



International Association of GeoChemistry

www.iagc-society.org

The Geology of Gems and Their Geographical Origin

This session began with two talks by Daniel Ichang'i, the first on the typology and geological setting of gemstones in East Africa and the second on the geology, geochemistry, and genesis of tsavorite deposits associated with graphitic gneisses in the Davis Mine in Kenya.

After tea, Stefanos Karampelas talked about emeralds from Itatiaia, Brazil, and then Isabella Pignatelli showed X-ray diffraction topography images of Colombian trapiche emeralds. The focus then shifted to ruby, with Andy Fagan's talk on the Fiskehaeset gemstone district in south-west Greenland, a new source of ruby and pink sapphire. Vincent Pardieu then spoke on amphibole-related rubies from Mozambique and how they are causing a revolution in the ruby trade. Vincent followed with this with a very interesting short film on gemstones and gem mining in East Africa.



Speakers in the gem session (left to right): Lee A. Groat (UBC), Vincent Pardieu (GIA Bangkok), Stefanos Karampelas (Gubelin Gem Lab, Lucerne), Isabella Pignatelli (CRPG-CNRS, Nancy), Gaston Giuliani (CRPG-CNRS, Nancy), Abigail Wamuny (U. Nairobi), Daniel Ichang'i (U. Nairobi), Andrew Fagan (UBC)

The session continued after lunch with Gaston Giuliani's presentation on oxygen isotope and trace element evidence for the origin of sapphire and/or ruby in the Mbuyi-Mayi kimberlite in the Democratic Republic of Congo and the Changle alkali basalt in China. Next up was a talk by Ulrike D'Haenens-Johansson on advances in quality and identification methods for near-colourless CVD and HPHT synthetic gem diamonds.

Overall it was an excellent session that illustrated once again that the study of gems and gem deposits has come of age as an important area of mineralogical science.

Lee A. Groat, University of British Columbia

2015 JOINT ASSEMBLY, MONTRÉAL, 3–7 MAY 2015



Offered in conjunction with the Joint Assembly in 2015 will be a short course entitled Developments in Uranium Deposits, convened by Michel Cuney (CNRS) and Kurtis Kyser (Queen's University), and a Berry School entitled Applications of TEM-FIB-SEM Methods to Geomaterials, convened by Hojatollah Vali and Robert F. Martin of McGill University and Luiz Morales and Richard Wirth of GFZ German Research Centre for Geosciences. Watch for more details in the next issue.

IAGC WORKING GROUPS – FIRST ANNOUNCEMENTS

ISEG10 – 10th International Symposium on Environmental Geochemistry

18–22 January 2016 – Perth, Western Australia
www.iseg10.com/

ISEG10 will provide a forum for presenting original and innovative research in the broad area of environmental geochemistry. We encourage scientists, consultants, regulatory authorities, and other practitioners (public health / environmental health) with an interest in the links between environment and health to meet, discuss, and share their research and experience. The symposium will promote awareness, enable recognition of the trans-boundary nature of current environmental issues and assist management through the application of appropriate techniques and strategies.



Symposium themes:

- Environmental Impacts of Small-Scale Mining and Industry in the Developing World
- Geochemistry of Acidic and Alkaline Environments
- Geochemical Aspects of Climate Change
- Emerging Contaminants
- Mercury and the Metalloids in the Environment
- Urban Geochemistry
- Water Resources and Aquatic Environments
- Analytical Environmental Geochemistry

Applied Isotope Geochemistry 11 (AIG-11)

21–25 September 2015 – Orleans, France
<http://aig11.brgm.fr>

The purpose of the AIG-11 international conference is to bring together specialists in the different fields related to applied isotope geochemistry, to present state-of-the-art developments and key examples of application, and to promote the exchange of ideas among scientists.



The AIG-11 conference welcomes contributions on a wide range of related topics, including:

- Technological achievements and their applications; isotope techniques in environmental geochemistry
- Isotope hydrology as a tool for water-supply policy; paleoclimatology and paleoenvironmental changes; recent applications and developments in dendroisotopes
- Biogeochemistry and ecological applications; isotopic tools applied to degradation of organic contaminants
- Applied gas isotope geochemistry
- Isotope geochemistry of sedimentary to high-temperature geological processes, ore genesis and hydrocarbon exploration
- Non-geoscience applications (e.g. archeometry, forensic studies, food authenticity, medical studies, doping investigations)