

# IUPAC Offers an Open Door to Chemists of the World\*—A Program Revisited

by Colin J. Humphris

**A**t the meeting in São Paulo, Brazil in July 2017, the IUPAC Council approved important recommendations for the revision of the programmes through which individual chemists can be affiliated to IUPAC, either as a paid member (the Affiliate Membership Programme, or AMP) or as a sponsored affiliate (an option for limited numbers of early career chemists from emerging regions).<sup>†</sup>

These programmes have been in place for over 30 years, supported by the member countries of IUPAC through their respective National Adhering Organisations (NAOs). The objectives of the current changes are to update Affiliate memberships to reflect the realities of IUPAC today and to further broaden and diversify the worldwide membership base by offering chemists in both member and non-member countries the opportunity to engage more effectively in support of IUPAC's international work.

The intention of the revised programme is to build on the original objectives of the AMP:

- To maximize the participation of chemists worldwide in the affairs of IUPAC and to disseminate information about IUPAC, its activities, and its output to a much wider audience globally.
- To provide a broader personal contact base for IUPAC to chemists who are not recorded as active members of IUPAC bodies identified in its Divisions and Committees.
- To promote a wider contact of IUPAC with Chemical Societies and other chemistry organizations by permitting them to operate an Affiliate Program with IUPAC.
- To provide a route for contact with individual chemists in countries not having a Chemical Society (or one with insufficient resources to operate a program) by allowing them to become affiliated directly via the IUPAC Secretariat through an application process.

## 1980's—The Launch of AMP

The original Affiliate Membership Programme (AMP) was approved at the 32nd General Assembly in 1985



in Lyngby, Denmark by a majority vote of the Council. The first Affiliate members were enrolled at the beginning of 1986 with the recruitment of 5500 members in the first year of operation. This followed a period of extensive discussion that centered on how individual chemists could become associated with IUPAC without interfering with the responsibilities of the NAOs or the way in which Divisions (or then the Commissions) operated. A full review of these discussions is available in previous issues of *Chemistry International* [1,2].

The IUPAC Statutes define the Union as 'a *voluntary nongovernmental, nonprofit association of organizations each representing the chemists of a member country, a member country being a country where Adhering Organization has joined the Union.*' Core to the governance structure established for IUPAC was the principle that only the NAOs would be able to communicate with the Union on matters of policy, administration, and other non-scientific matters. This continues today, with the Union governed through the Council of member countries. Individual chemists could only stand for election to Divisions and Committees as Titular Members (financially supported to attend Division or Committee meetings), or as Associate Members or National Representatives (whose attendance is not financially supported). All three categories are contingent on the approval of the members' respective NAOs. Traditionally, therefore, chemists from non-NAO countries have been excluded from the core scientific bodies of the Union.

In 1981, as the original proposals for affiliate membership were under consideration, the International

\* The same title was used and published in 1983 when the Affiliate Membership Programme was first presented; see ref. 1

† The proposals were developed through a process during 2016 and early 2017 led by the Treasurer and Executive Director, through discussion at the 99th Executive Meeting, Beijing 8-9 November 2016, and the 99th Bureau meeting 8 April 2017, before consideration at Council in July 2017.

Meeting of Chemistry Society Presidents in Belgrade was considering plans for the creation of an International Chemistry Society. These were abandoned, given the initiative under consideration by IUPAC. There was, however, a balance to be struck. The Affiliate programmes were not to interfere with the relationships between chemists and their national chemistry representative bodies. To this end, NAOs or Chemistry Societies were offered the opportunity to coordinate the programme locally, to ensure that chemists only became affiliates through their NAO or their national Chemistry Society. If neither wished to coordinate the programme and had no objections to its chemists becoming Affiliates, chemists could apply to IUPAC directly.

The subscriptions to be paid comprised two components. The first was intended to cover the cost to IUPAC for editing, printing, and distributing *Chemistry International*, to which all affiliate members were entitled. The second component was meant to enable the NAO or Chemistry Society to recover the costs of operating the Affiliate programme. When the programme began, the total proposed annual subscription was to be USD 15. This rose to USD 35 in 2003 and has remained unchanged since.

Where applicable, AMP coordinators from developing and economically-disadvantaged countries were entitled to provide a maximum of 25 complimentary, "Sponsored" Affiliate memberships.

## The Changing World of IUPAC

Since the creation of the AMP, IUPAC has changed in a number of important ways. Probably the biggest recent change has been the introduction of a project system for the management of IUPAC work. This not only allowed for better management of activities, but also crucially opened to all chemists, whatever their nationality, the possibility of IUPAC voluntary work. In its report to the Council in 2013, the Evaluation Committee noted that chemists from 77 countries were involved in projects between 1997 and 2012. At the time, IUPAC comprised 61 member countries. Project leaders were drawn from 52 countries, 4 of which were not NAOs. The change was, therefore, having some success in engaging a wider chemistry community. More work remained, however, as most of this early volunteer effort was concentrated in the traditional member countries. Out of the 2966 chemists involved over this period, 1184 were from the USA, UK, or Germany.

Since the turn of the millennium, IUPAC has seen a significant turndown in its publishing income, a fact

that lay behind the decision to work with De Gruyter to upgrade publishing activities, especially marketing, a resource IUPAC lacked. The net annual cost to IUPAC for *Chemistry International* had also become very high, at around USD 150,000. Although there were a number of reasons for this, it was clear that a subscription of USD 35.00 would not cover the costs of printing and distribution. The current price of *CI* to third parties subscribing through De Gruyter is USD 74.00 per annum.

A process of reorganization—of the IUPAC Secretariat and its accounting procedures, as well as a fundamental overhaul of the IUPAC website, supporting databases, and IT infrastructure—is coming to fruition at the end of 2017. For 2018, it will be possible to carry out transactions directly with IUPAC electronically, to validate membership online, and to provide member-specific services.

At the same time as publishing income was falling, the 2008 global economic turndown impacted the ability of national members to pay national subscriptions. Many are national science bodies dependent on shrinking government funding. In 2018, approximately USD 900,000 of the total IUPAC income of USD 1,300,000 is provided by national members. There is a need to grow new income sources given ongoing pressure on national budgets.

The Company Associate scheme for corporate members has also been reviewed by the Committee on Chemistry and Industry (COCI). Recommendations were approved by the Council to encourage membership by industrial chemists and the engagement of companies in all aspects of applied chemistry.

## AMP Review

In reviewing the AMP scheme, the following core principles were considered:

- To retain and enhance the original objectives of the AMP scheme
- To encourage further engagement and involvement of chemists in all countries, whether in academia, government, or industry, in the work of IUPAC
- To maximize the advantages of working with NAOs or existing Chemistry Societies where possible.
- To make the fullest use of IUPAC's new IT infrastructure and Secretariat capabilities.
- To continue to reduce the net cost of *CI* through digital publishing whilst enabling those who prefer paper copies to receive them.

## IUPAC Offers an Open Door to Chemists of the World

2018 Affiliate subscriptions (in USD)	Paid subscription	including printed CI
<b>Membership through a Coordinator</b>	<b>\$50.00</b>	<b>\$75.00</b>
of which, to Membership Coordinator	\$20.00	\$20.00
and to IUPAC	\$30.00	\$55.00
<b>Sponsored Affiliate</b>	<b>\$ 0.00</b>	<b>\$25.00</b>
and to IUPAC	\$ 0.00	\$25.00
<b>Membership direct through IUPAC</b>	<b>\$50.00</b>	<b>\$75.00</b>

- To ensure that the subscription fee is commensurate with the benefits package provided.
- To provide practical ways of managing the Sponsored Affiliate scheme to maximize the opportunities for younger chemists to continue to benefit from it.

These led to the key features of the new Affiliate Membership Programme:

1. Affiliate members from both NAO and non-NAO countries are eligible to be nominated as candidates for *Associate Member* positions in Division elections and for election or appointment to Standing Committees. This represents a significant new opportunity for chemists to become further involved with the scientific work of IUPAC.
2. Affiliate members can continue to participate in IUPAC projects, including the development of project proposals, and can serve both as chairs or members of project task groups.
3. Affiliate members continue to receive a 10 % discount on registration fees for IUPAC-endorsed conferences and symposia. Affiliate members will continue to receive a 25 % discount on IUPAC books.
4. Affiliate Members receive complimentary access to the digital version of *Chemistry International* via DeGruyter.com/ci. A print version is available for USD 25.00 annual subscription premium as a contribution to printing and distribution costs for those who would prefer it.
5. The Affiliate programme continues to be administered in many countries through an AMP coordinator. For IUPAC member countries, the coordinator is appointed by the NAO. For non-member countries, the coordinator is appointed by a recognized Chemistry Society, agreed with IUPAC.
6. AMP coordinators in developing and economically-disadvantaged countries also continue to be entitled to provide a maximum of 25 complimentary "sponsored" Affiliate memberships for early-career chemists. Membership as a sponsored affiliate is limited to a total of six years to ensure a suitable turnover of early-career chemists. Sponsored Affiliates have digital access to *Chemistry International*. However, if a sponsored Affiliate would like "printed" copies of *CI*, he/she can acquire such copy at a cost of USD 25.00 per year to contribute to the printing and distribution costs.
7. Affiliate members receive a certificate of membership and an Affiliate membership card. All members will be listed on the IUPAC website, without distinguishing between paid or sponsored affiliates.

To join as an Affiliate, interested chemists can find contact details for their AMP coordinators published at [www.iupac.org/home/individual-members/](http://www.iupac.org/home/individual-members/). Alternatively, chemists can apply directly to IUPAC by contacting the IUPAC Secretariat's Affiliate Membership manager, Ms. Linda Tapp, at <LTapp@iupac.org>. IUPAC will keep national coordinators informed of any direct applications in their countries. 🏠

### References

1. T.S. West. IUPAC offers an open door to chemists of the World. *Chem. Int.*, **5**(1):6-10 (1983).
2. IUPAC Scheme of Affiliate Membership. *Chem. Int.* **5**(4):17-20 (1983).

Colin Humphris <chumphris@iupac.org> has been IUPAC Treasurer since 2016, serving a four-year term. Previously, he was involved in IUPAC's Committee on Chemistry and Industry (COCI), both as a Titular Member (2004-2009) and Secretary (2010-2013). He has also served as IUPAC Secretary General (2014-2015), as well as a Bureau Member since 2010.