

THE UNIVERSITY OF MICHIGAN

Regents Communication

ACTION REQUEST

Subject: Report of Faculty Retirement

Action Requested: Adoption of Retirement Memoir

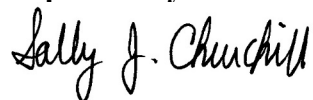
Maria Clara Cruz da Silva Castro, Ph.D., professor of earth and environmental sciences in the College of Literature, Science, and the Arts, retired from active faculty status on December 31, 2022.

Professor Castro received her B.Sc. (1988) degree from the University of Porto, Portugal. She received her M.S. (1991) degree from the University of Paris VI (Université Pierre-et-Marie-Curie). She received her Ph.D. (1995) degree from the University of Paris VI and Paris School of Mines, France. Professor Castro joined the University of Michigan faculty as an assistant professor in 1999, and was promoted to associate professor in 2006, and professor in 2013.

Professor Castro's specialty is Geohydrology, the study of water residing in aquifers at Earth's surface and in deep subsurface geological settings. She has employed noble gas isotope geochemistry (NGIG) to define the source of fluids, hydrocarbons and water, to discern their migration pathways, and to elucidate their evolution in response to past and present geologic processes. During her tenure at Michigan, she developed a state of the art analytical laboratory that enabled the development, calibration and application of noble gases to a broad spectrum of research questions. Through an innovative application of NGIG, she and her team of post-doctoral and Ph.D. graduate students have developed interpretive algorithms applied to understanding episodes of climate change, migration of fluids and gases in subsurface hydrocarbon reservoirs, and tracing the sources of clean geothermal energy. Such studies span the globe, ranging from frozen lakes of Antarctica to tropical realms of the Galapagos. Her contributions have challenged the long established assumptions to construct new methodologies for deciphering the processes active in the whole Earth system. Professor Castro's legacy will be defined by her contributions to both the research and educational missions of the University of Michigan.

The Regents now salute this distinguished faculty member by naming **Maria Clara Cruz da Silva Castro, professor emerita of earth and environmental sciences.**

Requested by:



Sally J. Churchill, J.D.
Vice President and Secretary of the University

December 2022