IUPAC Hints 2.2 An Informal Review of IUPAC Members' Benefits, Duties and Functions, and Relevant Programs

Contents

Preamble

Introduction

What does it take to be an NAO?

Benefits of being an NAO

Duties and responsibilities

Observer status of ANAOs

The Affiliate Member Program (AMP)

Examples of implementation

The Company Associate program

Examples of programs

Other IUPAC programs

Acronyms and Keywords

AMP – Affiliate Membership Program

ANAO – Associate National Adhering Organizations

CA – Company Associate

CEFIC-the European Chemical Industry Council

CI – *Chemistry International* (IUPAC bimonthly newsmagazine)

NAO – National Adhering Organization (the formal member of IUPAC)

PAC – Pure and Applied Chemistry (IUPAC monthly scientific journal)

UNIDO - United Nations Industrial Development Organization

Preamble

This document is intended to provide guidelines for IUPAC National Adhering Organizations (NAOs) on the benefits and duties of NAO membership. In addition, it provides information for Associate NAOs and potential NAOs.

IUPAC is a member of the International Council for Science (ICSU), and therefore by becoming NAOs, the members of IUPAC benefit also from this connection to an overarching network of scientists. One implication of IUPAC membership of ICSU is that the Union (and its members) should observe and actively uphold the principle of the Universality of Science. This principle entails freedom of association and expression, access to data and information, and freedom of communication and movement in connection with international scientific activities, without any discrimination on the basis of such factors as citizenship, religion, political stance, ethnic origin, language, sex or age.

This document can be seen as an informal guide on how to be a "good member." It is expected that subsequent versions of this document will include more ideas and hints. Simply put, this document is intended to improve the functioning of the Union by clearly stating the roles and responsibilities of the Union's NAOs.

Introduction

The formal "Members" of IUPAC are the **National Adhering Organizations** (**NAOs**). NAOs are chemical societies, national academies, or equivalent bodies that represent all chemists in that country. The word country may include a specific geographic territory that is widely recognized as having the cultural and administrative characteristics usually associated with an independent state but without necessarily having complete independence or sovereignty. For countries in which there is not a single body that represents all chemists, a National Chemistry Committee for IUPAC has been formed to act as the NAO. This committee will represent all members of the various chemical societies.

The NAOs pay annual dues to the Union. The dues, or National Subscriptions, are based on the chemical turnover for that country, with a minimum of USD 1 000. (The chemical turnover is the value of chemical products produced in a country, as reported by UNIDO and/or CEFIC). Currently, the sum of all NAO dues is about half of the Union's annual budget of USD 1.5 million. It is therefore important that each NAO has adequate financial resources or can obtain funds from government grants or other outside support to pay National Subscriptions as they become due. (For example, National Subscription for a country like Chile is of the order of USD 5 000, for Australia it is about USD 10 000, or yet for Germany is about USD 50 000)

This document reviews the benefits and duties of the NAOs and presents details on two specific programs: the Company Associates (CA) program and the Affiliate Membership Program (AMP). These programs are designed to increase the visibility of the NAOs and IUPAC and to improve cooperation with the chemical industry and outreach to individual chemists. IUPAC depends entirely on NAOs to run these programs. However, the programs can in some instances be utilized by NAOs to raise funds to contribute to their dues or to use the collected funds on the condition that it benefits IUPAC and/or the NAO's status in IUPAC.

As a step on the way to "full" membership, a country may choose to join IUPAC as an Associate National Adhering Organization (ANAO). The ANAOs have an "observer" status and their benefits are limited. Effective 1 January 2006, the annual dues for all ANAOs are set at USD 250.

What Does it Take to be an NAO?

According to the IUPAC Statutes, a country may join the Union through only one national organization representing its chemists. This Adhering Organization may be a national chemical council, a national society representing chemistry, a national academy of science, or any other institution or association of institutions representative of national chemical interests. Applications for NAO status are reviewed and must be approved by the IUPAC Council (i.e., the highest governing body of the Union, composed of the delegations of the NAOs). Applications include a summary in English of the constitution of the organization and a description of its mission.

In 2008, IUPAC had 51 NAOs.

The benefits of being an NAO include:

- International and global recognition of the NAO and the individual chemists that its represents.
- Representation on the IUPAC Council, the highest governing body of the Union.
 The IUPAC Council holds a meeting every two years, usually scheduled at the
 end of the General Assembly. In recent years, IUPAC has provided financial
 support for the travel expenses of one delegate from each NAO delegation to
 participate in the Council meeting.
- Individual chemists from an NAO country are eligible to become titular or associate members or national representatives on any IUPAC Division or Standing Committee. Rules regarding committee membership are listed in the Union Statutes and Bylaws (see IUPAC Handbook or website). Election to a committee is a recognition of one's scientific expertise. Committees are involved in the oversight of specific projects and activities, ranging from establishing chemical standards to assessing the quality and accessibility of international conferences that apply for IUPAC sponsorship.
- Titular members of Division and Standing Committees are compensated for travel expenses incurred in fulfilling the responsibilities of the position.
- NAO countries are eligible to host IUPAC Congresses and IUPAC-sponsored conferences.

- Each year, each NAO can name one national event at which IUPAC Poster Prizes can be awarded.
- Young chemists from an NAO country are eligible to enter the IUPAC Prize
 contest. The prize (four awards per annum) is given for the most outstanding
 Ph.D. thesis in the general area of the chemical sciences, as described in a 1000word essay.
- Each NAO receives one free subscription to the monthly journal *Pure and Applied Chemistry (PAC)*, up to three free subscriptions to the bimonthly news magazine *Chemistry International (CI)*, and a copy of the Biennial Report.

Duties and Responsibilities

In order to make the most of their membership, NAOs have the following duties and responsibilities:

- Proactive recruitment and nomination of candidates for elections to IUPAC bodies
- Participation in the Council meeting, including discussions, elections, and decisions on topics such as the structure of the Union or financial matters
- Dissemination of IUPAC information, including scientific reports published in *PAC* and news from *CI*, to their national scientific community via their national publications
- Extension, within their reach, of the IUPAC network with individual chemists and with the industrial sector by coordination and implementation of the AMP and CA programs (see below).

ANAO Status

A country may join IUPAC as an Associate National Adhering Organization (ANAO). The ANAOs have no voting rights but only "observer" status. The countries they represent are not eligible to host IUPAC Congresses and IUPAC-sponsored conferences. Effective 1 January 2006, a time limit for ANAO status is set to four years. Over that 4-year time period, it is expected that ANAOs will progressively engage in IUPAC activities and secure their participation as full member. The limited ANAO benefits include the following:

- International and global recognition of the ANAO and the individual chemists that its represents.
- An observer representing the ANAO is invited to attend the Council meeting without voting rights; no financial support for travel expenses is provided.
- Young chemists from an ANAO country are eligible to enter the IUPAC Prize contest. The prizes (four per annum) are given for the most outstanding Ph.D. thesis in the general area of the chemical sciences, as described in a 1000word essay.
- Each ANAO receives one free subscription to *PAC*, a maximum of three free subscriptions to the bimonthly news magazine *CI*, and a copy of the Biennial Report.

The Affiliate Membership Program

The AMP was established in the 1980s to increase IUPAC's outreach to individual scientists. The program allows any individual with an interest in IUPAC and IUPAC activities to sustain a direct relationship with the Union.

Affiliates receive *CI*, which includes advance information on IUPAC-sponsored conferences and provisional recommendations, and keeps readers informed about IUPAC's programs and activities. Affiliates obtain a discount of 25% on the cost of all IUPAC publications, including *PAC*, the IUPAC nomenclature books, as well as compendia of chemical data. They also receive a 10% reduction of registration fees at IUPAC-sponsored conferences.

IUPAC depends on NAOs to develop and operate the AMP. Each NAO decides individually how it will implement this program. In practice, an AMP coordinator consolidates affiliates' information and arranges for the distribution of *CI*.

The AMP is not systematically implemented in all member countries. In some cases, there is a coordinator for a region. Also, a country (or region) that is not currently an IUPAC member can implement the program.

An individual may become an IUPAC Affiliate by subscribing directly to the relevant coordinator in the country/region in which he/she resides. The coordinator is responsible for managing the subscription, billing the affiliates, and distributing *CI*. Effective 1 January 2006, IUPAC charges the coordinator a yearly fee of USD 20 per affiliate, and the coordinator charges the affiliates. The ultimate fee is fixed by the coordinator, who is allowed to increase the per-Affiliate charge by a reasonable amount to cover administrative and mailing costs. In most cases, the coordinator receives copies in bulk, which are then redirected to each of the affiliates. If preferred, and by agreement with IUPAC, the coordinator can supply the list of addresses to IUPAC so that *CI* can be mailed directly to each affiliate.

Recruitment of affiliate members is left to the initiative of the NAO and coordinator.

Where applicable, coordinators are entitled to a maximum of 25 free, "sponsored" affiliate memberships, which are reserved for young chemists (under the age of 35) from developing and economically disadvantaged countries.

Examples of Implementation

In the USA, the AMP is operated by the American Chemical Society. To become an IUPAC Affiliate via the ACS is as simple as a checkmark on the annual member renewal form. The ACS manages the largest pool of Affiliates with more than 3000 individuals. In 2007, the annual charge per member was USD 34.

The Company Associates Program

The Company Associates (CA) program was established in the 1960s to improve collaboration between the chemical industry and the Union. Organizations such as industrial companies, research and development institutions and laboratories, scientific societies, or any other bodies interested in the activities of the Union may become associated with it as Company Associates.

CAs receive *CI* and activity reports. CAs are entitled to a 25% discount on *PAC* and other IUPAC publications including nomenclature books. IUPAC Company Associates have the opportunity to participate in the IUPAC-UNESCO Safety Training Program.

The IUPAC Committee on Chemistry and Industry (COCI) is responsible for developing and maintaining, in collaboration with the NAOs, an active program to recruit, guide, and inform CAs on IUPAC programs and policies. Multinational companies can be recruited in cooperation with the NAO in any or all countries in which the company operates. COCI can also recruit CAs in countries that are not currently members. A brochure presenting the reasons for a company to become a CA is available to all NAOs for recruiting purposes.

Each NAO representing a country having two or more CAs may propose a National Representative to COCI. By mutual agreement, two or more NAOs in a given geographic region that has more than three CAs may jointly propose a National Representative from that region.

The minimum annual subscription for a CA is USD 450. The subscription includes an administrative fee of USD 50 which is paid directly to IUPAC, while the remaining amount can be counted towards the National Subscription of that NAO or towards other programs that the NAO chooses to develop. Larger companies are encouraged to subscribe for more than the minimum.

Subscriptions can be collected by the NAO or by the IUPAC Secretariat. At present eight NAOs — Canada, Germany, Japan, Korea, Netherlands, Russia, Switzerland, and the

USA — recruit and collect funds from CAs and pay IUPAC USD 50 per CA. Another 10 NAOs — Hungary, Norway, Denmark, Poland, South Africa, Sweden, Belgium, Italy, UK, and China (Beijing) — have enlisted CAs but have chosen not to manage independently the funds collected from their CAs. That task is handled by the IUPAC Secretariat, which bills the companies and maintains the funds to be used by each NAO for national subscriptions or for other support of IUPAC activities.

Examples of Implementation

NAOs have adopted different strategies in implementing the CA program. For example, in 2003, Germany and Japan raised funds from CAs equivalent to 22 and 38 CA units respectively (one unit is USD 450). Germany raised 22 units from 8 CAs, while Japan raised 38 units from 38 CAs.

Following are examples of programs developed independently by NAOs, using in part funds raised through the CA program:

Young Observer Programs

The UK and USA have independently developed programs through which they sponsor the participation of young scientists at IUPAC General Assemblies. The individuals attend as observers of relevant meetings of the Divisions, Standing Committees, or task groups, with prearranged authorization from the group chairman. These programs have proven to strengthen the involvement of NAOs in the scientific programs of IUPAC, and they have broadened the network of scientists to include younger chemists.

Young Scientists Travel Award

The Canadian NAO manages an award that supports the participation of young scientists at IUPAC-sponsored conferences. By doing so, the Canadian NAO has strengthened the IUPAC conference program by recognizing the high standard of these events and simultaneously increasing the awareness of IUPAC among young scientists. Part of the funding for this award program comes from CA subscriptions.

Moreover, if one particular CA subscribes to at least three units, the award bears the joint name of IUPAC and of that company.

Your Program Here!

There might be other programs that NAOs have developed—if you are aware of such initiatives, please let the Secretariat know about them!

Other IUPAC Programs

IUPAC Poster prize

Every year, IUPAC sponsors international symposia and conferences. According to the rules of the conference sponsorship program, these events are to take place in a country represented in IUPAC by an NAO. These major events are a benefit to the local scientific community, as well as the local economy. In 2004, IUPAC added the option for IUPAC-sponsored events to give up to three awards for the best posters exhibited at the conference.

Acknowledging Industrial Sponsors of IUPAC-Sponsored Conference

To promote the Company Associates program and to assist the NAOs in recruiting new CAs, IUPAC is developing a scheme to recruit new CAs that coordinates with the efforts made by conference organizers to obtain corporate financial support for conferences. Under this plan, companies that financially support an IUPAC-sponsored conference can be granted CA status free for one year. This allows companies to learn first hand what IUPAC is and what it does. It is hoped that after a year of complimentary membership, these companies will choose to enroll as paid Company Associates.

Financial Support for Conferences

IUPAC offers two programs that provide modest financial support for conferences: one focuses on *New Directions in Chemistry* and the other specially benefits *Scientifically Emerging Regions*. The financial support is to promote the specific participation of international expert lecturers or of young scientists and advanced students from that region.

The Young Chemist and Young Observer programs

The Young Chemist and Young Observer programs are both designed to encourage and facilitate the participation of young scientists at the biennial IUPAC Congress and the concurrent General Assembly, by offering travel assistance to young scientists.

Ask secretariat @ iupac.org for detailed information.