Éloge: Masanori Kaji (1956-2016)



Masanori Kaji passed away in Yokohama, Japan, on July 18 at the age of sixty. Many of his colleagues, friends, and students were present to mourn for him at a Buddhist funeral held on July 23.

Masanori was born in Yokohama on February 8, 1956. In 1974 he enrolled in the Department of Chemistry at the Tokyo Institute of Technology (Tokyo Tech). As a junior, his interest shifted from chemistry to history. Encouraged by Tatsumasa Doke, professor of the history of science, he began studying the history of science in Tokyo Tech's graduate program in social engineering. In 1988, he was awarded a doctoral degree upon completion of his dissertation on the Russian chemist Dmitri Mendeleev and his discovery of the periodic law.

Masanori was amused to say that he and Mendeleev shared the same birthday (although the latter's was in the Gregorian calendar). In 1990 he was selected as a Soviet government-sponsored foreign student for Russian language training and study of the history of Russian chemistry at Leningrad State University. The following year saw the collapse of the Soviet Union. By the time he left for Japan in 1992, the Soviet Union had been renamed the Russian Federation, and his university Saint Petersburg State University. As he was specializing in the history of chemistry, Masanori was assigned to I.S. Dmitriev, who had just been appointed in September 1991 as the Director of the D. I. Mendeleev Museum-Archive at Leningrad State University. The latter advised him to further focus on Mendeleev, and, following this advise,

Masanori became one of the leading scholars in the world on Mendeleev's life and work. In 1997, he published the first scientific biography written in the Japanese language about the eminent Russian scholar: Mendeleev's Discovery of the Periodic Law of Chemical Elements (Sapporo: Hokkaido University Press, 1997). This was followed by numerous journal articles on that topic, including some publications in Russian. One often cited article was on 'branches of Mendeleev's genealogical tree' that investigated Mendeleev's Japanese relatives, in particular his granddaughter.

He received the 2005 Outstanding Paper Award from American Chemical Society's Division of the History of Chemistry for his paper "D. I. Mendeleev's Concept of Chemical Elements and The Principles of Chemistry," Bulletin for the History of Chemistry vol.27, no.1 (2002): 4-16. He co-edited Early Responses to the Periodic System (Oxford University Press, 2015).

Over the past decade, he eagerly worked on the history of organic chemistry in Japan, with a special focus on the work of Riko Majima and Tetsuo Nozoe.

Masanori later also contributed important publications on the eminent Russian scholar V. I. Vernadskii, including a translation of his work on the history of science. One of the most interesting of Masanori's publications about Vernadskii was a study of his role in the Soviet atomic project. Prompted by an article published by E. O. Lawrence in *The New York Times* Vernadskii advocated for the formation of the Commission on the Problems of Uranium in the USSR in 1940, similar to what Einstein had done in the United States.

Thus, Masanori was a leading scholar of Russian and Japanese chemistry. A prolific writer, he published and edited over 10 books and wrote nearly 40 papers either in Japanese, English, or Russian.

Masanori became an associate professor of the history of science at the Tokyo Institute of Technology in 1994. He was promoted to professor in 2014. He served the Japanese Society for the History of Chemistry for many years as a Council member and was Secretary in Chief from 2007 to 2013. He was also an Executive Council member of the Commission for the History of Modern Chemistry (CHMC), of the International Union of History and Philosophy of Science, Division of History of Science and Philosophy. Masanori played a major role in organizing the International Workshop on the History of Chemistry (IWHC 2015), "Transformation of Chemistry from the 1920s to the 1960s," held in March 2015 at Tokyo Tech.

He was a real cosmopolitan who restlessly took part in many international conferences in Europe, America, Middle East, and Asia. In Japan, he always showed warm hospitality to foreign scholars who visited Japan. Masanori had many friends and colleagues in Russia. He maintained close scholarly ties with the Chemistry Faculty at Moscow University and the Russian

Chemical-Technological University named after D. I. Mendeleev. Over the course of many years, Masanori forged many direct ties among scholars in Japan, Russia, and the West. Also more generally Masanori played an important role in Europe. He was present at the business meeting at the 4th International Conference on the History of the Chemistry (ICHC) in Budapest in 2003, organized by the Working Party on the History of Chemistry (WP) of the European Association for Chemical and Molecular Sciences (EuCheMS), when it was decided to organize these conferences in the future also outside Hungary. At all the next ICHC meetings - Lisbon 2005; Leuven 2007; Sopron 2009; Rostock 2011; Uppsala 2013 - he was present and attended not only the conferences but also the business meetings. As a result, he was appointed in 2009 observer and (honorary) member of the Working Party, and became in that quality the only non-European member of the WP. During the same conference in Sopron he organized two sessions on the 'Early Responses to the Periodic System' that ultimately resulted in the book published in 2015. Masanori also played a crucial role during all these conferences by always taking the group picture. He will be remembered dearly by all who attended, and he will be greatly missed as a careful 'visual historian' of the history of chemistry as a field. (see his picture of the Uppsala 2013 meeting, with Masanori standing in the front row on the left). It was thus very unusual for the European community not to meet him in the Aveiro edition of the ICHC, in September 2015, where the paper he intended to deliver was read by a colleague.

In September 2015 indeed, out of the blue, Masanori was diagnosed pancreatic cancer and was sentenced several months. While receiving chemotherapy, he was forward-looking and continued to be active in writing papers and attending meetings. In December, he delivered a paper on the history of Japan's chemical community at the Pacifichem conference held in Honolulu. Climbing Diamond Heads and swimming at Waikiki, he looked cheerful at the time.

Masanori was hospitalized two days after he attended the annual meeting of the Japanese Society for the History of Chemistry, held at Mie University in July 9-10, 2016. We were deeply saddened by the news of his subsequent death, even though we felt the day might come in the near future. He is survived by his wife, Michiko Akamatsu, a scholar of Russian history. His death was a great loss to the history of chemistry community. Masanori Kaji and his contributions to the historical scholarship of chemistry shall long be remembered by many of us in Japan as well as worldwide.

Yasu Furukawa, Ernst Homburg and Elena Zaitseva



Group photo from the 9ICHC in Uppsala (2013), with Masanori to the left in the front row.