



Gemmological
Research
Industries Inc.



Half day workshop

Screening and Identifying of Synthetic Diamonds with Standard and Advanced Instruments

Instructor: **Branko Deljanin**, B.Sc., GG, DGA, FGA, DUG,
Gemmological Research Industries Inc, Canada

June 5th, 2020 (Friday) at EGM, 460 rue Sainte Catherine Ouest, suite 913, Montréal

1pm -5pm: IDENTIFICATION of NATURAL and SYNTHETIC DIAMONDS

- **Types of diamonds** based on nitrogen and boron content
 - **Methods of growing** HPHT and CVD diamonds
 - **Inclusions** in Natural and Synthetic diamonds
 - **UV lamp** – reaction of different types of diamonds under LW and SW UV light (“PL inspector”)
 - **CPF (Cross Polarized Filters) method** and instrumentation to screen and ID diamond’s origin
 - **Screening and ID of melee and Mounted diamonds** – methods for ID and limitations
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- **COLOURLESS diamonds:** sources/producers, characteristics and identification
 - **YELLOW, BROWN and ORANGE diamonds:** sources/producers, characteristics, and ID
 - **GREEN, OLIVE and BLUE diamonds:** source/producers, characteristics and identification
 - **PINK, PURPLE and RED diamonds:** sources/producers, characteristics and identification
 - **Use of Standard Instruments** to separate Coloured Natural / Synthetic Diamonds
 - **Use of Advanced Instruments (EXA)** to separate Colourless Natural / Synthetic Diamonds

PRACTICAL WORKSHOP: Samples of Ia, IIa, IIb, Ib diamonds (natural and synthetic origin) are tested with microscopes, mini UV lamp (“PL inspector”) and with **Portable “Synthetic Diamond ID Kit”** (loupe, polariscope, light, UV lamp) and **EXA Natural Diamond detector**.

A **Certificate of Attendance** will be issued to all participants.

Cost: CDN\$300