

# Environmental Science Processes & Impacts

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## IN THIS ISSUE

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**Cover**  
See Jackson P. Webster *et al.*, pp. 667–685. Image reproduced by permission of Jackson Webster from *Environ. Sci.: Processes Impacts*, 2024, 26, 667.



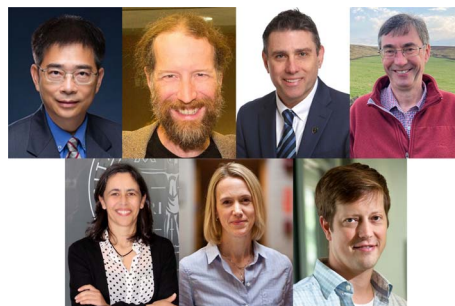
**Inside cover**  
See Syeed Md Iskander *et al.*, pp. 657–666. Image reproduced by permission of Syeed Md Iskander from *Environ. Sci.: Processes Impacts*, 2024, 26, 657.

## EDITORIAL

654

### 2023 Outstanding Papers published in the *Environmental Science* journals of the Royal Society of Chemistry

Zongwei Cai, Neil Donahue, Graham Gagnon, Kevin C. Jones, Célia Manaia, Elsie Sunderland and Peter J. Vikesland

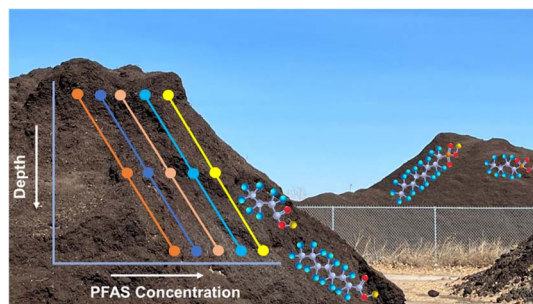


## COMMUNICATION

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### PFAS occurrence and distribution in yard waste compost indicate potential volatile loss, downward migration, and transformation

Biraj Saha, Mohamed Ateia, Sujan Fernando, Jiale Xu, Thomas DeSutter and Syeed Md Iskander\*





# Environmental Science: Atmospheres

GOLD  
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Fundamental questions  
Elemental answers



# Wildland–urban interface wildfire increases metal contributions to stormwater runoff in Paradise, California

# Ecotoxicological assessment of biomass-derived furan platform chemicals using aquatic and terrestrial bioassays

**Ecotoxicological assessment**

**Aquatic organisms**

**Terrestrial plants**

**Eukaryotic yeast**

**Furanic compounds**

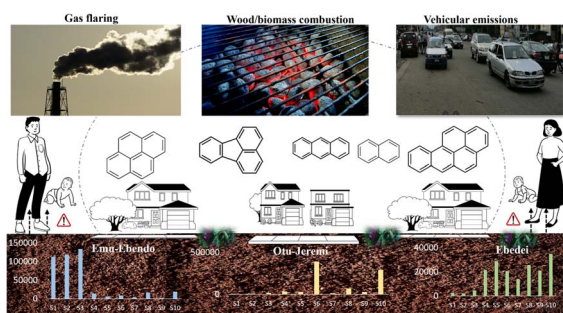
A range of significant biobased furan platform molecules could serve as green alternatives to the use of petroleum-based compounds

## Investigating the effects of PFOA accumulation and depuration on specific phospholipids in zebrafish through imaging mass spectrometry

## Phytotoxicity of metal–organic framework MOF-74(Co) nanoparticles to pea seedlings



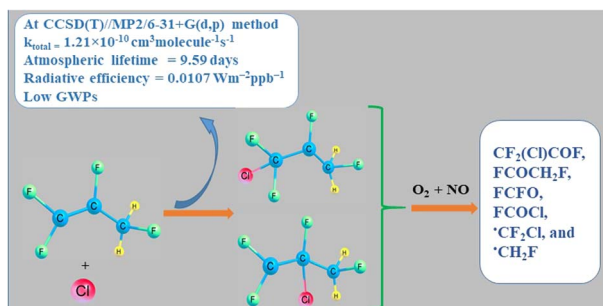
721



### Distribution, sources, and risk of polycyclic aromatic hydrocarbons in soils from rural communities around gas flaring points in the Niger Delta of Nigeria

Eze W. Odali, Chukwujindu M. A. Iwegbue,\* Francis E. Egobueze, Godwin E. Nwajei and Bice S. Martincigh

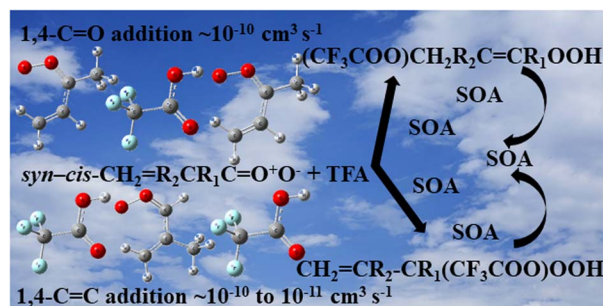
734



### Oxidation pathways and kinetics of the 1,1,2,3-tetrafluoropropene ( $\text{CF}_2=\text{CF}-\text{CH}_2\text{F}$ ) reaction with Cl-atoms and subsequent aerial degradation of its product radicals in the presence of NO

Udeshna Priya Kakati, Dikshita Dowerah, Ramesh Chandra Deka, Nand Kishor Gour\* and Subrata Paul\*

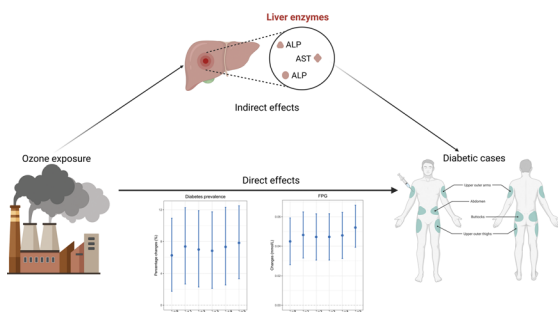
751



### New insights into the mechanism and kinetics of the addition reaction of unsaturated Criegee intermediates to $\text{CF}_3\text{COOH}$ and tropospheric implications

Makroni Lily, Xiaofan Lv, Asit K. Chandra,\* Narcisse Tsona Tchinda\* and Lin Du\*

765



### The role of liver enzymes in the association between ozone exposure and diabetes risk: a cross-sectional study of Zhuang adults in China

Xiaoyun Ma, Han Wu, Huishen Huang, Peng Tang, Xiaoyun Zeng, Dongping Huang, Shun Liu\* and Xiaoqiang Qiu\*

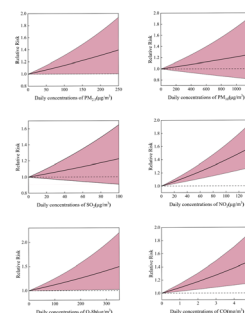


## PAPERS

778

# Association between short-term ambient air pollutants and type 2 diabetes outpatient visits: a time series study in Lanzhou, China

Yilin Ye, Hongran Ma, Jiyuan Dong\* and Jiancheng Wang



## COMMENT

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## Comment on "Detection of exposed phosgene in household bleach: development of a selective and cost-effective sensing tool" by S. Saha and P. Sahoo, *Environ. Sci.: Processes Impacts*, 2023, 25, 1144

Patrick M. Plehiers\*

