

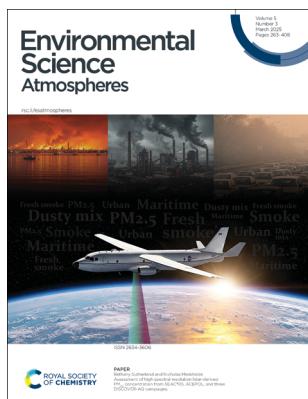
Environmental Science: Atmospheres

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 5(3) 263–408 (2025)



Cover

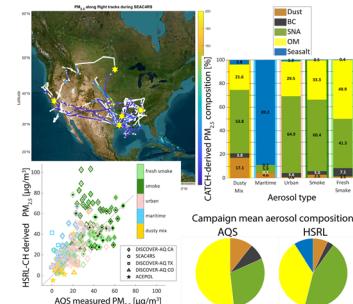
See Bethany Sutherland and Nicholas Meskhidze, pp. 270–290. Image reproduced by permission of Nicholas Meskhidze from *Environ. Sci.: Atmos.*, 2025, 5, 270.

PAPERS

270

Assessment of high spectral resolution lidar-derived PM_{2.5} concentration from SEAC⁴RS, ACEPOL, and three DISCOVER-AQ campaigns

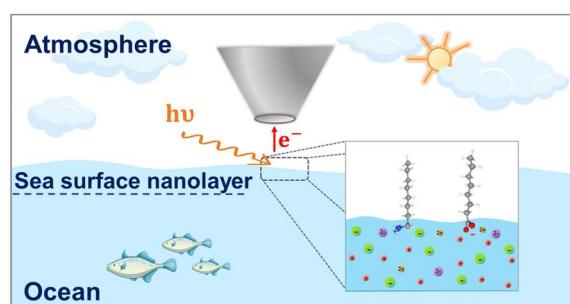
Bethany Sutherland and Nicholas Meskhidze*



291

Interaction of ions and surfactants at the seawater-air interface

Shirin Gholami, Tillmann Buttersack, Clemens Richter, Florian Trinter, Rémi Dupuy, Louisa Cablitz, Qi Zhou, Christophe Nicolas, Andrey Shavorskiy, Dian Diamant, Uwe Hergenhahn, Bernd Winter and Hendrik Bluhm*





GOLD
OPEN
ACCESS

EES Solar

Exceptional research on solar energy and photovoltaics

Part of the EES family

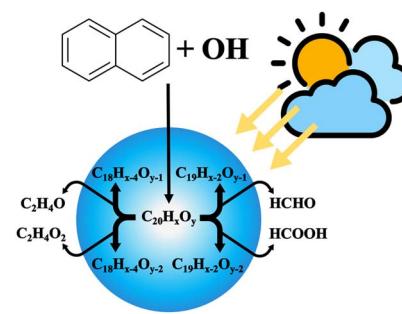
Join
in | Publish with us
rsc.li/EESSolar

PAPERS

300

Photodegradation of naphthalene-derived particle oxidation products

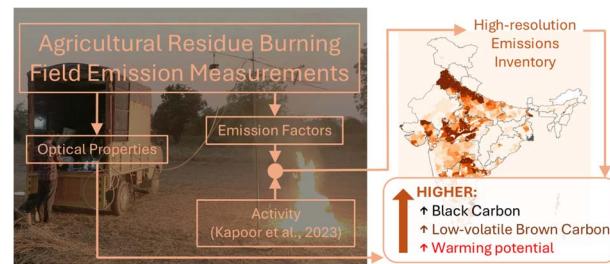
Félix Sari Doré, Cecilie Carstens, Jens Top, Yanjun Zhang, Clément Dubois, Sébastien Perrier, Imad El Haddad, David M. Bell* and Matthieu Riva*



316

Emissions from agricultural fires in India: field measurements of climate relevant aerosol chemical and optical properties

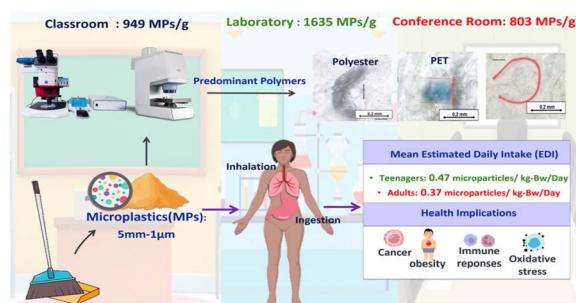
Taveen Singh Kapoor, Gupta Anurag, Chimurkar Navinya, Saurabh Lonkar, Kajal Yadav, Ramya Sunder Raman, Chandra Venkataraman and Harish C. Phuleria*



332

Microplastics in settled dust from university indoor environments: Puerto Colombia, Colombia

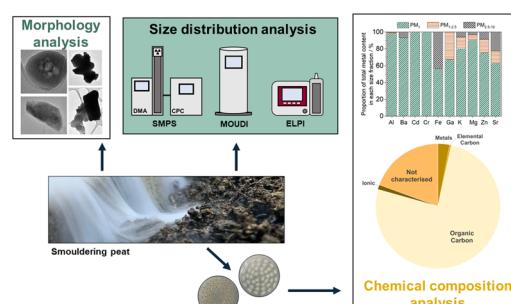
Maria Gabriela Avilés Valera, Victoria Andrea Arana Rengifo and Carlos David Grande-Tovar*



348

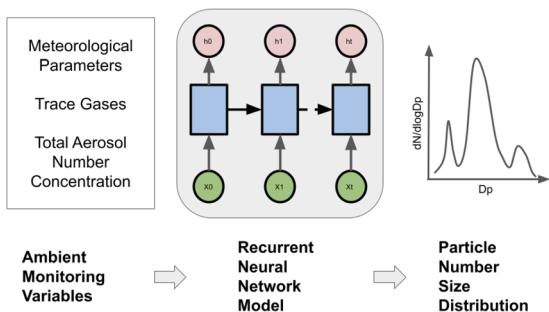
Particles emitted from smouldering peat: size-resolved composition and emission factors

Amy L. Wilson, Wuquan Cui, Yuqi Hu, Marta Chiapasco, Guillermo Rein, Alexandra E. Porter, Geoff Fowler and Marc E. J. Stettler*



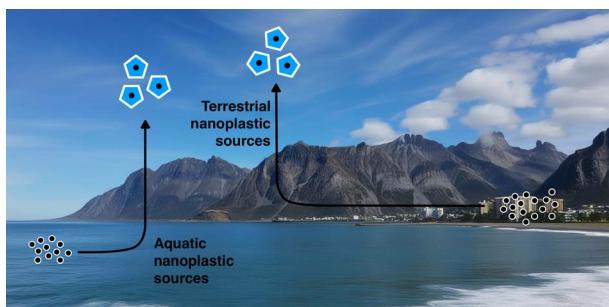
PAPERS

367

**Estimating the atmospheric aerosol number size distribution using deep learning**

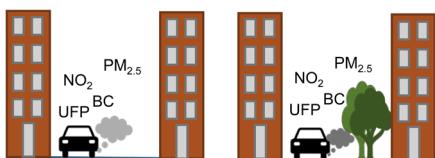
Yusheng Wu,* Martha Arbayani Zaidan, Runlong Cai, Jonathan Duplissy, Magdalena Okuljar, Katrianne Lehtipalo, Tuukka Petäjä and Juha Kangasluoma

378

**Ice nucleation onto model nanoplastics in the cirrus cloud regime**

Omar Girlanda, Guangyu Li, Denise M. Mitrano, Christopher H. Dreimol and Zamin A. Kanji*

394



Are street-level air pollutant concentrations higher or lower in streets with more tree cover?

Effect of street trees on local air pollutant concentrations (NO₂, BC, UFP, PM_{2.5}) in Rotterdam, the Netherlands

Juliane L. Fry,* Pascale Ooms, Maarten Krol, Jules Kerckhoffs, Roel Vermeulen, Joost Wesseling and Sef van den Elshout

CORRECTIONS

405

Correction: Assessing conditions favoring the survival of African dust-borne microorganisms during long-range transport across the tropical Atlantic

Ali Hossein Mardi, Miguel Ricardo A. Hilario, Regina Hanlon, Cristina González Martín, David Schmale, Armin Sorooshian and Hosein Foroutan*



CORRECTIONS

406

Correction: Numerical one-dimensional investigations on a multi-cylinder spark ignition engine using hydrogen/ethanol, hydrogen/methanol and gasoline in dual fuel mode

Ufaith Qadiri*

