

# MASS SPECTROMETRY

*Weekly Newsletters (June 6 - June 12, 2021)*



## THEME

*The origins of the chemical weaponry of the bombardier beetle (spray a toxic chemical that kills small predators) were discovered using mass spectrometry.*

## METAPHOR

*Historically, too much helium was necessary for the iodide plasma generation used in mass spectrometry. Too much of a good thing can actually become a bad thing, as helium is detrimental to both the environment and your pocketbook.*



## INSPIRATION

*Dr. Athula Attygalle a Sri Lankan scientist and leading professor at Stevens Institute of Technology was awarded "Inventor of the Year" (2014) and the Edison Patent Award (2017) for his helium-plasma ionization technique.*



# CAREERS

*Mass spectrometry scientists use mass spectrometry (a method used to detect the presence of particular molecules in a sample based on the unique mass-to-charge ratio of ions) for a variety of purposes including: drug testing and discovery, food contamination detection, pesticide residue analysis, isotope ratio determination, protein identification, and carbon dating.*



## TIPS

*Specializing in mass spectrometry can actually broaden your career options, as the technique is used for a variety of disciplines, including pharmaceuticals, medicine, forensic science, and environmental science.*



## INTERVIEW PREP

*For your next virtual interview: aside from good lighting and a simple background, consider wearing a solid colored top (patterns can look busy on a screen), looking at the camera (mimics eye contact), and having a back-up plan (should technology fail).*

# CONTACT SSCC

*For help picking or pursuing a career, contact **Dr. Cassie Briggs** at Success in Science Career Coaching. She specializes in helping high-school thru grad/professional students find their career confidence in STEM.*

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