# **Environmental Science Processes & Impacts**

# rsc.li/espi

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 2050-7887 CODEN ESPICZ 26(4) 647-794 (2024)



#### 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

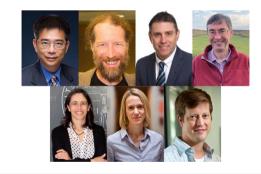
See Syeed Md Iskander et al., pp. 657–666. Image reproduced by permission of Syeed Md Iskander from Environ. Sci.: Processes Impacts, 2024, 26, 657.

#### **EDITORIAL**

**554** 

# 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

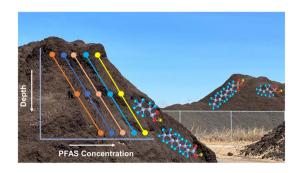


## COMMUNICATION

657

# 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

Connecting communities and inspiring new ideas

rsc.li/submittoEA

Fundamental questions Elemental answers

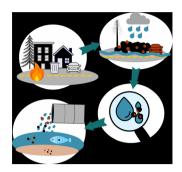


### **PAPERS**

#### 667

# Wildland-urban interface wildfire increases metal contributions to stormwater runoff in Paradise. California

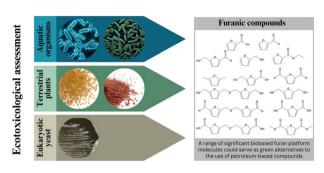
Lauren J. Magliozzi, Sandrine J. Matiasek, Charles N. Alpers, Julie A. Korak, Diane McKnight, Andrea L. Foster, Joseph N. Ryan, David A. Roth, Peijia Ku, Martin Tsz-Ki Tsui, Alex T. Chow and Jackson P. Webster\*



#### 686

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

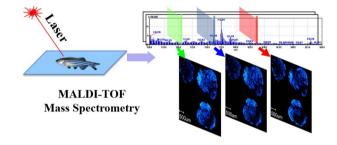
Stella Parmaki, Marlen I. Vasquez, Maria Patsalou, Rafael F. A. Gomes, Svilen P. Simeonov, Carlos A. M. Afonso and Michalis Koutinas\*



#### 700

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

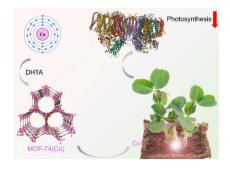
Qiuyue Shi, Zhengfen Wan, Shaoyong Lu,\* Cheng Fang, Changzhou Yan and Xian Zhang\*



#### 710

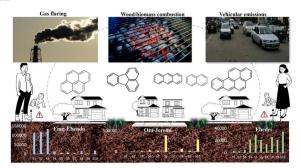
# Phytotoxicity of metal-organic framework MOF-74(Co) nanoparticles to pea seedlings

Ruonan Hu, Heyu Huang, Hua Chen, Jiahao Zhang, Qinmei Zhong,\* Xian Wu and Shengtao Yang\*



### **PAPERS**

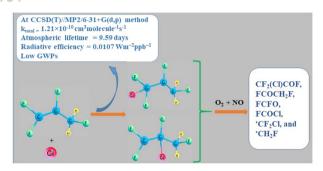
#### 721



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

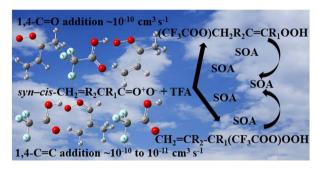
## 734



Oxidation pathways and kinetics of the 1,1,2,3tetrafluoropropene (CF<sub>2</sub>=CF-CH<sub>2</sub>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\*

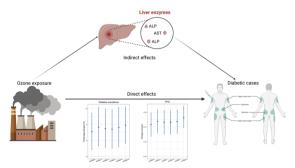
#### 751



New insights into the mechanism and kinetics of the addition reaction of unsaturated Criegee intermediates to CF<sub>3</sub>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

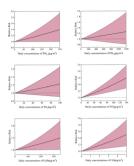
Xiaoyun Ma, Han Wu, Huishen Huang, Peng Tang, Xiaoyun Zeng, Dongping Huang, Shun Liu\* and Xiaoqiang Qiu\*

# **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

791

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\*