



Иван

JAN KACZMAREK

1920–2011

Elected in 1977

*“For pioneering work in the theory and technology of
machining and metal cutting.”*

ADAPTED FROM A MEMORIAL
WRITTEN BY KAZIMIERZ E. OCZOŚ
SUBMITTED BY THE NAE HOME SECRETARY

JAN KACZMAREK, founder and first editor in chief of the *Advances of Manufacturing Science and Technology Journal* and well known in the Polish and international engineering communities, died October 18, 2011, in Paris. As his former student and then friend, I present his numerous achievements to highlight the scale of loss that Polish science and the associated community have suffered.

Jan Marian Kaczmarek was born on February 2, 1920, in Pabianice, Poland. He obtained a pilot license before starting his studies in Warsaw in 1938. One year later, he took part in his homeland defense as a pilot of the Polish Air Force. He was wounded, but after his release from a military hospital in Vilnius he joined the Lithuanian Resistance Movement (1940–1942) and in 1942–1945 served in Poland’s underground resistance Home Army.

In 1945 he came to Krakow to continue his studies at the Academy of Mining (which in 1949 became the AGH University of Science and Technology). In 1947, while still a student, he started working as a teaching assistant in the Department of Product Engineering, directed by Professor Witold Biernawski. He obtained an MSc degree in mechanical engineering in 1948, his PhD in 1958, and his DSc in 1960. He became an associate professor in 1962 and a full professor in

1969. During his academic career he promoted 29 PhDs in engineering, six of whom became professors.

He worked at the Institute of Advanced Manufacturing Technology in Krakow (1949–1968), becoming its vice director (1953–1957) and then managing director. In 1958 he was named director of the Department of Manufacturing Technologies at Krakow University of Technology, and then assistant vice rector and vice rector of the university (1965–1968).

In 1968 Jan Kaczmarek moved to Warsaw. In 1965 he was elected a corresponding member of the Polish Academy of Sciences, and in 1971 he became a full member and scientific secretary (1971–1980). He also served as chair of the National Committee for Technical Progress (1968–1972), and next as Minister of Science, Higher Education, and Technology (1972–1974). During his tenure in these two positions he stimulated and modernized scientific and technological education and research in Poland. He fostered policies aimed at broadening research outcomes and promoting inventions for use in industrial and social practice; several complex research programs were initiated and international cooperation was partly reestablished. Poland began to be perceived as a country with valuable potential in science and higher education, thus becoming an important country for Europe's future.

Professor Kaczmarek's scientific activity was particularly fruitful in the 1950s and 1960s. Among his numerous publications, *Principles of Machining by Cutting, Abrasion, and Erosion* (1969 in Polish; 1976 in English) played a crucial role in the education of many generations of students and was widely read by workers in many branches of production engineering. The English edition quickly won recognition in many countries.

Jan was the first Polish citizen to become a member of the International Academy for Production Engineering (Collège International pour la Recherche en Productique; CIRP) in 1961. In 1973–1974 he was elected president of this elite international organization and in 1990 became an honorary fellow.

In 1978 he started working at the Polish Academy of Sciences' Institute of Fundamental Technological Research,

directing the Institute of Mechanical Systems, and returned to research on surface layer engineering. He was interested in the technological engineering of surface layers and particularly the microstructure of surfaces. His research involved the new stereometric estimation of accounting for the smoothness and load-bearing capacity of the surface and the construction of an ion implanter. His contributions—in books, papers, and applications—to the development of this area are exceptional.

Kaczmarek's research activities were always closely connected with measurement science and technology. The development of a system for measuring machine tool vibrations was his first metrological project (inspired by Professor Stanislaw Ziemba), which he completed just after graduation. He continued to work on measurement-related issues at Krakow University of Technology, at the Institute of Metal Cutting, and later at the Institute of Fundamental Technological Research.

He became a member of the Polish Society of Mechanical Engineers and Technicians in 1949, an honorary member in 1972, chair from 1980 to 1987, and in 1998 he was awarded the title of honorary chairman. He chaired the Supervisory Council of the Polish Federation of Engineering Associations (Naczelna Organizacja Techniczna; NOT) from 1972 to 1976, chaired NOT from 1984 to 1990, and in 2010 was named honorary chairman. In addition, he was a member of the Warsaw Scientific Society, Technical Culture Society, and Polish Association of Universalism. He was one of the founders of the Academy of Engineering in Poland (1992), served as its vice president (1994–1999), and in 1998 was named an honorary member. He was also active in the development of the Polish Academy of Arts and Sciences.

Professor Kaczmarek received honorary doctorates from Chemnitz University of Technology (1973), Bauman Moscow State Technical University (1974), Poznan University of Technology (2001), and Koszalin University of Technology (2003). He was elected a foreign associate of the US National Academy of Engineering (1977) and a member of the Bulgarian Academy of Sciences (1977), the Royal Academy of Sciences,

Literature, and Arts of Belgium (1978), and the Central European Academy of Sciences and Arts (1998). He was named a Commander in the Ordre des Palmes Académiques (1974) and Grand Officier de la Légion d'Honneur. In Poland he was awarded the Polonia Restituta Commander's Cross, Officer's Cross, and Knight's Cross, and the Copernicus Medal.

Jan remained faithful to his motto:

Everybody who cares about the development of civilization should—to the largest extent and according to his abilities and possibilities—act creatively and should not skip any opportunities that come [across] one's path. [In this way] one will have a positive influence on the activation of entrepreneurship and will improve conditions favorable to using effectively the results of creativity.

Goodbye, my dear friend.

Kazimierz E. Oczóś

