Obituary

Zsolt Fonyo (1943–2005)

On October 31, 2005 Professor Zsolt Fonyo passed away at the age of 62. He was the head of the Chemical Engineering and Processing Department, Budapest University of Technology and Economics (BUTE).

Zsolt Fonyo was born in Budapest, graduated in 1967 as chemical engineer at the Veszprem University of Chemical Engineering. He started his professional career as designer at the OLAJTERV Contracting and Engineering Company. He received his PhD (“Energy Requirements and Energy Conservation of Distillation Systems”) from the Hungarian Academy of Sciences in 1974 and started to work for the Chemical Engineering and Processing Department, Technical University of Budapest. He was guest researcher and visiting professor at the Chemical Engineering Department, University of Tokyo, Japan in 1979–1980 and at the Systems Engineering Group, Swiss Federal Institute of Technology (ETH), Zurich, Switzerland. He defended his thesis for the title of the Doctor of Sciences in 1986 (“Strategy of Separation System Design: The Systems Approach”). From 1994 until his passing away he was the head of the Chemical Engineering and Processing Department, BUTE. He became a corresponding member of the Hungarian Academy of Sciences in 1998 and a full member in 2004. In 2002 he founded and headed the Research Group for Technical Chemistry.

His research interests spanned the experimental and computational development of new energy efficient separation techniques; energy integration and heat pumping; process design with algorithmic approach; flowsheeting and dynamic simulation; process integration and process synthesis; conceptual design of hybrid separation schemes; controllability analysis during process design; environmental aspects of process design. He wrote seven books or book chapters and more than 300 scientific publications in these research areas. His works were cited more than 1300 times.

His teaching activities covered virtually the whole range of chemical unit operation, process engineering and systems engineering topics presented in a variety of courses taught in the Universities of Budapest, Tokyo, Køthen, Veszpréms, and ETH Zürich. His main teaching responsibility was computer aided process design. In the last three teaching semesters he delivered lectures for chemical engineers in the following areas: chemical unit operations; process engineering and control; chemical systems engineering; design and operation of thermal separations; process simulation, flowsheeting, integrated process design and process synthesis; controllability of chemical processes; integrated environmental protection; heat pump assisted chemical processes. He supplemented these courses with design and diploma projects. He also led in the development of teaching material on these subjects.

He had several important professional activities such as member of the editorial board of Chemical and Biological Engineering Quarterly, secretary of EURECHA (European...
Committee for the Use of Computers in Chemical Engineering Education; member of American Institute of Chemical Engineers (AIChE); member of Swiss Societies for Chemical Engineering; member of the Hungarian Chemical Society; member of the “European Forum for CAPE Research” Working Party; member of the Hungarian Chamber of Engineering; and member of the Hungarian Academy of Engineering.

He conducted and participated in about 50 industrial consultancy works. The main purposes of these works were energy conservation, redesign heat recovery networks, selection of optimal arrangements and parameters, energy integration of two or more plants designed individually. 34 of his industrial designs were completed among them the distillation system of the Danube Refinery (Hungary).

His high level research and educational work was acknowledged and he received the Best Technical Book award of the year for the book “Distillation” (1978), Teacher of the Year (BUTE, 1995), Szchenyi Professor’s Scholarship (1997), Varga Jozsef Award (1998).

Professor Fonyo was devoted and committed to his profession and his activities of high level were nationally and internationally acknowledged and appreciated both in the fields of education and research. In his last days he faced bravely his fate showing an extraordinary human greatness.

His enduring memory and his heritage will be enshrined by the chemical engineering profession.

Peter Mizsey *
Department of Chemical Engineering,
Budapest University of Technology and Economics
* Tel.: +36 1 463 2174/2202; fax: +36 1 463 3197
E-mail address: mizsey@mail.bme.hu