



ENHANCING RESEARCH AND TEACHING WITH THE MILESTONE DMA-80 *evo*



| CUSTOMER Prof. Ruth Gyure, Ph.D. is a Professor at the Department of Biological and Environmental Sciences at the Western Connecticut State University in Danbury, CT

| CHALLENGE Perform mercury analysis on solid and liquid matrices while avoiding spending lots of time and money on sample preparation and costly consumables.

| SOLUTION The DMA-80 was brought on campus as an instrument that is very easy to use and maintain. The instructions, manuals and customer service are all outstanding.

| APPLICATION

Each project at WCSU requires mercury analysis of 50 – 200 samples including – soils, waters, fish, reptiles, invertebrates and plants having a wide range of mercury concentration from ppb to ppm levels. We average 3 – 5 projects per academic year. One of my current bio remediation projects involves identifying areas where soil is contaminated with mercury and using genetically modified plants to remove mercury from soil.



| LIFE BEFORE DMA-80 IMPLEMENTATION

We initially had to outsource our mercury testing for mercury with the lack of an in-house instrument. This was an expensive process and required the use of grant money for funding the research and limited our ability to include smaller student based projects. After evaluating the all of the options we decided to get the direct mercury analysis technology in-house so that we could analyze all our samples in a cost-effective way and also provide the instrumentation as a teaching tool for students.

LAB PROFILE DMA-80 | ACADEMIA



| THE MILESTONE DMA-80

We decided to move forward with Milestone's DMA-80 as opposed to CVAA because it was cost and time effective, easy to operate and very easy to teach students and researchers. CVAA requires additional instrumentation, expensive acids and consumables for sample preparation adding to our costs.

The DMA-80 was a great way to bypass sample preparation and obtain a direct analysis of the mercury concentration in our samples. We purchased the DMA-80 because it was a beautiful instrument - not only easy to use but the design, and functionality is simple/transparent, sturdy and reliable.

"I never had an instrument that I felt so confident using, maintaining and servicing (in most cases I am able to troubleshoot and solve problems on my own)."

The instructions, manual, and customer service are all outstanding.



| BENEFITS OF THE DMA-80

We have been able to expand our research program and complete studies that would not have been possible before. In addition we have also been able to offer some wonderful outreach activities to CT middle schools and high schools. With increasing interest in mercury remediation with our undergraduate and graduate students, the DMA-80 has provided a good way to get them into the lab and doing the research (otherwise the method would be unaffordable and sample number severely limited – adversely affecting the quality of the studies).

Further, I have been able to help other colleagues who need sample sets analyzed as part of their own research program.

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– Prof. Ruth Gyure, Ph.D.

| ABOUT MILESTONE

With over 50 patents and more than 20,000 instruments installed in laboratories around the world, Milestone has been widely recognized as the global leader in metals prep technology for the past 30 years. Committed to providing safe, reliable and flexible platforms to enhance your lab's productivity, customers worldwide look to Milestone for their metals digestion, organic extractions, mercury analysis and clean chemistry processing needs.



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