

## **Division IV: Polymer Division**

The objective of this report is to summarize activities of Division IV since the summer of 2007 (General Assembly in Torino) to March 2008 for the Bureau Meeting, March. 28-29, 2008, Istanbul, Turkey and to discuss future goals for the division.

### **Polymer Science Awards**

Several years ago the IUPAC-Samsung Young Polymer Scientist Award was initiated through efforts led by then Division Vice President Jung-II Jin. This activity has inspired two new awards that have recently been established. The first is between the company DSM and IUPAC for the "DSM Performance Materials Award (with the cooperation of IUPAC)". The award will be presented at World Polymer Congresses starting in 2008 and continuing until 2012. It will be presented in conjunction with a ½ day special seminar. The awardee will be selected by a committee with representation from DSM, the Polymer Division, and the Congress organizing committee. There is no age limit on the recipient. A financial award of 50,000 Euros will be given to the very fortunate recipient. Besides the financial award, DSM will provide financial support for organizing the symposium.

Another development has been a proposal for the IUPAC-Polymer International Award, which will also be presented at the 2008 World Polymer Congress. A \$5000 award plus expenses will be presented by Wiley and be given to a scientist <40 years old. The awardee must attend the World Polymer Congress and agree to present a lecture on the work for which he will receive the award. This lecture has been made into a keynote lecture and while shorter than a plenary will be given to the full congress audience. The awardee will be selected by a committee of 5-7 scientists. Nominations of the award recipients for all major awards are underway.

### **Industrial Participation in the Division**

A strategic goal of the division is to improve out links to industry. The sub-committee on polymer structure-property relationships has an extraordinarily high level of industrial participation. A major reason for this is that the round-robin style of data collection and sharing has an enormous benefit for industry. It is our plan to use the high industrial participation to reach out to industry and build further ties. Bob Stepto, former Division President, has been appointed to serve as a new Industrial Liaison and has attended the sub-committee meeting to make connections to industry and also visited a trade organization located in Brussels to explain the role of IUPAC to the Polymer Industry. We expect these

and other actions will serve to build needed ties of the sort that led to the creation of the Samsung Fund.

### **Education Initiatives**

The Education group, headed by J.-P. Vairon, has been promoted to a subcommittee at the recent Polymer Division meeting held at Torino. In line with the strategic goals of the Polymer Division, it has a particular focus on educational activities for the developing world and younger scientists. Both are key elements for activities of the division as it moves into the new biennium. It has established the first international web site for polymer education (hosted on the IUPAC server) and it is developing links to polymer education sites across the globe. It is also the goal to use the web site to provide access to the educational material developed for IUPAC sponsored polymer division conferences.

As an outgrowth of this educational effort, Division IV is planning a showcase project with the IUPAC Task Group on "International Research Funding in the Chemical Sciences" to examine the possible role of IUPAC in fostering international joint research projects. Discussions were held in Paris in November and a rough plan for a call for proposals involving researchers of 3 or more countries was discussed. A joint project is planned in this activity.

### **Fostering Cooperation among International Polymer Societies**

At the recent IUPAC sponsored conference, IUMACRO-07, a mini-summit was held between the Polymer Division and several international polymer societies to discuss possible areas of co-operation. Attendees included representatives of the European Polymer Federation, the Japanese Society of Polymer Science, the Korean Polymer Society, and the American Chemical Society. Several topics for greater co-operation were identified including education, the developing world and in sponsoring symposia aimed at younger polymer scientists. A direct result of this mini-summit is the International young Polymer Scientist Symposium to be held at MACRO 2008 in Taipei. We expect to hold further meetings to continue these fruitful discussions.

### **Off-Year Division Committee Meeting**

The Off-Year Division Committee Meeting will be held in Taipei, 28-29 June 2008. We expect to have good representation at the meeting. To date 26 members (7 TMs, 6 AMs, 2 NRs, 11 Subcommittee Members) are expected to attend the meeting.

### **World Polymer Congress – MACRO 2008**

The 42<sup>nd</sup> World Polymer Congress (MACRO 2008, Organizer: Prof. Show-An Chen) will be held in Taipei, 30 June - 4 July 2008. Past meetings have had more than 1000 participants from 50 different countries and we expect a similar turnout. About 10 parallel sessions were

held simultaneously. The WPC held biannually is the very largest polymer congress in the world sponsored by Division IV and the next one is going to be held in Glasgow, Scotland, 11 - 16 July 2010 with Prof. Peter Lovell as the lead organizer.

### **Sub-committees and Projects**

A list of the current projects is compiled by the Secretariat and is available at the IUPAC web site. Division IV remains one of most active division in attracting and handling IUPAC projects. This division also is actively involved in interdivisional projects especially with Divisions VIII and II (Interdivisional Subcommittee on Materials Chemistry). In the past year a half-dozen projects were granted extension due to the need to expand or modify the original projects. Extension applications, however, were thoroughly discussed by the Subcommittee and also in the Division meeting for their justification. Presently, 17 projects ongoing activities. The Chairman of each Subcommittee closely monitors relevant projects including progress reports from the Task Force Leaders.

Reports on each Subcommittee's activities especially in relation to projects and subcommittee meetings can be found in the Division Meeting minutes that is being posted on the IUPAC web site.

### **Conferences**

Of special note, is the fact that the WCC in Torino hosted the first ever symposium focused on polymers. This symposium, jointly organized by the AIM Italy and the IUPAC Polymer Division, was one of the most heavily attended and successful sessions held in Torino.

The IUPAC web site describing sponsored Symposia lists the additional conferences sponsored by Div. IV. In the immediately past and current years, 12 sponsored conferences were or are scheduled. This includes the WPC 2008 separately mentioned before. In addition, four conferences to be held in 2009 are in the process of being granted IUPAC sponsorship. WPC 2010 is to be held in Glasgow (U. K.) Both WPC 2012 and WPC 2014 are in the planning stages and are expected to be held in the USA and Thailand, respectively.

### **Division Election in 2007 (Torino, Italy) and Special Election for Vice President**

The Division elected 4 TMs (including Division Secretary), 6 AMs and 10 NRs at the GA. Christopher Ober (Division Vice President) served as Chair of the Nominating Committee. Geographic consideration was a factor in the selection of the other Nominating Committee members. The elected members may be found in the Division minutes.

As a result of the election of Division President Jung-II Jin as IUPAC President, Christopher Ober became Division IV President. A special election was held for Vice President and

Michael Buback was elected. A former sub-committee chair and recently elected AM, he was replaced as AM by Jung-Il Jin.

### **Points of Note**

1. In the 2006 Polymer Division report, there were strong arguments against the Bureau's rule of no more than ten NRs. There was the general view that there should be no limitation for the number of NRs of a Division. Each Division should be free to accept a NR from an adhering National organization as long as there is no corresponding TM or AM in the Division. In the last election of NRs, it was very difficult to satisfy international requests for participation and to fulfill our needs with only ten NRs.

2. Another item of note was the request that IUPAC Fellows be expanded beyond retired Former Division members. I am happy to report that Mr. Hong Sik Ko, President of Samsung-Total, the driving force behind the Samsung gift, was nominated and successfully approved as a new fellow.

Christopher K. Ober

March 2008