

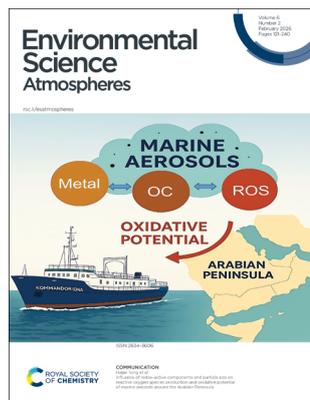
# Environmental Science: Atmospheres

rsc.li/esatmospheres

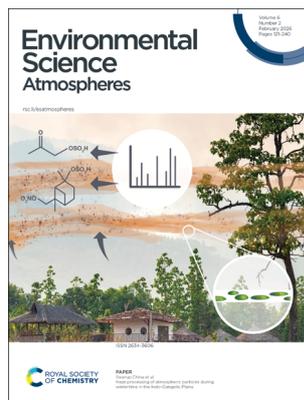
The Royal Society of Chemistry is the world's leading chemistry community. Through our high impact journals and publications we connect the world with the chemical sciences and invest the profits back into the chemistry community.

## IN THIS ISSUE

ISSN 2634-3606 CODEN ESANC9 6(2) 121–240 (2026)



**Cover**  
See Haijie Tong *et al.*, pp. 127–138. Image reproduced by permission of Haijie Tong from *Environ. Sci.: Atmos.*, 2026, 6, 127. Image was created using AI.



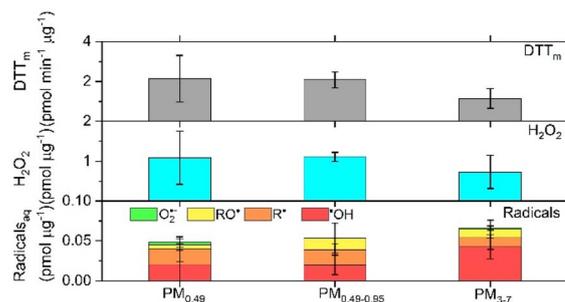
**Inside cover**  
See Swarup China *et al.*, pp. 139–151. Image reproduced by permission of Battelle Memorial Institute from *Environ. Sci.: Atmos.*, 2026, 6, 139. Image was created using AI.

## COMMUNICATION

127

### Influence of redox-active components and particle size on reactive oxygen species production and oxidative potential of marine aerosols around the Arabian Peninsula

Haijie Tong,\* Steven Lelieveld, Marco Wietzoreck, Alexander Filippi, Minas Iakovides, Roman Prokeš, Thomas Berkemeier, Ulrich Pöschl and Gerhard Lammel

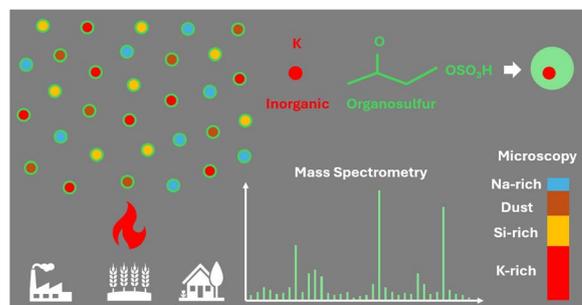


## PAPERS

139

### Haze processing of atmospheric particles during wintertime in the Indo-Gangetic Plains

Susan Mathai, Amna Ijaz, Tania Gautam, Zezhen Cheng, Nurun Nahar Lata, Harsh Bhotika, David Tseng, Rosalie K. Chu, Lynn Mazzoleni, Claudio Mazzoleni and Swarup China\*



# Environmental Science: Atmospheres

GOLD  
OPEN  
ACCESS

Connecting communities  
and inspiring new ideas

[rsc.li/submittoEA](https://rsc.li/submittoEA)

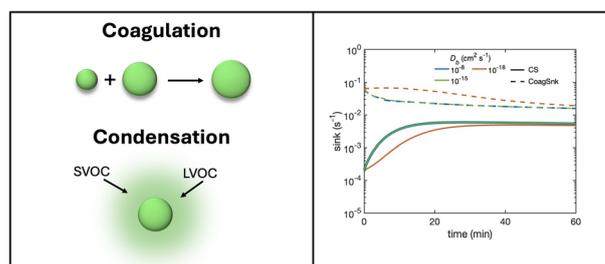
Fundamental questions  
Elemental answers



152

### Impact of particle phase state on the competition between condensation and coagulation

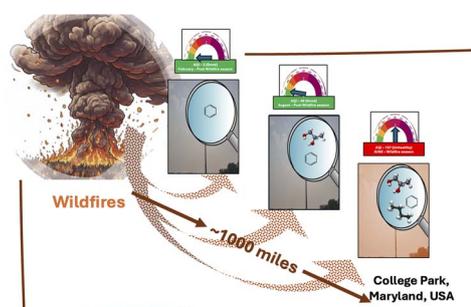
Kieudiem Nguyen, Meredith Schervish, Pascale S. J. Lakey, James N. Smith and Manabu Shiraiwa\*



166

### Chemical signatures of water-soluble organic carbon (WSOC) fraction of long-range transported wildfire PM<sub>2.5</sub> from Canada to the United States Mid-Atlantic region

Esther A. Olonimoyo, Martin Changman Ahn, Dewansh Rastogi, Yue Li, Candice M. Duncan and Akua Asa-Awuku\*



180

### Particulate matter monitoring and source apportionment inside and outside schools in a Global South metropolis

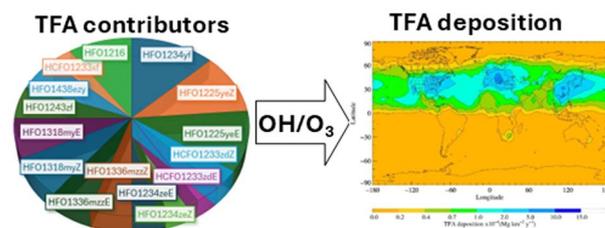
Vitalis C. Nwokorie, Dimitris Bousiotis and Francis D. Pope\*



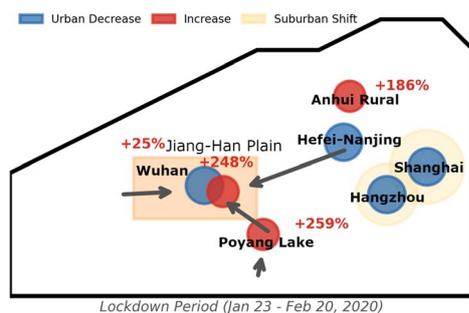
195

### Global modeling of trifluoroacetic acid surface concentration and deposition from the gas-phase oxidation of a wide range of precursor hydrofluoroolefins

M. Anwar H. Khan, Danielle C. Mendes, Rayne E. T. Holland, Maria de los Angeles Garavagno, Andrew J. Orr-Ewing, Kieran M. Stanley, Simon J. O'Doherty, Dickon Young, Martin K. Vollmer, Alvin John Antony, Fatima Karamshahi, Timothy J. Wallington, Carl J. Percival, Asan Bacak, Richard G. Derwent and Dudley E. Shallcross\*



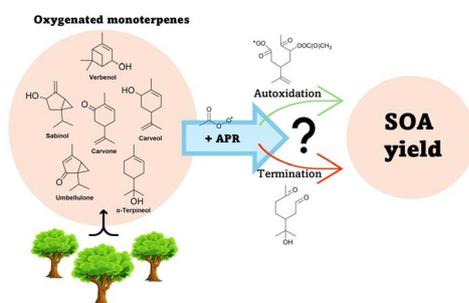
213



## Localized pollutant emission increases in China due to COVID-19 lockdowns

Fanghe Zhao, Yuhang Wang\* and Shengjun Xi

224



## Acetyl peroxy radical-initiated oxidation of oxygenated monoterpenes: functional group effects on reaction pathways

Ida Karppinen, Dominika Pasik and Nanna Myllys\*

