

# Welcome from IUPAC



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**IT IS A** great pleasure, on behalf of the International Union of Pure and Applied Chemistry, for us to greet the members of the Federation of Asian Chemical Societies, and to write this Foreword to the inaugural issue of AsiaChem, the new magazine of the FACS.

IUPAC celebrated its centenary last year, in 2019. After its beginnings in Europe, it soon expanded and has become a truly worldwide organization, representing the interests of the chemistry community and associated scientific communities. We encompass academic institutions, industry, and society at large. Our vision of being a global indispensable source of chemistry is embodied in our mission to provide objective scientific expertise and develop the essential tools for applying and communicating chemical knowledge to benefit humankind and the world. This is achieved through providing a common language for chemistry, advocating the free exchange of scientific information, and fostering sustainable development. Scientific excellence and objectivity, diversity and inclusiveness, are core values that we believe to be particularly important.

We are privileged to have more than 2300 Volunteers, and together we identify scientific issues and problems and reach consensus on approaching and solving them. We have over 800 Affiliate Members, a way that chemists who would like to participate in IUPAC activities can join without necessarily being a member of the 54 national member countries. Many of those 54 National Adhering Organizations are also members of FACS. We also have 32 Company Associates and 31 Associated Organizations, of which FACS is one.

Last year, 2019, was not only IUPAC's centenary, but was also the International Year of the Periodic Table of the Chemical Elements, of which IUPAC was the leading partner. Many events were held all over the world, as we are sure you know. These demonstrated the enthusiasm for chemistry among the young and less young of us from all parts of society, and not just scientists. It showed the fascination for the chemical elements and emphasized how much they do for us in contributing positively to our lives.

As part of this celebration, we held a Periodic Table Challenge, which was taken on by 65000 people in 136 countries. Given its huge success, a second edition was launched in June this year and has been equally successful; there are also versions this year in Chinese, Arabic and Spanish. Other Centenary year initiatives that have continued are the Global Women's Breakfast, and the Top Ten Emerging Technologies series of articles. The Periodic Table of Younger Chemists was another International Year of the Periodic Table initiative, in collaboration with the International Younger Chemists' Network, and this has led directly to a new project: ChemVoice, the voice of the younger chemists.

Core IUPAC activities continue, of course, and we continue to develop chemical nomenclature, with recommendations and technical reports appearing in our journal Pure and Applied Chemistry. Periodically we collect these documents and publish the recommendations in the "Color Books", which provide standards and standardized nomenclature in different areas of chemistry. The Green Book provides detail on the quantities, units, and symbols in physical chemistry. The Red Book covers the nomenclature of inorganic chemistry, the Blue Book covers organic chemistry nomenclature, the Purple Book is a compendium of polymer terminology and nomenclature. The Orange Book provides key terms in analytical chemistry. The Silver Book is a compendium of terminology and nomenclature of properties for clinical laboratory sciences, the White Book provides biochemical nomenclature, and the Gold Book is about chemical terminology.

In the next 100 years, in the world of Big Data, we foresee that it will be particularly important to develop Cheminformatics standards, of which the international chemical identifier (InChI) is an important example. Pure and Applied Chemistry also publishes themed scientific issues, many of them linked to important contributions made in IUPAC-endorsed conferences. Our publication Chemistry International highlights important news items and the results of our projects.

We will continue to foment activities in green chemistry and sustainable development, build on our links with industry, and take on projects in responsible care and, of course, education and training. Within these fields, we have a particular focus on inspiring younger chemists and reaching out to those parts of the world in greatest need.

We value our collaborations with other international organizations, including UNESCO, ISC, BIPM, OPCW, IUPAP, etc. For example, the International Union of Pure and Applied Physics (IUPAP) collaborates with us to determine when a new element has been synthesized and identified. The Organization for the Prohibition of Chemical Weapons (OPCW) is an essential international organization in chemistry. IUPAC was awarded the Hague award of the OPCW in 2019 for its work in collaboration with OPCW to further the peaceful uses of chemistry.

Finally, we wish FACS a productive and healthy future and to many future and fruitful collaborations between IUPAC and FACS.

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