## Heated Corundum, the Remarkable Winston Red, and an Extraordinary Renaissance Jewel



You're in for a delectable treat with our Spring 2025 issue of *Gems & Gemology*! We cover detecting heated corundum, the rare and remarkable Winston Red diamond, and an extraordinary Renaissance jewel containing emeralds from a surprising source.

Our first paper by Dr. Wasura Soonthorntantikul and Dr. Aaron Palke presents criteria for accurate identification of three hydrogen-related peaks in the infrared spectra of certain rubies and sapphires—especially Mozambique ruby and Madagascar pink sapphire—that are diagnostic of heat treatment.

Next, lead author Dr. Gabriela Farfan and fellow colleagues offer a characterization of one of the

"...a characterization of one of the Smithsonian's rarest treasures: the 2.33 ct Winston Red diamond."

Smithsonian's rarest treasures: the 2.33 ct Winston Red diamond. The group uses observation and advanced gemological testing to delve into the gem's origin of color, demonstrating that its uniquely rare, pure crimson hue is a balance of absorption related to plastic deformation and nitrogen-related defects.

In our final article, a team of researchers led by Dr. Gérard Panczer delivers a gemological investigation of a sixteenth-century pendant linked to Catherine de' Medici, Queen of France, and François Dujardin, goldsmith to King Charles IX. This new study indicates that the two principal green gems are emeralds from Pakistan, not Colombia as previously claimed, delivering striking evidence of the sophisticated trade routes between Asia and Europe at this time.

Our regular features have much to offer as well. *Lab Notes* presents interesting reports from GIA's global laboratories. *Micro-World* provides a glimpse at the inner beauty of gemstones, highlighting intriguing inclusions that catch our contributors' eyes. As this is our Spring issue, the *Gem News International* section reports on the 2025 Tucson gem shows and covers trends, noteworthy designs, and interesting finds.

Evaluate your knowledge of our 2024 feature articles in the annual *G&G* Challenge and learn which of those articles earned a Dr. Edward J. Gübelin Most Valuable Article Award.

Finally, I'd like to acknowledge Stuart Overlin and Faizah Bhatti—two wonderful colleagues—both of whom have left our journal after nearly three decades with GIA. Between them, as managing editor and creative director, respectively, they brought great flair to our words and graphics. We wish them every success and satisfaction in their future endeavors.

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