

## **Nomination – CSEG Roy Lindseth Award for David Eaton**

It is with great enthusiasm that we nominate Dr. David Eaton for the CSEG Roy Lindseth Award, in recognition of his outstanding contributions to geophysics through innovation in applied research, technology development, and leadership within our profession.

Dr. Eaton has made a profound and lasting impact on geophysics in Canada and internationally. His career spans more than 40 years and bridges academic excellence with industry application. After completing his Ph.D. in geophysics at the University of Calgary in 1992, he held faculty positions at the University of Western Ontario, where he helped build one of Canada's strongest seismology research groups, before returning to the University of Calgary in 2007 as Head of the Department of Geoscience.

His pioneering work on passive seismic monitoring and induced seismicity has advanced understanding of hydraulic fracturing, wastewater disposal, and carbon sequestration. David's work aided in demonstrating how high-density seismic arrays can be deployed for hydraulic fracture monitoring, and his work on seismic hazard characterization in the Western Canada Sedimentary Basin has directly influenced industry best practices and regulatory guidelines, including those adopted by the Alberta Energy Regulator and the BC Oil and Gas Commission.

Dr. Eaton is the lead author or editor of several important geoscience works, including *Induced Seismicity: Monitoring, Modeling and Mitigation* (Cambridge University Press, 2018), which has become an important reference in the field. He has published over 200 peer-reviewed papers, many of which are highly cited, on topics ranging from crustal structure and tectonics to micro seismicity and monitoring methods. His scientific research has been an influential contribution to understanding human-induced seismicity globally.

Equally important is his dedication to mentorship. Dr. Eaton has supervised more than 40 MSc and PhD students, many of whom now hold senior positions in academia, industry, and regulatory agencies. His former students frequently credit his guidance and encouragement as pivotal to their careers.

In 2019 David was named the **CSEG Distinguished Lecturer** for the CSEG Foundation, travelling across Canada to lecture at numerous universities on the subject of micro-seismicity. He has also served on the CSEG Foundation Board Executive and was instrumental in Calgary's successful bid to host the 2028 International Geological Congress. Furthermore, he has been an active contributor to the geophysics community and is deeply committed to promoting the field to broader audiences. Notably, he served as a seismology expert consultant for the 2021 film *Ghostbusters: Afterlife*, where he advised on realistic seismic images and helped ensure accurate earthquake safety depictions.

Dr. Eaton's accomplishments have already been recognized through numerous honors, including his **NSERC Synergy Award of Excellence for Innovation (2020)**, the **J. Tuzo Wilson Medal of the Canadian Geophysical Union (2020)**, and his appointment as **NSERC Industrial**

**Research Chair in Microseismic System Dynamics.** These accolades highlight both his scientific excellence and his ability to translate geophysical insight into real-world applications.

Dr. Eaton's ability to connect research with practical solutions embodies the spirit of the CSEG Roy Lindseth Award. His innovations in seismic monitoring and hazard mitigation are now standard practice across the Canadian resource sector, and his work has positioned Canada as a global leader in induced seismicity research.

For his sustained excellence in research, his innovative spirit, and his enduring impact on the practice and advancement of geophysics, David Eaton is a most deserving recipient of the CSEG Roy Lindseth Award.

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