SC3: Orogenic gold deposits

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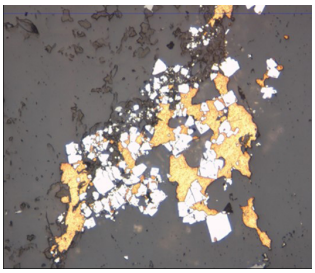
Orogenic gold deposits are a major gold source and a major target for mineral exploration. This workshop will feature up-to-date geology, structure and geochemistry of orogenic gold deposits.



The workshop will delve into the origin of hydrothermal fluids from source rocks P-T-X-t conditions to gold deposition mechanisms in localized mineralized zones. We will discuss current deposit models and challenges related to exploration. We have global experience and will show various examples from different deposits through space and time.

Jochen Kolb holds the Chair of Geochemistry and Economic Geology at the Institute of Applied Geosciences, Karlsruhe Institute of Technology, Germany. He is Dean of Studies for seven geoscience degree programs. He has more than 25 years experience in economic geology research with a strong focus on orogenic gold deposits. Jochen published various papers in particular on hypozonal deposits, their genesis and relevance. After finishing his degree in geology at the Goethe University in Frankfurt, he continued his PhD, PosDoc and Assistant Professorship at RWTH Aachen University, Germany. Before he started in Karlsruhe in 2016, he worked for 10 years as Senior Research Scientist and later as Research Professor at the Geological Survey of Denmark and Greenland. Jochen has been Associate Professor at Copenhagen University during this time. Jochen is member of the SGA executive council and editor of the SGA News. He is spokesperson of the THINKTANK „Industrial Resource Strategies“ at KIT and of the topic Georesources at the KIT Climate and Environment Centre. On top of this, he is active in various national and interdisciplinary initiatives

Georges Beaudoin is Professor of Economic Geology at Université Laval since 1993. His research has been centered on the origin of hydrothermal mineral deposits and fluid flow in the crust as revealed by isotopic tracers. In 2012, he was awarded the NSERC—Agnico Eagle Industrial Research Chair in Mineral Exploration to develop new indicator mineral methodologies for orogenic gold deposits. He is leading a multi-disciplinary team with international recognition, working on atmospheric carbon capture in mining residues. He is the founding Director of the Research Center on the Geology and Engineering of Mineral Resources (E4m) at Université Laval. He was Editor of Mineralium Deposita (2012-2022), the highest impact factor journal in the field of mineral deposits, was President of the Society for Geology Applied to Mineral Deposits (SGA, 2013-2015), and organized the 14th SGA Biennial Meeting in Québec, in 2017.

Nico Thébaud completed his Ph.D. in structural geology and geochemistry between the University of Paris 6 and the University of Sydney in 2006. From 2006 to late 2007 he spent 18 months expanding his skills and experience in mineral exploration as a structural geologist for Mercator Gold Australia. Nico joined the Centre for Exploration Targeting at the School of Earth Sciences (UWA) in October 2007. He is currently the Hamond and Nisbet fellow. His research focuses on geodynamic and tectonic processes, their petrological and geochemical impacts, and their controls on the formation of ore deposits. Nico has worked on Au deposits hosted principally in Precambrian Terrane throughout Australia, West Africa and South America.

Iain Pitcairn is associate professor of ore geology in the Department of Geological Sciences at Stockholm University, Sweden. Originally from Edinburgh, Scotland, Iain completed his PhD from the National Oceanography Centre, Southampton, UK in 2005 and after a post-doc at Queens University, Kingston Canada from 2005 to 2006 he moved to Stockholm University, first as a post-doc and then with a faculty position from 2010. The main focus on Iain's research has been the investigation into the sources of fluids and metals in ore deposits, especially orogenic gold deposits. Iain developed a new method for ultra-low detection limit analyses of gold which he has used over the last 15 years to identify the sources of gold enriched in ore deposits. Iain also works on ore deposits in the Skellefte and Bergslagen districts in Sweden.