

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(10) 1655–1914 (2024)



Cover

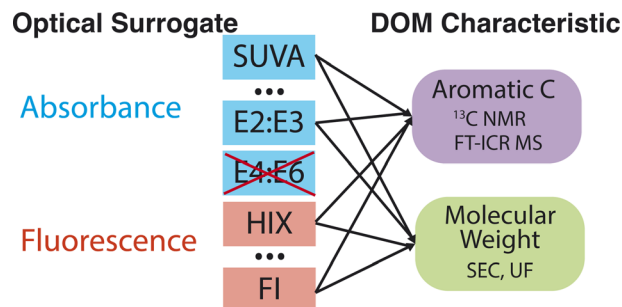
See Subhasmita Panda, Chinmay Mallik, S. Suresh Babu, Sudhir Kumar Sharma, Tuhin Kumar Mandal, Trupti Das and R. Boopathy, pp. 1716–1735. Image reproduced by permission of Subhasmita Panda and Boopathy R. from *Environ. Sci.: Processes Impacts*, 2024, 26, 1716.

CRITICAL REVIEW

1663

Critical review of fluorescence and absorbance measurements as surrogates for the molecular weight and aromaticity of dissolved organic matter

Julie A. Korak* and Garrett McKay*

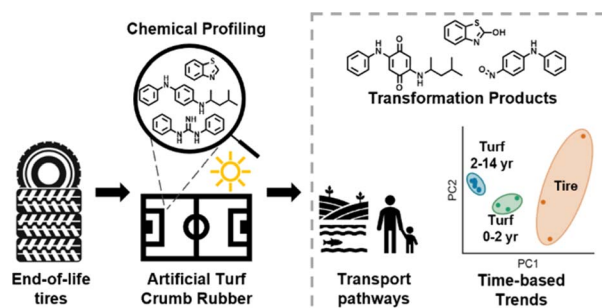


PAPERS

1703

Emerging investigator series: in-depth chemical profiling of tire and artificial turf crumb rubber: aging, transformation products, and transport pathways

Madison H. McMinn, Ximin Hu, Katherine Poisson, Phillip Berger, Paola Pimentel, Xinwen Zhang, Pranali Ashara, Ella L. Greenfield, Jessica Eig and Zhenyu Tian*



RSC Sustainability

GOLD
OPEN
ACCESS

Dedicated to sustainable
chemistry and new solutions

For an open, green and inclusive future

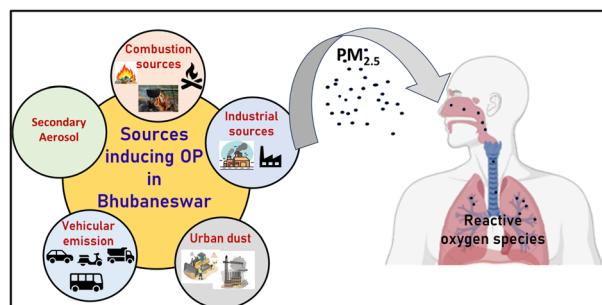
rsc.li/RSCSus

Fundamental questions
Elemental answers

1716

Vehicular pollution as the primary source of oxidative potential of $PM_{2.5}$ in Bhubaneswar, a non-attainment city in eastern India

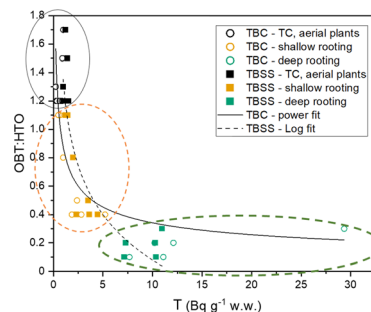
Subhasmita Panda, Chinmay Mallik, S. Suresh Babu, Sudhir Kumar Sharma, Tuhin Kumar Mandal, Trupti Das and R. Boopathy*



1736

Influence of tritium exposure route on vegetation types at the Savannah River Site

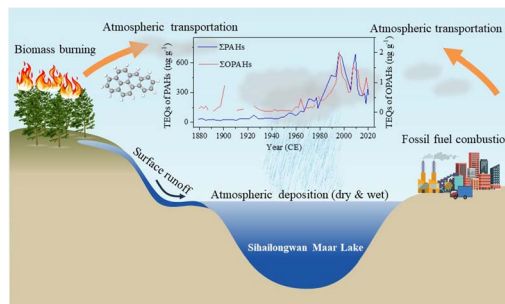
Martine C. Duff,* Elizabeth A. Pettitt and Holly VerMeulen



1748

A 150 years record of polycyclic aromatic compounds in the Sihailongwan Maar Lake, Northeast China: impacts of socio-economic developments and pollution control

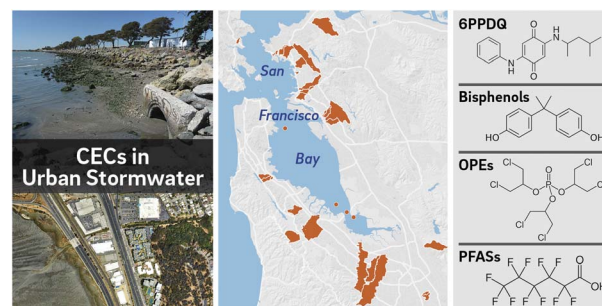
Jianing Zhang, Chong Wei,* Yongming Han,* Benjamin A. Musa Bandowe, Dewen Lei and Wolfgang Wilcke



1760

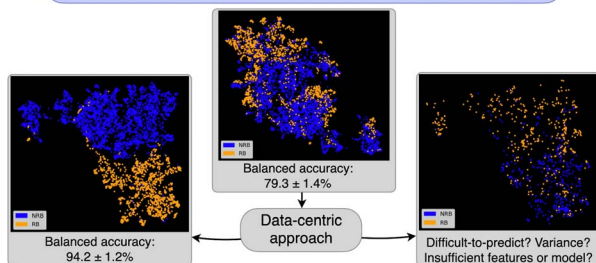
Storms mobilize organophosphate esters, bisphenols, PFASs, and vehicle-derived contaminants to San Francisco Bay watersheds

Katherine T. Peter, Alicia Gilbreath, Melissa Gonzalez, Zhenyu Tian, Adam Wong, Don Yee, Ezra L. Miller, Pedro M. Avellaneda, Da Chen, Andrew Patterson, Nicole Fitzgerald, Christopher P. Higgins, Edward P. Kolodziej and Rebecca Sutton*



1780

Machine Learning for Aerobic Biodegradability

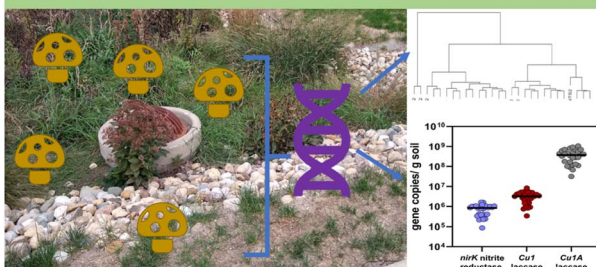


Critical insights into data curation and label noise for accurate prediction of aerobic biodegradability of organic chemicals

Paulina Körner, Juliane Glüge,* Stefan Glüge and Martin Scheringer

1796

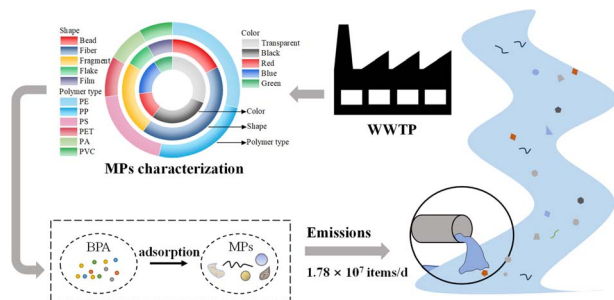
Fungal Communities + Remediation Genes in Stormwater Bioretention



Fungal diversity and key functional gene abundance in low bioretention cells: implications for stormwater remediation potential

Erica A. Wiener, Jessica M. Ewald and Gregory H. LeFevre*

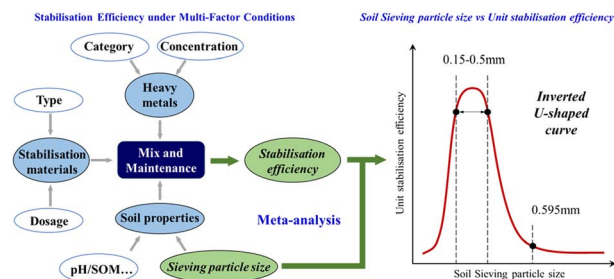
1811



Microplastics are effective carriers of bisphenol A and facilitate its escape from wastewater treatment systems

Wang Li, Bo zu,* Lei Li, Jian Li, Jiawen Li and Qiuji Xiang

1821



Impact of particle size separation on the stabilisation efficiency of heavy-metal-contaminated soil: a meta-analysis

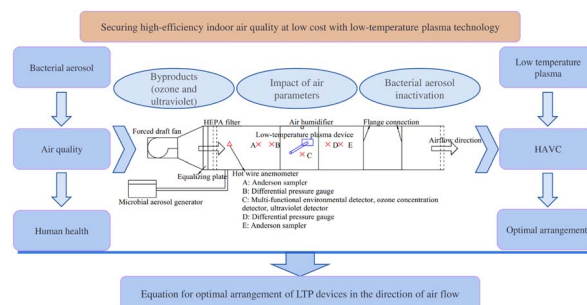
Lixia Sun, Yunlong Zhang, Bo Wu,* Enzhu Hu, Linlin Li, Longlong Qu and Shuqi Li



1836

Experimental assessment of low temperature plasma devices for bacterial aerosol inactivation in the air duct of HVAC systems

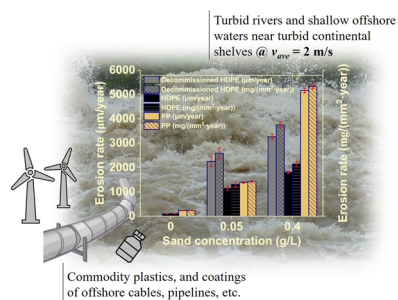
Yang Lv,^{*} Xiaodong Wang, Beibei Wang and Wenjie Yuan



1847

Erosion of rigid plastics in turbid (sandy) water: quantitative assessment for marine environments and formation of microplastics

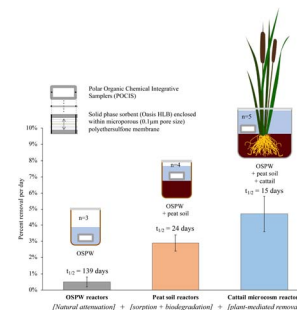
Ali Al-Darraj,^{*} Ibukun Oluwoye,^{*} Christopher Lagat, Shuhei Tanaka and Ahmed Barifcani



1859

Depletion rates of O₂-naphthenic acids from oil sands process-affected water in wetland microcosms

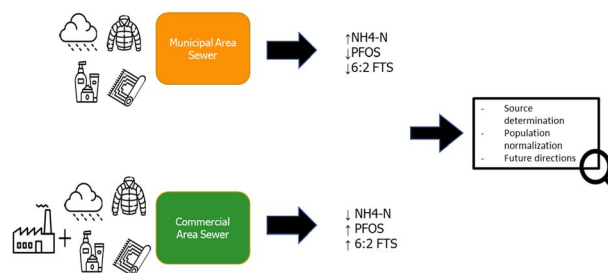
Alexander M. Cancelli^{*} and Frank A. P. C. Gobas



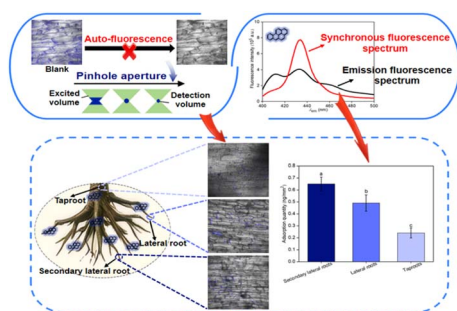
1868

Exploring the variability of PFAS in urban sewage: a comparison of emissions in commercial versus municipal urban areas

Krlovic N.,^{*} Saracevic E., Derx J., Gundacker C., Krampe J., Kreuzinger N., Zessner M. and Zoboli O.



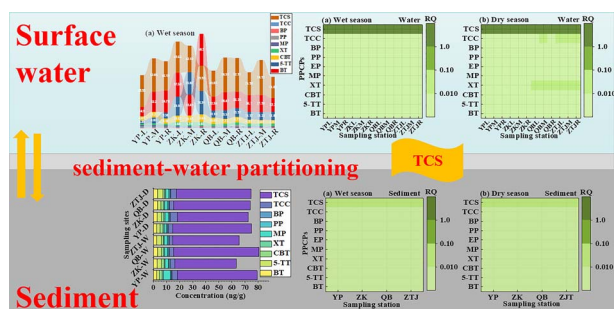
1879



Combining a tunable pinhole with synchronous fluorescence spectrometry for visualization and quantification of benzo[a]pyrene at the root epidermis microstructure of *Kandelia obovata*

Bingman Lei, Yaxian Zhu and Yong Zhang*

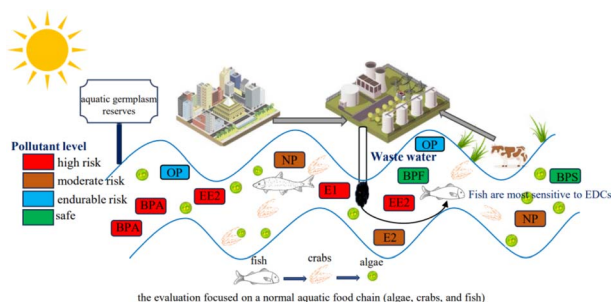
1887



Assessment of occurrence, source appointment, and ecological risks of pharmaceuticals and personal care products in the water–sediment interface of Qiantang River in the Hangzhou region

Yang Wan, Ziming Wang, Kaiping Xu, Wei Wang,* Pengcheng Yao and Aiju You

1898



Pollution characteristics and risk assessment of endocrine-disrupting chemicals in surface water of national (freshwater) aquatic germplasm resource reserves in Guangdong Province

Tao Zhou, Jie Li, Weizhen Zhang,* Yanyi Zeng, Yuan Gao, Haiyan Li,* Wanling Yang, Yongzhan Mai, Qianfu Liu, Caiqin Hu and Chao Wang

