

# Environmental Science Water Research & Technology

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## IN THIS ISSUE

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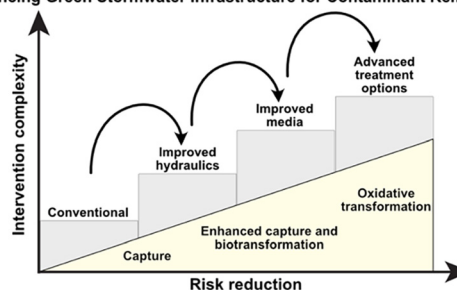
## EDITORIAL

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### A tiered complexity conceptual framework for treating water soluble, hydrophilic contaminants in green stormwater infrastructure

Stephanie Spahr,\* Gregory H. LeFevre\* and Elodie Passepport\*

#### Enhancing Green Stormwater Infrastructure for Contaminant Removal



## CRITICAL REVIEWS

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N. Moore, D. Pousty, D. Ma, R. Hofmann, A. Pras, R. E. Higbee, H. Mamane\* and S. E. Beck\*





# Environmental Science: Atmospheres

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Elemental answers



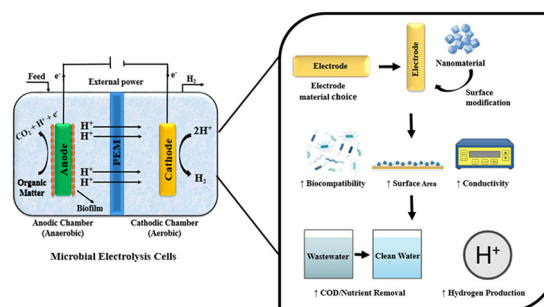
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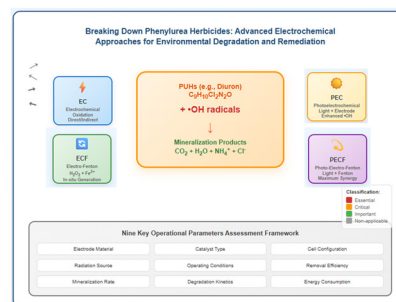
Nicolý Welter and Vinka Oyanedel-Craver\*



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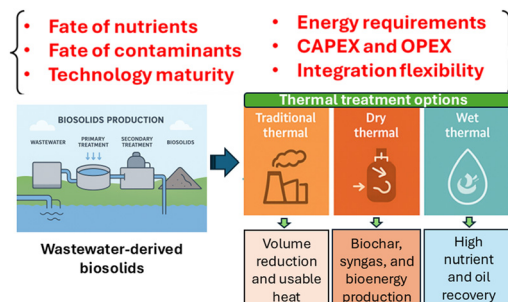
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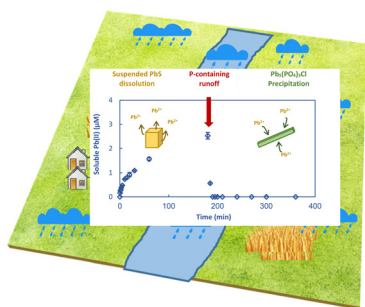
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## Comprehensive review of PFAS occurrence, regulatory frameworks, analytical, and remediation methodologies: emphasis on the Arabian Gulf and arid regions

Arun K. K., Haya Saleh Al Yasi, Ojima Z. Wada, Fares AlMomani\* and Khaled A. Mahmoud\*



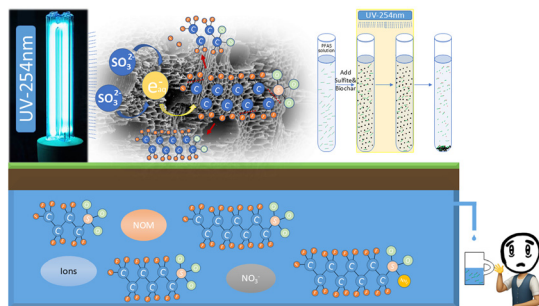
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### Transformation and immobilization of sedimental galena (PbS) by phosphate from surface runoff in simulated storm suspensions

Yi-Pin Lin\* and Ze-Xuan Tan

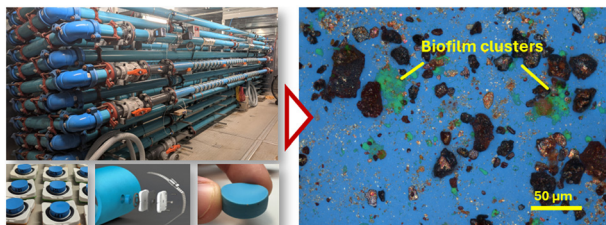
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Ziteng Song,\* Jianzhou He, Steven Mai, Thorsten Knappenberger and Yaniv Olshansky\*

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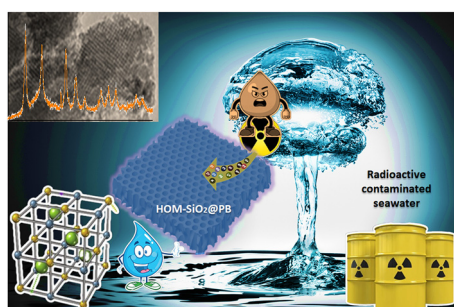


### The synergy between particles and biofilms that drives drinking water discolouration processes in PVC pipes

Artur Sass Braga,\* Yves Filion and Benjamin Anderson

- ❖ Biofilms facilitated the attachment of iron oxide particles on PVC pipes.
- ❖ Biofilms increased particles resistance to mobilization through flushing.

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### Mesoporous SiO<sub>2</sub>-Prussian blue composite for high-efficiency cesium ion removal

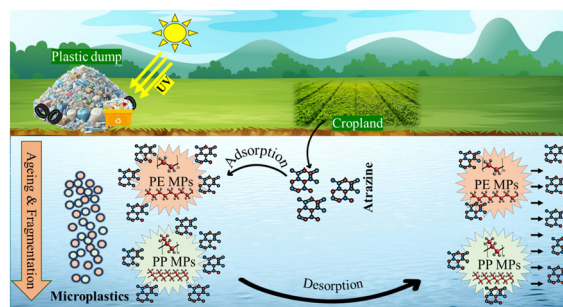
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## Microplastics in river water: occurrence, weathering, and adsorption behaviour

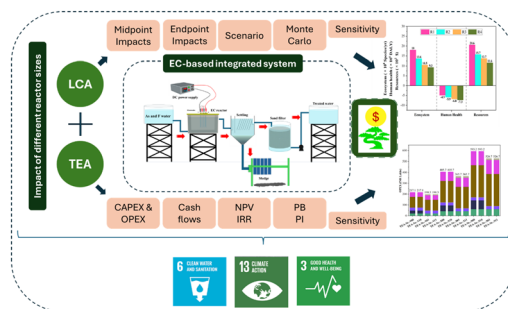
Bishwatma Biswas, Anuja Joseph and Sudha Goel\*



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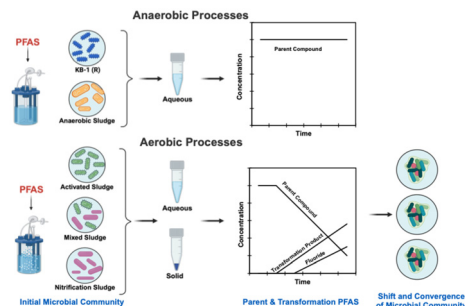
Hemant Goyal and Prasenjit Mondal\*



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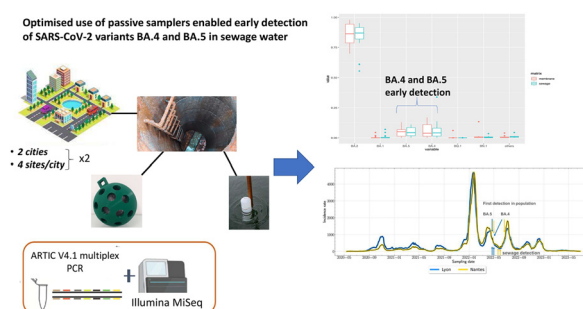
Sumaiya Saifur, Nisa Vyverberg, John Michael Aguilar, Jonathan Antle, Nirupam Aich, Diana S. Aga and Ian M. Bradley\*

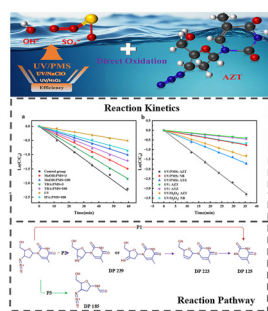


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## Optimised use of passive samplers enabled early detection of SARS-CoV-2 variants BA.4 and BA.5 in sewage water

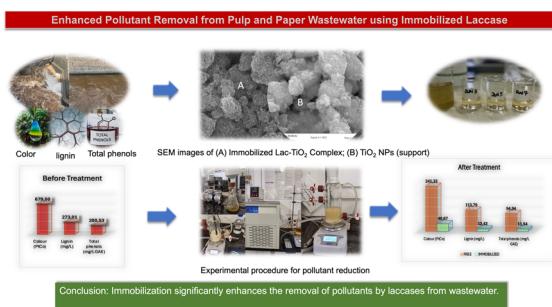
Françoise Vincent-Hubert,\* El Hacene Djaout, Marie Courbariaux, Nicolas Cluzel, Marion Desdouts, Julien Schaeffer, Valentin Tilloy, Virginie Lattard, Sionfoungo Daouda Soro, Mickaël Boni, Elodie Monchatre-Leroy, Françoise S. Le Guyader and Vincent Maréchal





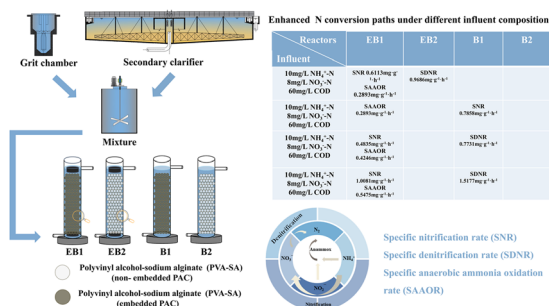
## Effects of UV/PMS oxidation on the degradation of zidovudine: kinetics, degradation products, and reaction pathways

Zhenqi Du, Yiran Jia, Zhangbin Pan, Xiaohong Wang, Baozhen Liu, Guifang Li, Yonglei Wang\* and Ruibao Jia\*



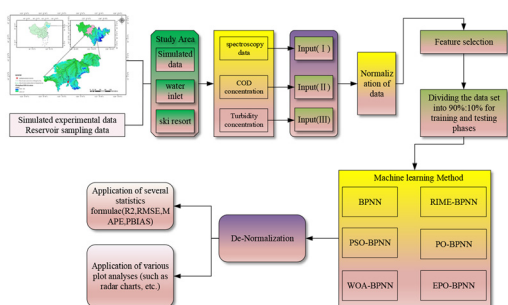
## Optimization of color, lignin, and total phenol removal from pulp and paper wastewater using immobilized laccase: a Taguchi approach

Toritsegbone Erik Tite,\* Peterson Thokozani Ngema and Thobeka Pearl Makhathini



## Effect of PAC-embedded fillers coupled with electrochemical systems on nitrogen transfer pathways and removal

Zhaoxu Peng,\* Meiqi He, Yingjian Zhang, Likun Gu, Yan Wang, Liyun Sun and Lulu Cheng



## Research on a small-concentration chemical oxygen demand prediction algorithm based on an enhanced parrot optimizer-BPNN and ultraviolet-visible spectroscopy

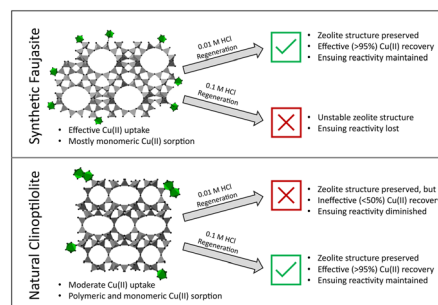
Hongmei Wang, Qiaoling Du\* and Xin Wang



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## Molecular-scale investigation of Cu(II) interactions with synthetic and natural zeolites during removal and recovery

Case M. van Genuchten,\* Kaifeng Wang, Claus Kjøller and Knud Dideriksen

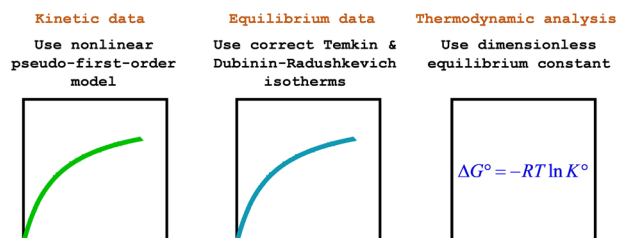


## COMMENTS

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Comment on “Shallow Shell SSTA63 resin: a rapid approach to remediation of hazardous nitrate” by E. Çendik, M. Saygı, Y. K. Receptoğlu and Ö. Arar, *Environ. Sci.: Water Res. Technol.*, 2024, **10**, 2765

Khim Hoong Chu\*



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Reply to the ‘Comment on “Shallow Shell SSTA63 resin: a rapid approach to remediation of hazardous nitrate” by K. H. Chu, *Environ. Sci.: Water Res. Technol.*, 2026, **12**, DOI: 10.1039/D4EW00976B

Elif Çendik, Mügenur Saygı, Yaşar Kemal Receptoğlu and Özgür Arar\*

$$q_e = B \ln(A_T C_e) \quad \longrightarrow \quad q_e = \frac{RT q_{\max}}{b_T} \ln(A_T C_e)$$

$$q_e = q_{\max} \exp(-\beta \epsilon^2) \quad \longrightarrow \quad q_e = q_{\max} \exp \left[ - \left( \frac{RT}{\sqrt{2} E} \right)^2 \left( \ln \left( \frac{C_e}{C_0} \right) \right)^2 \right]$$

$$\epsilon = RT \ln \left( 1 + \frac{1}{C_e} \right) \quad \longrightarrow \quad$$

$$E = \frac{1}{\sqrt{2\beta}} \quad \longrightarrow \quad$$

$$K_D = q_e / C_e \quad \longrightarrow \quad K_D^0 = \frac{(1000 \times K_B \times \text{molecular weight of adsorbate}) \times [\text{Adsorbate}]^0}{\gamma}$$

## CORRECTION

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## Correction: A novel water-from-air technology: creeping clathrate desalination of deliquescent salt solutions

Anke Snauwaert, Estelle Becquevort, Maarten Houllberghs, Robin Peeters, Sambhu Radhakrishnan, Eric Breynaert and Johan Martens\*

