

Vale Jim Dal Pont: a chemist and a gentleman

Marine chemist Giacomo (Jim) Dal Pont died on 21 November 2008 at the age of 80 after a lengthy illness. During 35 years with CSIRO, Jim pioneered a diverse suite of analytical techniques that found the measure of many things, from algal respiration to trace metals in the sea. He is remembered warmly by his colleagues as a true gentleman and a consummate technician.



Jim joined the former Division of Fisheries and Oceanography at Cronulla in New South Wales in November 1957 to work under David Rochford (later to become Chief of Division). He analysed seawater samples from an Australia-wide coastal monitoring network that included the 50- and 100-metre stations at nearby Port Hacking.

In 1964, he went to sea on the HMAS Diamantina to survey ammonia levels in the Indian Ocean. Back in the laboratory he delved into fatty acids and respiration in algae, dissolved organic carbon in seawater, and nutrient and metal analyses.

In the 1970s, Jim helped to set up a clean room facility at Cronulla and worked on 'planktostat', a culturing system to study algal exudates. He studied jarosite in seawater, mercury in air samples and marine biota. With scientists at the Australian Atomic Energy Commission (Lucas Heights), he developed column chromatography and electro-analytical chemistry techniques for the speciation of trace metals.

As part of the Port Hacking Study, he developed techniques to measure nutrients in the presence of large amounts of sulphide in anoxic sediment porewaters.

In 1984, Jim transferred to the new marine laboratories in Hobart where he calibrated and tested the new graphite-furnace atomic absorption spectrophotometer. He then helped to establish a clean room facility at Hobart for ultra-trace level metal measurements in seawater and determined trace metals in early samples from the CSIRO oceanographic research vessel Franklin in research led by Denis Mackey.

In later years, Jim worked with Ed Butler of CMAR Hobart on environmental chemistry research and surveys. Again he engaged in new areas, such as liquid chromatography and the determination of chlorophenolics in waters receiving pulp and paper mill effluents.

In his long, solid career with CSIRO, Jim Dal Pont touched almost the entire spectrum of marine chemistry and chemical oceanography. His broad experience of marine analytical chemistry, from classical wet chemistry to modern instrumental techniques, could not be gained in the present day.