



# Indoor air quality in domestic environments during periods close to Italian COVID-19 lockdown

Maria Chiara Pietrogrande\*, Lucia Casari, Giorgia Demaria, Mara Russo

Department of Chemical, Pharmaceutical and Agricultural Sciences, University of Ferrara,  
Via Fossato di Mortara 17/19 - 44121 Ferrara, Italy;  
mpc@unife (M.C.P); lucia.casari@unife.it (L.C.); dmrgrg@unife.it (G.D.); rssmra1@unife.it (M.R.)  
\* Correspondence: mpc@unife

## Supplementary Materials

The Supplementary Materials contain the following elements:

**Table S1:** results of inter-calibration study of the 4 Foobot devices used in the study: mean and standard variation values of the IAQ parameters simultaneously measured in the same laboratory for 3 consecutive days before each monitoring campaign.

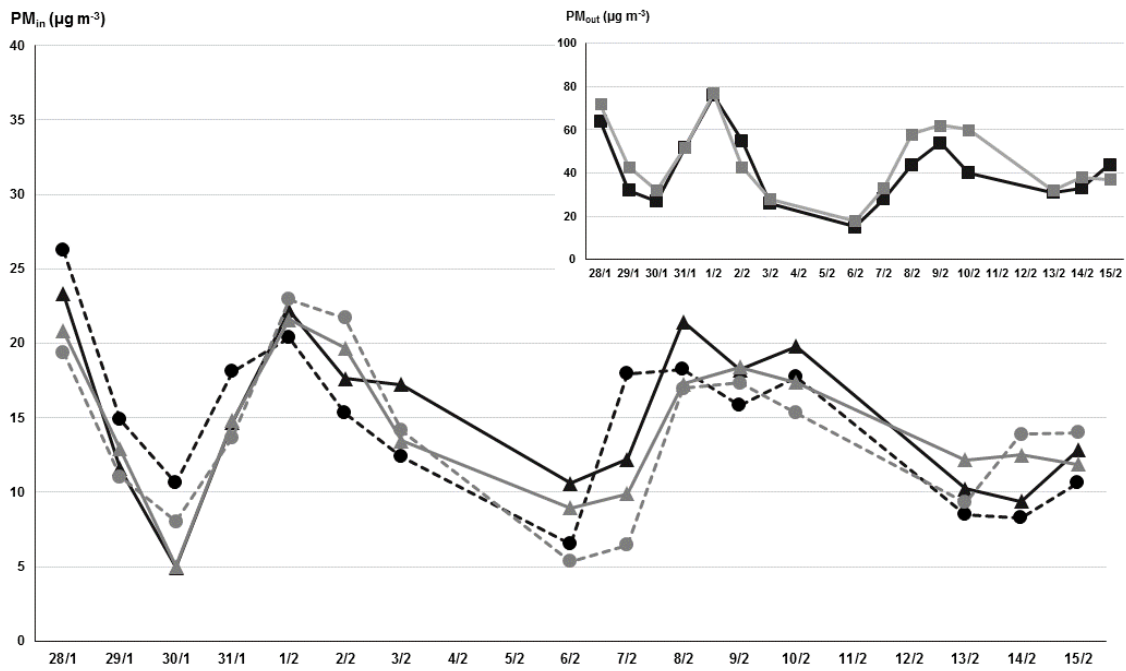
**Figure S1.** Time series plots of indoor PM<sub>2.5</sub> concentration during each monitoring campaign in the four investigated rooms. Points (dashed lines) represent kitchens and triangles (full lines) bedrooms; black symbols and lines correspond to flat 1; light grey symbols and lines correspond to flat 2. Figure insets show times evolution of outdoor PM<sub>2.5</sub> levels. S1a: winter campaign, 28 January to 15 February 2020; S1b: spring campaign, 23 May to 06 June 2020; S1c: summer campaign, 29 June to 13 July 2020.

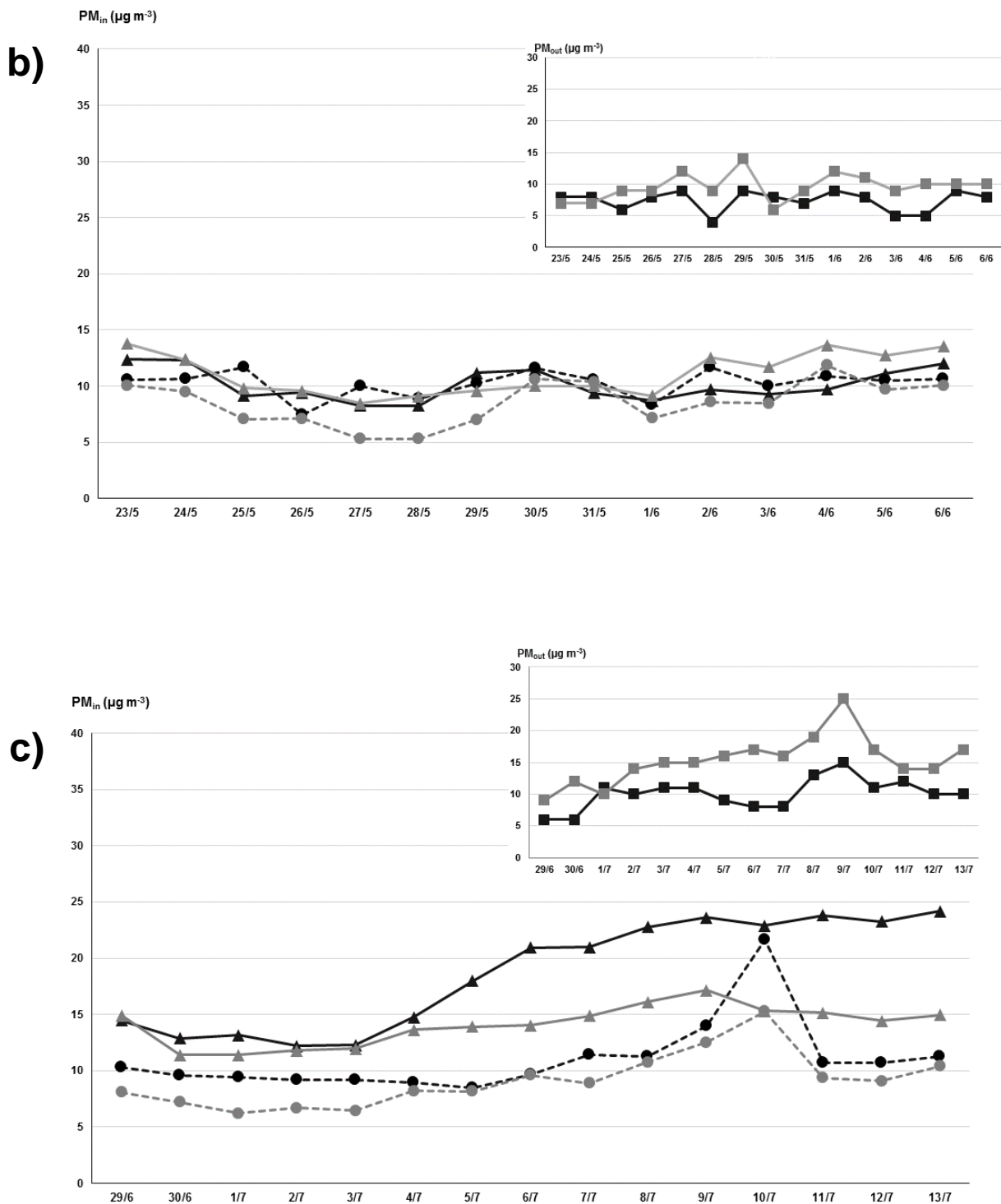
**Figure S2.** Time series plots of VOCs concentration during each monitoring campaign in the four investigated rooms. Points (dashed lines) represent kitchens and triangles (full lines) bedrooms; black symbols and lines correspond to flat 1; light grey symbols and lines correspond to flat 2. S2a: winter campaign, 28 January to 15 February 2020; S2b: spring campaign, 23 May to 06 June 2020; S2c: summer campaign, 29 June to 13 July 2020.

Table S1: results of inter-calibration study of the 4 Foobot devices: mean and standard variation values of the IAQ parameters simultaneously measured in the same laboratory for 3 consecutive days before each monitoring campaign.

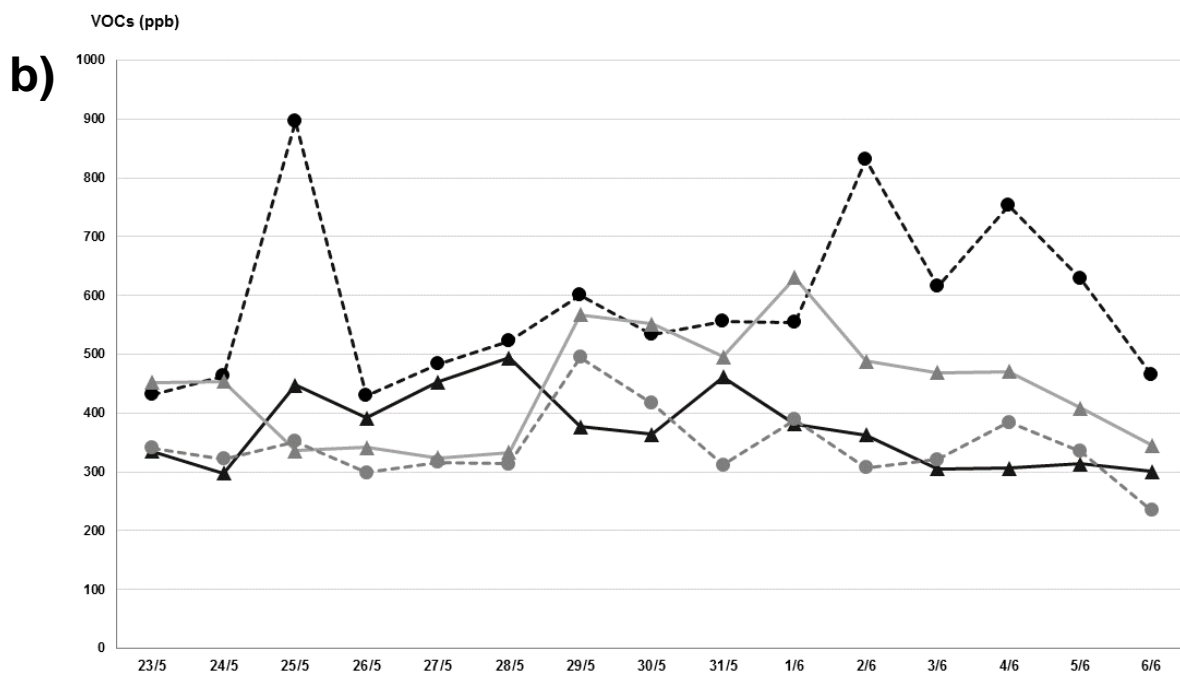
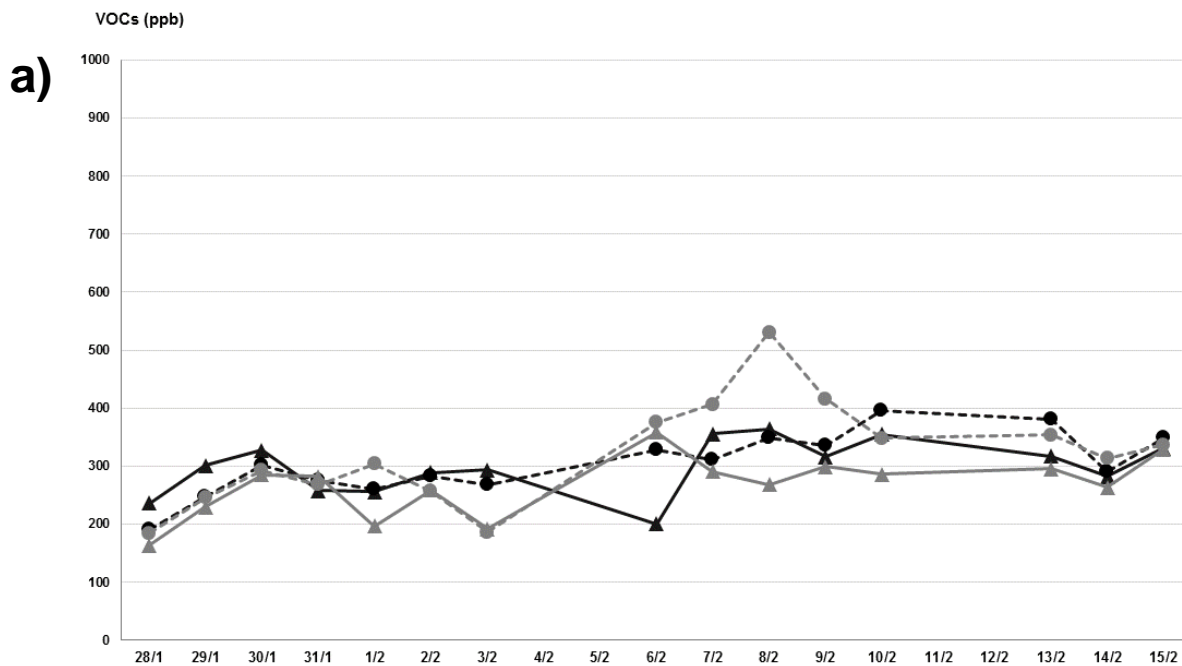
| Period       | T <sub>in</sub> (C°) | RH% <sub>in</sub> | Indoor PM2.5 (µg m <sup>-3</sup> ) | VOCs (ppb) | CO <sub>2</sub> (ppm) |
|--------------|----------------------|-------------------|------------------------------------|------------|-----------------------|
| 25 to 27 Jan | 20.2 ± 0.3           | 47.9 ± 1.9        | 15.2 ± 2.8                         | 270 ± 1.0  | 978 ± 0.9             |
| 20 to 22 May | 23.9 ± 0.3           | 50.2 ± 1.8        | 10.2 ± 1.9                         | 285 ± 0.9  | 1032 ± 0.95           |
| 25 to 27 Jun | 25.7 ± 0.4           | 47.1 ± 1.4        | 11.7 ± 2.1                         | 279 ± 1.0  | 1010 ± 1.0            |

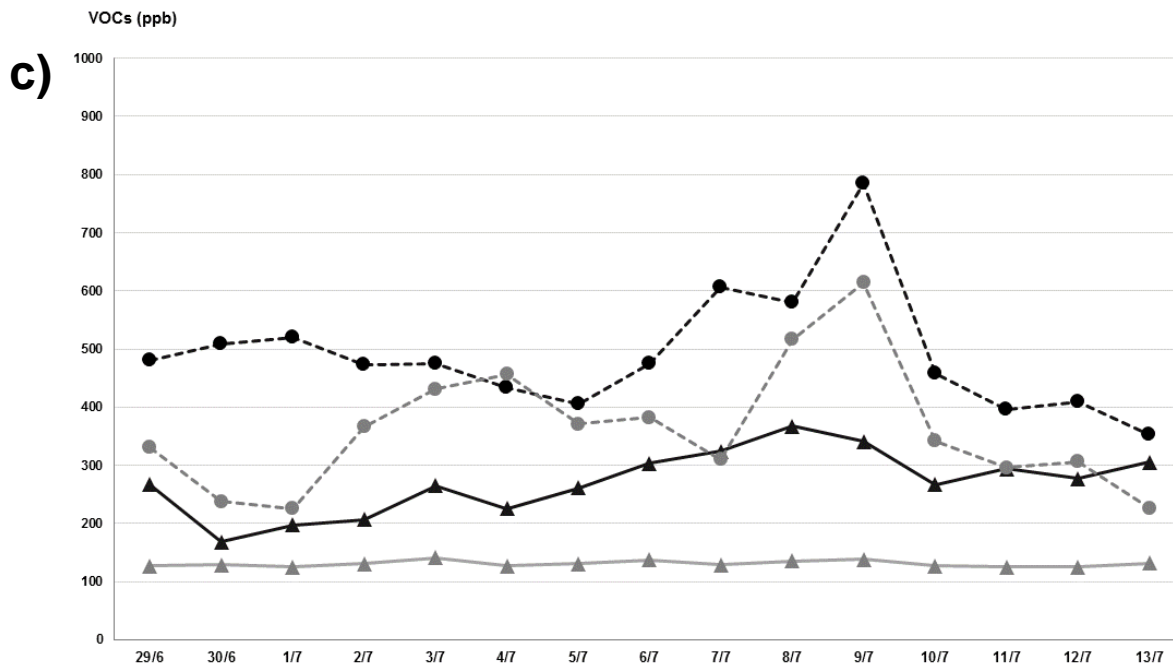
a)





**Figure S1.** Time series plots of indoor PM<sub>2.5</sub> concentration during each monitoring campaign in the four investigated rooms. Points (dashed lines) represent kitchens and triangles (full lines) bedrooms; black symbols and lines correspond to flat 1; light grey symbols and lines correspond to flat 2. Figure insets show times evolution of outdoor PM<sub>2.5</sub> levels. S1a: winter campaign, 28 January to 15 February 2020; S1b: spring campaign, 23 May to 06 June 2020; S1c: summer campaign, 29 June to 13 July 2020.





**Figure S2.** Time series plots of VOCs concentration during each monitoring campaign in the four investigated rooms. Points (dashed lines) represent kitchens and triangles (full lines) bedrooms; black symbols and lines correspond to flat 1; light grey symbols and lines correspond to flat 2. S2a: winter campaign, 28 January to 15 February 2020; S2b: spring campaign, 23 May to 06 June 2020; S2c: summer campaign, 29 June to 13 July 2020.