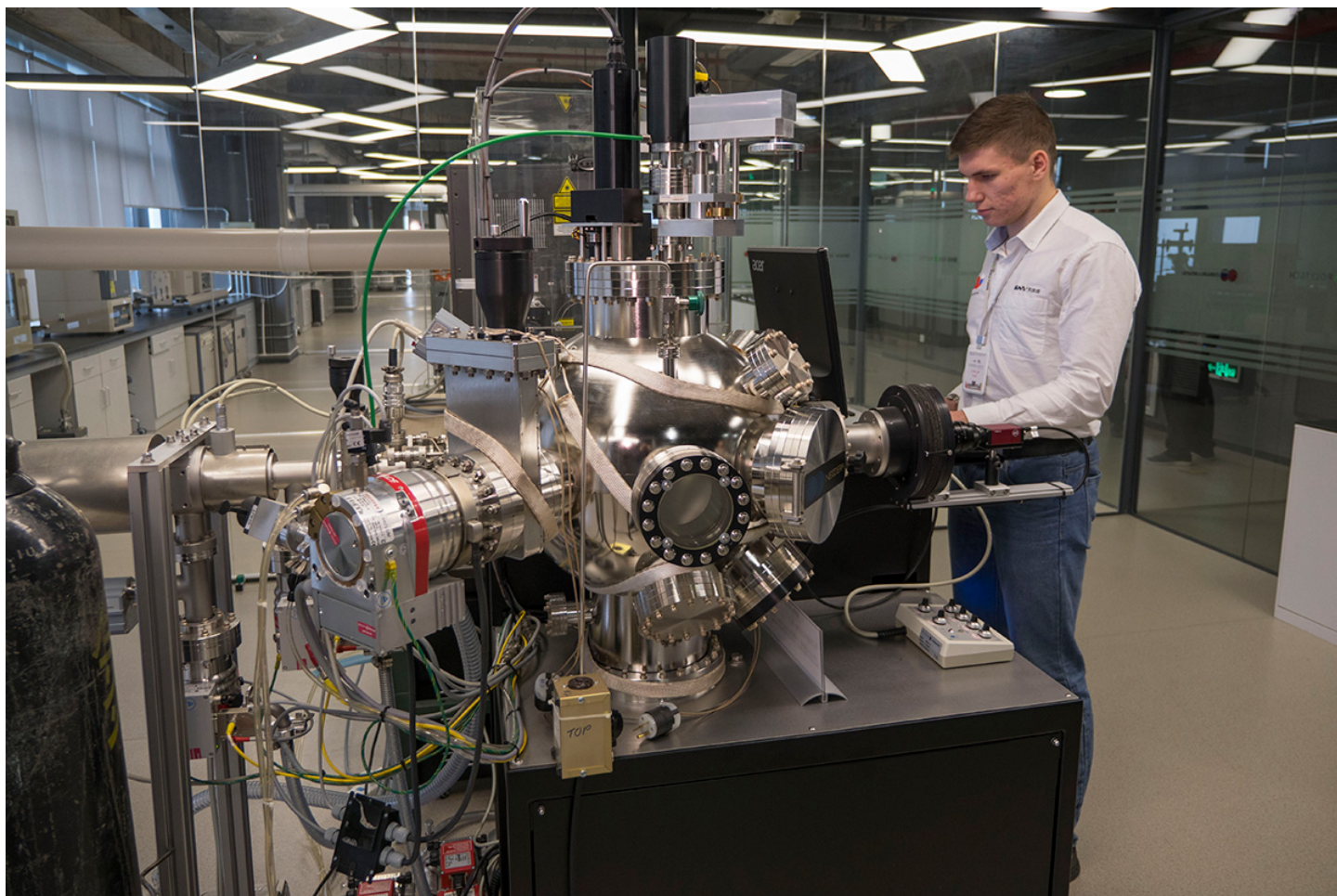
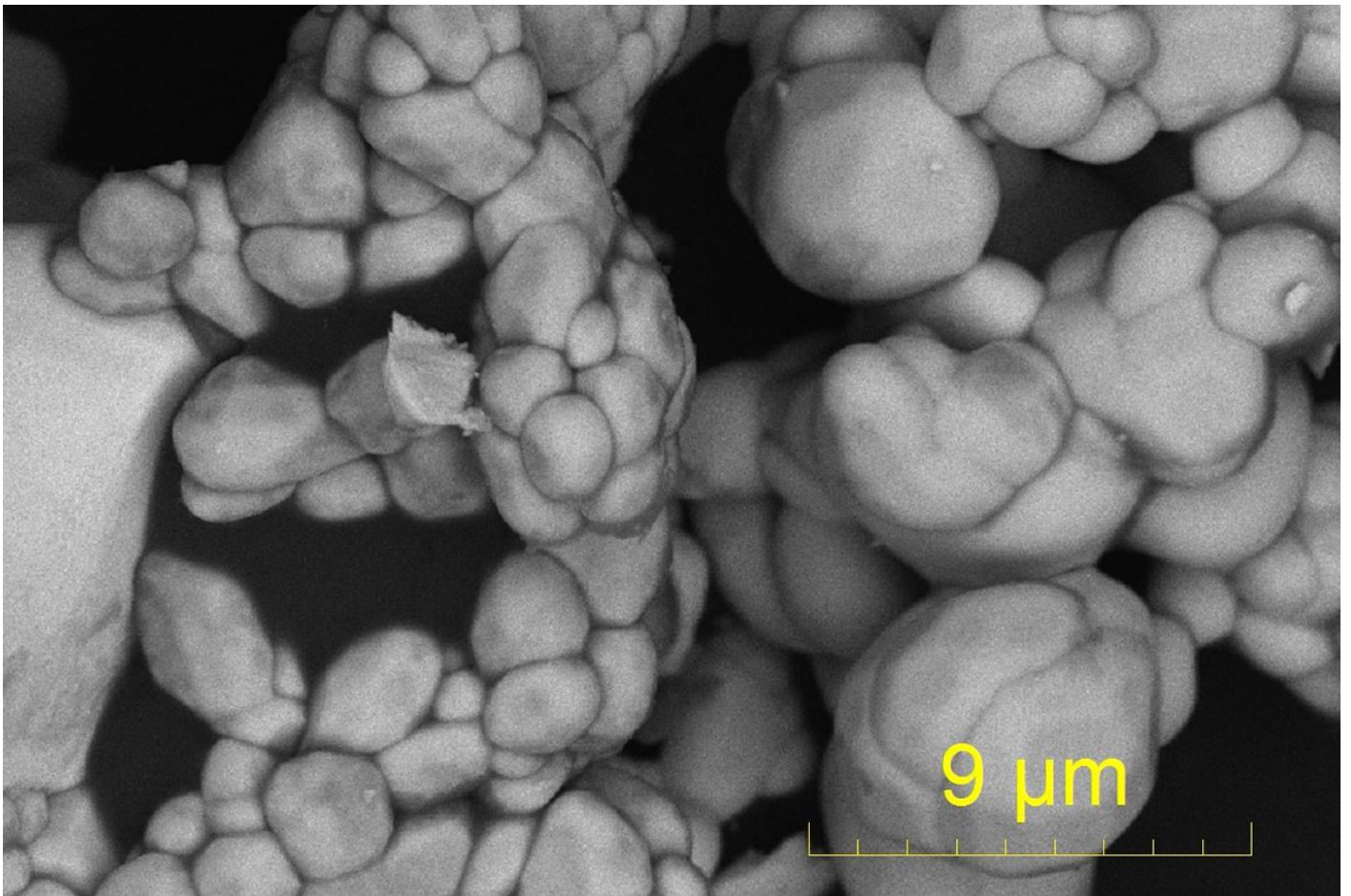


Scientists of Russia and China managed to increase the capacity of lithium-ion batteries by 15%



Lithium-ion batteries are used in different areas – from mobile phones and laptops to cardiac pacemakers and electric vehicles. Currently, scientists are trying to increase battery power while reducing its size. The team of researchers from Russia and China in collaboration with an industrial partner managed to increase the battery's energy capacity by 15%. The results were demonstrated at the “Advanced Batteries for XEV / ESS Conference scientific conference” in Qingdao, China.

The efficiency was increased by adding a solid electrolyte to the battery's cathode. The solid electrolyte was synthesized by Daniil Alexandrov, a master student of Peter the Great St. Petersburg Polytechnic University (SPbPU). Researchers managed to increase the battery's capacity by 15% compared to the one with liquid electrolyte. This achievement helped to reduce the weight of the entire product.



The tests were carried out in the laboratory and the battery sample was developed on the basis of the Joint Innovation Center "Science - Technologies" of ENV (Energy New Vehicle), established in China in collaboration with the Polytechnic University.

"The improvement of cathode materials and functional additives is one of the main tasks of our joint research center. In the framework of the development of energy-saving technologies, clean energy and electric transport, the result obtained in our center hastens the massive introduction of "green technologies" into the real life, "- said Mr. Wang Tsinsen, Director of ENV(Energy New Vehicle), alumni of SPbPU.