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## Monitoring of airborne particles in different home characterized by fireplaces or wood stoves as heating system

The production of particles and aerosols from biomass burning plays a significant role in the health risk assessment. The problems related to the toxicity of the particles emitted during these processes are associated both to the particles dimensions that vary depending on the conditions and on combustion efficiency, both to their chemical composition. It is known that some organic and inorganic components emitted during biomass burning have a high toxicological impact on the health of exposed people. Therefore there is a growing interest of the scientific community on indoor pollution produced by biomass burning. The use of stoves and fireplaces and some personal activities (cooking, smoking cigarettes, etc..) can increase the concentration of these pollutants in indoor environments. In this study a monitoring campaign of volatile organic compounds (VOCs) and airborne particulate matter (PM) was conducted in homes with fireplaces of different types (open fireplaces and closed stoves ) in order to determine exposure levels and to understand the trends of different pollutants at each stage of activity of the fireplace.

### Working group IAS (WG1, WG2, WG3) o sessione speciale (SPR)

WG1

### Tipo di presentazione (orale o poster)

Poster

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