

## Vortex Capture Probe

### Disclosure Number

201403401

### Technology Summary

The vortex capture probe provides for capture of material from a laser ablation plume into a continuous flow stream of solvent enabling the means for uninterrupted sampling, transport and ionization of collected material for coupling with mass spectral analysis, including spot sampling and chemical imaging. The design of the vortex capture probe provides capture solvent and gas flow dynamics that result in laser ablation plume confinement, high plume capture efficiency, dissolution and ultimately efficient analyte ionization and detection.

### Inventor

VAN BERKEL, GARY J  
Chemical Sciences Division

### Licensing Contact

CALDWELL, JENNIFER T

UT-Battelle, LLC

Oak Ridge National Laboratory

Rm 137, Bldg 4500N6196

1 Bethel Valley Road

Oak Ridge, TN 37831

Office Phone: (865) 574-4180

E-Mail: [CALDWELLJT@ORNL.GOV](mailto:CALDWELLJT@ORNL.GOV)