

# Environmental Science Processes & Impacts

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## IN THIS ISSUE

ISSN 2050-7887 CODEN ESPICZ 26(11) 1915–2104 (2024)



**Cover**  
See Sarah E. Rothenberg *et al.*, pp. 1975–1985. Image reproduced by permission of Sarah Rothenberg via Pixabay from *Environ. Sci.: Processes Impacts*, 2024, 26, 1975.



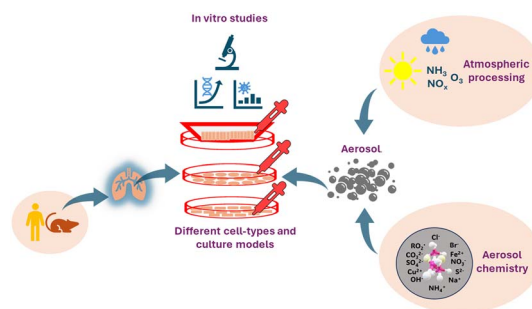
**Inside cover**  
See Sudheer Salana and Vishal Verma, pp. 1922–1954. Image reproduced by permission of Vishal Verma and Sudheer Salana from *Environ. Sci.: Processes Impacts*, 2024, 26, 1922.

## CRITICAL REVIEWS

1922

### Review of *in vitro* studies evaluating respiratory toxicity of aerosols: impact of cell types, chemical composition, and atmospheric processing

Sudheer Salana and Vishal Verma\*



1955

### Finding non-fluorinated alternatives to fluorinated gases used as refrigerants

Juliane Glüge,\* Katharina Breuer, Armin Hafner, Christian Vering, Dirk Müller, Ian T. Cousins, Rainer Lohmann, Greta Goldenman and Martin Scheringer

F-gases are critical solutions

**Fact or Fiction  
???**

Hydrofluoroolefins are the solution for the future

There are no alternatives to F-gases as refrigerants

The F-gas regulation covers the environmental problems of F-gases sufficiently



# Environmental Science journals

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Fundamental questions  
Elemental answers



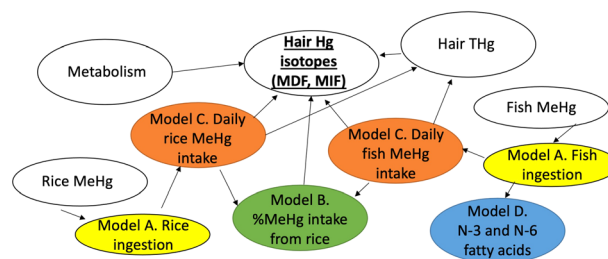


1975

## Hair mercury isotopes, a noninvasive biomarker for dietary methylmercury exposure and biological uptake

Sarah E. Rothenberg,\* Susan A. Korrick, Donald Harrington, Sally W. Thurston, Sarah E. Janssen, Michael T. Tate, YanFen Nong, Hua Nong, Jihong Liu, Chuan Hong and Fengxiu Ouyang

### Modeling Mercury Isotope Fractionation

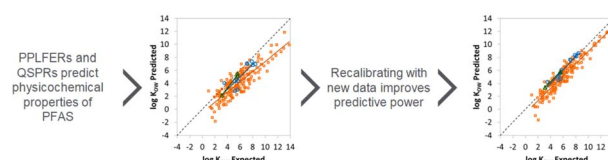


1986

## Improved prediction of PFAS partitioning with PPLFRs and QSPRs

Trevor N. Brown,\* James M. Armitage, Alessandro Sangion and Jon A. Arnot

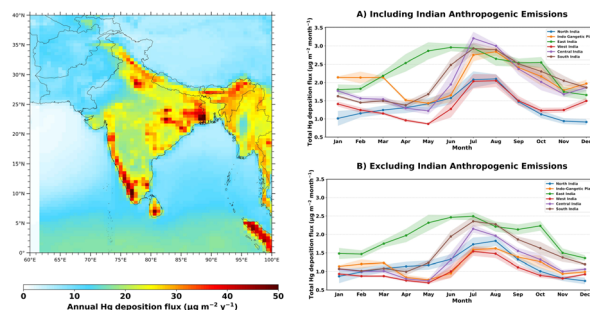
### Improved prediction of PFAS partitioning with PPLFRs and QSPRs



1999

## Modeling of mercury deposition in India: evaluating emission inventories and anthropogenic impacts

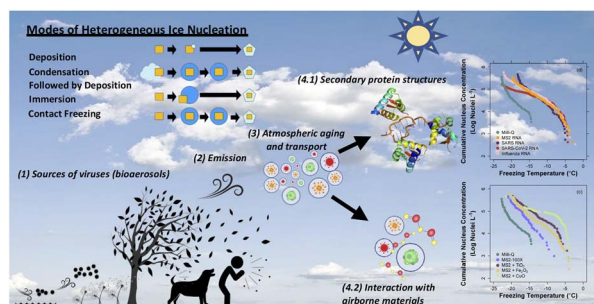
Chakradhar Reddy Malasani, Basudev Swain,\* Ankit Patel, Yaswanth Pulipatti, Nidhi L. Anchan, Amit Sharma, Marco Vountas, Pengfei Liu and Sachin S. Gunthe\*



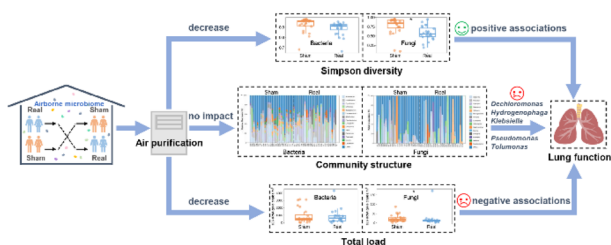
2010

## Physicochemical properties and their impact on ice nucleation efficiency of respiratory viral RNA and proteins

Mattie Hibbs, Devendra Pal, Gorjana Barudzija and Parisa A. Ariya\*



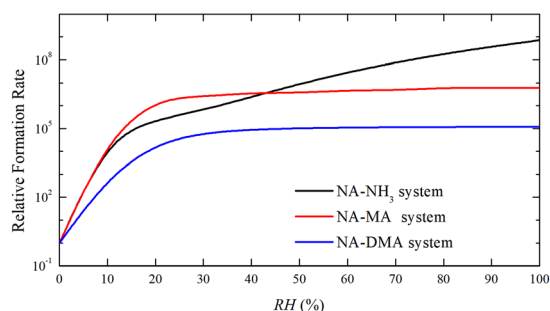
2020



### Associations of indoor airborne microbiome with lung function: evidence from a randomized, double-blind, crossover study of microbial intervention

Yetong Zhao, Shan Liu, Wanzhou Wang, Luyi Li, Wenlou Zhang, Xuezhao Ji, Di Yang, Xinbiao Guo\* and Furong Deng\*

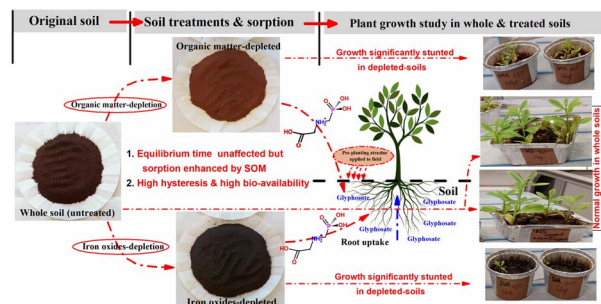
2036



### Formation of atmospheric molecular clusters containing nitric acid with ammonia, methylamine, and dimethylamine

Dong-Ping Chen,\* Wen Ma, Chun-Hong Yang, Ming Li, Zhao-Zhen Zhou, Yang Zhang, Xi-Cun Wang\* and Zheng-Jun Quan\*

2051

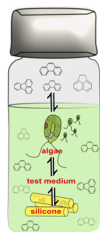


### Exploring the interactions of glyphosate in soil: the sorption scenario upon soil depletion and effect on waterleaf (*Talinum triangulare*) growth

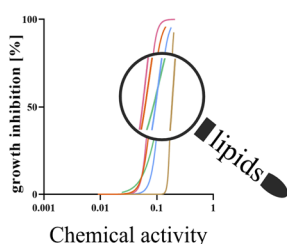
Paul N. Diagboya,\* Bamidele I. Olu-Owolabi and Rolf-Alexander Düring

2062

Exposure chemical mixture



Differences in phytoplankton population vulnerability



### Differences in phytoplankton population vulnerability in response to chemical activity of mixtures

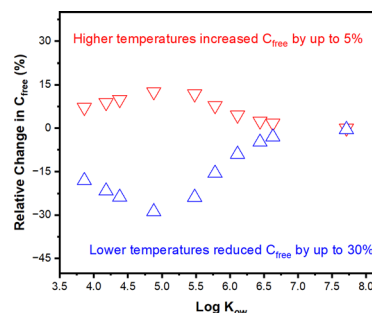
Talles Bruno Oliveira dos Anjos,\* Quyen Nham, Sebastian Abel, Elin Lindehoff, Clare Bradshaw and Anna Sobek



2076

## Combined temperature and salinity effects on the passive sampling of PAHs with an assessment of impacts to petroleum toxicity

Ibukun Ola,\* Carsten Drebenstedt, Robert M. Burgess, Lane Tidwell, Kim Anderson, Nils Hoth and Christoph Külls



2090

## Assessment of extracellular polymeric substances production and antioxidant defences in periphytic communities exposed to effluent contaminants

Carlos Silva,\* Etelvina Figueira, Diana Matos, Carina Sá, Tânia Vidal, Fernando José Mendes Gonçalves, Nelson Abrantes and Joana Luísa Pereira\*

