

## LAUDATION IN HONOUR OF PROFESSOR DR. JOŽE GASPERIČ ON THE OCCASION OF HIS 65<sup>th</sup> BIRTHDAY

MONIKA JENKO

Institute of Metals and Technology, Lepi pot 11, 1000 Ljubljana, Slovenia

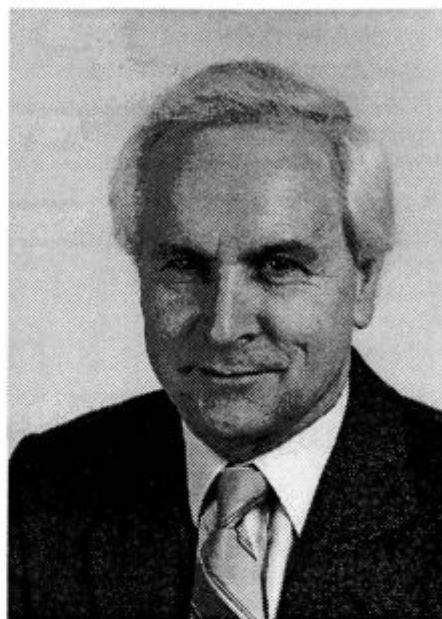
Professor Dr. Jože Gasperič, scientific councillor, leading Slovenian vacuumologist is celebrating his 65<sup>th</sup> birthday. This event is the occasion to look at the background and the development of this well known scientist and at the influence which his research work has in the field of vacuum science, development, construction and production of vacuum diffusion, rotary and diaphragm pumps, valves, traps etc, measuring vacuum gauges like Pirani, Penning, ionization gauges, McLeods, vacustats, mercury manometers, vacuum metrology, etc.

Jože Gasperič was born in Ljubljana on March 7, 1932. After finishing the grammar school education, he studied Electrical Engineering at the University of Ljubljana. In 1958 he passed the final examinations and second degree thesis. In 1957 he joined as Research Associate the Institute for Electronics and Vacuum Techniques in Ljubljana directed by its founder Professor Dr. Dušan Lasič. He was also Assistant in Electronics at the University of Ljubljana from 1956 to 1958 and later from 1959 to 1964 the lecturer of vacuum technique at Electrical Technical High School, Ljubljana. He prepared his master thesis in the field of Electrooptics and Electrooptical devices at the University of Ljubljana and graduated in 1964. In 1972 he graduated at the University of Ljubljana for doctor of Science in the field of Microelectronics - thin films.

In 1970 he was senior researcher and the manager of Vacuum Department from 1980 to 1985 at the Institute for Electronics and Vacuum Technique (IEVT). In 1986 he accepted the position of a visiting professor at the Department of Physics, Thin Film Laboratory, at Sri Venkateswara University, Tirupati, India and at Indian Institute of Science in Bangalore, India as visiting scientist.

In 1988 he returned to Ljubljana and joined to Solid State Physics Department of Jožef Stefan Institute.

Jože Gasperič, as a senior researcher and manager of Vacuum Department at IEVT Ljubljana, originated many new research programs, which received founding from institutes, industry, Slovenian and former Yugoslav research communities. His work has included characterization of evaporated and sputtered materials, metals compounds and alloys, especially cermets, decorative thin layers, etc. Developing high stabilized cermet resistor films. He developed and simplified theory for calculation of jet system for oil diffusion pumps for production in the range from 100 to 15000 l/s.



Dr. Jože Gasperič

He developed many vacuum pumping systems and equipment on the base of his own technologies, for industry and labs, for production of photo-sensitive and X-ray tubes, for degazation of insulating oils and other liquids for impregnation of electronic discrete circuits, condenser, power motor windings, wood, tools made by powder technologies, etc.

He developed also many types of medical inhalers and suction devices for surgical purposes, for suction of mother's milk for feeding prematurely born babies and he organized some centres in Slovenia for hiring such devices. He developed freeze-drying devices for pharmaceutical and biological labs.

He developed many special vacuum gauges as standards for calibration of other electronic vacuum gauges, baffles and traps, cooled with Peltier couples, complete portable equipment for service work on cooling devices (refrigerators, deep freezers, air conditioning devices).

At the IEVT he set up the universal calibration system for vacuum gauges, system for measuring all characteristics for rotary, diaphragm and diffusion pumps, monopole mass spectrometer, leak detection, various rough, high and ultra high vacuum systems for investigations, thin film evaporation systems.

He organized Leybold Heraeus and Jeol representative & service stations, both are now private.

Jože Gasperič is also an excellent organizer of conferences and congresses and he taught us how to organize the meetings in Slovenian Vacuum Society as well as in Union of Vacuum Societies of former Yugoslavia. He was the president of the Union and organizer of 4 Yugoslav vacuum congresses and Joined vacuum conference of Hungary-Austria-Yugoslavia and he was a member of organizing committee of the European Conference on Applications of Polar Dielectrics, FORUM BLED '97, and Solid State Protonic Conductors.

He succeeded with his project Vacuum impregnation of fossil bones of mammoth for Natural museum of Slovenia to save the prehistoric mammoth for our descendants.

He was editor of News of the Slovenian Society for Medical and Biological technique, co-editor of Slovenian journal *Vakuumist - Vacuumologist* and lector for Slovenian scientific journal *Kovine zlitine tehnologije - Metals, Alloys, Technologies*.

Our colleague and friend Jože is full of development spirit and creative ideas.

Jože Gasperič has published over 100 papers in international journals and conferences and 100 papers in Slovenian journals and conferences on the topics of science, technology, vacuum science and technique as well as vacuum metrology.

Professor Gasperič has been supervisor to several Ph.D. and Master Degree students at the Universities of Ljubljana, Maribor and India. He is also very active in the international academic field.

He is a member of executive council of Slovenian Vacuum Society, member of Slovenian Electronics and Microelectronics Society, Slovenian Society of Biomedicine, member of Electronics Materials scientific division of International Union for Vacuum Science, Technique and Applications - IUVSTA.

His colleagues and friends hope very much that he will take part in discussions, lectures and publications also in the future and we would like to wish him and his family many years in good health.