MICROPLASTICS ANALYSIS AND CHARACTERIZATION IN ENVIRONMENTAL SAMPLES. **Sandy Zhao**, Shimadzu (Mandel), 2 Admiral Place, Guelph, ON N1G 4N4, Canada.

Microplastics, tiny plastic particles measuring just a few micrometers, pose significant risks to marine ecosystems and human health. Despite increasing research, the full extent of their environmental impact remains unclear, emphasizing the need for innovative analytical methods. Advancement in physical characterization techniques such as IR/Raman microscopy and quantitative pyrolysis-GCMS is presented. These methods offer complementary insights in the hope to contribute to the development of effective strategies for mitigating the impact of microplastics pollution.