Environmental Science Water Research & Technology

rsc.li/es-water

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 2053–1400 CODEN ESWRAR 9(12) 3079–3498 (2023)

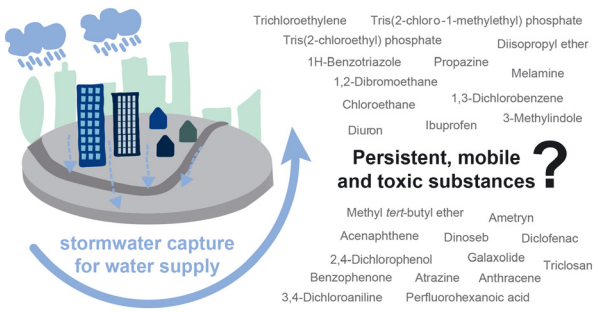
Cover
See Hongtao Zhao, Xuyong Li *et al.*, pp. 3146–3157.
Image reproduced by permission of Hongtao Zhao from *Environ. Sci.: Water Res. Technol.*, 2023, **9**, 3146.

Inside cover
See Robert Furén *et al.*, pp. 3158–3173.
Image reproduced by permission of Robert Furén from *Environ. Sci.: Water Res. Technol.*, 2023, **9**, 3158.

THEMED ISSUE ARTICLES

EDITORIAL

FRT



For queries about submitted papers please contact Claire Darby, Editorial Production Manager, in the first instance. E-mail: **eswater@rsc.org**

For pre-submission queries please contact Neil Scriven, Executive Editor. E-mail: **eswater-rsc@rsc.org**

Environmental Science: Water Research & Technology (electronic: ISSN 2053-1419) is published 12 times a year by the Royal Society of Chemistry, Thomas Graham House, Science Park, Milton Road, Cambridge, UK CB4 0WF.

All orders, with cheques made payable to the Royal Society of Chemistry, should be sent to the Royal Society of Chemistry Order Department, Royal Society of Chemistry, Thomas Graham House, Science Park, Milton Road, Cambridge, CB4 0WF, UK
Tel +44 (0)1223 432398; E-mail **orders@rsc.org**

2023 Annual (electronic) subscription price: £1881; US$3103. Customers in Canada will be subject to a surcharge to cover GST. Customers in the EU subscribing to the electronic version will be charged VAT.

If you take an institutional subscription to any Royal Society of Chemistry journal you are entitled to free, site-wide web access to that journal. You can arrange access via Internet Protocol (IP) address at **www.rsc.org/ip**

Customers should make payments by cheque in sterling payable on a UK clearing bank or in US dollars payable on a US clearing bank.

ROYAL SOCIETY OF CHEMISTRY

Environmental Science Water Research & Technology

rsc.li/es-water

Environmental Science: Water Research & Technology seeks to showcase high quality research about fundamental science, innovative technologies, and management practices that promote sustainable water.

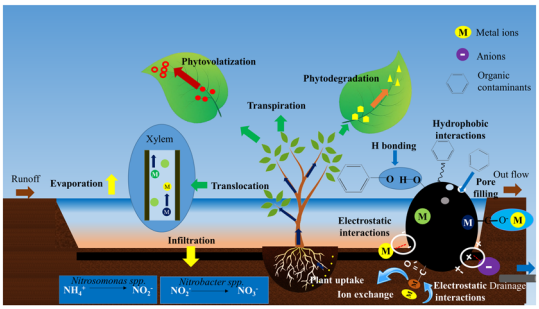
Editorial Board

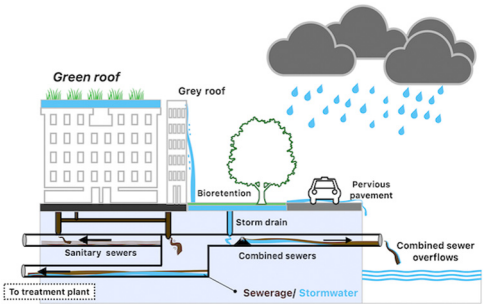
Advisory Board

Information for Authors

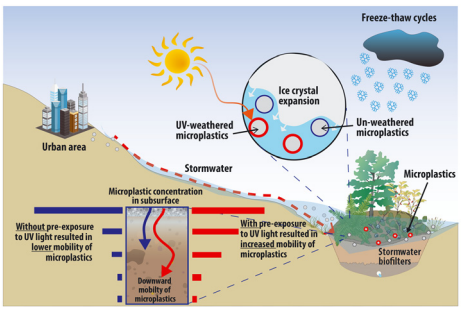
Full details on how to submit material for publication in Environmental Science: Water Research & Technology are given in the Instructions for Authors (available from http://**www.rsc.org/authors**). Submissions should be made via the journal's homepage: **rsc.li/es-water**

CRITICAL REVIEWS

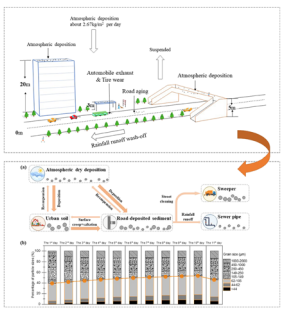




COMMUNICATION

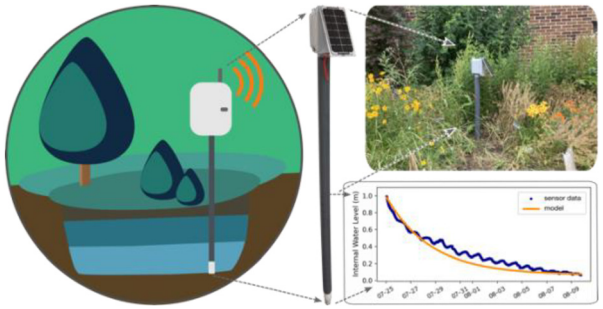


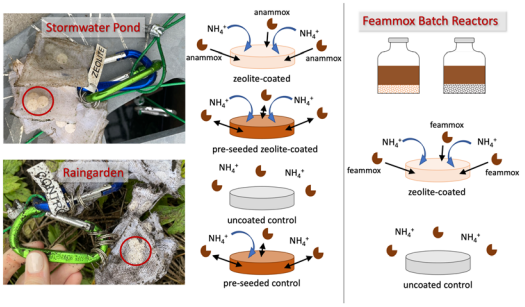
PAPERS

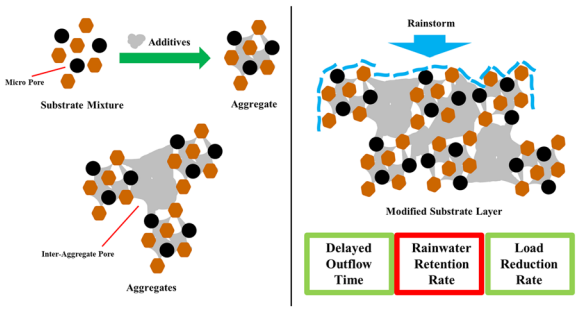


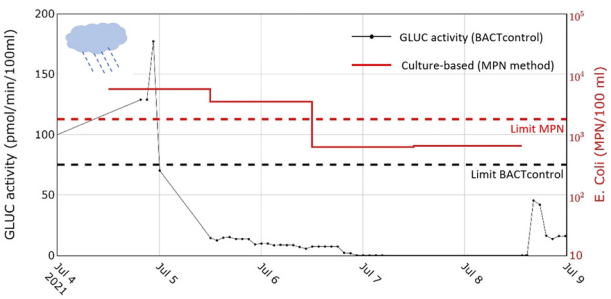
PAPERS

PAPERS



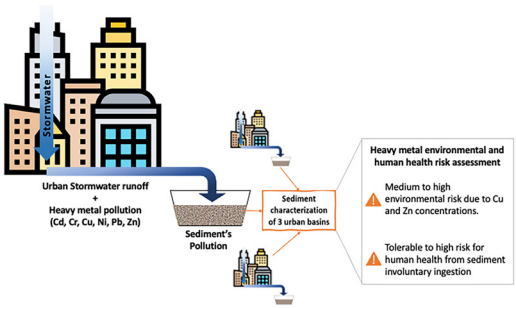






PAPERS

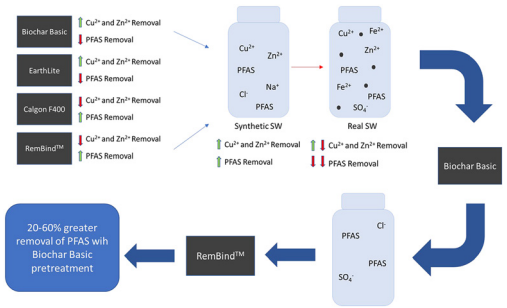
3269



Urban stormwater sediment risk assessment from drainage structures in Bogotá, Colombia

María Alejandra Pimiento,* Verónica Duque and Andres Torres

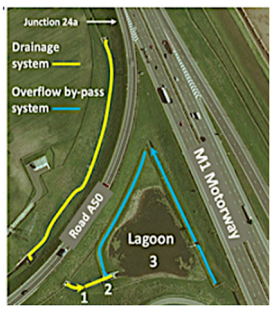
3281



Evaluation of sorbents and matrix effects for treating heavy metals and per- and polyfluoroalkyl substances as co-contaminants in stormwater

Bethany A. Parker, Casey A. Kanalos, Tyler S. Radniecki, Staci L. Massey Simonich and Jennifer A. Field*

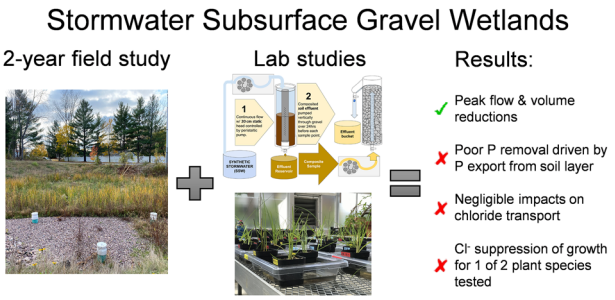
3290



Metal distribution in first flush in highway runoff of one of the busiest motorway junctions in the UK

Julia Zakharova,* Hamid Pouran and Andrew Wheatley

3302

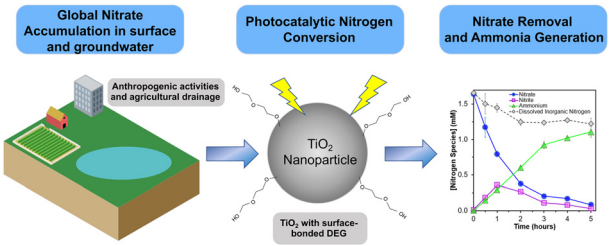


Stormwater subsurface gravel wetland hydraulics, phosphorus retention, and chloride dynamics in cold climates

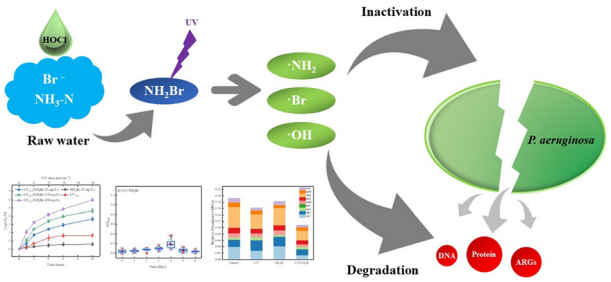
Eric D. Roy,* Andres O. Torizzo, Marcos L. Kubow, Nisha C. Nadkarni, Thomas M. Adler, Madeline F. Yandow, Finn A. Bondeson, Adrian R. H. Wiegman and Donna M. Rizzo

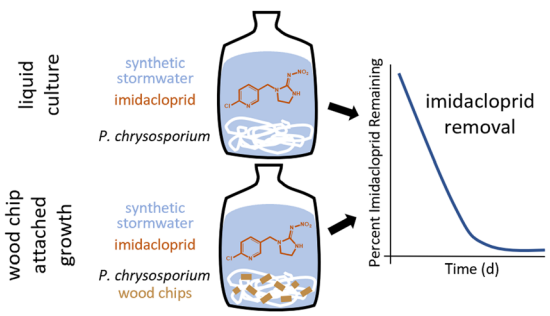
REGULAR ARTICLES

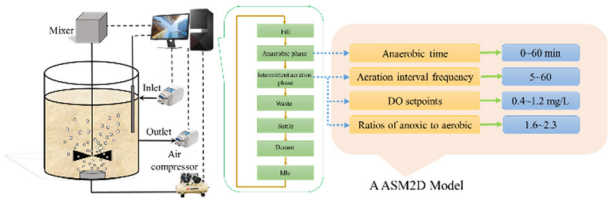
COMMUNICATION



PAPERS

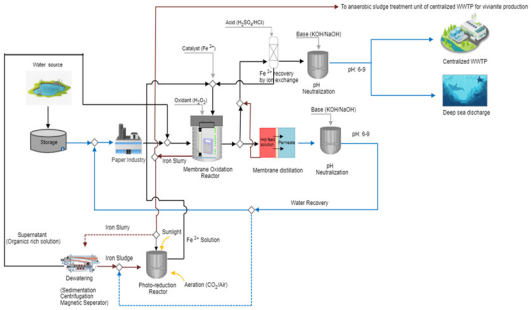


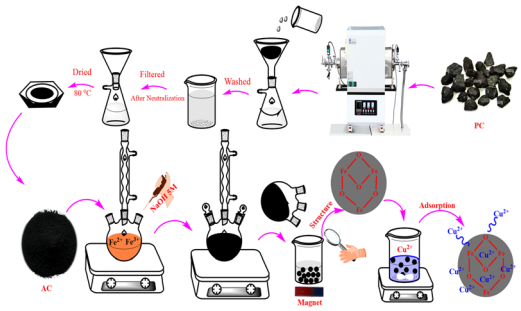


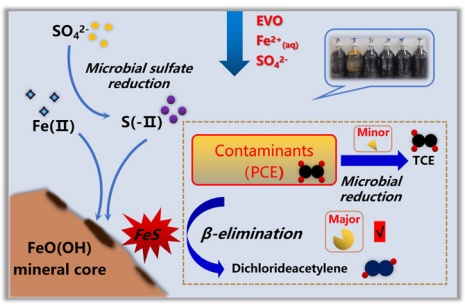


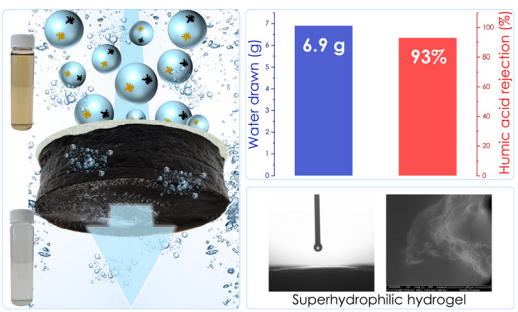
PAPERS

PAPERS



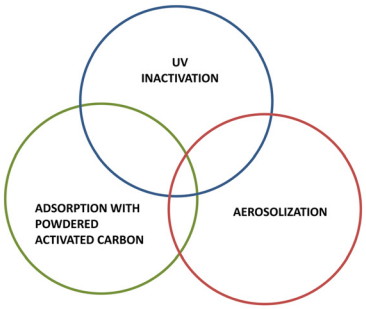






PAPERS

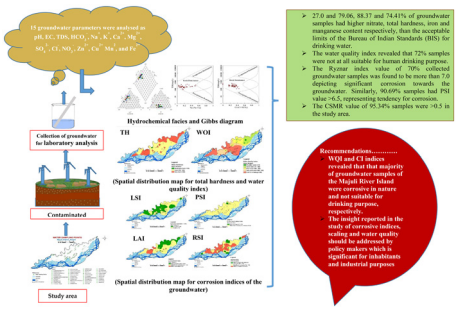
3458



Characterizing *Bacillus globigii* as a *Bacillus anthracis* surrogate for wastewater treatment studies and bioaerosol emissions

Leigh Durden, Kyle Eckhoff, Adam C. Burdsall, Sungmin Youn, Cindy Andújar-Gonzalez, Lubna Abu-Niaaj, Matthew Magnuson and Willie F. Harper Jr.*

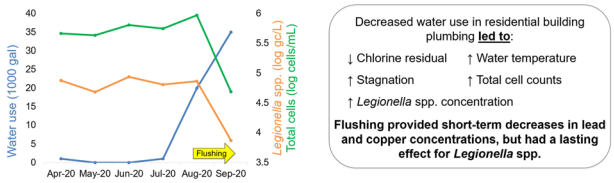
3467



Assessment of the hydrogeochemistry of shallow water aquifers using corrosion indices and geospatial techniques in the regions of the Brahmaputra river basin, India

Gulshan Kumar Sharma,* Roomesh Kumar Jena, Pravash Chandra Moharana, Prasenjit Ray, Shakir Ali, Krishna Kumar Mourya and Bachaspati Das

3484



Water quality during extended stagnation and flushing in a college residential hall

Danielle M. Angert, Christian Ley, Kyungyeon Ra, Yoorae Noh, Nadezhda Zyaykina, Elizabeth Montagnino, Ruth Wei, Andrew J. Whelton and Caitlin R. Proctor*