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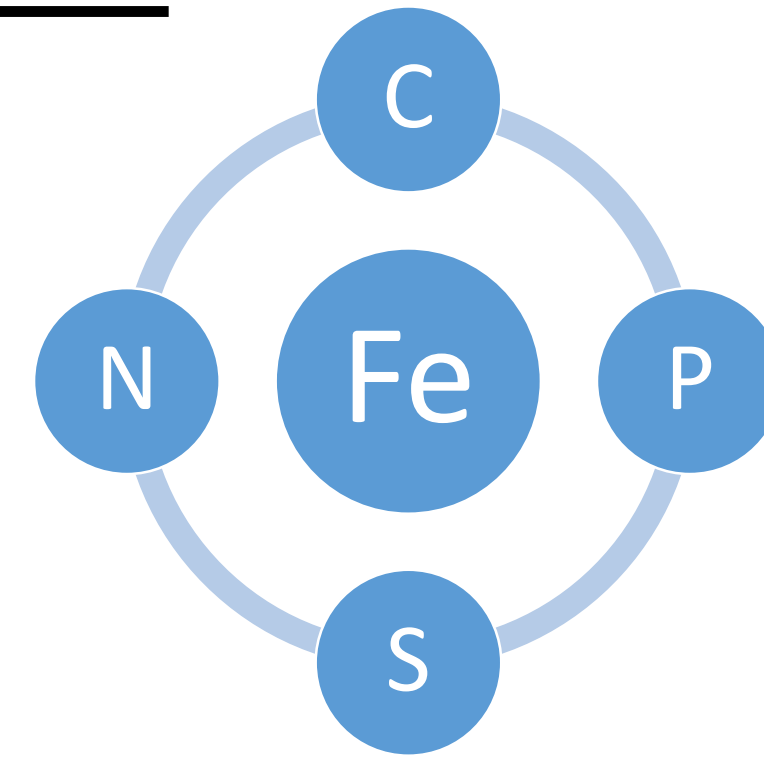
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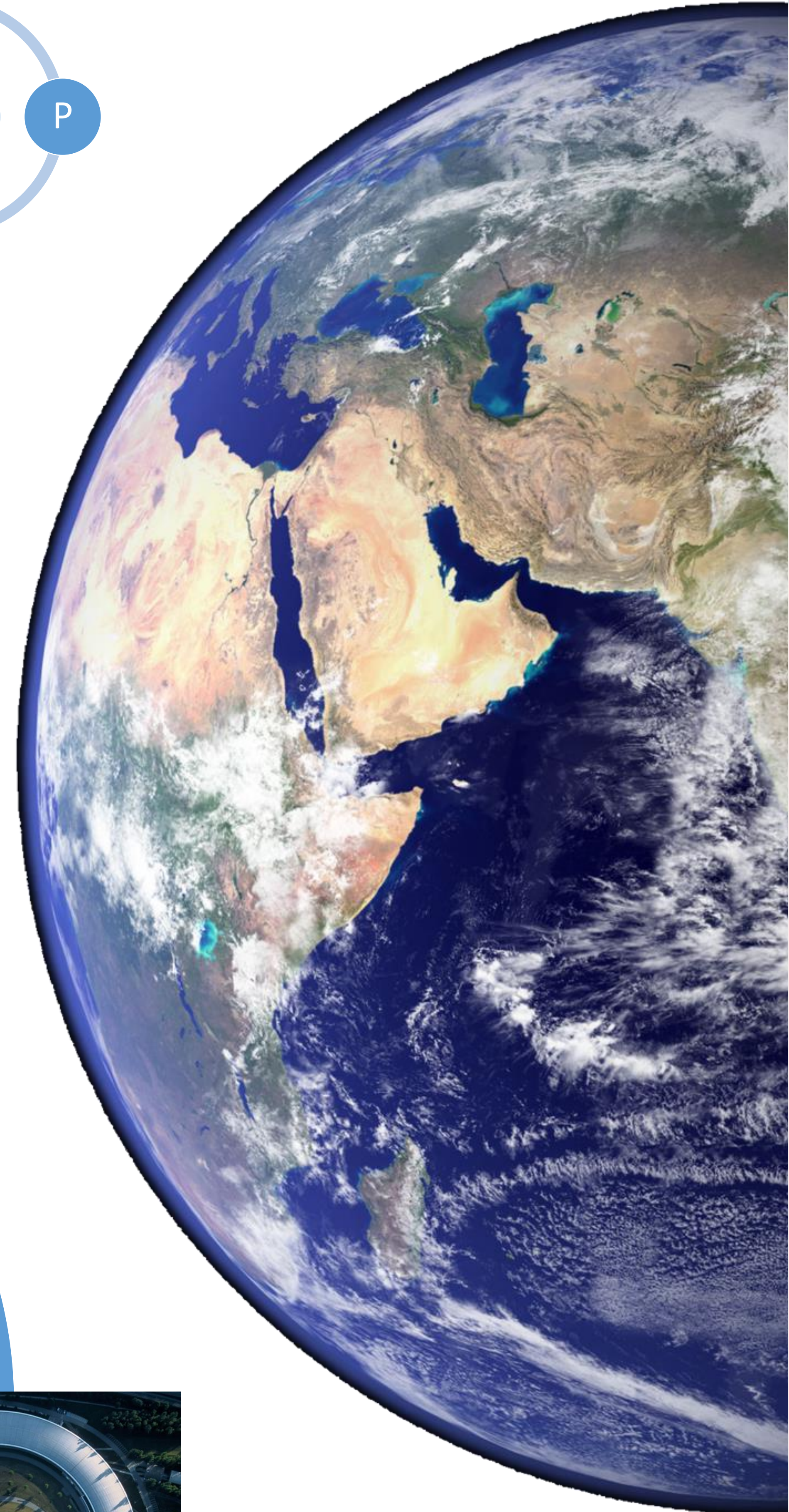
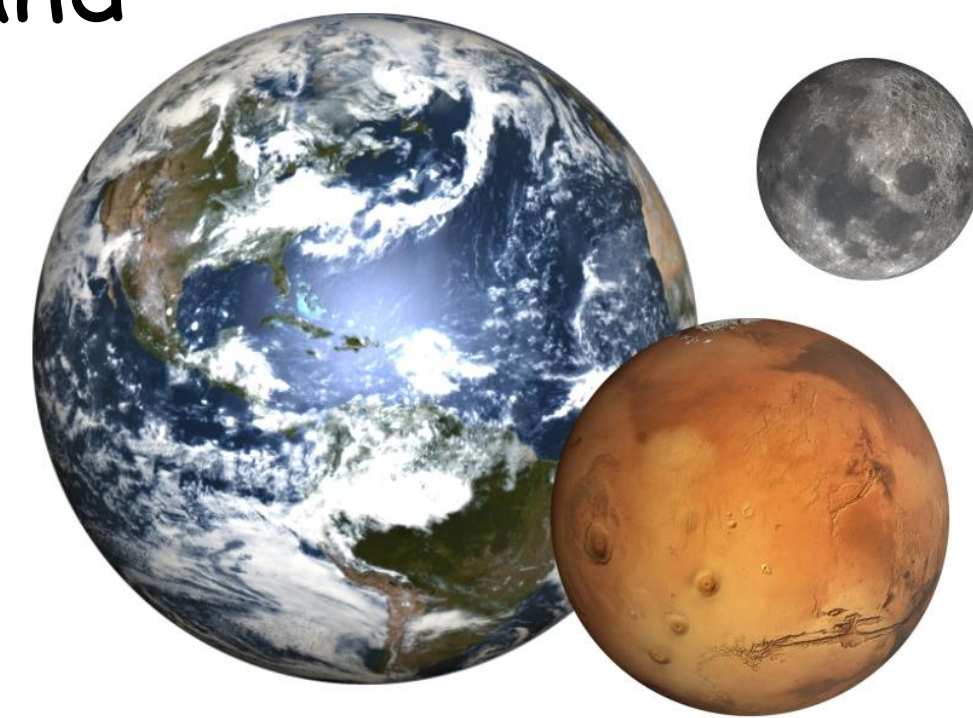


Research Interests

The (bio)geochemical iron cycle and how it is linked to the cycling of other elements such as carbon, nitrogen, sulphur or phosphorus.



Cross-fertilisation between the environmental sciences and planetary exploration



Mössbauer Spectroscopy lab for Earth and Environment (MöSEE)



Conventional Mössbauer Spectroscopy

Synchrotron-based Mössbauer Applications



(Field-)Portable Mössbauer Spectroscopy



More info on Mössbauer spectroscopy (free to download):

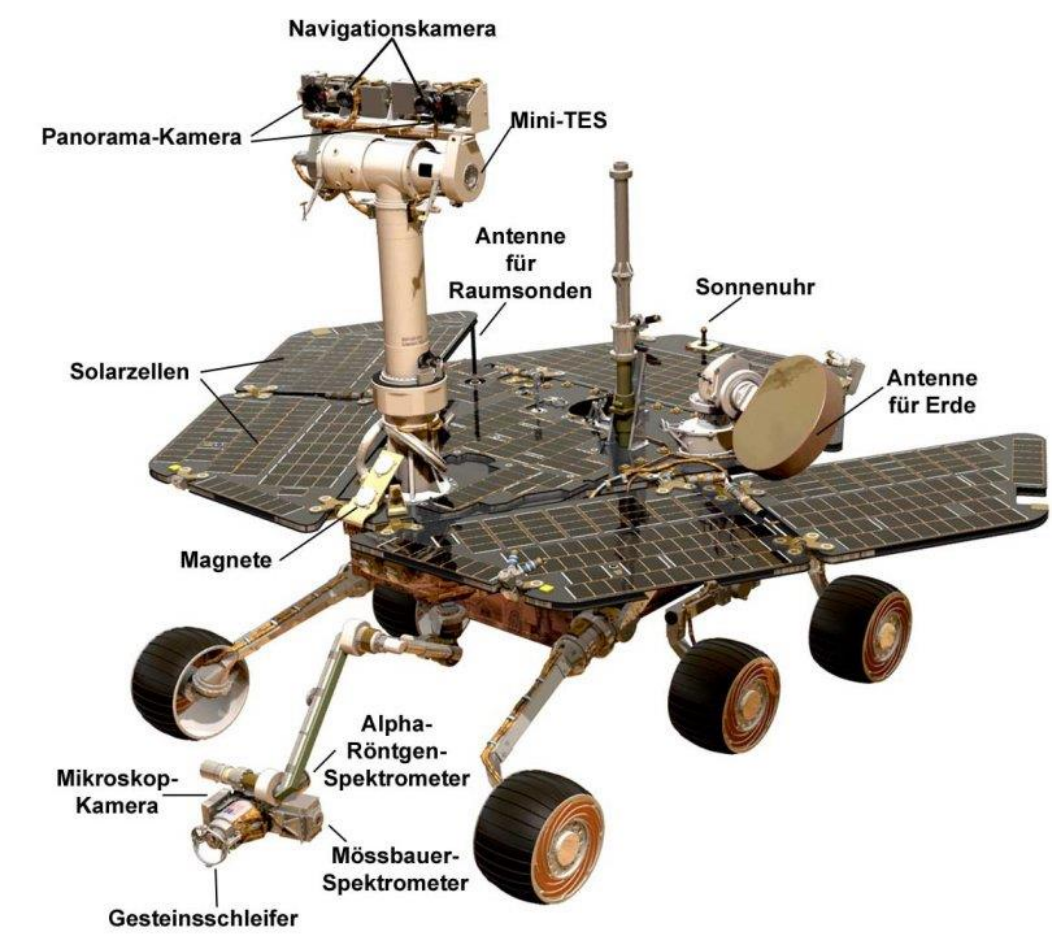
- Gütlich, Schröder, Schünemann: Mössbauer spectroscopy - an indispensable tool in solid state research. *Spectroscopy Europe* 24 (2012) 21-32
- Schröder: Mössbauer spectroscopy in astrobiology. *Spectroscopy Europe* 27 (2012) 10-13

More info on MöSEE: stirlingmoessbauerlab.wordpress.com/ (website under construction)

Current Projects and Initiatives



Mars Exploration Rover Science & Operations:
Follow-the-water and assess past suitability for life.



Topical Team Geobiology in Space Exploration:
Microbe-mineral interactions in the robotic and human exploration of space



Space Exploration Advisory Committee
Sample Return Working Group

Geo.Rep.Net.

STFC-funded initiative for cross-transfer of technology from the space and astronomical communities into geological repository (CO₂, nuclear waste) monitoring



Marine Alliance for Science and Technology for Scotland

Linking carbon and iron cycles by investigating transport, fate and mineralogy of iron-bearing colloids from peat-draining rivers - Scotland as model for high-latitude rivers

