

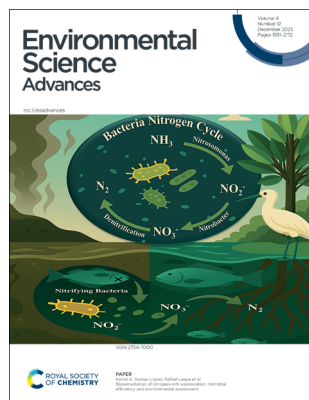
# Environmental Science: Advances

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## IN THIS ISSUE

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### Cover

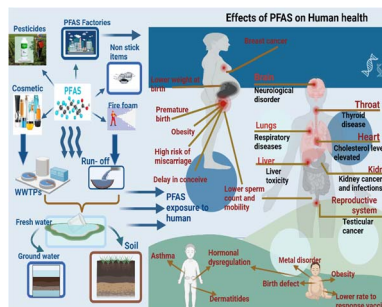
See Kelvin A. Sanoja-López, Rafael Luque *et al.*, pp. 2043–2054. Image reproduced by permission of Kelvin A. Sanoja-López from *Environ. Sci.: Adv.*, 2025, 4, 2043.

## CRITICAL REVIEWS

1939

### Potential human health effects of per- and polyfluoroalkyl substances (PFAS) prevalent in aquatic environment: a review

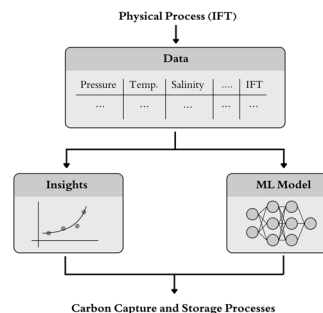
Srinithi Mayilswami, Nirav P. Raval, Rinki Tomar, Shailja Sharma, Sarva Mangala Praveena, Navish Kataria, Rangabhashiyam Selvasembian, Saravanan Ramiah Shanmugam, Ravinder Nath, Arindam Malakar, Sudeshna Dutta and Santanu Mukherjee\*



1963

### A comprehensive review of characterizing CO<sub>2</sub>-brine interfacial tension in saline aquifers using machine learning

M. Saud Ul Hassan, Kashif Liaqat\* and Laura Schaefer



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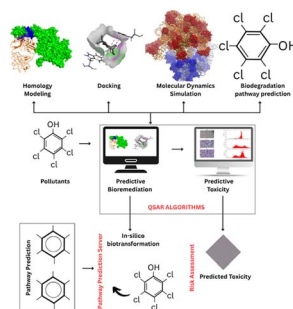


## CRITICAL REVIEWS

1987

### Artificial intelligence driven bioinformatics for sustainable bioremediation: integrating computational intelligence with ecological restoration

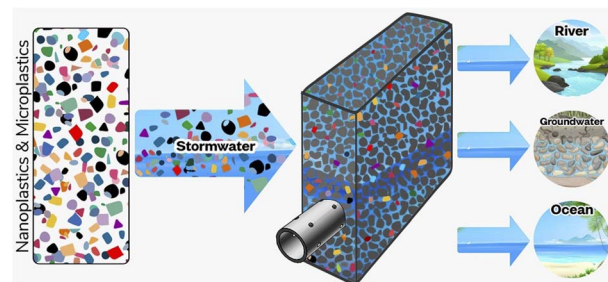
Kashif R. Siddique, Debajyoti Bose,\* Riya Bhattacharya, Raul Villamarin Rodriguez and Aritra Ray



1998

### Microplastics and nanoplastics in stormwater management engineered porous media systems: a systematic review of their sources, transport, retention, and removal characteristics

Aniekan E. Essien,\* Sarah E. Dickson-Anderson\* and Yiping Guo

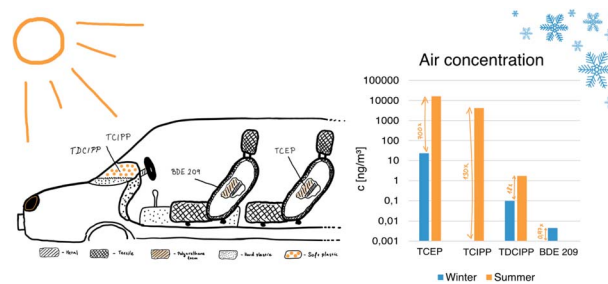


## COMMUNICATION

2027

### Investigation of seasonal changes in flame retardant concentrations in car interiors

Petra Svobodová, Simona Rozárka Jílková, Jiří Kohoutek, Ondřej Audy and Lisa Melymuk\*

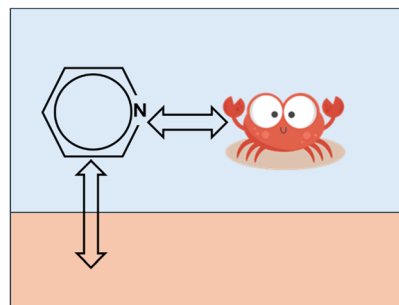


## COMMENTS

2034

### Comment on "Why there is no evidence that pyridine killed the English crabs" by A. T. Ford, M. F. Fitzsimons and C. Halsall, *Environ. Sci.: Adv.*, 2024, 3, 1385, DOI: <https://doi.org/10.1039/D4VA00006D>

Adam Peters\*



## COMMENTS

2040

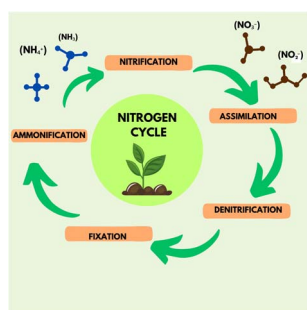


Reply to the 'Comment on "Why there is no evidence that pyridine killed the English crabs"' by A. Peters, *Environ. Sci.: Adv.*, 2025, 4, DOI: 10.1039/D4VA00420E

Alex T. Ford,\* Mark F. Fitzsimons and Crispin Halsall

## PAPERS

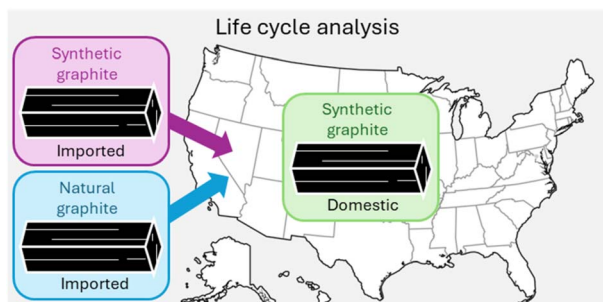
2043



**Bioremediation of nitrogen-rich wastewaters: microbial efficiency and environmental assessment**

Viviana Tamay, Jorge Flores, Oscar Navia-Pesantes, Carlos Camba, Marianela Barona-Obando, Cesar F. Suarez, Kelvin A. Sanoja-López\* and Rafael Luque\*

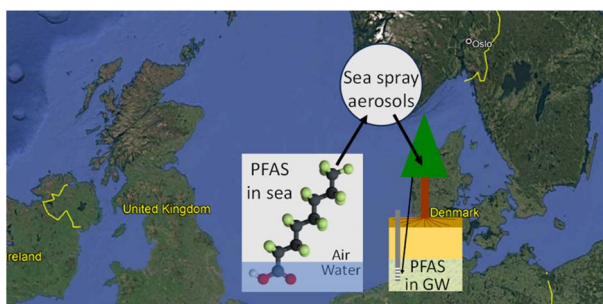
2055



**Energy, greenhouse gas, and water life cycle analysis of synthetic graphite anode production in the United States**

Ramsharan Pandey, Ulises R. Gracida-Alvarez, Rakesh K. Iyer and Jarod C. Kelly\*

2069



**Sea spray aerosols can be a source of PFAS pollution in coastal aquifers**

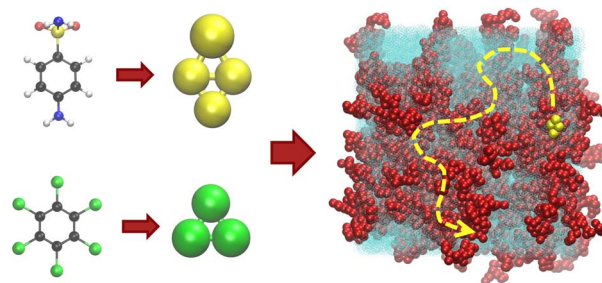
Christian Nyrop Albers\* and Denitza Voutchkova



2079

### Coarse-grained simulations of sulfanilamide and hexachlorobenzene mobility in soil organic matter

Lorenz F. Dettmann, Oliver Kühn\* and Ashour A. Ahmed



2091

### Are you being served? An examination of chemical risks posed by compostable single-use food service items

Alexander Wotton,\* Iliana Delcheva, Jason Gascooke, David Springer, Simon Mills, Anna Ernst, Melanie MacGregor and Helen Prifti



2104

### Lignite as a natural active immobilization system for surface/drainage water polluted by fertilizers

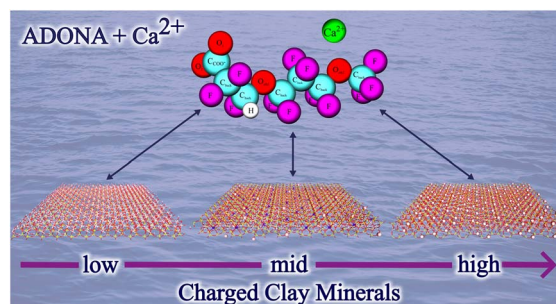
Martina Klučáková,\* Petra Závodská, Marcela Pavlíková, Lukáš Buršík and Veronika Sobotková



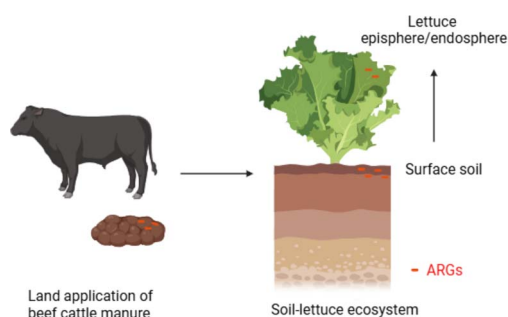
2116

### Interaction of ADONA with neutral and charged clay interfaces: molecular insights

Christina E. Schumm, Narasimhan Loganathan, James Hager and Angela K. Wilson\*



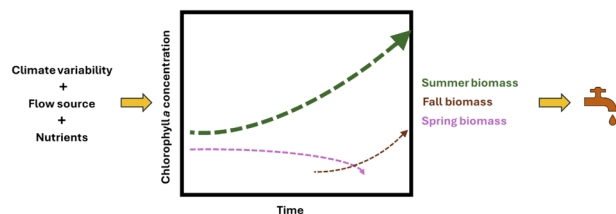
2127



## Land application of beef cattle manure facilitates the transmission of antibiotic resistance genes from soil to lettuce

Yuepeng Sun,<sup>\*</sup> Daniel Snow, Harkamal Walia and Xu Li

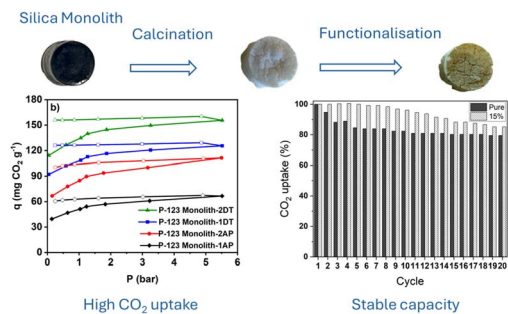
2138



## Climate variability and flow management impact phytoplankton biomass in a shallow reservoir

Danielle S. Spence,<sup>\*</sup> Kristin J. Painter, Ali Nazemi, Jason J. Venkiteswaran and Helen M. Baulch

2154



## Amine-functionalised monolithic silica adsorbents for CO<sub>2</sub> capture

Ali Kasiri, R. Sanz, Eloy S. Sanz-Pérez and Amaya Arencibia<sup>\*</sup>

