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## **BELARUSIAN STATE UNIVERSITY OF TRANSPORT AND TRIBO-FATIGUE**

**I**n 2015 the scientific community celebrates the 80<sup>th</sup> birthday of Leonid Adamovich Sosnovskiy, Doctor of Technical Sciences, Professor of the Belarusian State University of Transport and the 30<sup>th</sup> anniversary of the new engineering science Tribo-Fatigue that he established. According to **K. V. Frolov**, Vice-President of the Russian Academy of Sciences, Academician of the Russian Academy of Sciences and the Belarusian National Academy of Sciences, Professor, D. Sc, Hero of Labor, *"It is Belarus where [Tribo-Fatigue] was born and is in good progress"*.

By now, over 800 papers on Tribo-Fatigue have been published, over 20 books and monographs have been issued, and seven state standards have been developed, including three intergovernmental standards. Eighteen patents have been obtained and five manuals for technical universities have been issued, including the two-volume course of lectures "Fundamentals of Tribo-Fatigue" certified by the Ministry of Education of the Republic of Belarus which has also been published in English and Chinese. Six international symposia were organized in four countries: Republic of Belarus (Gomel (1993); Minsk, 2010), Russian Federation (Moscow, 1996; Irkutsk, 2005), Chinese People's Republic (Beijing, 2000), Ukraine (Ternopol, 2002). One hundred and twenty scientists from various countries have been awarded the Honorary Diploma For Contribution to Tribo-Fatigue, including 16 scientists from Belarus. 25 scientists and specialists from different countries have been awarded the honorary jubilee plaque Tribo-Fatigue-25 for their contribution to the organization of international conferences and research and technological development in this field for over 10 years. Since 1996, the International Coordination Council on Tribo-Fatigue has been operating. It was established by the Academies of Sciences of Belarus, Russia, and Ukraine (co-chairmen are N. A. Makhutov, L. A. Sosnovskiy, V. T. Troschenko, and Gao Wanzhen). In 2004 the State Committee for Science and Technologies of the Republic of Belarus, the National Academy of Sciences of Belarus, the Ministry of Industry of the Republic of Belarus and the Ministry of Education of the Republic of Belarus signed the protocol on the establishment of the Inter-Agency Laboratory TRIBO-FATIGUE. The objective was to concentrate all resources and facilities on the perspective area and to unite scientific, educational and industrial potential for quick and concrete solution of interdisciplinary problems. The laboratory proved to be very efficient; the economic effect obtained in 2005 surpassed

2,5 million USD. Since 1996, the Scientific Development and Production Center Tribo-Fatigue Ltd. has been operating in this area. **N. A. Makhutov**, Corresponding Member of the Russian Academy of Sciences, Professor, D. Sc., Head of the Durability, Resource and Safety Department of A. A. Blagonravov Institute of Machine Studies of the Russian Academy of Sciences, Chairman of Scientific Council of the Ministry of Emergency Situations of Russia, stated: *"Tribo-Fatigue has become an object for specific engineering activities"*.

Academician **P. A. Vityaz**, First Vice-Chairman of the Presidium of the National Academy of Sciences of Belarus said about Tribo-Fatigue: *"This new research trend has proved great scientific and practical significance of the problem of studying complex interaction of elements in mechanical systems and methods of their damage control"*. The Academician of the National Academy of Sciences of Belarus **M. S. Vysotskiy** noted about Tribo-Fatigue: *"Great science is made in Gomel"*.

Suffice it to say that the First International Symposium on Tribo-Fatigue was held at our University (1993). And now the VII International Symposium on Tribo-Fatigue ISTF 2015 will again take place at the Belarusian State University of Transport.

For three decades Gomel has remained the starting point on the way of Tribo-Fatigue: here the first fundamental experiments were carried out, new concepts were formulated, and fundamental theoretical results were obtained. It was the Belarusian State University of Transport where Tribo-Fatigue was established as an academic discipline for would-be mechanical engineers. And it is the Belarusian State University of Transport that is publishing now the University Bulletin devoted to the anniversary of Tribo-Fatigue and Professor L. A. Sosnovskiy.

We wish success to ISTF 2015 and new scientific achievements to L. A. Sosnovskiy and his colleagues.

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