GIA Research Finds Fluorescence Can Enhance the Appearance of Natural Diamonds

New scientific research presented by the Gemological Institute of America (GIA) suggests that fluorescence in natural diamonds—long regarded as one of the industry's most debated characteristics—generally has a neutral to positive effect on a diamond's appearance, with some stones appearing even brighter under daylight-equivalent lighting conditions. The findings were shared during a special Leadership Series session hosted by Bharat Diamond Bourse (BDB) in Mumbai.

The presentation was delivered by Mr. Sriram Natarajan, Senior Vice President, Global Laboratory Operations, GIA, and Dr. Yun Luo, Director, Metrology and Quality Control, GIA, who highlighted the institute's latest scientific research into fluorescence and its impact on the visual appearance of natural diamonds.

According to GIA, between 25% and 35% of natural diamonds exhibit some degree of fluorescence. Given the significance of this characteristic in the marketplace, greater transparency and scientific understanding have the potential to strengthen both trade confidence and consumer trust.

The research presented by GIA demonstrates that blue fluorescence generally has a neutral-to-positive impact on the appearance of natural diamonds and, in many cases, can make a diamond appear brighter in daylight-equivalent environments. For certain diamonds, fluorescence may also enhance appearance under natural daylight.

Building on these findings, GIA announced that it plans to introduce additional fluorescence observations in its Diamond Grading Reports and Diamond Dossiers beginning in the fourth quarter of this year, providing the industry with more detailed, research-based information about this naturally occurring characteristic.

Commenting on the research, Mr. Sriram

Natarajan, Senior Vice President, Global Laboratory Operations, GIA, said:

"Fluorescence has long been one of the more widely discussed and misunderstood characteristics of natural diamonds. At GIA, our research is focused on developing a science-based approach to accurately assess this phenomenon in natural diamonds. As the world's leading authority in gemology, GIA is committed to bringing greater consistency, transparency, and confidence to the global diamond industry through internationally recognized standards. We hope to share our findings on fluorescence soon, offering greater clarity for both the trade and consumers while further strengthening trust in natural diamonds."

Highlighting India's strategic role in the global diamond industry, Mr. Amit Pratihari, Managing Director, GIA India, added:

"As one of the world's largest centers for natural diamond manufacturing and trade, India plays a critical role in shaping global consumer confidence in natural diamonds. As buyers increasingly seek transparency and scientific validation, the industry must speak a common language supported by globally consistent standards. GIA's ongoing research into fluorescence is designed to bring greater clarity to a characteristic that has long been debated and misunderstood. We will continue to support India's diamond manufacturers, and retailers with enhanced capabilities and improved turnaround times, in their endeavour to communicate with

greater confidence and reinforce trust in natural diamonds across both domestic and international markets."

Speaking about the importance of the Leadership Series, Mr. Anoop Mehta, President, Bharat Diamond Bourse, said:

"As the world's largest diamond exchange, it is our constant endeavour to bring together leaders from across the global diamond industry to share the latest research, innovations, technologies, and developments that strengthen the sector and build consumer confidence. We are delighted to host GIA as part of our Leadership Series and value the opportunity it gives our members to hear first-hand about its latest research on fluorescence in natural diamonds."

The session brought together retailers, manufacturers, exporters, traders and other industry stakeholders to discuss how scientific research, globally consistent grading standards and greater transparency can help strengthen consumer confidence and support the long-term growth of the natural diamond industry.