

Science & Society Distinguished Public Talks

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Presents

The Anthropocene

By

John Geissman



April 20, 2023 6:30 PM

Meet and Greet at 6:00

UNM Dept. of Physics, Astronomy, & Interdisciplinary Science, 210 Yale Blvd NE

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John Geissman is Professor Emeritus of Geoscience at the University of Texas at Dallas (2021) and Professor Emeritus of Earth and Planetary Sciences at the University of New Mexico (2011). At the University of New Mexico he led a very active research laboratory in paleomagnetism and rock magnetism and retired in 2010, when he moved to the University of Texas at Dallas, and set up a second, highly active research laboratory. John Geissman's research interests lie in the fossil magnetic properties of geologic materials (paleomagnetism and rock magnetism) and their use in addressing geologic problems, in particular in structural geology, tectonics, and stratigraphy. He is past Chair of the Department of Earth and Planetary Sciences at UNM. He has served on several editorial boards and National Science Foundation advisory and review panels for the Earth Sciences. He is a Fellow of the American Geophysical Union (2006) and the Geological Society of America (1996).

Abstract: "We are in the Anthropocene!" exclaimed Nobel-prize winning Dutch atmospheric chemist Paul Crutzen, in utter frustration, at a conference in Cuernavaca, Mexico. "The Earth is not in the Holocene anymore. Instead we're in the "Anthropocene," a new epoch in which the Earth's geology has been fundamentally changed by humans. James Lovelock, in "One last chance to save mankind", remarked, "The number of people remaining at the end of the century [2100] will probably be a billion or less. It has happened before: between the ice ages there were bottlenecks when there were only 2000 people left. It's happening again." This presentation will cover many aspects of Crutzen's Anthropocene. I will provide a background on the "early" history and related perspectives and the global Geologic Time and the International Commission on Stratigraphy. I will emphasize the Cenozoic to present; time scale subdivisions and how they are defined (top and bottom/beginning and end), and the implications of a formal, official Anthropocene to science vs. sociology vs. politics vs. anthropology vs. economics vs. etc.