

BIO-PROFILE (250 words)

Dr Graziella Caprarelli FAIG holds a *MS Summa cum Laude* in Geological Sciences and a PhD in Earth Sciences from *Sapienza* University in Rome, Italy. She is currently President of the Women in Space Chapter, having previously served as Deputy Chair of the National Committee for Space Science, Chair of the NSW and SA Divisions of the Geological Society of Australia, President of the Japan Society for the Promotion of Science Alumni Association in Australia, as well as on several committees of the American Geophysical Union.

Dr Caprarelli's career has been dedicated to searching, discovering, and advancing the frontiers of science through the exploration of space. Her body of work includes: researching volcanic processes on Earth and Mars; using impact craters and radar sounder data to probe the Martian subsurface; the discovery of four lakes at the south polar region of Mars. The latter work, published in 2020, was widely reported in international mainstream and social media, with the work ranking 21st for its global impact in capturing the public's imagination, out of a total of 3.4 million papers published in all fields (source: #AltmetricTop100), and listed among the "Top 10 Science Stories" of the year (source: Australian Science Media Centre).

She is Adjunct Research Professor with the International Research School of Planetary Sciences in Italy, Adjunct Research Fellow with the Centre for Astrophysics at the University of Southern Queensland, and Founding Director of science consulting company Hypatia Scientifica P/L. Dr Caprarelli is a member of the MARSIS Science Team.

ANSWERS TO SPECIFIC QUESTIONS

Where do you work, and what is your occupation / position?

After completing my degrees, I worked at research institutions (including NASA) and universities in Europe, Asia, USA and Australia. Currently I hold adjunct positions in universities in Australia and Italy, while running start-up science consultancy company Hypatia Scientifica, of which I am Founding Director. I am member of the Mars Express MARSIS Science Team.

What is the most exciting part of your job?

To explore and discover things never previously found.

What do you enjoy most about your job?

The challenge of finding the solution to a difficult problem, by asking the right questions and knowing (and then acquiring) the best type of evidence needed to answer the questions.

How did you become...

At school I excelled at mathematics and physics, and I always liked to investigate and understand how everything works. After completing the common elementary and middle school curriculum, I chose a science-based curriculum in high school, which then led me to studying physical sciences at university. What fired my imagination in school was the exploration of Earth, planets and space, which is why I decided to become a geoscientist. I have a *MS Summa cum Laude* in Geological Sciences and a PhD in Earth Sciences from *Sapienza* University in Rome, Italy.

Any other interest

I am a classically trained pianist and opera singer, and while no longer performing in front of audiences, I still enjoy dedicating some time every day (when I am at home) practicing my favorite Bach. In the past I used to combine my competitive nature and my passion for solving problems by playing in chess tournaments: having no time for competitive chess right now, I only play late at night against the computer, but I am looking forward to joining a club / tournament as soon as I can spare some time. I am an explorer at heart, and I enjoy combining culture with field excursions during my travels. I engage in philosophy and politics debates with anybody willing to discuss issues important to humanity.