



2-5 November 2021

Times are based on Central U.S. time, which is UTC/GMT -5 hrs.

15 minute presentation and 5 minutes Q&A

10 minute platinum sponsor presentations daily

Equivalent daily start times based on 2 November 2021: California: 7:00AM; Calgary & Colorado: 8:00AM; Houston, Mexico City, Lima: 9:00AM; Toronto & New York City: 10:00AM; Rio de Janeiro: 11:00AM; St. John's Canada: 11:30AM; London: 2:00PM; Frankfurt and Nigeria: 3:00PM; Bucharest: 4:00PM; Kuwait City: 5:00 PM; Baku: 6:00PM; Mumbai: 7:30PM; Beijing & Perth: 10:00PM; Tokyo: 11:00PM; **Sydney: 3 November 2021 1:00AM**

Tuesday 2 November 2021: Day 1 Introduction, GPR and Electromagnetics

Session Co-chairs: Morgan Sander-Olhoef, Guideline Geo and Laura Quigley, Seequent

Start	Stop	Presentation Title	Speaker	Affiliation
09:00	09:10	Introduction	Morgan Sander-Olhoef & Laura Quigley	Guideline Geo and Seequent
09:10	09:20	SEG Board - Welcome	Rick Miller	Kansas Geological Survey
09:20	09:40	<i>Keynote #3: The Multiple Applications of UAS Geophysics in Ohio</i>	Helen McCreary	Ohio UAS Center
09:40	10:00	Development of a drone-based GPR system for alpine glacier surveying	Bastien Ruols	University of Lausanne
10:00	10:20	Using a Drone-based Ground Penetrating Radar for Avalanche Victim Search: A Case Study from Northern Spain	Kristaps Bass	SPH Engineering
10:20	10:40	Drone-mounted GPR surveying: flight-height considerations for diffraction-based velocity analysis	Tiffany Koylass	University of Leeds
10:40	10:50	<i>Break</i>		
10:50	11:00	Virtual Demonstration – Sponsor Highlight - Geometrics		
11:00	11:20	<i>Keynote: UAVs for Antarctica: Autonomous, long-range aircraft are needed to characterize and monitor rapidly melting glaciers and ice shelves</i>	Jamin Greenbaum	University of California, San Diego
11:20	11:40	UAV based semi airborne EM for groundwater investigations – first results	Mathias Ronczka	Leibniz Institute for Applied Geophysics
11:40	12:00	Novel Flying EM Sensor for Agricultural Research	Larisa Golovko	Landviser
12:00	13:00	<i>Discussion and Summary</i>		

Wednesday 3 November 2021: Day 2 Introduction and Magnetics

Session Co-chairs: Juan Ortega, Collier Geophysics and Rina Hartmann, Seequent

Start	Stop	Presentation Title	Speaker	Affiliation
09:00	09:05	<i>Introduction</i>		
09:05	09:25	<i>Keynote: Improving data while reducing risks: How UAVs are redefining magnetic surveying for Unexploded Ordnance</i>	Mick Kolster	Technical University of Denmark
*09:25	09:45	Sub-nanoTesla precision for rotary wing UAV aeromagnetic surveys	Geoffrey Phelps	U.S. Geological Survey
09:45	10:05	Drone Magnetic Survey Metrics and Calibration Review	James Jensen	Southern Geoscience Consultants
10:05	10:25	Drone Magnetic Survey System Noise Determination Test	Paul Mutton	Touchstone Geophysics
10:25	10:35	<i>Break</i>		
10:35	10:45	<i>Virtual Demonstration – Sponsor Highlight - Seequent</i>	Kanita Khaled	
10:45	11:05	<i>Keynote: Using drones for archaeology investigations of Holocaust sites in Lithuania and Poland</i>	Alastair McClymont	BGC Engineering, Inc.
11:05	11:25	From mono-sensor to multi-sensor archaeological magnetic surveying using drones	Jean Mercier de Lépinay	Terremys
11:25	11:45	On the use of two different flight configurations for drone-borne magnetic data	Filippo Accomando	University of Naples “Federico II”
11:45	12:45	<i>Discussion and Summary</i>		

Thursday 4 November 2021: Day 3 Introductions, EM, and Seismic**Co-chairs: Callum Walter, Queen’s University and Nathan Campbell, Juniper Unmanned**

Start	Stop	Presentation Title	Speaker	Affiliation
09:00	09:05	<i>Introduction</i>		
09:05	09:25	<i>Keynote: Applying Fixed Wing UAV Geophysics to Resource Exploration, A Few of the Lessons Learned</i>	Markku pirttijärvi	Radai Oy
09:25	09:45	Suitability study of the semi-airborne electromagnetic method based on a multicopter system	Philipp Oliver Kotowski	University of Münster
09:45	10:05	Some Thoughts about Future Airborne EM Concepts and Novel Visualization Techniques	Johannes B. Stoll	Mobile Geophysical Technologies GmbH
10:25	10:35	<i>Break</i>		
10:35	10:45	<i>Virtual Demonstration – Sponsor Highlight - Skyfront</i>		
10:45	11:05	<i>Keynote: Airborne Sensing of Seismicity and Other Phenomena with UAS</i>	Jamey Jacob	Director of Unmanned Systems Research Institute - Oklahoma State University
11:05	11:25	Drone-based active-source multichannel seismic survey system	Takeshi Tsuji	Kyushu University
11:25	11:45	Design and Development of a Drone Assisted Seismic Survey	John Ryan Himes	New Mexico Tech
11:45	12:05	Freefall Sensor Deployment by UAV Fleet – System Integration Pilot	John Archer	SAExploration, Inc
12:05	13:05	<i>Discussion and Summary</i>		

Friday 5 November 2021: Day 4 Introduction, Gamma-ray, Gravity & Guidelines**Co-chairs: Cian B. Dawson, U.S. Geological Survey and Jan Francke, Geolitix**

Start	Stop	Presentation Title	Speaker	Affiliation
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09:00	09:05	<i>Introduction</i>		
09:05	09:25	<i>Invited Presentation: UAS Enabled Gamma Ray Mapping at the Schwartzwalder Mine Jefferson County, CO</i>	Ron Bell	International Geophysical Services, LLC
09:25	09:45	Radon corrections for UAV-borne gamma-ray measurements	Steven Van der Veeke	University Medical Centre Groningen Medusa Radiometrics
09:45	10:05	Gravity gradiometry with a portable cold atom interferometer	Storm Weiner	University of California, Berkeley
10:05	10:15	<i>Break</i>		
10:15	10:25	<i>Virtual Demonstration – Sponsor Highlight – Axiom Group</i>	Babatunde Bello	
10:25	10:30	<i>Keynote: Complex drone operations - flying through the regulations</i>	Tom Pils	The Drone Lawyer
10:30	10:50	Application of remotely piloted aircraft systems (RPAS) to regional airborne geophysical mapping: a concept study	Richard Fortin	Geological Survey of Canada
10:50	11:10	Guidelines for Drone Geophysics	Geoff Pettifer	GHD Geotechnics
11:10	12:10	<i>Discussion and Summary</i>		

*Indicates presentation will not be recorded and available after the event.

Organizing Committee:

Morgan Sander-Olhoeft, Guideline Geo

Laura Quigley, Seequent

Technical Committee

Jose Arce, Arce Geofísicos

Ron Bell, Drone Geoscience

Nathan Campbell, Juniper Unmanned

Cian B. Dawson, U.S. Geological Survey

Jan Francke, Geolitix

Lorraine Godwin, Seequent

Rina Hartmann, Seequent

John Lane, Jr., U.S. Geological Survey

Juan Ortega, Collier Geophysics

Callum Walter, Queen's University

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