



Scientific Committee on Antarctic Research

SCAR Medal for International Scientific Coordination, 2008

Claude Lorius

Claude Lorius is well known as one of the scientists who began a brilliant career as a participant in the International Geophysical Year of 1957-58. It all came down to an ad on a bulletin board in 1955 on the walls of the University of Besançon: “Needed: young researchers to join scientific excursions organized in conjunction with the International Geophysical Year.” Two years later, now a fresh initiate to the emerging science of glaciology, he was wintering with two companions at Charcot Station, 2400 m up on the Polar Plateau. That’s where he learned to love the “mercilessly hostile” vastness of Antarctica. By 1965, Claude had participated in the international Victoria Land Traverse and was leading the winter campaign to the coastal base at Adélie Land to drill ice cores, something that would be a passion for him throughout his scientific career. Why do we know so much about CO₂ in ice cores? Because when Claude saw bubbles burst as ice cubes melted in a glass of whisky he realised they would hold vital information about composition of the air. A truly alcoholic insight!

Claude’s team joined the “Laboratoire de Glaciologie et Géophysique de l’Environnement” in Grenoble to develop ice core drilling equipment and techniques for dating and interpreting the ice sheet archives. International coordination began at once, with researchers and logistics specialists from the U.S., UK, Australia, France and the former U.S.S.R., to get the drill rig to Antarctica and on the job. Drilling began at Dome Concorde on the high plateau in the mid 1970s. To everyone’s surprise, they found much lower CO₂ and methane than today in glacial samples. By the 1980s they were continuing their work, again in collaboration, at Vostok. A series of major scoops followed, well published in *Nature*, notably showing the way that temperature and CO₂ followed one another religiously through the ice age.

Claude eventually became Director of the laboratory in Grenoble, a position he held until 1988. He also held a number of responsibilities at the national level: within the CNRS; the Ministries of Research and the Environment; the French National Committee on Antarctic Research, from 1987 to 1994; and the French Institute for Polar Research and Technology, which he founded in 1992. He also led a number of French Polar Expeditions from 1984 to 1987.

At the international level, he was a member of the World Climate Research Programme (OMM-ICSU) from 1980 to 1984, and the executive committee of “Past Global Changes” (IGBP) from 1989 to 1998. He contributed to the work of SCAR, for which he assumed the duties of President from 1986 to 1990, and the International Arctic Science Committee, between 1991 and 1998. Within the ESF, he led a working group on glaciology from 1985 to 1993, and was a member of the European Committee on Oceanography and Polar Sciences (European Science Foundation and Commission of the European

Community) from 1989 to 1997. He was also a member of the executive committee of the Greenland Ice Core Project from 1989 to 1993, and he presided over the EPICA project (European Program for Ice Coring in Antarctica) from 1993 to 1995.

For his scientific discoveries he has been awarded the Humboldt Prize (1989), the Belgica Medal (1989), the Italgas Prize (1994), the Tyler Prize for Environmental Achievement (1996), the Balzan Prize for climatology (2001) the Médaille d'Or du CNRS (2002) and is in the "Petit Larousse Illustré" next to Sophia Loren (2004). He is an officer of the Legion of Honor (1998), and a member of the Académie des Sciences and the Académie des Technologies. He is also a foreign member of the Russian Academy of Science (1994), a member of the Academia Europaea (1989), and a European Geophysical Society Fellow (1999).

Today we honour him for the international scientific coordination that made these truly magnificent scientific advances possible. Think ice cores, think Lorius.