

C H R O N I C L E

PROFESSOR ZBIGNIEW WITOLD ENGEL
DOKTOR HONORIS CAUSA
OF THE CRACOW UNIVERSITY OF TECHNOLOGY



On June 28th 2006 the Rector of the Cracow University of Technology presented the honorary title of Doctor Honoris Causa conferred to Professor Zbigniew Engel by the resolution of the Senate of the University of Technology. The Ceremonial Session of the Senate took place in the Collegium Maius Aula of the Jagiellonian University.

Professor Zbigniew Witold Engel, Doctor Honoris Causa of AGH University of Science and Technology, was born on April 1, 1933 in Zawady near Żółkwia, Lvov Voivodship. Between 1950–1955 he studied at the Department of Communication (Mechanics) at the Polytechnic Departments which was a part of the University of Mining and Metallurgy and he obtained the Master of Engineering Title and Diploma of the Master and Engineering.

In 1962 he successfully completed his PhD at the Faculty of Mechanization of the Mining and Metallurgy and he obtained the degree of Doctor of Science. In 1973 he obtained the postdoctoral qualifications (the Doctor Habilitatus degree). In 1973 he received the title of an Associate Professor and in 1978 he was granted the degree of a Full Professor.

Professor Zbigniew W. Engel occupied a position of the Director of the Mechanics and Vibroacoustics Institute for several years and he made a remarkable contribution in developing this institute. As an expert in the field of applied mechanics and vibroacoustics and also the creator of a vibroacoustics as a new area of science which has gained since worldwide attention – he also held the office of the Head of Chair of Mechanics and Vibroacoustics.

Professor Zbigniew Engel's research activity focuses on many topics in the field of mechanics and vibroacoustics particularly in the field of vibroacoustic synthesis of machines and devices, dynamics of machines, linear and nonlinear vibrations of mechanic systems, vibrations in technology, noise in environment, assessment and control of vibroacoustic hazards, the bases of active method of the vibroacoustic hazards suppression, the methods of research into vibroacoustic processes and the Reciprocity and Inversion Principles in vibroacoustics.

Professor Zbigniew Engel is the creator of the scientific grounds for a new science – vibroacoustics. He formulated its scope and fundamental objectives that are: the identification of the vibroacoustic energy sources, the identification of vibroacoustic energy transmission and its transformation, the vibroacoustic synthesis of machines and devices, the vibroacoustic diagnostic, the practical application of vibroacoustic processes, also in the field of medicine, the methods of research in vibroacoustic processes, the vibroacoustic Reciprocity Principle and also the inversion methods.

Printed scientific attainment of Professor Z. Engel consists of 540 contributions including monographs, text-books, scripts, papers published in scientific journals and presentations at the scientific conferences and congresses. Professor Engel is also an author of 15 patents and a wide variety of unpublished works that was carried out to satisfy the needs of industry and economy.

The large part of the overall activity of Professor Z. Engel concerns the didactic activity. He supervised 37 completed doctoral theses and he was a reviewer of over 100 of them. He also reviewed over 50 postdoctoral theses (doctor habilitatus). He issued the opinions concerning several professor's degree applications and many of his collaborators have been granted doctor habilitatus degree and have been appointed professors.

It is vital to mention that Professor Z. Engel has been involved in fruitful cooperation with numerous national and international research and development centers like Cracow University of Technology, Poznań University of Technology, Warsaw University of Technology, the Silesian University of Technology, Central Institute for Labour Protection – National Research Institute, Building Research Institute and Institute of Environmental Protection. The cooperation has been maintained in several forms mainly consisting of reviewing doctoral and postdoctoral theses and also providing opinions concerning professor's degree applications. It also involved organization of several meetings, seminars, symposiums and conferences.

Among numerous well-known research centers that Professor Z. Engel has cooperated with they are: Purdue University USA, Technical University of Copenhagen, Technical University of Bratislav, Institute of Materials and Machine Engineering of the Slovak Academy of Sciences, Institute of Building Machines of the Academy of Sciences in Moscow, Kiev Polytechnic Institute, St. Petersburg State Polytechnic University, Technological University of Budapest and University of Tokyo.

As a recognition of his important research contributions Professor Engel was invited to be a member of many international scientific associations such as: Academy of Engineering in Poland, St. Petersburg Academy of Sciences, Institute of Noise Control Engineering USA, International Institute of Acoustics and Vibration. He is a member of many national and international scientific associations such as: Applied Mechanics Committee, Deutsche Gesellschaft für Akustik and Gesellschaft für Angewandte Mathematik und Mechanik. Professor Z. Engel has actively taken part in numerous national and international congresses, conferences and scientific symposiums. Several times he was a member of Scientific Committees of Conferences such as INTER NOISE Congresses: Warszawa 1979, Edinburgh 1983, Munich 1985, Beijing 1987, Avignon 1988, Newport Beach 1989, Gothenburg 1990, Toronto 1992, Newport Beach 1995, Budapest 1997, Nice 2000, Hague 2001, Seoul 2003, Prague 2004. In 2000, 2002 and 2004 he hold the position of a Chairman of Scientific Committee of “Noise and Vibration in Transport” Conference held in St. Petersburg.

He also held a position of the Secretary of the Initiating Committee of Machines Dynamics Conference in Kraków in 1965. Since 1976 he has been a supervisor of the International Conference on Noise Control (NOISE CONTROL). He performed many vital functions such as: the Deputy Chairman of the Main Council of Sciences and University Education (1989–1990), the Deputy Chairman and the Member of the Acoustics Committee Presidium of Polish Academy of Sciences, the Member and the Deputy Chairman of the Kraków branch of PTMTS, the Secretary, Chairman and the Deputy Chairman of Theoretical and Applied Mechanics Committee, the Member of the National Board of Environment Protection, the member of many Scientific Councils and the Chairman of the Scientific Council of CIOP. Professor Z. Engel was awarded the 1st Class Awards of the Minister of Higher Education, Minister of National Education and Minister of Building and recently he has been awarded the Royal Capital City of Kraków Prize in the field of science and technology (December 2005).

Among several national and international honors he has been awarded the Golden Medal of the Czecho-Slovak Academy of Science, Hungarian Medal “PRO SILENTIA” and high national distinctions: the Golden Cross of Merit, Officer’s Cross and Commander’s Cross of the Order of the Revival of Poland and Commission of National Education Medal. He has also received “With Merit to Kraków University of Technology” Medal.

Professor Zbigniew Witold Engel is a remarkable scientist and lecturer, devoted tutor and organizer. His scientific and educational contributions to mechanics’ and vibroacousticians’ education and distinguished role he carries out in the development of mechanics and vibroacoustics has brought him a national and international acclaim.

His devotion and openness towards knowledge transfer is an impressive example of generosity for all his Faculty and University colleagues and collaborators.

Krzysztof Kosala