

Nano Science, Technology and Industry Scoreboard

Launching a Nanotech Lab at the Tajik National University Using Iranian Nanotechnology Equipment

2021-09-29

During the travel of Iran's president to Tajikistan to attend the 21st Shanghai Summit, several Iranian nanotechnology instruments were donated to the Tajik National University (TNU). Setting up a nanotechnology laboratory at the TNU could mark a new chapter in scientific cooperation between the two countries.

Over the course of his first foreign trip since taking office to <u>Tajikistan</u> on September 15th in order to attend the 21st Shanghai Cooperation Organization (SCO) Summit, the Iranian president paid a visit to the <u>Tajik National University</u>, where he donated nano-equipment made by Iranian scientists and technologists to the university.

The existence of more than 300 Iranian companies active in the field of nanotechnology, with around 775 nano-based products, makes <u>Iran</u> a powerful country in the field of nanotechnology in the region and across the globe. Hopefully, the equipment can contribute positively toward the development of nanoscience and nanotechnology in <u>Tajikistan</u>.



The Iranian president visited the Tajik National University.

The donated package included six equipment including:

– Electrospinning equipment capable of producing nano-scale fibers. Laboratory and industrial nano-fiber samples fabricated using this device have already been exported to countries such as <u>China</u>, <u>Thailand</u>, <u>Turkey</u>, and <u>South Korea</u>.

- Spattering equipment used for coating nano-scale materials on various substrates. This Iranian nanotechnology is now used by countries like the <u>UK</u>, <u>Italy</u>, <u>Canada</u>, and <u>Australia</u>.
- Electrical explosion of wire equipment used to synthesize aggregated nanopowders of metals.
- Planetary milling equipment used for micro- and nano-sized grinding and powdering of particles, as well as for particle alloying.
- Double beam spectrophotometer which is a device utilizing two beams of light rather than one to perform light absorption measurements in order to determine chemical properties of different substances. This device has a wide range of applications in various sectors such as oil, food, medicine, water, and wastewater industries.
- Ultrasonic homogenizer which is a device used to homogenize solutions via ultrasonic waves and is a paramount tool with a wide variety of applications in various nanoscience laboratories and industries.

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Donation of Iranian Nanotechnology Equipment to the Tajik National University.

Iran has been an internationally active country in nanotechnology development, promotion and education under the aegis of its national nanotechnology development council known as Iran Nanotechnology Innovation Council (INIC). Over the past years, this country has participated in joint programs in numerous countries to set up research and development laboratories as well as run educational programs.

It is hoped that setting up a nanolab in the Tajik National University will mark the start of a new chapter in lasting scientific relationships between the two countries and could eventually lead to the promotion of international cooperation in the field of nanotechnology.

Read the original article on INIC.

