

Empower the Future with MEMetic: Catalysing a Global Water Revolution

By synergising nature's biological processes with cutting-edge synthetic, sustainable polymer chemistry, MEMetic crafts exquisitely selective membranes for the removal and recovery of critical waste products in water.

Aston University's MEMetic technology heralds a global shift, introducing a pivotal solution at the intersection of waste and water. This transformative technology is poised to revolutionize water management across the globe, facilitating clean water access, advancing biopharmaceutical and bioproduct processes, enabling lithium recovery in battery recycling, and tackling a myriad of environmental challenges including silica, heavy metal, and phosphate management.

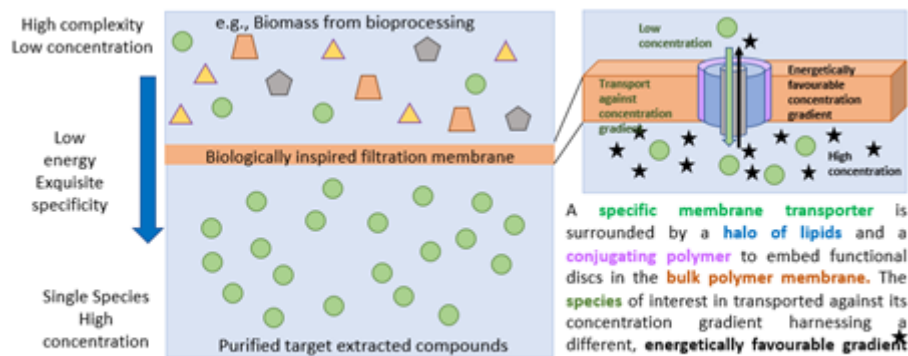


Figure 1: Schematic representation of the biologically inspired filtration membrane.

A Sustainable Vision: Seven Years to Change the World

Our vision spans a seven-year development cycle, aiming to refine and scale MEMetic technology for these global applications. This ambitious journey builds upon several million pounds in awards from peer-reviewed research grants, underscoring the project's solid scientific foundation and potential for transformative impact.

Fundamentally we intend to take this sustainable technology forward, at pace, through a focused research organisation hosted by Aston University, collaborating with industry to address genuine real-world challenges.

We envisage that at the end of this funding cycle we will have the capabilities to build an entire industrial base for the UK aligned with anyone who has challenges in wastewater management, as long as microbes have got their first (and they almost always have!). In the future, guided by computational biology and AI, we will design transporters to move any molecule we wish.

Invest in a Future Where Innovation Meets Sustainability

We are seeking £12 million in match funding, alongside up to £12 million from DSIT should we be successful in the Research Ventures Catalyst programme. We are actively seeking philanthropists, co-investors, industry, and anyone who wants to contribute to development of a sustainable future for our planet and society. Join us in advancing a technology that promises not only to impact every manufacturing sector in the world, but fundamentally aims to foster a cleaner, more sustainable world.

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