

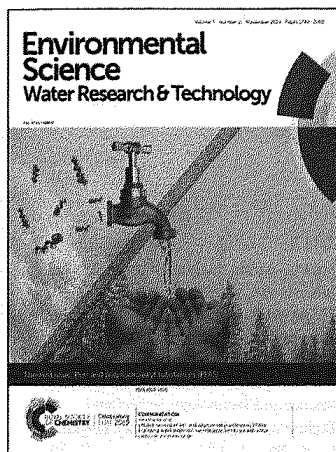
# Environmental Science Water Research & Technology

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## IN THIS ISSUE

ISSN 2053-1400 CODEN ESWRAR 5(11) 1799-2060 (2019)



### Cover

See Vera Franke *et al.*,  
pp. 1836–1843.  
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Water Res. Technol.*, 2019, 5,  
1836.

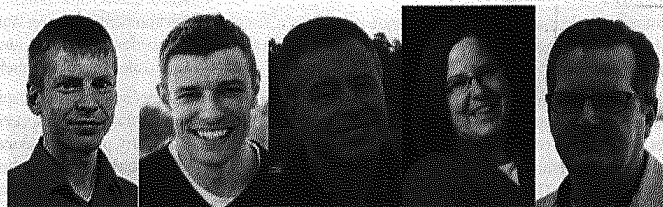
THEMED ISSUE: Per- and polyfluoroalkyl substances (PFAS)

## EDITORIAL

1808

### Themed issues on per- and polyfluoroalkyl substances

Lutz Ahrens, Jonathan P. Benskin, Ian T. Cousins,\*  
Michelle Crimi and Christopher P. Higgins

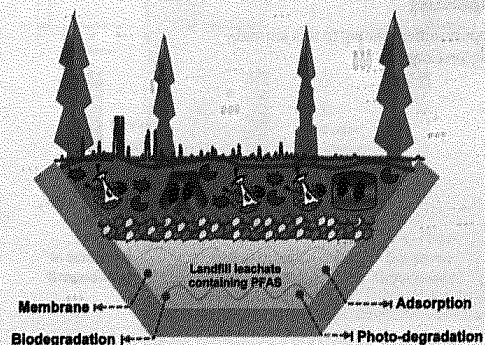


## CRITICAL REVIEW

1814

### Treatment of per- and polyfluoroalkyl substances in landfill leachate: status, chemistry and prospects

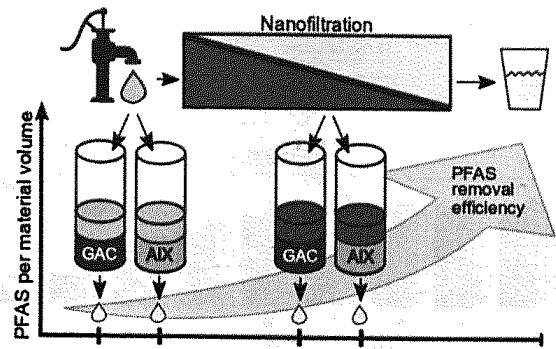
Zongsu Wei, Tianyuan Xu and Dongye Zhao\*



1836

**Efficient removal of per- and polyfluoroalkyl substances (PFASs) in drinking water treatment: nanofiltration combined with active carbon or anion exchange**

Vera Franke,\* Philip McCleaf, Klara Lindegren and Lutz Ahrens

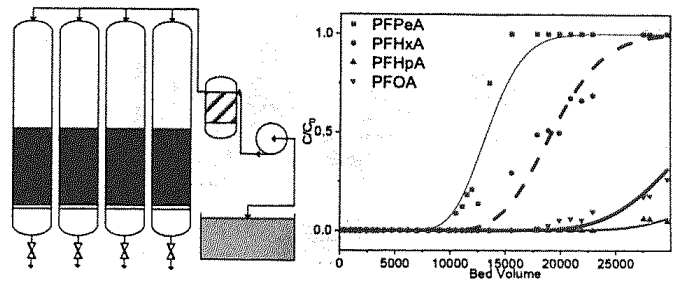


PAPERS

1844

**Removal of per- and polyfluoroalkyl substances (PFASs) from contaminated groundwater using granular activated carbon: a pilot-scale study with breakthrough modeling**

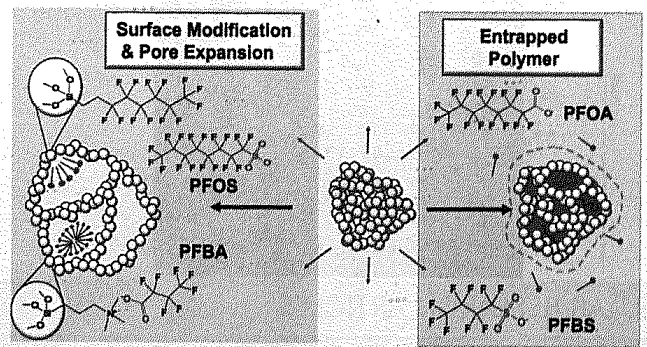
Charlie J. Liu, David Werner and Christopher Bellona\*



1854

**Absorption of short-chain to long-chain perfluoroalkyl substances using swellable organically modified silica**

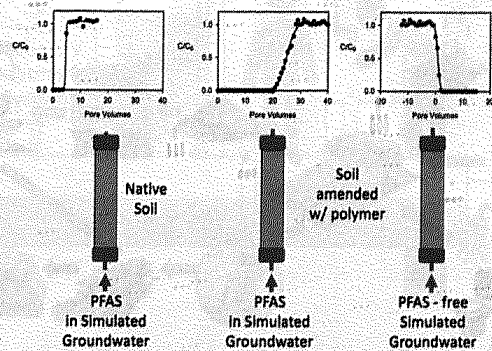
Eva K. Stebel, Kyndal A. Pike, Huan Nguyen, Heather A. Hartmann, Mattaeus J. Klonowski, Michaela G. Lawrence, Rachel M. Collins, Claire E. Hefner and Paul L. Edmiston\*



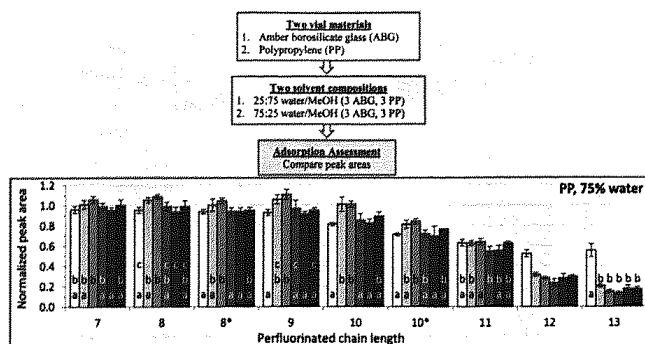
1867

**Enhanced adsorption of perfluoro alkyl substances for *in situ* remediation**

Yousof H. Aly, Daniel P. McInnis, Samuel M. Lombardo, William A. Arnold, Kurt D. Pennell, James Hatton and Matt F. Simcik\*



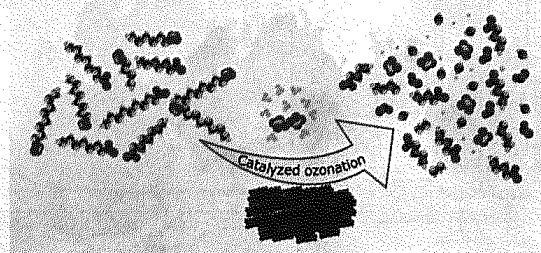
1876



**Towards the development of a standardized method for extraction and analysis of PFAS in biological tissues**

Adam D. Point, Thomas M. Holsen,\* Sujan Fernando, Philip K. Hopke\* and Bernard S. Crimmins

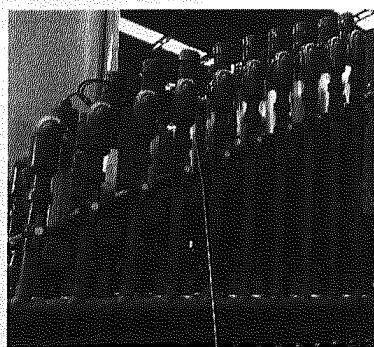
1887



**Removal of per- and polyfluoroalkyl substances (PFASs) from tap water using heterogeneously catalyzed ozonation**

Vera Franke,\* Miriam Dorothea Schäfers, Johan Joos Lindberg and Lutz Ahrens

1897



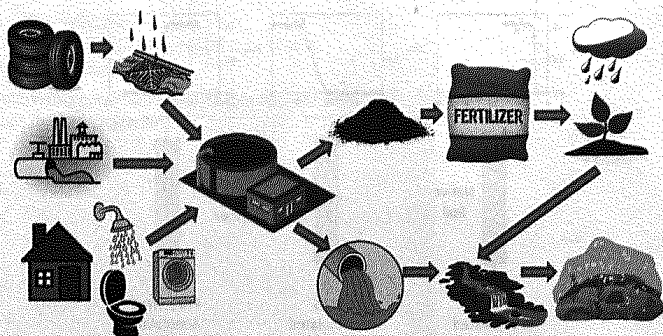
**Comparative study of PFAS treatment by UV, UV/ozone, and fractionations with air and ozonated air**

Xiaodong Dai, Zongli Xie, Brian Dorian, Stephen Gray\* and Jianhua Zhang\*

REGULAR RESEARCH ARTICLES

CRITICAL REVIEW

1908



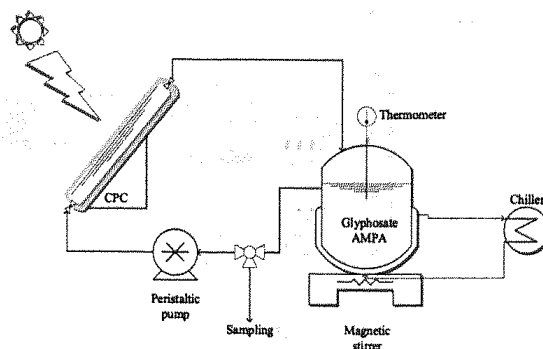
**Wastewater treatment plants as a source of plastics in the environment: a review of occurrence, methods for identification, quantification and fate**

Elvis D. Okoffo,\* Stacey O'Brien, Jake W. O'Brien, Benjamin J. Tscharke and Kevin V. Thomas

1932

**Glyphosate and AMPA removal from water by solar induced processes using low Fe(III) or Fe(II) concentrations**

Anna Serra-Clusellas, Laura De Angelis, Mercedes Beltramo, Melina Bava, Josefina De Frankenberg, Julián Vigliarolo, Nicolás Di Giovanni, Jorge D. Stripeikis, Julián A. Rengifo-Herrera\* and María M. Fidalgo de Cortalezzi\*

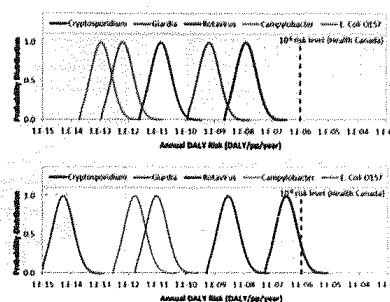


1943

**Quantitative microbial risk assessments for drinking water facilities: evaluation of a range of treatment strategies**

Joshua G. Elliott, Liz Taylor-Edmonds\* and Robert C. Andrews

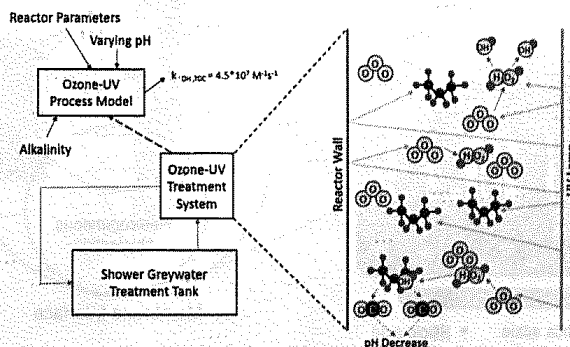
Impact of treatment on pathogen risk



1956

**Mineralization of greywater organics by the ozone-UV advanced oxidation process: kinetic modeling and efficiency**

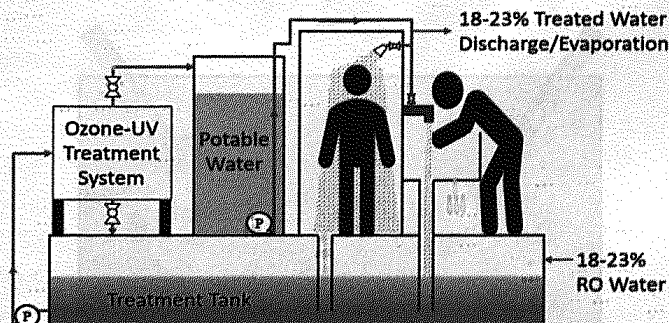
Lucien W. Gassie\* and James D. Englehardt



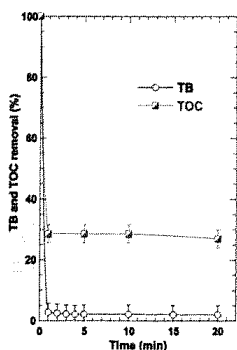
1971

**Ozone-UV net-zero water wash station for remote emergency response healthcare units: design, operation, and results**

Lucien W. Gassie,\* James D. Englehardt, Nichole E. Brinkman, Jay Garland and Mahamalage Kusumitha Perera



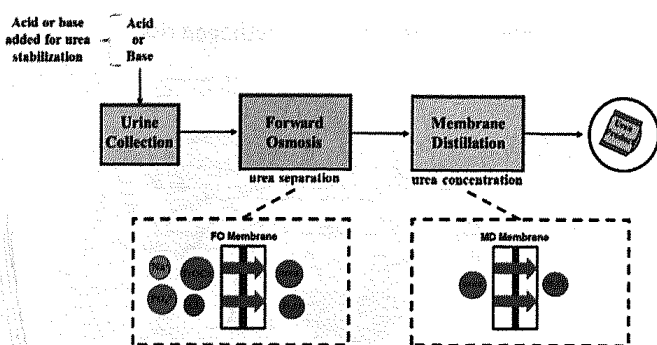
1985



**Influence of mineral water constituents, organic matter and water matrices on the performance of the  $H_2O_2/IO_4^-$ -advanced oxidation process**

Nor Elhouda Chadi, Slimane Merouani,\*  
Oualid Hamdaoui, Mohammed Bouhelassa  
and Muthupandian Ashokkumar

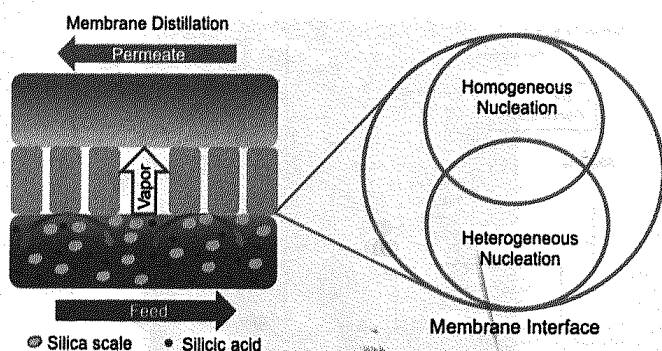
1993



**Urea recovery from fresh human urine by forward osmosis and membrane distillation (FO-MD)**

Hannah Ray,\* Francois Perreault and Treavor H. Boyer

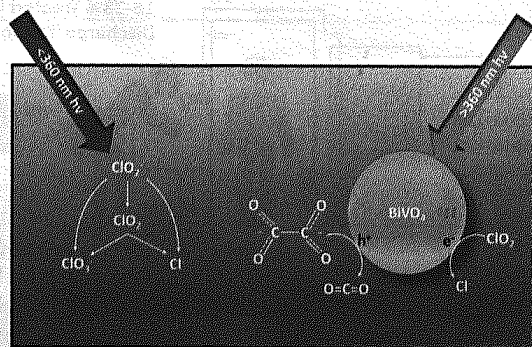
2004



**Elucidating mechanisms of silica scaling in membrane distillation: effects of membrane surface wettability**

Yiming Yin, Wei Wang, Arun K. Kota, Song Zhao  
and Tiezheng Tong\*

2015



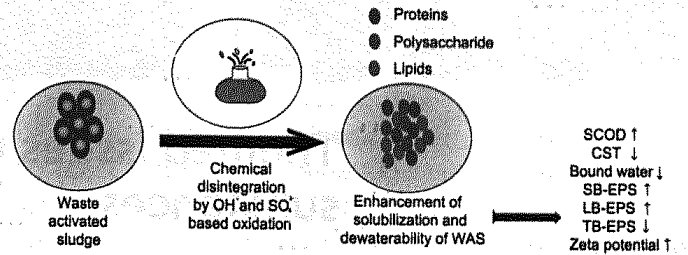
**Photocatalytic reduction of chlorite in water using bismuth vanadate ( $BiVO_4$ ): effect of irradiance conditions and presence of oxalate on the reactivity and by-product selectivity**

Randal Marks and Kyle Doudrick\*

2027

**Waste activated sludge disintegration by hydroxyl and sulfate radical-based oxidation: a comparative study**

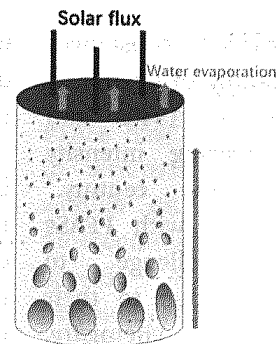
Hanife Sari Erkan



2041

**Mass production of superhydrophilic sponges for efficient and stable solar-driven highly corrosive water evaporation**

Xianhua Bai, Yaguang Li,\* Fengyu Zhang, Yingqi Xu, Shufang Wang and Guangsheng Fu



2048

**Performance of vacuum UV (VUV) for the degradation of MC-LR, geosmin, and MIB from cyanobacteria-impacted waters**

Flavia Visentin,\* Siddharth Bhartia, Madjid Mohseni, Sarah Dorner and Benoit Barbeau

