



Jane GORE

Home Country
Zimbabwe

Degree
Post-Doctorate in
Seismology

Expertise
Geophysics

Research Focus
3D Mapping of Crustal
Discontinuities Under
the Zimbabwe Craton

Host University
University of the
Witwatersrand,
South Africa

Fellowship Awarded
2006

Jane Gore was born in Goromonzi, Zimbabwe and attended high school in the eastern city of Mutare. Her family includes one sister and four brothers.

Jane obtained her Bachelor of Science degree with honors in physics from the University of Zimbabwe in 1994 and her Master of Science degree in exploration geophysics in 1997. She obtained her PhD in seismology from the University of Zimbabwe and Carnegie Institution of Washington, United States in 2005.

Jane's post-doctoral research focus is on the crustal and uppermost mantle crustal structures of the Earth's surface in Zimbabwe. She is looking at the craton and Limpopo Belt using tele-seismic receiver function and Rayleigh surface wave analyses. The aims of her PhD research were to obtain a three-dimensional "map" of the depth and character of the Moho and any other major crustal discontinuities beneath the Limpopo Belt and the Zimbabwe craton. This map was intended to determine crustal and uppermost mantle velocities.

Mapping the deep crustal and uppermost mantle configuration of the Zimbabwe craton and its contact with the Northern Marginal Zone sheds light on the movements between the craton and the Northern Marginal Zone, as determined by the geometry of the contact.

Jane also worked to determine Poisson's ratio as a function of location, and used it to estimate the average rock composition of the crust beneath the different geologic terrains. In addition to providing structural and compositional information for the Zimbabwe craton, thereby benefitting the mining sector as this craton may be rich in kimberlite-borne diamonds, the full interpretation of the seismic data has the potential to reveal much about Archaean, Proterozoic and Phanerozoic tectonics in southern Zimbabwe and may help in our understanding of the evolution of the Earth.

Jane is currently working as a lead analyst at the Comprehensive Test Ban Treaty Organisation (CTBTO) in Vienna, Austria.