

Fellowship Profile

IAEA PROGRAMS
AT ARGONNE NATIONAL LABORATORY

Marine Environment & Coastal Zone Management

TRAINING SUMMARY

I participated in a training program at the University of Wisconsin - Superior that was geared towards learning, understanding and performing basic techniques with Microplastic Analysis. Some of the major elements of the training program included equipment and reagent preparation using the SUMMIT X Fourier Transform InfraRed Spectrometer. It also included field sampling and treatment of samples. This part of the program was incorporated by taking samples in the field which consisted of beach sediment samples as well as water samples using a manta net and discrete water samples followed by treatment of the samples in the laboratory.

The training resulted in a better understanding of the theoretical principles behind microplastic monitoring as well as the principles of operation the equipment and techniques. Overall, I gained a deeper understanding of the sources of microplastics in our environment and how human activity can lead to the generation and proliferation of microplastics.

WHATS NEXT?

This training has prepared me to manage equipment and apparatus for the sampling, analysis and reporting of microplastic in both coastal and marine environments. One of the biggest takes away from this training is that it has taught me how to more efficiently manage the resources in my laboratory and how I can adapt the resources I have to achieve the results required. My home laboratory is currently in a transition state of receiving instrumentation and replacing or phasing out older instrumentation. It impacted not just technical skills but also the planning and soft skills will become useful to me in assisting this transition phase at my home laboratory. Also the presentations and teachings I had to do during the course of this training will assist me in teaching other laboratory personnel microplastics analysis techniques.



"This fellowship was a wonderful and learning experience that is second to none. This training has impacted my professional career in quite a positive manner and taught me that I should not take my environment for granted."

Shane Ramsammy - Trinidad & Tobago

September 25th - December 12th 2023

Hosted by: University of Wisconsin