New project on Passive Sampler PAS06

News

BREVETTI+: A new project on the economic enhancement of ENVINT Patent related to the Passive Sampler PASO6 is going on. The project is within the initiative of Italian Ministry for Economic Development and it is involving companies and research institution to promote the instrument of the national and international market.

A new project on Passive Sampler PAS06

PASO6 was developed in order to overcame the major limitation of monitoring atmospheric pollution by passive sampling. The prototype of this instrument offered the possibility to operate a new philosophy in passive sampling, since it can be operated according to timing and/or according to external inputs. The idea has been also the subject of a proper patent assigned to ENVINT srl, with Ivo Allegrini as inventor (Italian Patent 1020160000394998 of Nov. 6th, 2018). However, the commercial efforts to disseminate the instrument required some additional developments in order to improve the mechanics and electronics and to improve the loading of passive samplers into the instruments. Also, the instrument needed a revision to reduce its cost, making it more attractive for the international market.



Interior view of PAS06



PAS06 in operation in a working place

For this reason, ENVINT applied for a contribution within the initiative "Brevetti+" for the Italian Ministry of Economic Development. The contribution was assigned under the project BRE0000220 to cover expenses relevant to consultancies needed for the technical and commercial promotion of the instrument. This project will be developed with the assistance of the following companies and scientific bodies:

Elettronica & Automazione, Rome: This company is taking care about the revision of the mechanical and electronic parts of the instrument to make it more reliable and more user friendly. In addition, it will furtherly develop the coupling of PASO6 with external devices such as meteorological stations, sensors and other actuators.

SGR Ricerche, Padova: the company provide assistance and support for the commercial development of PAS06 on the international market through a document on the use of passive sampling and possible applications in air pollution monitoring in ambient atmospheres, indoor and industrial sites. Also, certifications, cost analysis and a scheme for commercial network are provided.

- CNR, Institute for atmospheric pollution, Rome. The institute is evaluation applications of PAS06 in ambient atmospheres and in indoor environment. Also, CNR is testing the new design of the instrument with a new control of turbulence. Experimental measurements are carried out in cmparison with automatic instruments.
- University of Tor Vergata, Department of Chemistry, Rome. The Department is evaluating the use of PAS06 for the very important application in the conservation of cultural heritage. The use of PAS 06 in museums, monuments and restoration rooms is provided opening an interesting market and an effective social interest in passive sampling.