Academician Vladimir Nakoryakov

The 70th Anniversary of Nakoryakov, the eminent Russian scholar in the field of fluid flow, transfer phenomena and wave processes in multiphase and porous media was on 26 June 2005.

Vladimir Nakoryakov, who is a member of the Russian Academy of Sciences, has made significant contributions towards transport phenomena in porous media. He has developed the theory of film condensation and film boiling at a surface imbedded within a porous media. His results are substantiated by various experimental results. His work on the study of turbulent flow in a packed bed using the Laser Doppler Anemometer (LDA) has made possible determination of important flow field characteristics. Dr. Nakoryakov has also developed the weak nonlinear theory of elastic wave propagation in liquid-saturated porous media containing capillary-trapped gas bubbles. The evolution equation derived by Dr. Nakoryakov contains both the dispersion and relaxation terms and is capable of predicting the oscillatory pattern of a "fast" wave mode. More recently Dr. Nakoryakov is working on the development of the theory of two-phase flow in high-temperature alkaline and low-temperature proton exchange membrane fuel cells.

Dr. Nakoryakov has developed the electro-diffusion diagnostics for studying two-phase flow in channels. His contribution in the field of gas-fluid flows, wave propagation in gas-liquid media and combustion is well known to the scientific community. The existence of the shock rarefaction waves in a medium near the critical point was also discovered in co-authorship with Dr. Nakoryakov.

Academician Nakoryakov is known for his original thinking and his broad knowledge spectrum. His extraordinary intuition enables him to formulate new problems and provide new research avenues and obtain original data in several fields of science and technology. Dr. Nakoryakov has made substantial strides in the theory of absorption heat pumps and has developed several aspects of environmentally responsible power engineering and power-saving technologies. He is also engaged in research in the field of hydrogen power engineering.

He is the author of 440 scientific papers, 11 monographs, such as "Heat Transfer in the Sound Field", "Wave Dynamics in Gas and Vapor-Liquid Medium", "Wave Flow of Liquid Films", "Heat and Mass Transfer in Two-Phase Systems", etc. In 1981 Dr. Nakoryakov was elected as the Associate Member of the Russian Academy of Sciences. He became a Full Member of the Academy in 1987. He has trained over 40 professors and more than 200 Ph.D.s. He has served as an Expert of the Nobel Committee in physics and has been the Chancellor of Novosibirsk State University, Director of the Institute of Thermophysics, Siberian Branch of the Russian Academy of Sciences and

Deputy Chairman of the Siberian Branch of RAS. Currently, Dr. Nakoryakov is Director of the Institute for Innovative Studies and Adviser to the Russian Academy of Sciences. He is Member of 12 Editorial Boards for Russian and International Journals and Member of 5 Scientific Committees. He has also published various papers on the problems of modern science, economy and society.

On behalf of numerous doctoral students and friends, we wish Vladimir Nakoryakov sound health and many more years of creative work.

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