

BCGS

BC Geophysical Society

Drones in Geoscience

A Workshop hosted by the BC Geophysical Society

12-13 May 2022

Vancouver-Burnaby, British Columbia, Canada

Drones are playing a greater and greater role in society on almost a daily basis. Every day you hear of a new application for drones, or of ways that drones are helping to innovate an industry. Some uses are obvious when you think about it, some uses are frankly a little unsettling, some uses are instantly recognizable as a better way of doing things for all sorts of convenience and economic reasons. Whatever the news, it is clear that there is only one direction this is going.

These observations in general are even more noticeable and more recognizable as significant in the geosciences. Because applied geoscience, working outside in all manner of conditions and environments, is tough. Investigating the earth is a challenging business: to engineer utilization of the earth, both the surface and interior, for human benefit; to find resources critical for modern life; to help steward the earth and keep it liveable. The use of drones for these purposes have been instantly recognizable by those engaged in these pursuits, both for economic (i.e. it is faster and easier to collect information and hence cheaper) and safety (i.e. let a machine go into difficult places to gather the information) reasons. And prominent among the geosciences for the adoption of drones for these purposes has been geophysics.

This workshop by the BC Geophysical Society is a sort of state-of-the-art examination of where the use of drones is now and where it is headed into the future in applied geoscience, and especially in applied geophysics. The first day of lectures and presentations at a downtown Vancouver university facility will include leading experts in the fabrication of drones as well as geophysical service providers discussing their innovations and showing how drones are being used. We plan to have this portion of the workshop recorded for later viewing by BCGS members.

On the second day, we will reconvene at an outdoor Burnaby facility used for remote controlled model aircraft use and drone demonstrations, to witness advanced and innovative drones in flight. Leading drone enthusiasts will described and demonstrate the features and capabilities of their drones. Expect to see an incredibly wide range of drones.

A key component of the workshop will be the new technologies being adopted by drone manufactures to make them safer and more versatile for geophysical use. Legal and government regulation aspects of drone use in geoscience will also be a prominent component of the workshop.