

CONGRATULATIONS TO VOLF YAKOVLEVICH BOROVOY ON HIS 90TH BIRTHDAY!

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July 18, 2014, marked the 90th birthday of Volf Yakovlevich Borovoy, Doctor of Technical Sciences, Professor, and Honored Researcher of the Russian Federation. Dr. Borovoy has been working at TsAGI since 1947, starting after he graduated from the Moscow Aviation Institute. His main areas of scientific interest are the aerodynamics of hypersonic flow and heat transfer, as well as methods of experimental research. He has published a monograph and over 150 scientific papers in journals worldwide and has obtained 15 inventor's certificates.

For many years Dr. Borovoy has initiated experimental studies on heat resistance materials for thermal protection of missiles and re-entry spacecraft. With his active participation, methods have been developed and implemented in practice that allow investigating heat transfer using temperature-sensitive coatings, measuring heat flux with surface thermocouple sensors, and visualizing spatial flow using laser sheets. With these methods, important features of three-dimensional separated flows have been found, including the generation of narrow peaks of intensified heat transfer, which are dangerous in flying vehicle structures. For these studies, Dr. Borovoy and his team of researchers were honored with the N. E. Zhukovsky Award in 1971 and the State Award of the Soviet Union in 1978.

Volf Yakovlevich Borovoy has actively participated in the research of aerodynamic heating and thermal protection of the Buran shuttle and the Energia-Buran multiblock space transportation system. In the last 10 years he has initiated, and was the leader of, extensive scientific and experimental work on shock tubes. Through the initiative of Dr. Borovoy, new panoramic experimental methods of investigation have been successfully implemented, which have greatly enhanced the ability to glean information from experiments conducted in hot-shot wind tunnels. Dr. Borovoy and his coworkers were honored with the Government of the Russian Federation Award in 2008 for a series of studies on heat transfer on the surface of space vehicles entering the atmosphere of other planets.

Because of his broad scientific vision and erudition, highest professionalism and self-discipline, and caring and respectful attitude toward colleagues, Volf Yakovlevich

Borovoy has earned universal recognition from both Russian and international scientific communities as well as from aviation and aerospace industry institutions. For many years, Dr. Borovoy has been a member of the editorial board of *Uchenye zapiski TsAGI (TsAGI Science Journal)*, and has been instrumental in maintaining the high scientific level of functioning demonstrated by the editorial board. We wish Dr. Borovoy good health on his 90th birthday and continued success in new scientific achievements!