

Killam winner tests depth of still waters in classroom

Michael Brown

Brian Jones has a reservoir of research experience to offer his students.

The reservoir geologist in the Department of Earth and Atmospheric Sciences has been plying his trade at the University of Alberta for 34 years. Over that time, Jones has been named the C.R. Stelck Chair in Petroleum Geology, a member of the Royal Society of Canada and now a Killam Professor.

“The U of A has been a great place to work. We have all the research facilities that we need; it is hard to find anywhere else that has the same level and calibre of equipment and technical staff to help run the machines,” said Jones. “The university has always provided me with an opportunity to do my research, and I enjoy working with the students.”

Jones spends a lot of time focused on the precipitates (carbonates and silica) and microbes that are found around hot springs in such places as New Zealand, Iceland and China, specifically, looking at the minerals that

precipitate out of the boiling water and the role micro-organisms play in that precipitation.

He is also involved in researching oil and gas reservoirs in Western Canada’s sedimentary basin and has done work in the Cayman Islands looking at the evolution of carbonate rock successions. His research there has helped the Cayman Islands water authority develop their water supply, which is done by converting ocean water into fresh water.

“In order to do that you have to get a supply of water, know what the geology is and how the water is going to flow through rocks to the plants,” said Jones. “Essentially, I tell them where to get their water and what depth to obtain it from.”

Because Jones’ research laboratory is in the field, he says it is easy to bring real-world examples of research to the classroom, particularly his work in the Caymen Islands and exploration and exploitation of oil and gas in Western Canada.

“Instead of talking about things in a very abstract sense, I try to bring in very

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practical examples based on my own experience working in the field to show students what the application of the research is and why they need to deal with some of these issues,” said Jones, who teaches a first-year introductory class, and senior undergraduate and graduate-level courses in carbonate sedimentology.

Jones says he stresses the importance of very basic knowledge, but does try to get students to think for themselves and not just to learn by rote memorization.

“They have to do some of that, but I also want them to think and reason and develop things. I always try to show the practical application of what we’re teaching. I try to get across the idea that we’re not just teaching

for the sake of teaching, but be able to show them that their knowledge does have real applications.” ■



Brian Jones in New Zealand.

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