Environmental Science: Advances

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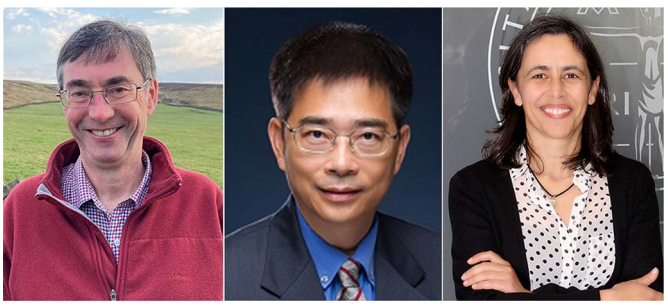
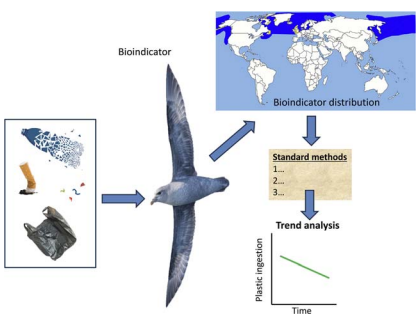
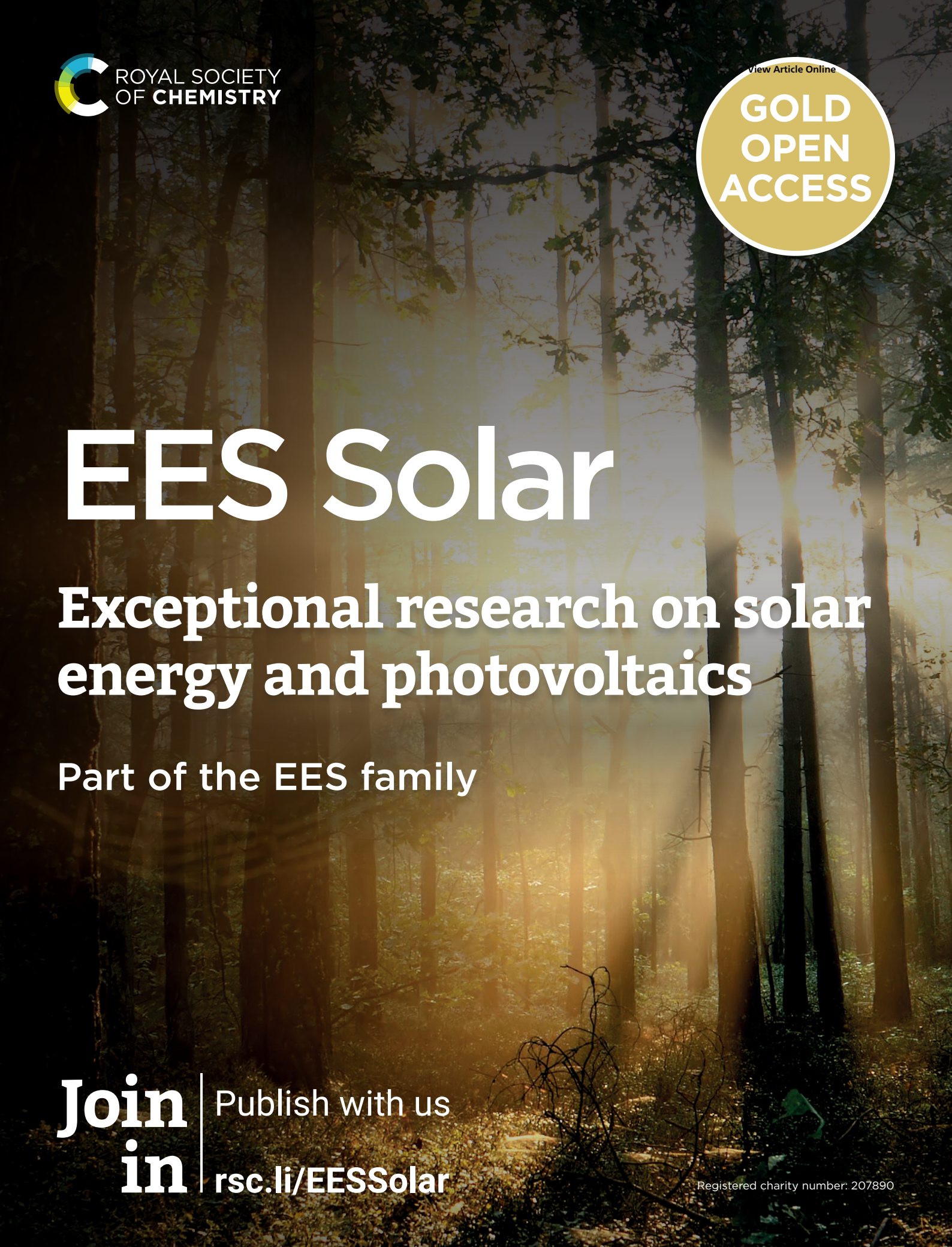
See Sougata Ghosh *et al.*, pp. 97–114. Image reproduced by permission of Sougata Ghosh from *Environ. Sci.: Adv.*, 2025, **4**, 97.

EDITORIAL



CRITICAL REVIEWS

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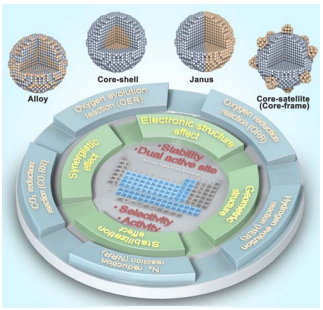
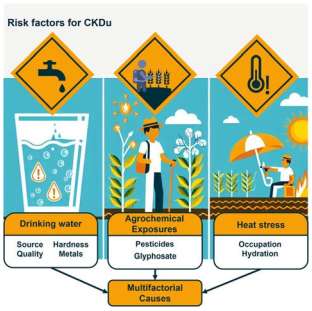
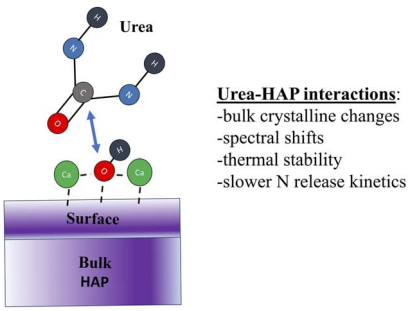
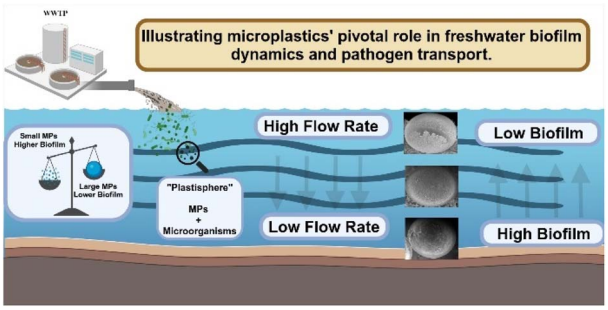






COMMUNICATION



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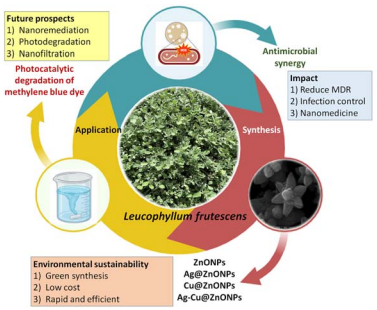

Green synthesis of silver and copper-doped zinc oxide nanoflowers using *Leucophyllum frutescens* leaf extract for photodegradation of methylene blue dye and antibacterial applications

Maitri Nandasana, Tanawat Imboon, Rashbihari Layek, Arindam Dey, Pranav Pandya, Vijay Singh Parihar, Madhumita S. Tawre, Santosh Sutar, Pathik Kumbhakar, Karishma Pardesi, Sirikanjana Thongmee and Sougata Ghosh*

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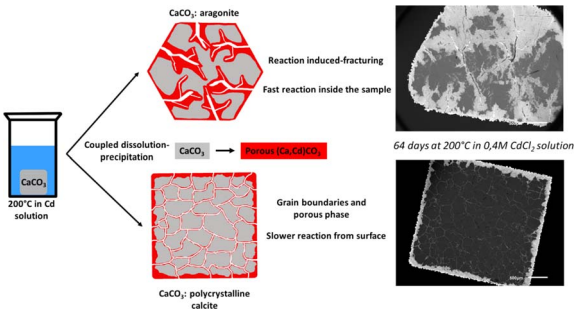

Porosity and fluid pathway development during cadmium sequestration by calcium carbonate replacement

Maude Julia,* Christine V. Putnis, Oliver Plümper and François Renard

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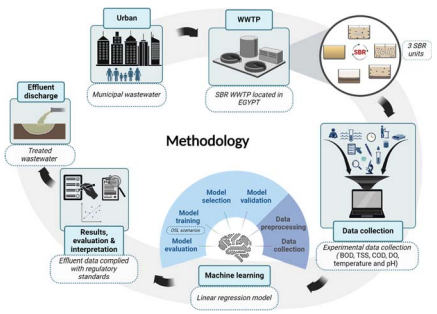

Machine learning application in municipal wastewater treatment to enhance the performance of a sequencing batch reactor wastewater treatment plant

Hagar H. Hassan*

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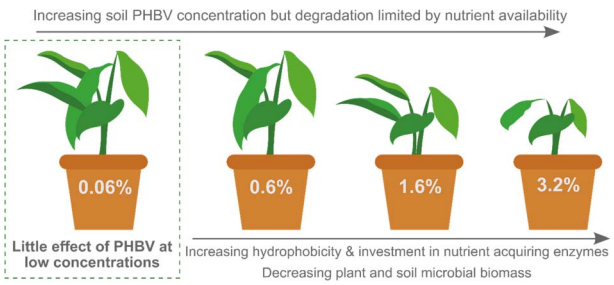

Microbial degradation of bioplastic (PHBV) is limited by nutrient availability at high microplastic loadings

Michaela K. Reay,* Martine Graf, Lucy M. Greenfield, Rafael Bargiela, Charles Onyije, Charlotte E. M. Lloyd, Ian D. Bull, Richard P. Evershed, Peter N. Golyshin, David R. Chadwick and Davey L. Jones

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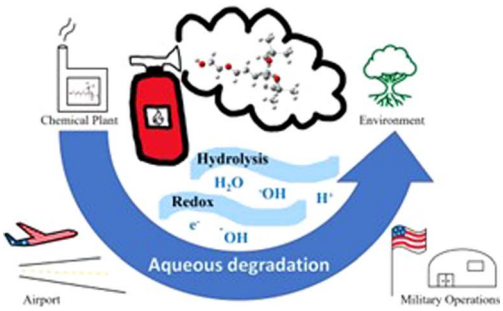
Aqueous solution degradation pathways of trimethylsiloxane surfactants

Maleigh Mifkovic, Brian D. Etz, Manoj K. Shukla* and Shubham Vyas*



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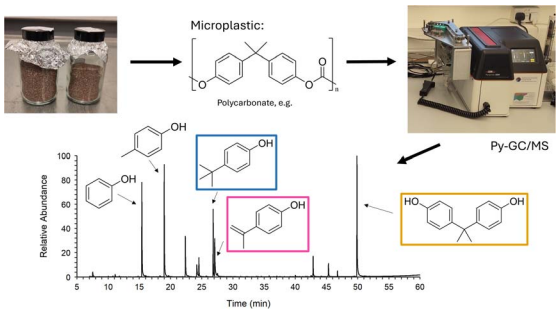
Quantification of microplastic targets in environmental matrices using pyrolysis-gas chromatography-mass spectrometry

Rebecca H. Peel, Charlotte E. M. Lloyd, Stephen J. Roberts, B. D. A. Naafs and Ian D. Bull*



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Atmospheric mercury concentration variations at Syowa Station, Lützow-Holm Bay, East Antarctica and contributing factors

Koyomi Nakazawa,* Osamu Nagafuchi,* Akihiro Mitsui, Tomoaki Watanabe, Naoko Hishida, Megumu Tsujimoto and Satoshi Imura