groups having the status of a section:

Section on Medicinal Chemistry

Section of Clinical Chemistry

The assigned objectives are to progressively learn to work together and to start on new topics able to involve simultaneously both communities. Moreover some totally new areas situated in the very broad domain of Chemistry and Human Health should be approached and treated as being out of the usual scope of the Sections on Medicinal or Clinical Chemistry. With the time going, with new scientists coming in, it is expected that all activities of the Division will progressively be performed by temporary Commissions and/or Working Parties according to the IUPAC Strategic Plan.

For all these reasons, the main efforts made within our Division this last year were oriented towards these objectives:

- 1 - Reorganize the structure of the Division and its way of functioning in order to facilitate the transition according to the IUPAC Strategic Plan during the year 2000.
- 2 - Identify, beside the traditional fields of activity of the present two Sections, new and federative topics.
- 3 - Recognize and support activities that will have a high impact on the scientific communities and improve the image of IUPAC. For example edition of technical or practical handbooks, of recommendations and of glossaries.

One of the most positive point contributing to a better understanding of our two communities consisted in the organization of two meetings of the Divisional Committee(*), one in Edinburgh, in September 1998, at the occasion of the European Symposium on Medicinal Chemistry, and one in Paris in April 1999.

(*) The Divisional Committee consists in: the Division President, the two Presidents, the two Vice-Presidents, the two Past Presidents and the two Secretaries of the Sections on Clinical or Medicinal Chemistry receptively.

The main outcomes of these meetings appear clearly in the minutes of the Paris Meeting:

THE MINUTES OF THE DIVISIONAL MEETING HELD AT THE MAISON DE CHIMIE, PARIS ON THE 17TH OF APRIL, 1999

Participants

Professor Wermuth, President
Doctor A Kallner, President, Clinical Chemistry Section
Doctor Koga, President, Medicinal Chemistry Section
Professor J Topliss, Past President, Medicinal Chemistry Section
Professor H P Lehmann, Past President, Clinical Chemistry Section
Professor R Ganellin, Vice President, Medicinal Chemistry Section
Mr T D Geary, Secretary, Clinical Chemistry Section
Doctor T Perun, Secretary, Medicinal Chemistry Section
Doctor J Duffus, Chair, Commission on Toxicology, Observer
Doctor B K Trivedi, Commission on New Technologies and Special Topics, Observer

Opening Remarks:

Professor Wermuth welcomed the participants. He indicated that his wish was to have the meeting discuss the election of Officers for the biennium, 1999-2001, future activities of the Division and for those present to indicate how they felt the two Sections could work together.

Professor Wermuth outlined the discussion which had taken place at the Bureau meeting held in Frankfurt. The discussions centered upon the strategic plan, the way in which activities would be structured and means by which the image of IUPAC held by both the chemistry profession and the general public, could be improved. Professor Woods was appointed to co-ordinate the latter effort. Professor Fischli feels that cooperation with other organizations such as WHO and IUPHAR should be expanded. The Division provided the link between chemistry and health.

At the meeting, Professor Jortner, the President of IUPAC, indicated that he had no problem with the Division having a structure consisting of two Sections. He feels that the Sections are complementary to own another.

Professor Wermuth indicated that the meeting should discuss ways in which the Division could be structured in order to maintain ongoing projects of a sectional nature and at the same time develop new activities directed more towards chemistry and human health.

New Projects

It was proposed that the following projects should be considered:

1. Population specific analytical aspects of drug disposition

Identify clinical markers to assist with the determination of disposition within subpopulations

2. Population specific design

Identify clinical markers to assist in the determination of the sensitivity of subpopulations to a specific drug.

3. Nutraceuticals

Identify the effectiveness of food supplements such as vitamins.

4. Artificial materials and health

The effect of various substances use in artificial implants on human health. There may be cooperation with the macro-molecular group within IUPAC.

5. Miniaturization of analytical systems in health

There exists a possibility of cooperation with the Analytical Chemistry Division.

6. Self monitoring/point-of-care testing

There is a possibility of cooperation with other groups within IUPAC as well as WHO and CEN.

7. Robotics

This is an industry orientated project which could lead to specification of systems and standardization.

Other projects

1. Doctor Duffus mentioned that "Risk assessment of chemicals in food" had been proposed in Edinburgh. It is to be followed up.

2. Professor Topliss outlined progress which had been made on the project "Natural and unnatural substances" It is intended to produce a position paper comparing the activity and toxicity of natural and unnatural substances. The document is being prepared for publication in scientific journals and in a form which would be more suitable for lay publications. Professor Topliss indicated that he had established the group with five others, all having expertise in the area.

Appointment of Division Officers

The Clinical Chemistry Section had agreed to nominate Doctor Kallner for the position of President of the Division at its meeting the previous day. In light of correspondence received, it had been assumed that Professor Wermuth had been appointed for two years and was not eligible for re-appointment. Professor Wermuth reported that he had been told that he was eligible for re-appointment. The Clinical Chemistry Division subsequently withdrew the nomination and agreed to support a recommendation that Professor Wermuth be re-appointed for two years to complete his term of office.

It was agreed to support the nomination of Doctor Kallner as Vice President. The position of Secretary is to be filled. (Later the Section of Clinical Chemistry proposed that Professor Birger Heinzow be considered for this position. He is Secretary of the Commission on Toxicology and is an Environmental Health Chemist. He has experience as a secretary and professional expertise in area required for the future activities of the Division.).

Structure of the Division

Professor Wermuth indicated that in his opinion there are three possibilities.

1. Maintain the status quo with two Sections operating independently of one another.

2. Combine the two Sections and work towards projects which would reflect more the name of the Division, Chemistry and Human Health.

3. Dissolving the Division with a view to combining with other groups within IUPAC.

There were a number of structures proposed for the Division. In the discussion which followed, agreement was reached on a structure, as below, which was reasonably satisfying to those present.

President

Vice President

Secretary

2 Members at large (medicinal chemistry)

2 Members at large (clinical chemistry)

responsible for ongoing projects

6 Members at large selected for their expertise

in areas of interest to the division.

They are to convene exploratory groups and prepare position papers on specific topics. Term of office 2 years.

Professor Wermuth stressed that the next biennium would be important for it would indicate if the Division could arrive at joint projects which related to chemistry and human health rather than Medicinal Chemistry and Clinical Chemistry. The meeting agreed that it is important to maintain links with the industry. This has proven to be a means of bringing into the Division participants which are funded externally.