

2010 Winter Conference on Plasma Spectrochemistry Fort Myers, Florida, January 4 – 9, 2010

CONFERENCE PRESENTATION TITLE AND ABSTRACT SUBMISSION FORM

Submission Deadline: July 10, 2009

I (we) plan to submit a paper as a ☐ lecture (15 min), ☐ poster, ☐ computer poster, ☐ either.

TITLE Single particle- inductively coupled plasma mass spectrometry of metal-containing nanomaterial in surface waters around Las Vegas, Nevada, USA

AUTHOR NAME(S) [give full names of all authors, underline presenting author]:

Edward M. Heithmar¹, Emily Siska²

COMPLETE POSTAL AND E-MAIL ADDRESS(ES) [give full address of all authors]:

¹US EPA Office of Research and Development

944 E. Harmon Ave

Las Vegas, NV 89119

heithmar.ed@epa.gov

²Student-services contractor to US EPA ORD, Las Vegas, NV

Please type a 50-word descriptive abstract, sign below, and return this form by July 10, 2009, to 2010 Winter Conference, Attn: R. Barnes, ICP Information Newsletter, P.O. Box 666, Hadley, MA 01035-0666, or 18241 Beauty Berry Ct., Lehigh Acres, FL 33972-7525 USA; fax (239) 674-9431, e-mail wc2010@chem.umass.edu

Detection and characterization of metal-based nanomaterials in environmental compartments is challenging due to the low concentration of the materials and the ubiquity of many metals in dissolved form. SP-ICPMS provides screening level information on metal-bearing nanoparticle concentration and metal mass in individual nanoparticles. Application of the technique to screening urban surface water for nanomaterials will be presented.

CLASSIFICATION. Which of the following best describes your paper?

A. Symposium:

☐ **Sample introduction/transport phenomenon**, ☐ Micronebulizers, flow processing, ☐ Elemental speciation, ☐ Chromatography and plasma detectors, ☐ Automation and plasma instrumentation, ☐ Artificial intelligence, ☐ Chemometrics, Software, ☐ On-line and remote analysis, ☐ Sample preparation and treatment, ☐ Spectroscopic standards and reference materials, ☐ Excitation mechanisms and plasma phenomena, ☐ Laser-assisted plasma spectrochemistry, ☐ Glow discharge, ☐ Teaching spectroscopy, ☐ Plasma source mass spectrometry, ☐ Stable isotope analysis, ☐ Quality assurance.

B. Application:

☐ Agriculture/Botany, ☐ Biology, ☐ Chemicals, ☐ Energy, ☐ **Environment**, ☐ Food, ☐ Geology, ☐ High-purity materials, ☐ Industrial products, ☐ Medicine/Clinical/Forensic, ☐ Metals, ☐ Petroleum, ☐ Semi/superconductor, ☐ Stable isotopes, ☐ Water, ☐ Other _____; ☐ Workshop on New Plasma Instrumentation

PUBLICATION. Which of the following best describes your intentions for publication of the proposed paper?

☐ submission to Conference proceeding journal:

☐ *Analytical and Bioanalytical Chemistry* or ☐ *Journal of Analytical Atomic Spectrometry*.

☐ submission to *ICP Information Newsletter*. ☐ submission to another journal. ☐ no plan to submit manuscript.

CERTIFICATION.

I (we) certify that the material to be presented represents original research or development, which at the time of the Conference will previously not have been published or presented in public.

SIGNATURE _____ DATE _____

COMPLETE MAILING ADDRESS (if not included above):

TELEPHONE/FAX/EMAIL:

.....
Received: Manuscript No. Paper Registration 2010- _____ - _____