

## Józef Giergiel<sup>1</sup>

Professor Józef Giergiel is a native of Cracow. Almost one year ago, he celebrated the 75-th anniversary of his birth and the 50-th anniversary of his work. He is also a Doctor Honoris Causa of the Rzeszów University of Technology.

His whole education is connected with Cracow. He finished there elementary school, secondary school and the university. In 1957 he graduated with a Master of Science degree from the Faculty of Mining and Metallurgical Machines of the AGH University of Science and Technology.



On 11<sup>th</sup> January 2006 Professor Józef Giergiel has been awarded degree of Doctor Honoris Causa at the Technical University of Lodz

His work, as a design engineer, during the study is also worth mentioning. Next, as a scientist he kept in touch with industry by being a science consultant. In 1958 he started working as an assistant in the Department of Mechanics at the Faculty of Mining and Metallurgical Machines where his whole scientific career took place - from an assistant to an ordinary professor.

During his long employment in the AGH, held a number of administration positions. He was a vice-director of the Institute of Machine Design, and after the reorganization at the Faculty of Mining and Metallurgical Machines he took over the same position in the Department of Robotics and Machine Dynamics. From 1974 to 1977 he was a vice-dean at the Faculty of Mining and Metallurgical Machines and from 1977, for a period of 10 years, he was performing the duties of the Dean, then he became a vice-rector of the AGH.

Professor Józef Giergiel is a remarkable scientist who is well known in Poland and outside. His scientific successes are extraordinary in the area of machines dynamics,

<sup>1</sup>based on the laudation presented by professor Leszek Kwapisz

mechanical vibration with internal friction. Moreover, his achievements in field of identification of mechanical properties in different kinds of machines and devices are worth mentioning. There is a domain of science where a lot of experiments with random and deterministic forced were taken. The one of the main successes of the professor J. Giergiel is the discovery of coupling between mechanical and electrical vibrations. In this field of research he is a precursor; nowadays this area expands very fast and it is known as mechatronics. Mechatronics joins the knowledge from three fields: mechanics, electrics and informatics.

Professor Giergiel's papers are characterise, by high scientific and practical applications.

Professor Giergiel's recent works have been connected with modeling, identification and controlling of the mechatronic systems with the application of an artificial intelligence. In his experimental works, he uses stationary and mobile robots. Now he is concerned with his newest researches into micro- and nanomechanics and micro- and nano-robots.

Professor Giergiel has an enormous merit as a science manager. He creates his own school, which exists in the AGH and Technical University of Rzeszow, simultaneously. High level of education in the field of robotics, mechatronics and identification of mechanics composition allows to treat this school as a huge success.

On Professor Giergiel's works a few generation of engineers have been brought up. He also has started to organize a nationwide seminary at the AGH and Technical University of Rzeszow. These seminars give the opportunity to listen to the most remarkable Polish researchers. From Professor's inspiration many kinds of scientific projects are made. He is a co-creator of a new programme of studies: Automatics and Robotics.

Professor Giergiel is still very much involved in teaching and upbringing of young scientists. He has supervised many of the MSc's and PhD's who are now very active researchers. He has reviewed more then 300 PhD's, DSc's thesis and professors' applications. He has promoted 17 PhD's students, 4 professors and 6 university professors.

He has published more than 350 papers, 30 monographs and books and 7 patents. His works were published in the journals of Polish Academy of Sciences, Slovakia Academy of Sciences, scientific papers of AGH, also at the conferences in Poland and abroad for example: in the USA, Germany, Russia, Czech, Hungary and France.

Professor Giergiel is a member of The Committee on Mechanics of PAN and Polish Committee on Machines and Mechanisms Theory of PAN, the former member of The Committee on Machine Building of PAN and The Committee on Transport of PAN. He is the chairman of the Section of Dynamics of Systems of Committee on Mechanics of PAN, member of the American Society of Mechanical Engineering, the honorary member of The American Biographical Institute. He was a member of the City Council of the Cracov.

During nearly 50 years of work at the AGH and 5 years at the Technical University of Rzeszow he was frequently rewarded by Minister and Rector and he was decorated with honours: Commander's Cross of Polonia Restituta, Medal of Merit of Rzeszów University of Technology, Gold Medal of Merit of AGH and many more.

Professor Giergiel has been connected with the Faculty of Mechanical Engineering at the Technical University of Łódź. For the Council of the Faculty of Mechanical

Engineering he has elaborated 27 reviews of DSc's and PhD's, professors and university professor applications. This cooperation has been going on from 70's, and included also the organization of seminars, conferences and activities in the Section of Dynamics of Systems of Committee on Mechanics of PAN.