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The invention claimed is:

1. An interface apparatus for the analysis of liquid sample having carbon content by an accelerator mass spectrometer comprising:

- a wire,
- spaced paint droplets on the wire,
- a droplet maker for producing droplets of the liquid sample and placing said droplets of the liquid sample on said spaced paint droplets on said wire,
- a system that converts the carbon content of said droplets of the liquid sample to carbon dioxide gas in a helium stream,
- a gas-accepting ion source connected to the accelerator mass spectrometer that receives said carbon dioxide gas of the sample in a helium stream and introduces said carbon dioxide gas of the sample into the accelerator mass spectrometer for analysis, and
- a system for moving said wire from said droplet maker to said system that converts the carbon content of said droplets of the liquid sample to carbon dioxide gas in a helium stream.

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2. An interface apparatus for the analysis of liquid sample having carbon content by an accelerator mass spectrometer comprising:

- a wire,
- spaced solder droplets on the wire,
- a droplet maker for producing droplets of the liquid sample and placing said droplets of the liquid sample on said spaced solder droplets on said wire,
- a system that converts the carbon content of said droplets of the liquid sample to carbon dioxide gas in a helium stream,
- a gas-accepting ion source connected to the accelerator mass spectrometer that receives said carbon dioxide gas of the sample in a helium stream and introduces said carbon dioxide gas of the sample into the accelerator mass spectrometer for analysis, and
- a system for moving said wire from said droplet maker to said system that converts the carbon content of said droplets of the liquid sample to carbon dioxide gas in a helium stream.

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