

## Biography



**Jérôme Chappellaz** is Director of Research at the CNRS and Director of the French Polar Institute Paul-Émile Victor (IPEV). He has conducted most of his research at the Laboratoire de Glaciologie et Géophysique de l'Environnement (LGGE, which became IGE in 2015) in Grenoble. A researcher specialised in climate change and greenhouse gases, his scientific work has regularly contributed to the conclusions of successive IPCC reports. Thanks to ice cores and interstitial air from the polar snow pack, he has been able to characterise the temporal dynamics of the main greenhouse gases over the last few hundred thousand years, using isotope geochemistry to determine the causes of observed changes. His research has also made it possible to highlight regional disparities in Earth's climate evolution on the scale of a few centuries, pointing to the essential role played by the thermo-haline ocean circulation, coupled with atmospheric

dynamics, in global energy redistribution.

Jérôme Chappellaz's research work is dominated by the experimental and instrumental components. In addition to the development of isotope geochemistry, he has initiated the use of optical spectrometry for ice core analysis. An ERC Advanced Grant winner, Jérôme Chappellaz also led an ERC Proof of Concept project that resulted in an international patent in the field of analysis of gases dissolved in a liquid phase. In recent years, this work has led to a significant thematic mobility towards oceanography. In 2015, he initiated the international Ice Memory project (sponsored by Unesco) to save samples of glaciers that are disappearing due to global warming, in order to preserve them in Antarctica for future generations of researchers.

Through his participation in 10 expeditions to Antarctica and 2 to the Arctic, his knowledge of polar environments covers both scientific and logistical aspects. As Director of the IPEV (Public Interest Group employing about 150 staff, managing 6 research stations including a Very Large Research Infrastructure, as well as a supply icebreaker ; annual budget ~17 M€), he is responsible for coordinating and organising the logistical support of French science in the Arctic, Antarctic and the sub-Antarctic islands of the Indian Ocean. He represents France in several international institutions related to the polar regions : member of the French delegation to the Antarctic Treaty Consultative Meetings, member of the European Polar Board and of European projects focused on the polar regions, member of the COMNAP (Council of Managers of National Antarctic Programmes) and of the FARO (Forum of Arctic Logistic Operators) executive committee.

Jérôme Chappellaz has held numerous managerial responsibilities in scientific research at national and international levels, in particular as Deputy Director of the LGGE, member of the CoNRS in section 19 evaluating and recruiting researchers, member of ERC evaluation panels, member of international IGBP programme boards. In addition to his responsibilities at the IPEV, he is also in charge of polar affairs, attached to the scientific direction of the CNRS, promoting interdisciplinarity in these environments.

Jérôme Chappellaz belongs to the *"Highly Cited"* category of researchers and is the author or co-author of 186 publications including 29 articles published in *Nature* or *Science*. His work has been rewarded with the bronze and silver medals of the CNRS, the Jaffé Grand Prize of the Académie des Sciences, the Niels Bohr Medal of Honour from the University of Copenhagen in Denmark and the Nicholas Shackleton Medal. He is a "Chevalier" (Knight) in the French national order of *Légion d'honneur* and of the national order of *mérite* and is a *Fellow* of the European Geochemical Association and the American Geochemical Society.