

Antique Miner's lamp with Kunzite Crystals

Scholarly Treasure:

The Role of Gems in a University Setting

Presentation by Elise A. Skalwold

A visual feast overviewing the author's paper presented at the first-ever Gemological Session of the historic 125th Anniversary Annual Meeting of the Geological Society of America (GSA) held in Denver, Colorado in October 2013.

The Gemological Session of the 125th Anniversary Annual Meeting of the Geological Society of America Paper No. 375-3 (abstract):

Gems and gem-related programs are uniquely suited for an academic environment, and diverse gem collections are invaluable educational assets for a university. The vast majority are derived from minerals, therefore the science of gemology is intrinsically linked to that of geological studies, including optical mineralogy, crystallography, geophysics, petrography, mineral physics and mining - just to name a few. They can also attract those interested in the fine arts, economics, social issues, history, archeology, environmental science, materials science and, in the case of gems of organic origin, the biological sciences as well. Therefore they can be anticipated to attract added resources and notoriety to a geological department.

Gemology, the science of gem materials, investigates the properties which make gems desirable and uses (usually) non-destructive technique in their identification and characterization. At its heart a forensic science, gemology encompasses a range of skills depending on the setting, from a simple triplet loupe used in the field, to the advanced instrumentation used in gemological and other types of high-tech laboratories (e.g.: microtomography, Raman, FTIR, EDXRF and UV-Vis spectroscopy).

Gems with inclusions offer an exciting area of expertise found at all levels of study, from vocational to the highest levels of academia. Understanding these microscopic clues can tell us much about minerals and the gems themselves, including their identity, origin and possible treatment, making polished gems veritable windows into both geologic processes and the gem's own history.

Gems are ideally suited for use as teaching models, for attracting scholarship through research activities, and for educating the public through community outreach. Gem displays in university

museums, along with academic programs and non-credit course offerings related to gems may inspire career paths and academic pursuits not previously considered, while also providing enrichment to the overall academic experience.

Excerpted from: Skalwold, E.A. and Bassett, W.A. (2013) Scholarly treasure: the role of gems in a university setting 125th Anniversary Annual Meeting of the Geological Society of America (GSA) Paper No. 375-3 . Denver, CO., 27-30 October 2013



Elise A. Skalwold is an Accredited Senior Gemologist, independent researcher, educator, author, and photographer. She has served as Consulting Gemological Curator at her alma mater Cornell University (B.Sc. 1982) and is Contributing Editor and author for the quarterly column *G&G Micro-World* featured in *Gems & Gemology*, the peer-reviewed scientific journal of the Gemological Institute of America (GIA). Ms. Skalwold is a Graduate Gemologist (G.G.) trained in residence at the Gemological Institute of America Robert Mouawad Campus located in Carlsbad, CA. While living in Thailand she worked in the famous gem markets of both Chanthaburi and Bangkok and pursued studies at the Gem & Jewelry Institute of Thailand for which she was subsequently elected a Fellow of the Gemmological Association of Great Britain (F.G.A.) in London.

As well as having co-authored the 415 page book <u>The Edward</u> <u>Arthur Metzger Gem Collection</u> and presently working on a companion volume to it, Ms. Skalwold is an author/co-author of gemology and mineralogy papers featured in *Rocks & Minerals Magazine, Gems & Gemology, The Journal of Gemmology, InColor,* and

(most proudly) two optical mineralogy booklets published by the Mineralogical Society of America. Passionate about her work, she takes great pride in representing gemology as a relevant geoscience around the world and with having done so at Cornell University; birthplace of the 125+ year-old Geological Society of America (GSA). A quintessential theme throughout her work was represented by the paper "Scholarly Treasure: The Role of Gems in a University Setting" presented at the 2013 GIA-sponsored first-ever Gemological Session of the GSA (for her review of the event, please see: "Gemology Bears Triumphant Tidings: a Review of the Historic 125th Anniversary Annual Meeting of the Geological Society of America" <u>http://www.nordskip.com/GSA_Gemology_Session.pdf</u>).

An internationally sought-after speaker, her engagements have recently included: 2018 Keynote Speaker at the Scottish Gemmological Association Conference in Dullatur, Scotland; the Scandinavian Gem Symposium in Kisa, Sweden; the Accredited Gemologists Association Conference in Tucson; several chapters of the Gemological Institute of America Alumni Association; Banquet Speaker, as well as, past speaker for the New York Mineralogical Club (co-founded by George F. Kunz in 1886); repeat speaker for the Rochester Mineralogical Symposium; and was the only female speaker for the prestigious 11th Annual Sinkankas Symposium [Ruby] held at the Gemological Institute of America in Carlsbad, CA.