



The Inorganic Chemistry Division at the IUPAC General Assembly in Istanbul, August 2013, gathering members and observers. Left to right, back row: Daniel Rabinovich, Milan Drábik, Adem Kiliç, Norman Holden, Markku Leskelä, Juris Meija, Thomas Walczyk, Javier García-Martínez, Ken Sakai; front row: Duangsamorn Morawong, Udomphan Kemawadee, Ladda Meesuk, Robert (Bob) Loss, Robin Macaluso, Lars Öhrström, Jan Reedijk, and Brian Korgel.

decade long, controversy between the USA (Glenn Seaborg and Al Ghiorso at the Lawrence Radiation Laboratory, LBL, at Berkeley, California) and the Soviet Union (Georgiy N. Flerov at the Joint Institute for Nuclear Research, JINR, at Dubna, Russia). Both of these laboratories were involved in heavy element research, including claims to the first discovery of the elements numbered 104 and 105, and both groups denied first discovery claims from their rival lab. The major players (nuclear scientists involved in the production and the measurement of nuclides of heavy elements) supported either one camp or the other.

When Yves Jeannin and I wrote an article on the 'Systematic Naming Scheme for the Heavy Elements' in *Nature* during 1985, see [2], we mentioned two reasons for the proposed naming scheme. First, there was the problem of a pair of chemical elements with $Z = 104$ and $Z = 105$, whose discovery was claimed by two separate scientific groups. Each of these groups reported different names for each of the two elements. There were multiple articles appearing in the scientific literature with a total of four names for these elements. The experiments of the US group followed the alpha particle decay of reaction products from a given target and projectile. The experiments from the Soviet group followed the spontaneous fission decay of reaction products from a different target and projectile.

LÖ: What was the initial response of IUPAC?

NEH: The expertise of IUPAC is in chemistry and not in the physics of nuclear reactions, thus IUPAC chose a 'wait and see' attitude to determine if some consensus would form in the scientific community. Unfortunately, this was the period of the Cold War and it eventually became clear that such a resolution would never be forthcoming. In 1974, IUPAC and IUPAP, the International Union of Pure and Applied Physics, appointed a group of experts who were not directly involved in the controversies, three experts from the USA, three from the USSR, and three from other countries. This committee never completed its work, nor issued a report, nor met as a group, until it disbanded. I later attended a meeting of the Interdivisional Committee on Nomenclature and Symbols (IDCNS), a forerunner of the present Interdivisional Committee on Terminology, Nomenclature and Symbols (ICTNS), and I argued for IUPAC to form another group to try to resolve the impasse between the scientists from the USA and the Soviet Union. The proposed IUPAC 1979 naming scheme would provide systematic alternative neutral names for discussion and for use as a periodic table placeholder, until an official discovery was recognized. In 1985, IUPAP and IUPAC established a new joint group, the Transfermium Working Group (TWG). Members would not be drawn from countries of the major labs