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EBNet Travel Bursary Support  
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# 18th International Symposium on Microbial Ecology (ISME), 14-19 August 2022

## Microbial biodegradation of polystyrene microplastics in seawater analysed by stable isotope tracing techniques

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In August 2022 I attended the ISME18 conference in Lausanne, Switzerland, thanks to a travel bursary funded by EBNet. The conference was a stellar week of microbial ecology, with talks and poster presentations given on a wide array of topics from researchers around the globe. For many people, including myself, it was their first in-person conference since the pandemic. I think everyone was grateful to be able to catch-up and network in person again, and the social programme was certainly appreciated and enjoyed by all. In addition to this, the beautiful setting of Lausanne, looking over Lac Léman and the Alps, was the icing on the cake!

In terms of the scientific programme, the daily keynote lectures were well curated and thought-provoking. I also attended many interesting talks in the sessions on microbial ecology of marine, soil, and deep subsurface environments; global biogeochemical cycles; microbes in extreme environments; and microbes in a changing world. The scale of the ISME conference provided a great opportunity both to catch-up on research relevant to my current postdoctoral position, and to hear about other fields that interest me and may hold opportunities for the future.

I presented a poster on the (bio)degradation of polystyrene in the ocean and a novel method to track this in laboratory experiments using stable isotope techniques. The poster was well received, and led to many interesting discussions during the two-hour poster session where I presented my work. There were several other researchers working on microbial degradation of plastics and microplastics at the conference, and it was helpful to discuss our progress so far with them. I received useful suggestions to improve our experimental set-up in future, as well as sharing our novel approach with interested parties.

It was valuable to meet other researchers and catch-up with collaborators working in plastic biodegradation by attending their talks and posters as well. I also attended number of presentations on stable isotope probing, which is a technique that is central to my current work, but relatively new to me. Overall, I am grateful to EBNet for the opportunity to attend ISME18. It was a wonderful opportunity to catch-up with old and new colleagues, and to learn about current, state of the art research in my field of microbial ecology.



Dr Sophie Holland at ISME18. Use the QR code to view the video where she describes her work.