



Wayne Pennington

Jefferson Science Fellow

Wayne Pennington, chair of the Department of Geological & Mining Engineering and Sciences, has been named a Jefferson Science Fellow by the US Department of State. The Jefferson Science Fellowship was established to create opportunities for substantial engagement of tenured scientists and engineers from US academic institutions.

Pennington will serve a one-year assignment working full-time as a Senior Engineering Advisor with a group at USAID, the Agency for International Development. He will help improve methods of infrastructure development for increased capacity building, particularly in post-disaster and post-conflict settings in Pakistan and Afghanistan. His focus will be primarily on improved energy development and distribution, and on earthquake hazard mitigation.

A geophysicist, Pennington's research is centered on the response of Earth materials to changes in physical conditions, such as stress, saturation, and temperature. The applications of this work are found in induced seismicity, deep earthquakes, as well as oil and gas exploration and development.

Pennington has worked in both academia and in industry and has conducted fieldwork at sites around the world. In the 1970s, he studied tectonic earthquakes in Latin America and Pakistan. In the 1980s, at the University of Texas at Austin, he studied the relationship of earthquakes to oil and gas production. Following that, he worked at the research laboratory for Marathon Oil Company, studying techniques to improve the identification of, and production from, oil and gas reservoirs. Since 1994, he has been at Michigan Tech, teaching and conducting research into geophysical observations of oil and gas production.

He has served as the first vice president for the Society of Exploration Geophysicists, published over thirty papers, and coauthored a book (with his students). His degrees are from Princeton University, Cornell University, and the University of Wisconsin-Madison.

The words of Thomas Jefferson in an inscription on the southeast interior wall of the Jefferson Memorial in Washington, DC.



I AM NOT AN ADVOCATE FOR FREQUENT
CHANGES IN LAWS AND CONSTITUTIONS.
BUT LAWS AND INSTITUTIONS MUST GO
HAND IN HAND WITH THE PROGRESS
OF THE HUMAN MIND. AS THAT BECOMES
MORE DEVELOPED, MORE ENLIGHTENED,
AS NEW DISCOVERIES ARE MADE, NEW
TRUTHS DISCOVERED AND MANNERS AND
OPINIONS CHANGE, WITH THE CHANGE
OF CIRCUMSTANCES, INSTITUTIONS
MUST ADVANCE ALSO TO KEEP PACE
WITH THE TIMES. WE MIGHT AS WELL
REQUIRE A MAN TO WEAR STILL THE
COAT WHICH FITTED HIM WHEN A BOY
AS CIVILIZED SOCIETY TO REMAIN
EVER UNDER THE REGIMEN OF THEIR
BARBAROUS ANCESTORS.