

PHILIPPE GILLET

Professeur Ecole Polytechnique Fédérale de Lausanne
Chief Scientific Officer SICPA

Education and qualifications

Master in Geophysics and Geochemistry (1979-1983) at Ecole normale supérieure de la rue d'Ulm.

PhD in Geophysics and Geochemistry (1983) defended at Université de Paris VII.

State thesis in Geosciences (1988) defended at Université de Rennes.

Research fields

Earth and natural resources

Physics-chemistry of materials

Use of trace elements in Food and Health

Extraterrestrial matter and birth of the Solar System

Blockchain and Track & Trace

Academic and private employment

2016– : SICPA

2010– : Professor – Ecole Polytechnique Fédérale de Lausanne,
Switzerland. **1992–2010: Professor** – Ecole normale supérieure de Lyon,
France.

1988–1992: Professor – Université de Rennes, France.

1983–1988 : Assistant-Professor – Université de Rennes, France.

Professional services (recent)

2017– : Chief Scientific Officer at SICPA

2010–2016: Vice-president of Academic Affairs (Provost) – Ecole Polytechnique Fédérale de Lausanne, Switzerland.

2013–2014: President ad interim – Ecole Polytechnique Fédérale de Lausanne, Switzerland.

2014–2017: Director General – Humain Brain Projet

2007–2010: Chief of Staff of the French Minister for Higher Education and Research, Mrs Valérie Pécresse.

2003–2007: Director – Ecole normale supérieure de Lyon.

2006–2007: President – French National Science Foundation (ANR).

2004–2007: President – University of Lyon.

2000–2003: Director – Institut des Sciences de l'Univers (CNRS, French Research Agency in charge of research in Space, Environment, Oceanography, Climate and Earth Sciences).

Board and committees responsibilities (recent)

2016–: President of the Scientific and Innovation Board of the French region “Île de France”.

2016–: President of the Scientific Board of the Institut National de la Recherche Agronomique et Environnement (INRAE France).

2019–: Chairman of the Industrial Committee - AI4EU. European industrial program on Artificial Intelligence.

2014–2017: Director General – Humain Brain Projet (European Commission Future Emerging Technologies Flagship Project in Digital).

2018–: Operating Partner – C4V. Venture fund in digital. In charge of deep tech.

2014–2019: Board member – BioMérieux (Diagnostics Company).

2014–: Board Member – Berger and Van Berchem (Asset Management Company).

2013–: President of the Advisory Board – IRGC (International Risk Governance Council). **2011–2019: Member of the Executive Committee** – BNP Paribas Foundation in charge of climate and biodiversity research funding.

2010–2015: President of the Board – Institut de Physique du Globe de Paris.

2013–2016: President of the Board – VetAgroSup School.

2001–2007: President of the Board – Synchrotron facility SOLEIL.

2003–2007: Member of the Board – French Institute of Petroleum and Renewable Energies (IFPEN).

2003–2005: Member of the Advisory Committee – Terres Australes et Antarctiques Françaises (TAAF)

Principales publications

- Gillet, P., Ingrin, J. & Chopin, C. Coesite in subducted continental crust : P-T history deduced from an elastic model. *Earth and Planetary Science Letters* **70**, 426-436, doi:10.1016/0012-821x(84)90026-8 (1984).
- Gillet, P., Choukroune, P., Ballevre, M. & Davy, P. Thickening history of the Western Alps. *Earth and Planetary Science Letters* **78**, 44-52, doi:10.1016/0012-821x(86)90171-8 (1986).
- Gillet, P., Richet, P., Guyot, F. & Fiquet, G. High-temperature thermodynamic properties of forsterite. *Journal of Geophysical Research-Solid Earth and Planets* **96**, 11805-11816, doi:10.1029/91jb00680 (1991).
- Biellmann, C., Gillet, P., Guyot, F., Peyronneau, J. & Reynard, B. Experimental evidence for carbonate stability in the Earth's lower mantle. *Earth and Planetary Science Letters* **118**, 31-41, doi:10.1016/0012-821x(93)90157-5 (1993).
- Gillet, P., Badro, J., Varrel, B. & McMillan, P. F. High pressure behaviour of AlPO₄. Amorphization and the memory glass effect revisited. *Physical Review B* **51**, 11262-11269, doi:10.1103/PhysRevB.51.11262 (1995).
- ChamorroPerez, E., Gillet, P. & Jambon, A. Argon solubility in silicate melts at very high pressures. Experimental set-up and preliminary results for silica and anorthite melts. *Earth and Planetary Science Letters* **145**, 97-107, doi:10.1016/s0012-821x(96)00188-4 (1996).

- Gillet, P., Chen, M., Dubrovinsky, L. & El Goresy, A. Natural NaAlSi₃O₈-hollandite in the shocked Sixiangkou meteorite. *Science* **287**, 1633-1636, doi:10.1126/science.287.5458.1633 (2000).
- Clenet, H. *et al.* A deep crust-mantle boundary in the asteroid 4 Vesta. *Nature* **511**, 303+, doi:10.1038/nature13499 (2014).
- Dumcenco, D. *et al.* Large-Area Epitaxial Mono layer MoS₂. *Acs Nano* **9**, 4611-4620, doi:10.1021/acsnano.5b01281 (2015).
- Acunzo, D. J. *et al.* Framing planetary health: arguing for resource-centred science. *The Lancet Planetary Health* **2**, e101-e102 (2018).
- Nabiei, F. *et al.* A large planetary body inferred from diamond inclusions in a ureilite meteorite. *Nature Communications* **9**, 1327-1329 (2018).
- Dorfman, S. M. *et al.* Effects of composition and pressure on electronic states of iron in bridgmanite. *American Mineralogist: Journal of Earth and Planetary Materials* **105**, 1030-1039 (2020).