

**November 15<sup>th</sup> 2011 Joint ASM and Capital District  
Microscopy and Microanalysis Society  
2011 Materials Poster & Micrograph Contest and Exhibition  
Russell Sage Dining Hall, RPI (Troy, NY)**

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**Poster Viewing and Social Hour  
5:00 - 6:30 pm**

Hors d'oeuvres and Cash bar

**Posters: 1<sup>st</sup> Place - \$200 2<sup>nd</sup> Place - \$100  
Micrographs: 1<sup>st</sup> Place - \$100**

Professional, Undergraduate, and Graduate Student Categories

Student winners receive complimentary registration to  
the 2011 Local ASM Spring Symposium  
and a one year membership in CDMMS

Contact Mike Marko or Brittany Hamilton for an entry form:  
marko@wadsworth.org, 518-474-7049 or  
hamilton.brittany@gmail.com, 518-395-4997  
Entry forms must be submitted by Friday, Nov. 4<sup>th</sup>

**Dinner  
6:30 - 8:30 pm**

**Fresh Mesclun Salad**

**Chicken Piccata:** Boneless breast of chicken lightly sautéed and served  
in a light lemon sauce with capers

- or -

**Eggplant Roulade:** Eggplant roulade stuffed with wild mushrooms and  
tofu, ricotta and roasted plum tomato sauce and mozzarella

Please register your dinner selection by noon on Friday, Nov 4<sup>th</sup> by  
contacting Brittany Hamilton at [hamilton.brittany@gmail.com](mailto:hamilton.brittany@gmail.com) or 395-4997

\$20/professionals and guests; \$10/retirees; \$5/students

**“A New Method for Quantitative Phase Analysis Using  
Backscattered Electron Imagery: Examples from Martian Meteorites”**

**E.P. Vicenzi**

Smithsonian Institution, Museum Conservation Institute

During the 2003-2004 field season to the Miller Range (MIL), the Antarctic Search for Meteorites (ANSMET) team recovered MIL 03346, deemed to be Martian in origin. This stone is a cumulate of pyroxene crystals  $[(Mg,Fe)CaSi_2O_6]$  with rare olivine  $[(Mg,Fe)_2SiO_4]$  grains erupted by a Martian volcano some 1.3 billion years ago. The crystal size of both minerals are on the order of 100's of micrometers in diameter and are set in a fine-grained matrix (down to the submicrometer scale) where multiply saturated phases are complexly intergrown. The 2009-2010 ANSMET team returned to the Miller Range and collected three additional meteorites; namely, MIL 090030, MIL 090032, and MIL 090136. These three specimens share a number of petrographic features with MIL 03346 and therefore these stones are thought to be derived from the same parent meteorite. In order to rigorously evaluate the microstructure of these rare and valuable meteorites, a technique has been developed that rapidly and quantitatively analyzes a specimen's chemical phases.

*Directions to Russell Sage Dining Hall at RPI:*

**Route 7 East:** Cross the Collar City Bridge and follow signs for Hoosick Street. At the 4th traffic light, **turn right onto 15<sup>th</sup> Street**. Continue through the third traffic light on 15<sup>th</sup> Street. Signs for parking for the **armory parking lot will be on the left** immediately following the pedestrian bridge. No parking passes are needed after 5 p.m.

Walking from the armory parking lot (P1) to the Sage Dining Hall: Cross 15<sup>th</sup> street using the pedestrian bridge. The Sage Dining Hall will be on the right after passing the Quad buildings.

