



Gemmological
Research
Industries Inc.

1 DAY INTERMEDIATE DIAMONDS (Identifying of Synthetic Diamonds with Standard Instruments)

Previous gemmological education required

Instructor: Branko Deljanin, B.Sc., GG, DGA, FGA, DUG

Assistant: Elena Deljanin, M.Sc. FGA

9am-12.30pm: **IDENTIFICATION of NATURAL and SYNTHETIC DIAMONDS**

- **Types of diamonds** based on nitrogen and boron content
- **Colourless Natural diamonds:** sources, characteristics and identification
- **Methods of growing** HPHT and CVD diamonds
- **Inclusions** in Natural and Synthetic diamonds
- **UV lamp** – reaction of different types of diamonds under LW/ SW UV (“PL inspector”)
- **CPF (Cross Polarized Filters) method** and instrumentation to screen and ID diamonds

PRACTICAL WORKSHOP: Samples of Ia, IIa, IIb, Ib diamonds (natural synthetic origin) are tested with microscopes, PL inspector and Mini Polarioscope with Portable light

1.30-5.00pm: **SCREENING for TREATMENTS of NATURAL and SYNTHETIC DIAMONDS**

- **Testing and screening methods** for **treated diamonds** with standard instruments
- **Post treatments** of **CVD-grown** diamonds and **HPHT-grown** diamonds
- **ID of mounted synt. diamonds** with EXA instrument and screening instruments
- Problems and solution in identification of **melee natural and synthetic diamonds**

PRACTICAL WORKSHOP: Colorless Diamonds are tested with microscopes, mini UV lamps, CPF (portable polarioscopes) and portable spectrometer for natural, treated or synthetic origin

- **Portable “Synthetic Diamond ID Kit”** (loupes, polarioscope, lights, UV lamps) will be available

To register please contact Branko D at info@BrankoGems.com or 604-619-3590