



## A Review: Twentieth Sinkankas Symposium

by Lisbet Thoresen

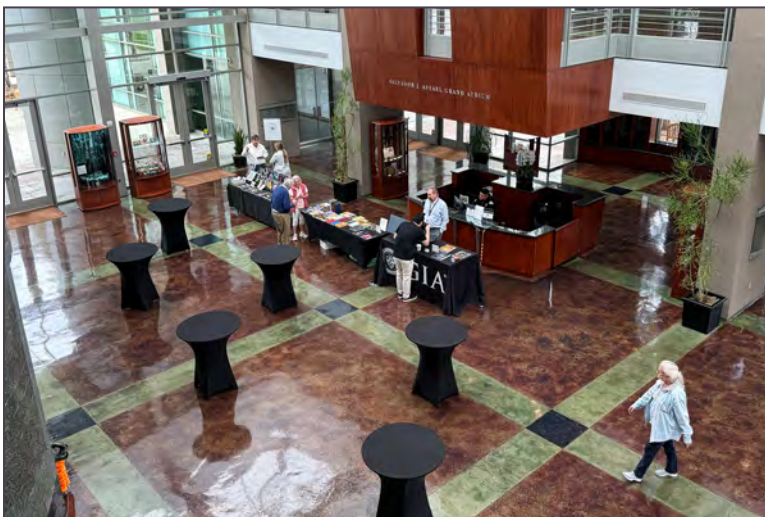
*“This is Burma, and it will be quite unlike any land you know about.”*

*— Rudyard Kipling*

**O**PENING REMARKS from **Robert Weldon**, mellifluous raconteur and emcee of the Sinkankas Symposium, set the tone for a perennial event that promised and delivered a marvelous full-day program. This year, 125 attendees gathered to hear from an impressive roster of speakers. Robert harkened back to **Roger Merk’s** original idea for honoring his friend **John Sinkankas** with topics that encompassed the breadth of his keen appreciation for minerals ranging from scientific to historical to

economic, aesthetic, and artistic. This year, ten experts in their fields talked about gems from the Mogok Stone Tract, one of the world’s most storied and prolific gem-producing regions. A consistent perspective of Burma’s specialness emanated from the speakers who had traveled there (37 times for **Bill Larson**). Drawing upon personal experiences with the geography, landscape, and people, they described a country whose beauty and magical allure are deeply affecting.

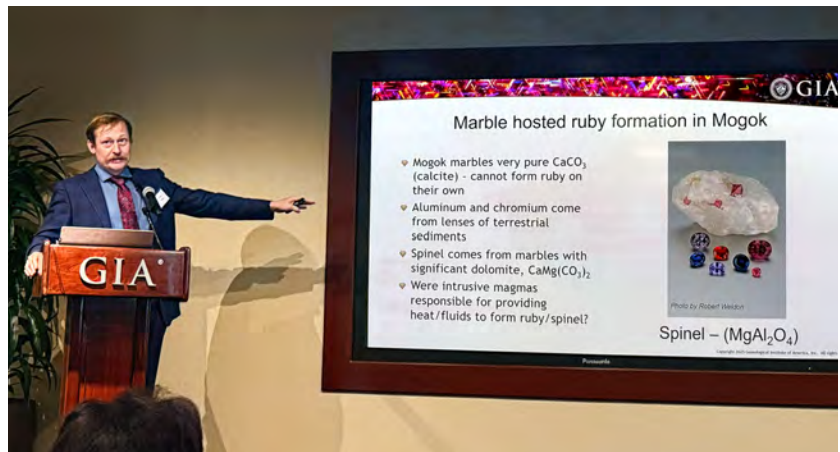
Excellent graphics helped explain the geological processes and local variations in the rock-forming environment that gave rise to an astonishing number of rocks and minerals—all of them stunningly beautiful and distinctive. Apparently, there can be



**Above.** Twentieth Sinkankas Symposium speakers and organizers at GIA (left to right): Laichen Sun, Tao Hsu, Aaron Palke, Rachele Turnier, Stuart Overlin, Stuart Robertson, Robert Weldon, Lisbet Thoresen, Dona Dirlam, Richard Hughes, Roland Schluessel, Bill Larson, and Nathan Renfro.

**Left.** The grand atrium, where booksellers Gloria Staebler and Ann Frazier and GIA Instruments are ready to welcome symposium attendees. GIA World Headquarters and Robert Mouawad Campus, Carlsbad, California. April 25, 2026.

great variability not only within a single gem variety from one deposit to another, but also within individual gem crystals, for example the strong zonation of blue sapphires from Thurein-taung as compared against the limited zonation of sapphires from Lay-thar. GIA scientists **Rachelle Turnier** and **Aaron Palke** did a masterful job of explaining with meticulous clarity the complexity involved in unraveling the mystery of how geochemistry associates a gem with a specific locality and what makes Mogok so special in this regard. GIA's field gemologist, **Wim Vertriest**, discussed the framework for how GIA evaluates the reliability of the data from gems collected for analytical provenancing, which depends on scrupulous documentation of where and how sample specimens are sourced. He opened a window on the culture of mining and dealing gems in Burma, a theme that other speakers would illuminate further.



**Top right.** Rachelle Turnier discusses the geochemical signatures of blue sapphires from deposits in Mogok, with a slide at right of the speaker and her compatriots on a field trip to "Ruby Land" in 2019.

**Middle right.** Aaron Palke discusses the geology of Mogok and the local variations that gave rise to some of the world's finest and most distinctive gems.

**Bottom right.** Going to the source. Wim Vertriest (middle left) and Aaron Palke (right) examine assorted gem crystals brought by members of mining families in Chaung-Gyi, Mogok, 2019. Photo: Robert Weldon.



**Roland Schluessel** underscored how remarkable it is that all the mineral diversity found in Burma occurs in such a small area. Mogok is an S-shaped, 30-kilometer swath of undulating valleys and hills, where up to 180,000 miners have plied their skills at perhaps 2,000 mining deposits over the past century or so. (Its recorded history dates back hundreds of years; the unwritten history extends back much further, to prehistoric epochs.) Schluessel showed some of Mogok's mines (notably at Dattaw). He described mining methods (i.e., alluvial and hard-rock mining) and the mineral products they yielded. As a gemologist and dealer with more than 35 years of industry experience, his deep knowledge and passion for gems from Burma was manifest in an exuberant presentation with beautiful images and a trove of personal anecdotes.

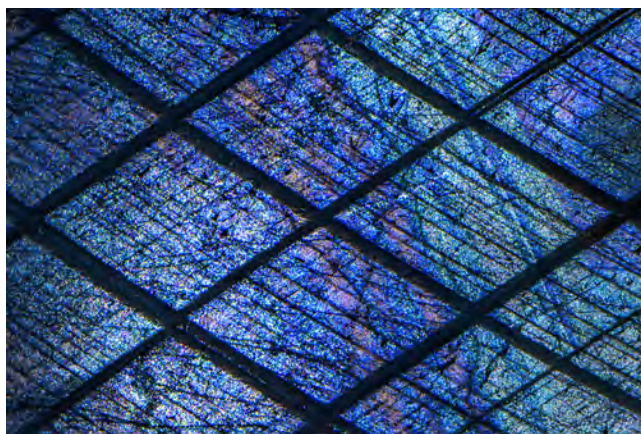
A tour of the internal world of Burmese gems reinforced the hallowed status of Mogok. **Nathan Renfro**, GIA's manager of identification of colored stones, pointed out features that are unique signatures associated exclusively with this tiny corner of the world. As **Stuart Robertson** would emphasize in his afternoon market report on Burmese gems, over the past 10 to 15 years, country of origin reports, especially a Burmese origin, can significantly enhance the value of otherwise comparable specimens from other less illustrious localities. Inclusion features, which sometimes are diagnostic for origin, now routinely play an important role in confirming the pedigree of colored stones. Nathan reiterated several times what an important resource the John Koivula Inclusion Collection was for him making photomicrographs. He explained how it enabled him to help develop GIA's inclusion library, which is now an indispensable resource for preparing country of origin reports. In addition to providing invaluable information that reveals the unique paragenesis of gemstones, Renfro shares Koivula's



**Above.** Roland Schluessel discusses the criteria for attributing the “pigeon’s blood” color to Burmese rubies, with examples shown here, including the 23.10 ct Carmen Lucia Ruby (pictured far right), now in the Smithsonian Institution.



**Right.** Mining blue sapphire at Thurein-taung, Mogok, using the *hmyaw-dwin* technique, where trenches are plowed in gem-bearing host rock and water is channeled through the trenches to concentrate the gem-bearing material. Photo: Roland Schluessel.



Lamellar twinning in a Burmese sapphire is clearly visible within the vibrantly colored field of exsolution rutile particles. Stone courtesy of the John Koivula Inclusion Collection. Photomicrograph: Nathan Renfro; field of view 10.07 mm.



Dick Hughes talked about jade nomenclature but is shown here explaining the online resources available free of charge to gemologists on his company's website at [lotusgemology.com](http://lotusgemology.com).

talent for capturing enchanting microscale landscapes contained within them. Visiting the microworld of gemstones guided by Renfro is always an intriguing and visually lush odyssey.

The afternoon session shifted focus, beginning with the peculiar and tortured history of jade nomenclature. **Richard Hughes**, co-founder of **Lotus Gemology** with wife **Wimon Manorotkul** and daughter **Billie Hughes**, has been researching and publishing articles and books on this topic for some time. He made a compelling argument for reverting to *fěi cui*, the traditional Chinese name for what westerners contorted into (pyroxene) jade, which he reminded the audience repeatedly, is a rock, not a mineral.

Hughes's presentation was a counterpoint to the morning session's immersion into the analytical methodologies used to characterize single crystal minerals. He pled the case for applying different, common-sense, practical standards to the naming of mineral aggregates such as nephrite, jade, turquoise, and lapis lazuli (Chinese *yan*), which are rocks of highly variable composition. On any topic, Hughes has a gift for setting focus on the common denominator for what stirs the passion of gem and mineral enthusiasts—beauty. Beauty distilled to its most essential, human meaning and values. Concerning *fěi cui*, the term and its meaning belong to a profoundly spiritual, culturally entrenched tradition in China,



Pearl buyer at the 56th MyanMa Gems Emporium, in Nay Pyi Taw, capital of Myanmar (Burma), 2019. Photo: Tao Hsu.

where the stone is revered. This was the key takeaway of a thoughtful discussion on jade nomenclature, which sought to reconcile mineralogical and cultural values attached to this stone of heaven.

Historian **Laichen Sun's** presentation on Burmese jadeite in China (c. 1580s–1911) provided historical and cultural context, which complemented very well the previous talk by Hughes. Sun set forth a timeline when Burmese *fěi cui* first came to the notice of the Chinese court. He traced its progressive elevation in status among gemstones, crediting the Chinese with bringing Burma to worldwide attention as the preeminent source of the very best material obtainable.

**Tao Hsu**, a GIA director in charge of educational program development, shifted focus to a discussion of Burmese pearls. She traced the history of production in cultured pearls and their varied colors over the past century or so, with golden pearls produced by gold-lipped *P. maxilla* mollusk taking center stage as one of Burma's loveliest nacreous pearls. She discussed the vagaries of a sometimes precarious industry farming pearls and bringing them to market. She also provided an overview of non-nacreous melo pearls, with their orangey hue and flame pattern in the finest specimens. Given the many famous gem minerals associated with Burma, it was refreshing to see a spotlight placed on pearls, which are so beautiful, but perhaps less well-known to non-specialists more familiar with jade, ruby, sapphire, spinel, and peridot.



Stuart Robertson discusses changes in the market value of Burma's premier gemstones.

**Stuart Robertson**, gemologist and president of **Gemworld International Inc.**, spoke about recent trends in gemstone valuations and shifting criteria of their value in recent years, especially ruby, sapphire, spinel, and peridot. Since 2020, marked increases have been seen in the “origin” premium applied to gems of otherwise comparable quality when they have a Burmese origin compared with a less illustrious pedigree. Vaunted pigeon’s blood rubies above three carats at the higher quality range are now so scarce that the resale market in “old” stones is filling the void. Peridot from Burma is currently held in higher esteem than the beautiful material coming out of Pakistan. Robertson noted that the deep green crystals skewing slightly bluish from Burma are commanding the highest prices.

The last speaker of the day was **Bill Larson**, who reminded us all that he is *raconteur par excellence*. He shared entertaining stories garnered from more than three dozen trips to Burma. His legendary shrewdness



“Burma Bill” Larson shares his experiences of visiting Mogok in search of fine crystals. Shown here is Wimon Monorotkul holding “Big Momma,” a 10,300 ct ruby Bill once owned.

and discriminating eye as a dealer and collector made for a visually stunning presentation. Bill’s enthusiasm for the people and places he encountered also reflected a deep appreciation for the beauty and wonders of the world beyond minerals. An added bonus for attendees was many of the superb Burmese crystals in his fabulous mineral collection could be viewed downstairs in GIA’s exhibition on **Temples & Treasures of South Asia**. There is nothing like seeing the real thing. Like the man himself, Bill’s superb crystal specimens and the superlatives used to describe them were, well, over the top while still being objectively true.



**John Koivula**, who was a symposium contributor for many years before passing the baton to Nathan Renfro, attended this year’s event. Warm recollections of **George Rossman**, who traditionally closed every symposium program with a discussion about color and a summary of the day’s talks, found their way into many of the day’s presentations, which included some hilarious and also some very sweet photos snapped by Bill Larson. **George Harlow**, curator emeritus at the **American Museum of Natural History**, wrote a tender remembrance about his friend and colleague for the proceedings volume, and he came to the event to pay homage to him. For many of us, it was a bittersweet opportunity to share a few wistful memories and misty-eyed regret at saying a final goodbye to the Sinkankas Symposium series, which drew to a close on its 20th anniversary.



Richard Hughes honoring George Rossman, to whom the Twentieth Sinkankas Symposium was dedicated.

## The Sinkankas Symposium: A Brief History

**How it began.** Roger Merk established the Sinkankas Symposium in 2003 to honor his best friend, John Sinkankas, who passed away the previous year at age 87. Especially for the generation that came after him, perhaps only dimly aware of his remarkable career, John Sinkankas was a legendary polymath who cast a long shadow. He was a rock, mineral, and gem enthusiastic who authored 15 books as well as innumerable articles and field and mining reports. He and wife Margorie were purveyors of fine and antiquarian books on earth science topics. They assembled one of the most impressive rare book collections in private hands (now at GIA). They also built an amazing mineral collection numbering more than 13,000 specimens. John was an accomplished lapidary artist and mineral illustrator in the tradition of the great 19th century mineral illustrators such as James Sowerby and Casimir Schmiedel.

The premise of the annual event Roger envisioned was to showcase the beauty and wonder of a different gem mineral every year in a manner consistent with Sinkankas's own interests. And so, the programs featured lectures by experts on topics ranging from the scientific aspects of



Roger Merk at SDMG's Gem Diego Show, 2006. Photo: Garry Cannon.

minerals, including geology, crystallography, chemistry, paragenesis, inclusions, and causes of color, to the practical and economic aspects of field collecting, mining, and market trends, to the aesthetic, artistic, and cultural value of gems, including the art of carving and cutting them, as well as their history and lore.



**Recent years.** The annual event was held sporadically after Roger passed away in the fall of 2015 (no event in 2016, 2020, 2024, or 2025). Covid-19 kept people isolated for two years running (the event was held online in 2021 and

2022). By the nineteenth symposium, most of the commercially important gems had been covered, so the themes shifted to important gem-producing regions, beginning with the gems and minerals of San Diego County in 2023. After a two-year hiatus,

on April 25, 2026, the twentieth and perhaps last Sinkankas Symposium was held at GIA's worldwide headquarters in Carlsbad, California. The theme was gems and minerals of Burma (Myanmar).

**Acknowledgments.** The Gemological Institute of America (GIA) has been a co-sponsor of the Sinkankas Symposium every year and hosted all of the in-person events at its beautiful worldwide headquarters in Carlsbad, California. In recent years, the Geo-Literary Society has co-hosted the event. Previously, it was the San Diego Mineral & Gem Society and Gemological Society of San Diego.

Each year the staff at the GIA Library have provided resources to the speakers and authors. This year marked the Sinkankas Symposium's 20th anniversary, and library staff had something very special to share with attendees. Dianna Parsons arranged a display of the *Bishop collection: investigations and studies in jade*. This two-volume catalogue was completed in 1906, with only 100 copies printed for presentation to heads of state and important libraries in Europe and Asia. Each volume measures 26" x 19" and weighs 75 pounds. Historically, Burma has a well-earned reputation for producing the most beautiful green jade (*fei cui*) in the world, which is showcased beautifully in the Bishop collection volume.

Every year, William Larson has supported the Sinkankas Symposium in myriad ways, material and spiritual. Some of the most stunning cut stones and crystal specimens from any given locality are lent for exhibition by the Larson family to complement the event's theme. This year, GIA curator Terri Ottaway mounted a dazzling exhibition of *Temples & Treasures of Southern Asia*, which features some of the finest-quality specimens that Burma has ever produced, many courtesy of the Larson family. They include vibrant pigeon's blood rubies on matrix; faceted royal blue sapphires alongside large and exceedingly rare natural blue crystals; cut and octahedral spinel crystals; a faceted, absinthe green peridot weighing 36.14 carats dwarfed(!) by a 4.3 cm tall blocky peridot crystal on the neighboring plinthe, also absinthe green in color, from the old mine in Pyang-guang, Bernardmyo; a case with maw-sit-sit, an ornamental stone unique to northern Burma, with slabs and blocks that show its variegated pattern and an exquisite Dreher carving of a gecko with a pulsating green color; an array of moonstones cut en cabochon - over the top for their size and quality; zircons, pearls, yellow sapphires; and last but, not least, some of the world's rarest minerals, including painite and wadeite.



Robert Weldon and Dona Dirlam have been the godparents of the Sinkankas Symposium since Roger Merk's passing. It would not have continued without their dedication and force of will. This year, GIA's Paige Hammers handled registration and event logistics. Stuart Overlin once again stepped up to provide editorial oversight of the printed proceedings volume. Lisbet Thoresen lent a hand with editorial duties, book design, and event and book promotion. Gloria Staebler and Ann Frazier brought a marvelous array of hard-to-find books and specialty publications for sale.