

# ASA, CSSA, and SSSA 2010 International Annual Meetings

Oct. 31-Nov. 3 | Long Beach, CA

## Green Revolution 2.0: Food+Energy and Environmental Security

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### Success!

- The 2010 Annual Meetings, "Green Revolution 2.0: Food + Energy and Environmental Security," was a success. Thank you to all of the attendees, exhibitors, sponsors, donors, vendors, and volunteers.
- Save the date for next year: **Oct. 16-19, 2011**, San Antonio, TX.

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*American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America will host 3,000 scientists, professionals, educators, and students to the 2010 International Annual Meetings, Oct. 31-Nov. 3 in Long Beach, CA.*

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## ASA, CSSA, and SSSA 2010 International Annual Meetings

Oct. 31-Nov. 4 | Long Beach, CA



### Green Revolution 2.0: Food+Energy and Environmental Security

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#### 94-1 Quantification of Phase Distributions in Porous Media with High-Resolution Benchtop Micro-CT.

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Monday, November 1, 2010: 1:15 PM

Hyatt Regency Long Beach, Shoreline B, First Floor

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(2)University of Arizona, Tucson, AZ

Recent technological advances and steadily increasing computational capabilities led to the development of a new generation of benchtop X-Ray Micro-Computed Tomography (M-CT) systems with maximum resolution and image quality comparable to synchrotron M-CT. The objective of the presented study was to evaluate and optimize the potential of an advanced, high-resolution benchtop M-CT system for quantification of phase distributions in artificial and natural porous media. Effects of metal filters and various acquisition parameters (i.e. total rotation, rotation step, and radiograph frame averaging) on image quality and acquisition time were evaluated. Impacts of sample size and scanning resolution on CT-derived porosities and pore-size distributions are illustrated. Radiograph inversion and advanced three-phase segmentation methods are discussed.

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