

2011 Fellow of the Geological Society of America



Shanaka (Shan) de Silva

Professor, Geology and Geophysics

Shan de Silva was named a Fellow of the Geological Association of America in 2011, in recognition of distinguished contributions to the geosciences. The international scientific organization GSA focuses on advancing the geosciences, enhancing the professional growth of its members, and promoting the geosciences in the service to humankind and stewardship of the Earth.

de Silva's primary interest is in explosive volcanism and its plutonic underpinnings. This interest was honed on the high Andean plateau during his PhD years, in the mid 1980s. With a truck and a tent he mapped and sampled the huge stacks of ignimbrite deposits in the vast unpopulated area extending across the mutual borders of Chile, Bolivia and Argentina. Using geochronology along with chemical and mineral "fingerprints" he established a coherent

stratigraphy that has formed the basis for broader investigations of the region.

Today, de Silva is widely recognized as having provided the geological community with an integrated understanding of how the largest caldera-forming eruptions are part of broader regional flare-ups during which granite batholiths, form. He has also contributed to our understanding of plinian eruptions and the volcanic impact on climate through a decade long study of the 1600 AD eruption of Huaynaputina in Peru. His newest efforts involve aeolian sedimentology and geomorphology using in the Puna of the Central Andes as an analog for Mars.

de Silva is committed to Earth Science Education and Outreach. VolcanoWorld an award winning K-12 and Higher-ed website is now housed at Oregon State University. He is also committed to undergraduate research and Increasing Diversity in Earth Sciences.

de Silva received a BS in Geology in 1982 from the University of Southampton, U.K., and a PhD in Earth Sciences in 1987 from Open University, U.K. After postdoctoral work, de Silva was appointed Assistant Professor at Indiana State University in 1991 and advanced to full Professor in 2000. In 2001, de Silva began working at University of North Dakota as Professor and Chair in Space Studies as well as becoming Director of the North Dakota Space Grant Consortium and the NASA EPSCoR Program. In 2006, de Silva was appointed Professor at Oregon State University.



Since his first visit in 1983, Shan has spent over a 1000 days doing fieldwork in the Altiplano-Puna of the Central Andes. Here he is on top of the Purico complex at over 5000m with an installment of the ALMA millimeter array observatory in the background.

"The Geological Society of America provides a welcoming and supportive professional environment and I am delighted and humbled to have been recognized by this great organization. This recognition is a testament to the collegial and stimulating environment at Oregon State University and the contributions of the many excellent undergraduate and graduate students I have had the pleasure to work with." — Shan de Silva