

Inventions of TTPU graduates are receiving internationally recognized patents

Are you aware that Turin Polytechnic University in Tashkent is a cradle of inventors with internationally recognized patents? Then meet [Shahbozbek Abdunabiev](#) – our graduate who has previously delivered computer engineering courses in our university, and currently is the researcher, conducting scientific research on the topic of “The radiosonde cluster network: a novel approach to track Lagrangian fluctuations inside atmospheric clouds” under a scientific supervision of [Professor Daniella Tordella](#) in the Department of [Applied Science and Technology \(DISAT\) of Politecnico di Torino](#).

Shahbozbek Abdunabiev – is one of the inventors of the [patented](#) latest generation radiosonde cluster system, which is developed by a team of researchers led by [Professor Daniela Tordella](#). Currently, this innovative solution is in the process of being implemented in other countries, such as Great Britain. The advantage of the system compared to existing devices and its operation principle are covered in this [scientific article](#).

This innovative radiosonde cluster system has been exploited by Shahbozbek Abdunabiev in the [scientific experiment](#), with the objective of studying cloud flow dynamics, thermodynamic parameters and magnetic field variability in the lower part of atmospheric boundary layer (ABL) within the Cloud Microphysics course, organised at the International Center for Mechanical Sciences (CISM) in Udine, Italy.

Scientific research on clouds began in the 1800s, and they are in the focus of the international scientific community today. In recent years, clouds are one of the main drivers of the climate change, not only in global scale, but also in regional (local) scale too, and their dynamics can be observed in the

lower layers of our atmosphere.



