# Doing Chemistry at the Art/Archaeology Interface

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The archaeological chemical rewards of spending a sabbatical year in Israel and Italy will be discussed along with modern methods used to examine both ancient and modern artifacts. The archaeological work in Israel involved analysis of ancient pigments and dyes found on excavated materials from caves in the Judean desert and the ancient fortress of Masada. Textiles from the "Cave of the Warrior" were examined from their pigment content. The work in Italy involved examination of medieval artists' manuals for recipes for blue pigments, which were then carried out and characterized, with some surprising results. Additional applications of the methods of archaeological chemistry to such famous artifacts as the forgeries of Han van Meegeran and the Shroud of Turin will be discussed, including some evidence that the radiocarbon date of the shroud may not be valid because of fire damage it experienced by the Shroud in 1532. Pros and cons will be discussed.

6:00-6:30 pm Reception, Howell Hall Atrium
6:30-7:15 pm Dinner, Nigh University Center, Heritage, Room 326
7:15-8:15 pm Presentation
University of Central Oklahoma,
Edmond, OK
http://www.uco.edu/

## Menu, Fajita Buffet

Beef and chicken fajita strips
tossed in grilled peppers and onions
beside warm flour tortillas
Spanish rice and refried beans
shredded cheddar, sour cream, guacamole,
shaved lettuce and tomatoes
cinnamon churros with warm honey

#### Cost

\$20 members \$5 students



LICO campus mar

#### **RSVP Deadline**

Monday, February 20<sup>th</sup>, noon Contact: Carla Supon phone: 405-974-5732 email: csupon@uco.edu

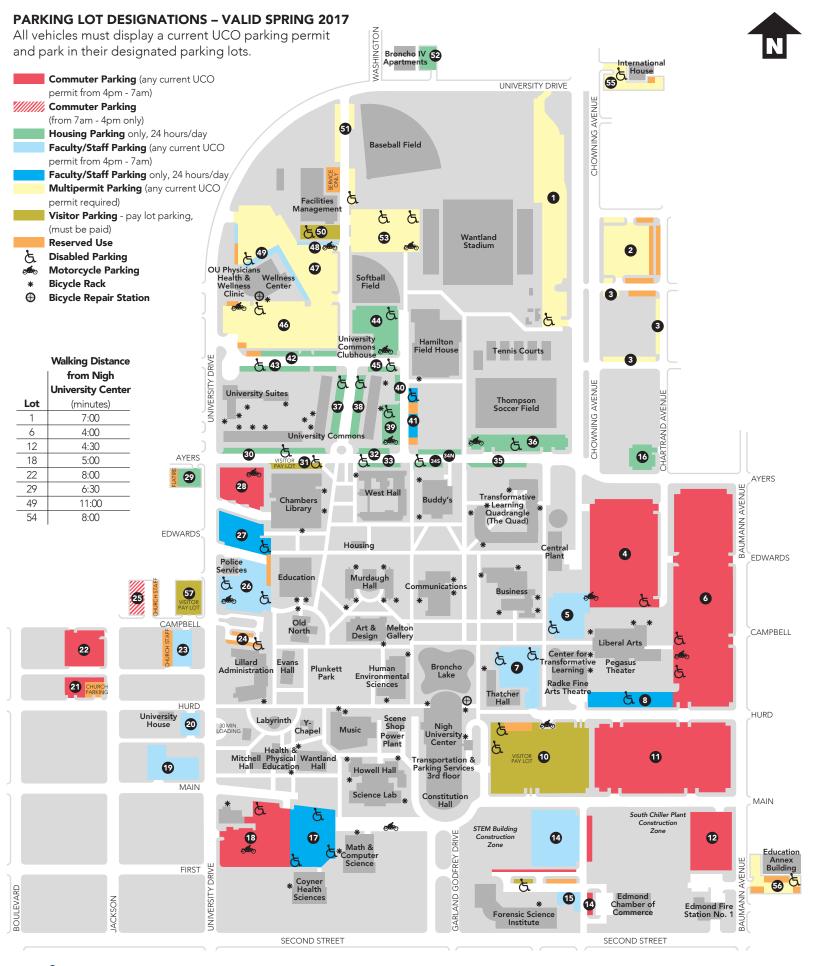
Vegetarian option available. Please indicate when you RSVP

<u>Directions</u> Campus map (QR above or see page 2) Paid parking is available in the Visitor Lot, east of the Nigh University Center. The Howell Hall Atrium is on the ground floor between Howell Hall and the Howell Hall Laboratory Annex Building. The Heritage room is on the third floor to the right of the central stairway.

# Mary Virginia Orna Biographical Sketch

Sister Mary Virginia Orna, O.S.U. (Order of Saint Ursula) is professor of chemistry at the College of New Rochelle and Editor-at-Large, Chemical Heritage magazine. She has lectured and published widely in the areas of color chemistry and archaeological chemistry. She is active in several divisions of the American Chemical Society, having served as chair of the History and Chemical Education Divisions. She is a recipient of the following major awards: the 1984 CMA Catalyst Award for excellence in college chemistry teaching, the 1989 New York State Professor of the Year and National Gold Medalist, the 1989 Merck Innovation Award, the 1996 ACS Visiting Scientist

Award, the 1996 James Flack Norris Award, the 1999 ACS George C. Pimentel Award in Chemical Education, and the 2001 New England Association of Chemistry Teachers J. A. Timm Award for excellence in chemistry teaching. She is presently president of ChemSource,Inc., a major effort in chemistry teacher preparation and enhancement funded by the National Science Foundation. She was a Fulbright Fellow in Israel (1994-95), where she lectured at The Hebrew University, The Weizmann Institute of Science, Shenkar College of Textile Technology, 2008 Henry Hill Award, and 2009 ACS Volunteer Service Award.





### THE BEST PLACES TO PARK THROUGHOUT THE DAY!

If you arrive between Look for open spaces
7 – 9am .... In all parking lots
9 – 11am .... North and east side of campus

11am - 3pm .... North of Ayers