IN MEMORIAM

ANGELES ALVARIÑO 1916–2005

CalCOFI Systematist and Biological Oceanographer Dies



Classically trained Continental Natural Scientist, Dr. Angeles Alvariño, joined the renowned SIO team of zooplankton biogeographers in 1958 to assist in studying the biological oceanography of the great El Niño of 1957–59. This was the first El Niño to be fully described by the California Cooperative Oceanic Fisheries

Investigations (CalCOFI) hydrographic and plankton surveys. While continuing her global interest in the systematics of the zooplankton predators, she joined the NMFS Fisheries Oceanography Center team led by Dr. Elbert Ahlstrom, Dr. Reuben Lasker, and Dr. Longhurst in 1970. She redirected her efforts to the applied science of interpreting ichthyoplankton distribution, abundance, and mortality by analysis of the horizontal and vertical distribution of invertebrate planktonic predators in relation to the early life stages of commercially valuable fishes.

Dr. Alvariño's early education was in El Ferrol, Spain, followed by college in Santiago de Compostela and at the University of Madrid. She interrupted teaching and her work at the Spanish Department of Sea Fisheries to continue advanced studies. Her renowned mentors in oceanography were Sir Frederick Russell of the Plymouth Marine Laboratory in 1953 and Mary Sears of Woods Hole Oceanographic Institution in 1956. From 1958 until 1970, Dr. Alvariño was a research scientist in the Marine Life Research Group of Scripps Institution of Oceanography at the University of California San Diego.

She joined the newly formed Department of Commerce, National Oceanic and Atmospheric Administration, Fisheries Oceanography Center at La Jolla and remained there for the rest of her career, through 1987.

Dr. Alvariño is the author of about 100 scientific publications. She was among a very few global authorities on the predatory zooplankton, including chaetognaths [arrow worms], the complex colonial siphonophores [Portuguese Man of War, for example], and hydromedusae [jelly fish]. Dr. Alvariño described 22 new species from these groups and also a pelagic octopus. In the early days of collaborative work of NOAA with faculty and students of Hispanic-American University, Angeles Alvariño forged a vital link in imparting scholarly traditions.

Paul E. Smith (Retired) Ed Brinton





Left: Dr. Angeles Alvariño with colleagues at a Sardine/Anchovy Recruitment Program meeting. (From left Ronald Lynn, Angeles Alvariño, Alex Herman, Robert Owen, Geoffrey Moser, Patricio Bernal, Richard Barber).

Right: Dr. Angeles Alvariño delivering a paper at a CalCOFI Meeting.