

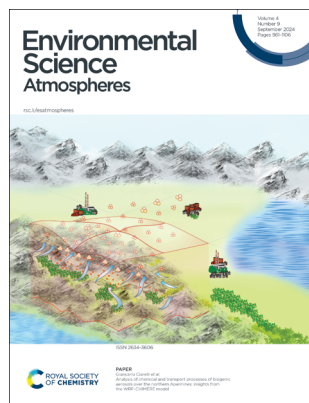
# Environmental Science: Atmospheres

rsc.li/esatmospheres

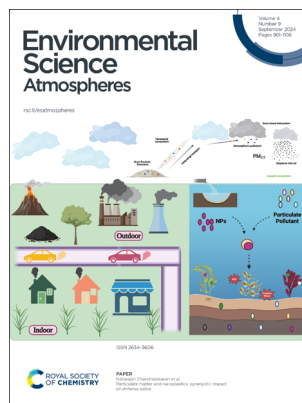
The Royal Society of Chemistry is the world's leading chemistry community. Through our high impact journals and publications we connect the world with the chemical sciences and invest the profits back into the chemistry community.

## IN THIS ISSUE

ISSN 2634-3606 CODEN ESANC9 4(9) 961–1106 (2024)



**Cover**  
See Giancarlo Ciarelli *et al.*, pp. 967–987. Image reproduced by permission of Paulina Dukat from *Environ. Sci.: Atmos.*, 2024, 4, 967.



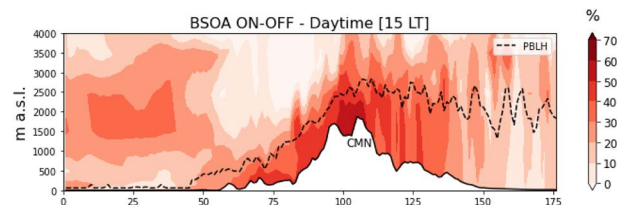
**Inside cover**  
See Natarajan Chandrasekaran *et al.*, pp. 988–999. Image reproduced by permission of Natarajan Chandrasekaran from *Environ. Sci.: Atmos.*, 2024, 4, 988.

## PAPERS

967

### Analysis of chemical and transport processes of biogenic aerosols over the northern Apennines: insights from the WRF-CHIMERE model

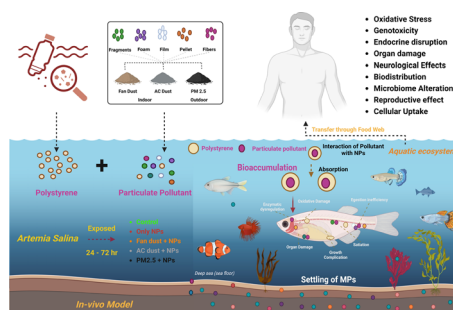
Bruno Vitali, Manuel Bettineschi, Arineh Cholakian, Dino Zardi, Federico Bianchi, Victoria A. Sinclair, Johannes Mikkola, Paolo Cristofanelli, Angela Marinoni, Martina Mazzini, Liine Heikkinen, Minna Aurela, Marco Paglione, Bertrand Bessagnet, Paolo Tuccella and Giancarlo Ciarelli\*



988

### Particulate matter and nanoplastics: synergistic impact on *Artemia salina*

Mohanraj Gopikrishnan, Kanimozhi Subramanian, Ashwin Krn, George Priya Doss C., B. Srimuruganandam and Natarajan Chandrasekaran\*



**GOLD  
OPEN  
ACCESS**

# EES Batteries

**Exceptional research on  
batteries and energy storage**

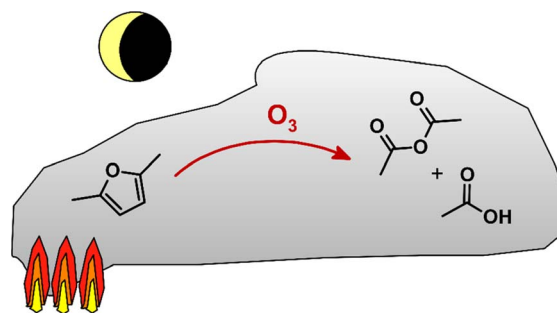
Part of the EES family

**Join  
in** | Publish with us  
[rsc.li/EESBatteries](https://rsc.li/EESBatteries)

1000

## O<sub>3</sub> chemistry of 2,5-dimethylfuran: mechanism development

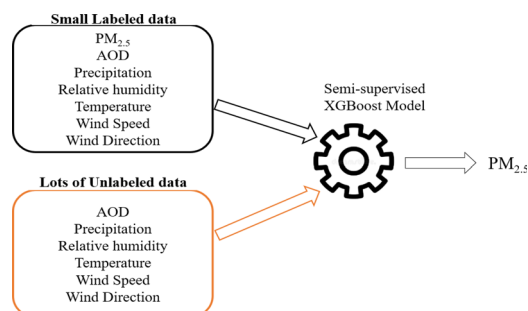
Niklas Illmann\* and Vera Rösgen



1012

## Fine particulate air pollution estimation in Ouagadougou using satellite aerosol optical depth and meteorological parameters

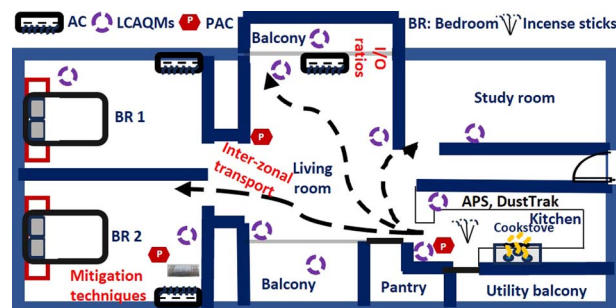
Joe Adabouk Amooli, Kwame Opong Hackman, Bernard Nana and Daniel M. Westervelt\*



1026

## Characterization of particulate matter in a multizonal residential apartment: transport, exposure, and mitigation

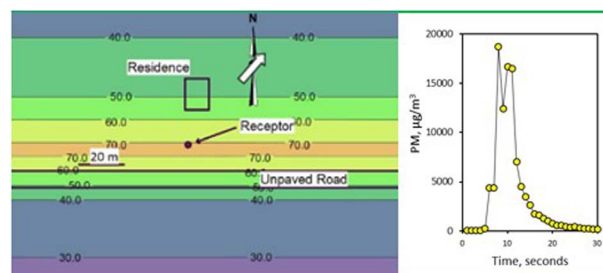
Alok Kumar Thakur and Sameer Patel\*



1042

## Unpaved road particulate matter emission rates and vehicle-induced transient plume characteristics

James Kacer, Ralph Altmaier, David M. Cwierny and Patrick T. O'Shaughnessy\*



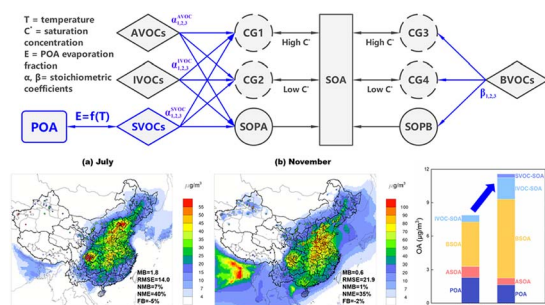
1051



### Assessing CMAQ model discrepancies in a heavily polluted air basin using UAV vertical profiles and sensitivity analyses

Zihan Zhu, Khanh Do, Cesunica E. Ivey\* and Don R. Collins

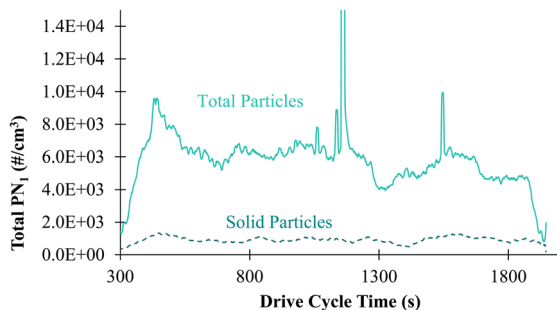
1064



### An improved framework for efficiently modeling organic aerosol (OA) considering primary OA evaporation and secondary OA formation from VOCs, IVOCs, and SVOCs

Ling Huang, Zi'ang Wu, Hanqing Liu, Greg Yarwood,\* Dandan Huang, Gary Wilson, Hui Chen, Dongsheng Ji, Jun Tao, Zhiwei Han, Yangjun Wang, Hongli Wang, Cheng Huang and Li Li\*

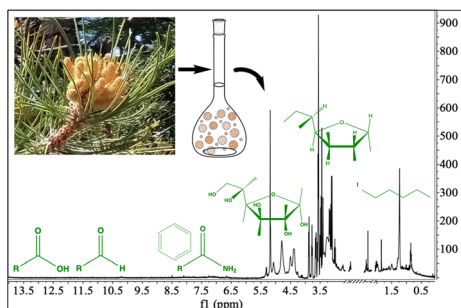
1079



### Method development and analysis of nanoparticle size fractions from tire-wear emissions

Molly Haugen, Philipp Bühler, Stefan Schläfle, David O'Loughlin, Sirel Saladin, Chiara Giorio and Adam Boies\*

1091



### Characterization of organic species and functional groups in pollen, fungi, algae, and bacteria bioaerosols

Palina Bahdanovich, Kevin Axelrod, Andrey Y. Khlystov and Vera Samburova\*

