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Title: Polyaniline (PANI): an innovative support for sampling and removal of VOCs in air matrices

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Polyaniline (PANI): an innovative support for sampling and removal of VOCs in air matricesCristina Della Pina,^a Maria Antonietta De Gregorio,^b Laura Clerici,^b Pierluisa Dellavedova,^bErmelinda Falletta^{a*}^a Dipartimento di Chimica, Università degli Studi di Milano, via C. Golgi, 19, 20133, Milano (Italy)^b Settore Laboratori, ARPA Lombardia, via Rosellini, 17, 20124 – Milano (Italy)

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Graphical abstract**Highlights**

- Polyaniline was used for the first time as a material for VOCs removal and sampling from air matrices.
- The results are similar as those obtained by the official methods using commercial activated carbon as sampling material.
- PANI sorbents allowed to replace the toxic CS₂ with the less hazardous CH₃OH for the extraction step.
- PANI sorbent was subjected to recycling tests showing a high adsorption/desorption efficiency retention up to four runs.

Abstract

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