

An IUGS Event



RFG 2018

RESOURCES FOR FUTURE GENERATIONS

THEMES & SESSIONS

PREMIER INTERNATIONAL CONFERENCE ON
ENERGY • MINERALS • WATER • THE EARTH

June 16-21, 2018

Vancouver Convention Centre, BC, Canada

RFG2018.ORG

The Earth

EA1: Convergent Margin Geohazards and Geodisasters: Present Understanding, Mitigation, and Long and Short Term Preparedness

EA3: Geo-engineering and Earth Sciences: Integration Opportunities

EA4: Contaminants in the Natural Environment

EA6: Archean Evolution and Ore Deposit Models: Is Plate Tectonics the Key to the Past: A Session to Honour the Career of John Percival

EA7: Proterozoic Crustal Evolution and Metallogeny

EA8: Resources in Paleozoic Orogenic Belts and Associated Sedimentary Basins: Challenges and Opportunities for Multidisciplinary Tectonics

EA9: From Continental Shelf to Slope - Mapping the Oceanic Realm

EA10: Global Plate Models: The State of the Art and Future Developments

EA11: Supercontinent Cyclicity with a Focus on Contributions from Circum-Pacific Regions

EA14: Geomicrobiology - Driving Force in Earth History

EA17: Integrated Geosciences for Regional Geology: Geophysics, Remote Sensing and Field Mapping

EA18: Geophysical Constraints on Lithospheric Structures and Processes

EA19: Geophysical Exploration Methods

EA21: Marine Geosciences on Canada's West Coast

EA22: Geochronology and Mineralogy of Crusts and their Ores Using Emerging Techniques

EA24: Quaternary Paleoenvironments

EA25: Advances in Surficial, Environmental and Geomorphic Hazard Characterization in the Anthropocene: Changing Climates, Changing Threats

EA26: IGCP661 The Critical Zone in Karst Systems (2017-2021)

EA27: Proterozoic Sedimentary Basins: The Bigger Picture of a Formative Eon

EA30: Tectonics and Metallogeny of Cordilleran-Type Orogens: A Celebration of the Career of JoAnne Nelson

EA32: From EarthScope to the Canadian Cordillera Array: Integrated Earth Systems Observatories

EA33: Fault and Shear Zone Processes Across Space and Time

EA37: Minerals as Archives of P-T-X and Time

EA38: Current Concepts in Igneous and Metamorphic Petrology

EA39: In Memory of Kurt Kyser: Snapshots of Studies to Emphasize the Application of Isotope Geochemistry and Mineralogy to Earth Processes

Full description here: <http://rfg2018.gibsongroup.ca/index.php>

Education & Knowledge

EK1: Public Engagement in Earth Science

EK2: Speaking With One Voice - Geoscience Messaging in a Fragmented Community

EK3: Geoheritage as a Societal Resource for Education, Environment, Culture and Tourism

EK4: Public Perception of Geoscience: Does the Public Understand the Role of Geoscience in Modern Society?

EK5: Paleontological Collecting and Collections: Is There a Future for Fossils?

EK6: The changing world of work

EK8: Indigenous Knowledge and Perspectives in Education

EK9: Open Education

EK10: New Horizons in Earth Science Education Research

EK11: Expanding the Traditional Classroom: Innovative Tools for Transporting Students into the Field and through Time

EK12: Ideas for Enhanced Earth Science Learning in Schools

EK13: STEM Education

EK14: Attracting and Developing Earth Science Teachers

EK15: Mentorship and Transferring Knowledge to the Next Generation of Geoscientists and Geoscience Educators

EK17: Bridging the Gap: Skills Training for Geoscience Graduates

EK18: Transferring Geo-Knowledge to the Future and Beyond: Connecting Seasoned Experts with Early Career Generations

EK19: Navigating Your Early Career Path - Promises and Pitfalls

Full description here: <http://rfg2018.gibsongroup.ca/index.php>

Energy

EN2: Energy Futures

EN4: Global Shale: Resources, Economics, and Environmental Challenges

EN5: Marine Geosciences and Energy Resources for Future Generations

EN8: The Role of Geoenergy Test Beds in Developing Future Energy Systems

EN10: Geothermal Solutions for Northern Regions, Mines and Other Remote Areas

EN11: Geothermal Energy in the 21st Century

EN12: New Innovations in Geothermal Exploration

EN14: Southwest Athabasca Basin, Canada: The Largest Undeveloped Uranium Deposits in the World

Full description here: <http://rfg2018.gibsongroup.ca/index.php>

Minerals

MIN1: Mineralization and Hydrocarbons in Black Shale Environments

MIN2: Exploring Controls on Ore Deposit Formation in Volcanic and Sedimentary Environments and Evaluating the VMS-SEDEX-MVT Continuum

MIN3: Ore Deposit Models

MIN4: Multiparameter Integrated Footprints of Mineral Systems

MIN5: Fluid Evolution in Magmatic-Hydrothermal Deposits

MIN6: New Developments in Canadian Diamond Exploration - Finding the Next Generation of Diamond Deposits

MIN7: Magmatic Arc Fertility and the Genesis of Porphyry Cu-Mo-Au Deposits

MIN8: Bridging the Discovery Gap - Providing the Exploration Industry More Effective Area Selection Tools

MIN9: 20 Years of Porphyry Progress: A Cordilleran Perspective

MIN11: Multi-Commodity, Multi-Scale Exploration Targeting Using the Large Igneous Province Record

MIN12: Mineral Deposits at Terrestrial Impact Structures

MIN14: Grass Roots Exploration Success Stories: Discussing the Discovery Process from Initial Area Selection Through to Drilling

MIN15: Iron Oxide Copper-Gold (\pm P, REE, U) and Related Deposits: The Debate Continues

MIN17: Reassessing Gold Deposit Models for the 21st Century

MIN19: Gold Deposits in Orogenic Belts

MIN20: Sediment-Hosted Base Metal Systems: Exploring the Nature, Formation and Role of Sedimentary Processes and Implications for Detection

MIN22: Secondary Processes on Ores: From Sugerene Enrichment to Element Dispersion

MIN24: Stable and Radiogenic Isotope Systems: Applications in Exploration and the Environment

MIN25: Exploration Case Studies - Out of the Box Concepts, Methodologies and Practises

MIN26: Big-Data: Integration, Management and Regional Scale Surveys

MIN27: Footprints of Giant Orebodies - Mineralogical, Spectral and Geochemical Vectors to Discovery

MIN28: Micro to Micro-Biogeochimistry: Exploration, Processing, Remediation and the Environment

MIN29: Exploration Undercover - Techniques, Technology and Strategy

MIN30: Mineral Exploration in Extreme Environments

MIN31: Drift Prospecting for Mineral Deposits

MIN32: Minerals, Mining and Genomics

MIN33: Mineral Exploration under Glaciated Cover: New Tools, Trends, and Discoveries

MIN34: Mining for Clean Energy - the Role of Minerals and Metals in the Clean Energy Transition

MIN35: How Methodology Determines What is Critical

MIN36: U, Th, and REE Deposits of Canada

MIN37: Energy and Technology Metals: Rare Earth Elements, Lithium and Related Advanced Materials - from Deposit Formation to Mining and Processing

MIN38: Platinum-Group Element (PGE) Deposits: Formation, Exploration, Characterization, Beneficiation, and Future Sources

MIN39: Geoenvironmental Characteristics of Critical Metal Deposits

MIN40: Resilient Supply Chains as a Measure for Criticality

MIN41: Ensuring the Supply of Critical Materials to Meet the UN 2030 Sustainable Development Goals

MIN42: Classification of Anthropogene Resources

MIN43: Exploration under Deep Cover

MIN44: Asteroids as Sources of Economic Resources

MIN45: Marine Mineral Resources - Prospects and Challenges

MIN46: Exploring with Rich Data: Applied Geoinformatics for Resource Discovery

MIN47: Quantitative Assessment and Prediction of Deeply Buried Mineral Resources in Covered Regions

MIN48: Hydrocarbons in the Exploration for Metaliferous and Non-Metaliferous Deposits

MIN50: Mineral Prospectivity Modeling and Assessment of Undiscovered Mineral Resources

MIN51: Ore Fertility Indicators: Fingerprinting Magmatic Processes to Evaluate Resource Formation

MIN53: Quantitative Mineralogy: Application in Mineral Exploration

MIN54: Applied Mineralogy in the Mining Industry - Integration, Applications and Future Development

MIN55: Analytical Technology in the Search for Minerals: Space to the Lab to the Field

MIN58: Geometallurgy

MIN62: Innovations in Tailings Management and Utilization

MIN64: Mine Wastes and the Environment: Contamination, Management and Reclamation

MIN65: Industrial Minerals for a Prosperous Future for All

MIN66: Isotope Geochemistry in a Mineral Systems Framework: Analytical and Application Advances

Full description here: <http://rfg2018.gibsongroup.ca/index.php>

Resources & Society

RS1: Resource Development Conflicts: Challenges and Solutions

RS3: Public Reporting on Natural Resources - A key Geoscience Contribution to Future Generations

RS6: Social Geology Applied to Mineral Resources

RS8: Geoethics and Responsible Conduct of Scientists

RS9: Geoethics in Georisks Management for a Safer and More Resilient Society

RS10: Geoethics in Geoscience Education, Communication and Citizen Science: Experiences, Approaches, and Concepts

RS12: Forensic Geology; Ethics, Communication, Regulation and Opportunities

RS13: Geoethics and Environmental and Social Responsibility: Doing the Right Thing to Develop Resources for Future Generations

RS16: The Role of Indigenous Perspectives/Traditional Ecological Knowledge in Natural Resources Projects: Exploration to Reclamation

RS17: Geoscience Information Technology for the Next Generation

RS18: Preserving Geoscience Data for Decision Making Tomorrow

RS19: The Future Role of Geological Mapping in Resources and Research

RS21: Geoscience Syntheses of the Arctic

RS22: The Changing Role of Geological Surveys

RS24: Global-Scale Geochemical Mapping: A Critical Component for Resourcing Future Generations

RS26: Three-Dimensional Geological Modelling for Sustainable Resource Development

RS27: International Cooperation (in the Context of Geosciences' Practice)

RS28: The Role of the African Professional in Optimizing the Continent's Natural Resources

RS29: The International Resource Panel and the Emergence of a Science-Policy Consensus on Mineral Governance

RS30: Classification, Management and Sustainable Development of the Global Resource Endowment - Unification and Standardization of Terminology and Practice

RS31: Resources and Sustainability: Dialogue, Design, and Developing Differently

RS32: Future Impacts of Minerals Production on Climate Change

RS33: Economic Redevelopment of Brownfields: New Uses for Old Mines

RS34: Exploration and Mining in the 21st Century: From Responsible to Sustainable

RS36: The impact of Climate Change on Financing for Mining and Oil Companies

RS38: Balancing the Needs of Society with Natural Resources Development and Environmental Stewardship and Community Well Being.

RS39: Exploration Activities Communication and Public Engagement In Populated Regions

RS40: Sustainable Mineral Resource Management: Role of International Resource / Reserve Reporting Codes

Full description here: <http://rfg2018.gibsongroup.ca/index.php>

Water

WA4: Groundwater and the Water-Energy-Food-Climate Nexus

WA5: Groundwater and Surface Water Sustainability for People and the Environment: Science to Inform Water Management and Policy from Local to Global Scales

WA6: Leadership in Water Sustainability

WA8: Groundwater and Unconventional Oil and Gas Resource Development

WA9: Modelling Integrated Surface-Subsurface Hydrologic Systems for Energy Resource Development and Regulation

WA11: Environmental Impacts to Water by Resource Extraction

WA13: Mining Water Policy and Stewardship in the Developing Context

WA14: Hydrogeochemistry: Environment and Exploration

WA15: Innovations in Water Treatment and Water Quality

WA16: Mine Waste Management and Waste Site Remediation: Case Studies from Around the World

Full description here: <http://rfg2018.gibsongroup.ca/index.php>