



Gemmological
Research
Industries Inc.

1 DAY ADVANCED DIAMONDS (Identifying of Coloured Diamonds and Treatments with Advanced 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**

- **BROWN diamonds:** sources/producers, characteristics and identification
- **YELLOW and ORANGE diamonds:** sources/producers, characteristics, and identification
- **GREEN and CHAMELEON diamonds:** source/producers, characteristics and identification
- **BLUE diamonds:** sources/producers, characteristics and identification
- **PINK/RED diamonds:** sources/producers, characteristics and identification
- **Use of Standard Instruments** to separate Coloured Natural and Synthetic Diamonds

PRACTICAL WORKSHOP: **Microscopy** – metallic inclusions for HPHT synthetic and **UV lamp** – colours of fluorescence are giving indication of treated/synthetic origin

1.30-5.00pm: **IDENTIFICATION of TREATED NATURAL and SYNTHETIC DIAMONDS**

- **Clarity and Color Enhancements - unstable** (Fracture Filling and coating),
- **Clarity Enhancements - stable** (Traditional Lasering, KM Laser drilling)
- **Processes for colour treatments** of diamonds, natural and synthetic
- **Color Enhancements - stable** (irradiation, annealing, HPHT, multistep treatments)
- **Post treatments of HPHT-grown and CVD-grown diamonds** (irradiation, HPHT)
- **Identification methods for treated diamonds** with advanced instruments at labs
- **Certification** of treated and synthetic diamonds at gem laboratories

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

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

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