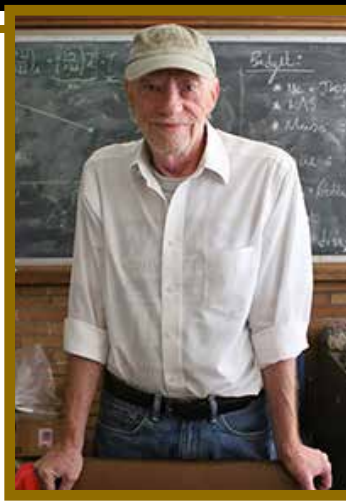
| LEWIS ASHWAL |



AWARDS, HONOURS AND ACHIEVEMENTS

- A2-rated scientist, South African National Research Foundation (NRF) (2011 to the present; A-rating reinstated for 2017 – 2023)
- Presidential Award, Geological Society of South Africa (2008)
- Jubilee Medal Geological Society of South Africa for best paper of the year (2005)

DEFINING MOMENT

In 1981, he and a colleague worked on a paper in which they wrote that certain types of meteorite from outer space came from Mars. They were the first to make this discovery.

WHAT PEOPLE MIGHT NOT KNOW

His father owned a chocolate factory in New York City called Ashwal's Chocolates.

ALWAYS THE GEOLOGIST, NEVER THE TOURIST

Lewis Ashwal has been to so many places all over the world that it would be easier to name the places he has not been to. As a world-renowned geologist he has done fieldwork in North America, Europe, Africa and India, and on many of the islands in the Indian Ocean.

"Doing the kind of work that I do as a geologist, I get to weird and interesting places and not only do scientific work there, but also experience what life is like in those strange places," he says. And one of these strange places is the island of Madagascar, which he has visited more than 30 times in his career.

"It is a big place, about half the size of South Africa. It is very different from Africa, from the culture and language to the food and the scenery," he says. He has studied the geology of almost the whole island and describes it as wonderful and unique.

Ashwal was born in the Bronx, New York, in the United States. As a young man he happened to hear that geologists do fieldwork out in the countryside and in weird and exciting places – an attractive idea for a city-born boy who preferred not to be city-bound.

Today, after nearly thirty years in the country, he spends most of his time at the University of the Witwatersrand (Wits), but the Bronx accent is still there.

"In the late 1980s, my job was coming to an end and I was looking for a new job," he says, explaining how he came to South Africa in the first place. At the time, he was a staff scientist at the National Aeronautics and Space Administration's (NASA) Lunar and Planetary Institute in Houston, Texas. He got a call from what is now the University of Johannesburg (UJ), offering him a job at the Department of Geology.

"It completely surprised me," he remembers. A week passed, and the university called again, offering to double the salary they mentioned in the previous phone call. "They said, we heard that you have a girlfriend and we will get her a job too."

"Now, that is a phone call you don't get every day!"

He decided to take it on as an adventure, planning to stay in South Africa for only a few years. But over the following three decades he became a professor in the School of Geosciences at Wits, and the director of the African Lithosphere Research Unit.

"And now my family is here, both of my children, and I am a grandpa and I don't want to go anywhere else – I like it here," he announces.

FROM MARS?

Apart from building a life here, he has made major scientific contributions in Africa and beyond. In 1981, he worked with a colleague to write a paper, "SNC meteorites: Igneous rocks from Mars?" claiming that there are certain types of outer space meteorite that came from Mars. "This was an outlandish idea! It was thought at the time that meteorites did not come from planets, they only came from asteroids. Nobody believed us."

Their claim was proven correct within six months. "So now, there are maybe a hundred pieces of meteorite that are identified as pieces of Mars and we were the first to propose that possibility."

In 1993, he penned the book *Anorthosites,* in which he described a type of rock that is found on the earth, on the moon and on other planets and he has since become one of the world's foremost experts on these rocks.

He edited another book in 1997, *Greenstone Belts*, which is a definitive work explaining how geology reveals the secrets of the early stages of the earth's development.

"Very recently I wrote a paper about identifying a new piece of continent under the island of Mauritius," referring to a discovery he made with his colleagues that made headlines all around the world. "We wrote that there must be a piece of ancient continental crust under the small island in the middle of the Indian Ocean, which was surprising since there is a piece of continent in a place where it should not be".

"Oh boy! When that paper came out in January of 2017, it went viral," he jokes, referring to the huge popularity the story garnered on social media at the time. "I think I did about 40 live interviews on TV and radio, and for about a month, I was doing nothing else but interviews."

There were articles written about the discovery in the *New York Times*, *Time* magazine and many other international publications. "There was even an article about it in the *Cosmopolitan* magazine – now that's something you don't expect!" He found the coverage of his work rewarding and says talking to the media and explaining science in an easy-to-understand way is an important part of being a public scientist.

Lewis Ashwal's impact on the field of geology was recognised by the National Research Foundation with an A2-rating which acknowledges him as a leading international researcher.

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Legends of South African Science II

Academy of Science of South Africa (ASSAf)

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