

**Thursday, September 11, 2014**

***Chemistry & the Arts Lecture Series***

**Memorial Art Gallery - 500 University Ave., Rochester, NY**

**7:00 pm: Dr. Mary Virginia Orna - College of New Rochelle**

***Five Thousand Years of Chemistry: Uncovering the Secrets  
of Ancient & Medieval Artisans through Chemistry***

This lecture will discuss how modern chemical methods can be used to examine both ancient and medieval artifacts. 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. Pigments in medieval manuscripts formed the basis of further work on colorants. In addition, medieval artists' manuals were examined for recipes for blue pigments which were then carried out and these pigments were characterized with some surprising results.

**Sister Mary Virginia Orna**, O.S.U. (Order of Saint Ursula), Professor of Chemistry at the College of New Rochelle, received her Ph.D. in analytical chemistry from Fordham University. She is Editor-at-Large of Chemical Heritage magazine, former Director of Educational Services at the Chemical Heritage Foundation, and former Publications Coordinator of the Journal of Chemical Education. She has lectured and published widely in the areas of color chemistry and archaeological chemistry, including authoring 5 books and co-editing 9 others. She is active in several divisions of the ACS, having served as Chair, Program Chair and Treasurer of the Division of the History of Chemistry and is currently serving as ACS Councilor and a member of the ACS Local Section Activities Committee. Her teaching and research has been recognized by numerous awards, including the Chemical Manufacturing Association's Catalyst Award for Excellence in College Chemistry Teaching (1984), the Merck Innovation Award (1989), the James Flack Norris Award for Outstanding Achievement in the Teaching of Chemistry (1996), the ACS's George C. Pimentel Award in Chemical Education (1999), the Henry Hill Award (2008), and the 2009 ACS Award for Volunteer Service. As a Fulbright Fellow in Israel (1994-95) she lectured at The Hebrew University, The Weizmann Institute of Science and Shenkar College of Textile Technology and did research on ancient middle-eastern artifacts in collaboration with the Israel Antiquities Authority, the Israel Museum and the Edelstein Center for the Analysis of Middle Eastern Textiles and Related Artifacts. She is currently President of *ChemSource, Inc.* a major effort in chemistry teacher preparation and enhancement funded by the NSF and a national tour speaker for the American Chemical Society. Her forthcoming book, "The Lost Elements: The Periodic Table's Shadow Side" will be published by Oxford University Press in November.

**8:00 – 9:30 p.m.: Reception – Bausch & Lomb Parlor**

**Further information on this and other Rochester ACS Section events is available  
at [www.Rochester.sites.ACS.org](http://www.Rochester.sites.ACS.org)**