

# The Geology of Gem Deposits

## MINERALOGICAL ASSOCIATION OF CANADA SHORT COURSE

Short course organizer: Lee Groat, University of British Columbia  
May 21–22, 2007, prior to the GAC-MAC Joint Annual Meeting, Yellowknife, Canada

### Overview



This two-day short course will look at gemstones from a geological perspective. It will precede Yellowknife 2007—the joint annual meeting of the Geological Association of Canada and the Mineralogical Association of Canada, in Yellowknife, Northwest Territories, Canada. It will be a unique opportunity to experience a change of climate and a meeting north of 60°. A special



session on Diamonds: Exploration to Production - A Northern Canada Perspective and a post-conference field trip to the Canadian diamond mines, sponsored by BHP and Diavik, will complement the short course.

Gem deposits are rare because in general the conditions that promote their formation are unusual and thus worthy of scientific study. Recently, modern geological and analytical techniques have been applied to gem occurrences in Canada and elsewhere, and our models and understanding of their formation are being radically altered. This short course will review our current understanding of diamond, ruby, sapphire, and emerald deposits, but will also examine the lesser-known coloured gems.



Photos courtesy of True North Gems Inc.

### The following topics will be covered:

- **Diamonds:** *Thomas Stachel* (University of Alberta)
- **Gem corundum:** *Gaston Giuliani* (IRD et CRPG/CNRS)
- **Gem beryl:** *Lee Groat* (University of British Columbia)
- **Other gems (tsavorite, tanzanite, topaz, etc.):** *Dan Marshall* (Simon Fraser University)
- **Pegmatite gem deposits:** *Skip Simmons* (University of New Orleans)
- **Jade deposits:** *George Harlow* (American Museum of Natural History)
- **Canadian coloured gem occurrences:** *Brad Wilson* (Alpine Gems Ltd.)

Registration fees: **CDN\$425** (professional) and **CDN\$250** (students).  
Attendees must also register for at least one day of the GAC/MAC meeting.



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