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E.O. Paton Electric Welding Institute, NASU

International Association «Welding»

Publisher

International Association «Welding»

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www.patonpublishinghouse.com

State Registration Certificate

KV 4790 of 09.01.2001

ISSN 0957-798X

Subscriptions

\$348, 12 issues per year,

air postage and packaging included.

Back issues available.

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UKRAINIAN-CHINESE SCIENTIFIC AND TECHNICAL COOPERATION

At the beginning of January this year 25 years passed since the establishment of diplomatic relations between Ukraine and People's Republic of China. One of the priority directions of bilateral relations is the cooperation in the field of science and technology. The example of this is the old and fruitful cooperation of the Ukrainian welders and Chinese colleagues.



During meeting at the PWI on February 16, 2017 (from left to right: Academician Paton B.E., Mr. Zhang Wei, Dr. Korzhik V.N.)

«Over 25 years, passed since the establishment of diplomatic relations between Ukraine and People's Republic of China, the significant results were achieved in the field of scientific and technical cooperation between our countries, and the cooperation in the field of electric welding and materials science can be considered in general as a striking example of the mutually beneficial bilateral scientific cooperation» noted Paton B.E., Academician, the President of the National Academy of Sciences of Ukraine, during the visit of Mr. Zhang Wei, the first Secretary of Embassy of PR China in Ukraine to the E.O. Paton Electric Welding Institute of the NAS of Ukraine. The reporting about this meeting and interview with Academician Paton B.E., Director of the Institute, were published in «Renmin Ribao», one of central Chinese newspapers.

Cooperation of Ukraine with China in the sphere of electric welding technologies has an old history (for example, in Harbin the «Paton» installation for electroslag welding has been already operated a half of century), but after the signing the Intergovernmental Agreement and establishment of the Commission on cooperation between the Government of Ukraine and Government of People's Republic of China in 2011 the spectrum of directions was greatly widened. At the same 2011 the E.O. Paton Chinese-Ukrainian Institute of Welding was officially opened by the initiative of the National Academy of Sciences of Ukraine, Ministry of Science

and Technology of PR China and State Department on management of foreign specialists of PR China in the Guangdong province.

As Paton B.E. noted, over the years of existence of the joint E.O. Paton Chinese-Ukrainian Institute of Welding, founded on the base of the scientific and technical platform, the new innovation form of the international cooperation in the sphere of high technologies, the both countries received the unique and very useful experience. He mentioned that the results, obtained for 5 years, were sufficiently successful and «meeting not only the interests of Guangdong province and the National Academy of Sciences of Ukraine, but China and Ukraine as a whole».

Realization of this Chinese-Ukrainian project has joined effectively the technological capabilities of Ukraine with market requirements of China, and also actively promoted the embodiment of Chinese efforts into life for the technological breaks in many key branches of economy. The E.O. Paton Chinese-Ukrainian Institute of Welding managed not only to concentrate the most progressive knowledge and equipment in the field of electric welding and materials science, but also to direct efforts for the creation of innovations in the interests of several different industry branches. These are the technologies and equipment for flash-butt welding of pipelines and stop valves, which open the opportunities in the construction of reinforced concrete bridges, viaducts and motor roads. These are also methods of joining the aluminium alloys, used in construction of special-purpose ships, in aviation and cosmonautics. In addition, these are technologies of restoration of parts by using the high-velocity plasma spraying for the textile industry, polygraphy, etc. Important results were obtained also in the fulfillment of large scientific projects in the field of oceanographic engineering, as well as in manufacture of equipment for nuclear power stations and application of welding technologies in medicine. Owing to the effective cooperation the welding technologies, used in China, were greatly improved and optimized to the advanced world level.

Dr. Korzhik Vladimir N., the co-director of the E.O. Paton Chinese-Ukrainian Institute of Welding from the Ukrainian side, who is working in this project from the very beginning, informed that during these years the Institute fulfilled more than 300 research programs of the governmental and regional level, services for spreading and technical support of technologies were given to more than 100 enterprises. More than 300 scientific papers and monographs were published from the results of the carried out works, 56 patents were received.

During recent years the cooperation is actively progressing with such powerful Chinese industrial concerns, as China Aerospace Science and Technology Corporation (CASC), Aviation Industry Corporation of China (AVIC), China State Shipbuilding Corporation (CSSC), Anshan Iron and Steel Group Metallurgical Company, Dongfang Electric Machinery Corporation.

Furthermore, during all years of its activity the E.O. Paton Chinese-Ukrainian Institute of Welding paid a lot of attention to the development of fundamental research investigations and supported the academic exchange between our countries in every way. Among the events, organized by the Institute, it is possible to mention the seminar on welding technologies in oceanographic engineering, seminar on key technologies of Arctic shipbuilding, etc.

The Institute activity was marked by 15 awards of Guangdong province, prizes of profiled Ministries and Establishments. For the great contribution to the process of modernization of China and development of scientific and technical cooperation between China and Ukraine the Academician Paton B.E. in 2012 and Dr. Korzhik V.N. in 2014 were awarded the higher and most authorized governmental award for foreign specialists: order of Friendship of People's Republic of China.

At the end of the meeting the academician Paton B.E. noted that the Ukrainian scientists appreciate highly the strategy «Chinese production-2025» developed by the Chinese government. In his opinion this strategy will promote the soonest transformation of China into a global industrially developed state, and the development of welding technologies, as the fundamentals for manufacturing specialized equipment, will receive a new powerful impetus for the further development. In particular, he expressed a hope for the extension of cooperation in the field of welding of live tissues in the interests of a clinic medicine.

From the Russian version of newspaper
«Renmin Ribao»