16th SGA BIENNIAL MEETING
SHORT COURSE

Geology, genesis and exploration of epithermal ore deposits

One-day short course, **1 April 2022**

SHORT COURSE DESCRIPTION

Epithermal deposits host substantial resources of gold and silver that are often blind to the surface and that are sometimes very high grade. This one-day course covers their geological setting and ore-forming processes, and the exploration methods that enable their discovery. Emphasis is placed on interpreting hydrothermal alteration patterns to understand the depth-level of exposure and proximity to upflow zones in which epithermal deposits form.

SHORT COURSE SCHEDULE

- Characteristics of epithermal ore deposits
- Active geothermal systems: chemical & thermal structure
- Gold (silver) transport and deposition
- Hydrothermal alteration and mineral zonation patterns
- Exploration considerations

PRESENTER

Stuart Simmons
Stuart is a consulting geologist (Hot Solutions Ltd, New Zealand) and a research professor (University of Utah), and he is primarily known for his work on epithermal Au-Ag deposits and geothermal resources. His work is directed at understanding the geological, hydrological, and geochemical controls on hydrothermal fluid flow, precious metal mineralization and heat transfer. Stuart received his PhD in Geology at from the University Minnesota, and he currently works nearly full time on the Utah FORGE project, which is funded by the US Department of Energy (utahforge.com). Stuart has published over 70 refereed papers and technical reports in a wide range of journals, and he is the former Chair of the SEG Publications Board. In 2014, he was awarded the Silver Medal, and in 2018, the Marsden Medal, both by the Society of Economic Geologists.

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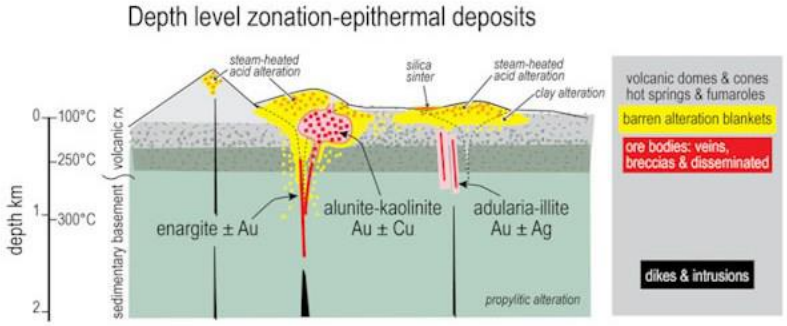
FEES

$160 for members, $200 for non-members, $80 for student or retired members and $100 for student or retired non-members. Register at https://confer.eventsair.com/sga2022/registration

FURTHER INFORMATION

Email Stuart Simmons at stuart@hotsolutions.co.nz

GALLERY



Banded quartz+carbonate+sphalerite+galena+chalcopyrite+electrum, Talisman, New Zealand

Empire Vein, Golden Cross, New Zealand

Gold, Emperor, Fiji