

2022 Memorials for scientists involved with SCOR

Philip Roy Pugh, UK († 24 November 2021)



Philip Roy Pugh was Emeritus Professor at the National Oceanography Center (NOC) in the UK. He was a full member of SCOR Working Group #87 on Fine-Scale Distribution of Gelatinous Planktonic Animals established in 1986. During his incredible career, and even after his retirement in 2004, most of Phil's work was on siphonophores, a group of cnidarians. Phil described a quarter of all known siphonophores (43 new species), more than anyone who has ever lived. His reviews and taxonomic syntheses were extremely important as they brought order to several confused siphonophore families, stimulating further discovery. During his long career, Phil took part in over 50 research expeditions and published more than 100 papers and reports, becoming the world authority on siphonophores (a title he retains to this day).

Obituary by NOC: <https://noc.ac.uk/news/memorial-Philip-Roy-Pugh>

Raymond Pollard, UK († 14 December 2021)



Raymond Pollard was a physical oceanographer affiliated to the National Oceanography Center (NOC) in the UK and a member of the Scientific Steering Committee of the Integrated Marine Biosphere Research (IMBeR) program from 2004-2006. He led the formation of the James Rennell Centre for Ocean Circulation in 1989 to deliver the World Ocean Circulation Experiment (WOCE), which integrated observations and ocean modelling. This ultimately led to the Institute of Oceanographic Sciences (IOS) moving to the then newly built Southampton Oceanography Centre in 1995, which would later become the National Oceanography Centre.

Raymond led numerous major seagoing expeditions, some of which include the Crozet Islands and in the Southern Ocean and Southwest Indian Ocean.

Raymond was also an innovator, creating new measurement techniques and playing a crucial role in the development and use of towed undulating CTDs. He was also an early user of Acoustic Doppler Current Profilers (ADCPs)

and he played a critical role in bringing scientific computing onboard ships – most notably on the RRS Discovery – to process the vast quantities of data quickly and to adaptively adjust sampling to what was developing in the ocean.

Obituary by NOC: <https://noc.ac.uk/news/memoriam-raymond-pollard>

Robie Macdonald, Canada († 13 February 2022)



Robie was a Senior Research Scientist with Fisheries and Oceans Canada, Institute of Ocean Science and adjunct professor at the University of Manitoba's Centre for Earth Observation Science. Robie was actively involved in the Canadian SCOR National Committee (CNC-SCOR) for over a decade, beginning in 2002. He was the Canadian Chair from 2009-2012. Rob also played a significant role in shaping the present form of the Canadian National Committee, broadening

its membership across the country, and including more university academics on the committee. His great intellect, multidisciplinary expertise, and ability to make connections and see the 'big picture' meant that over his long career Robie conducted, spearheaded, and published ground-breaking research in areas such as marine geochemistry, oceanography, and contaminant sciences. His contributions to the work of the Arctic Monitoring and Assessment Programme (AMAP) covered a range of issues: contaminants including mercury and POPs, climate change, Arctic Ocean acidification and the melting of the Arctic cryosphere. He conceived and led the first AMAP assessment addressing the impacts of Arctic climate change on contaminant pathways.

Obituary by the Arctic Monitoring & Assessment Programme (AMAP) and Paul Myers posted in the Canadian Ocean Science Newsletter (May 2022, #124):

<https://cncscor.ca/site/canadianprogram/newsletter>

Viktor Akulichev, Russia († 27 February 2022)



Viktor Akulichev was an Academician of the Russian Academy of Sciences, Professor, and Doctor of Physical and Mathematical Sciences. He was a Russian Nominated Member for SCOR and Vice President of the Executive Committee of SCOR from 2004-2008. He was also an associated member of Working Group #96 on Acoustic Monitoring of the World Ocean established in 1991. For many years, Viktor Akulichev was the director of the Pacific Oceanological Institute of the Russian Academy of Sciences. He created a well-known scientific school on ocean acoustics and hydrophysics in the Far East, and he headed the Department of Hydrophysics at the Far Eastern State University. In 2008, he was elected President

of the Russian Acoustic Society. He was a full member of the American Acoustic Society (since 1989), a member of the Russian National Committee on Theoretical and Applied Mechanics, a member of the Interdepartmental National Oceanographic Commission of the Russian Federation.

Tribute by Sergey Shapovalov

Timothy (Tim) Parsons, Canada († 11 April 2022)



Tim was a retired professor from the University of British Columbia in Canada. He was the chair of Working Group #24 on Estimation of Primary Production under Special Conditions established in 1964 and jointly sponsored by SCOR and the International Biological Program (IBP). He was also the Vice-chair of Working Group #85 on Experimental Ecosystems established in 1986, as well as an Ex-officio member of the SCOR Executive Committee from 1976 to 1982 as President of the International

Association for Biological Oceanography (IABO). He became a Fellow of the Royal Society of Canada in 1979 and an Officer of the Order of Canada in 2005. In 2001, he became the first and only Canadian to receive The Japan Prize (Japan's equivalent of the Nobel Prize) for his work in biological and fisheries oceanography. In 2005, the Dept. of Fisheries and Oceans established a medal in his name, the Timothy R. Parsons Award, which is awarded annually to an outstanding scientist in ocean sciences.

Obituary: <https://www.dignitymemorial.com/obituaries/victoria-bc/timothy-parsons-10707768/amp>

Jordi Garcia Orellana, Spain († 5 July 2022)



Jordi was a professor at the Department of Physics of the Autonomous University of Barcelona in Spain. He served as member of the GEOTRACES Scientific Steering Committee from 2011 to 2016. Jordi's research focused on using radionuclides to study the oceans, leading research on the biological carbon pump and on

dating of sediment cores to assess marine pollution, and on assessing the accumulation and distribution of radionuclides in Naturally Occurring Radioactive Material (NORM) industries. For the last two decades, he was a driving force on the research on submarine groundwater discharge in coastal areas using radon and radium isotopes. At the University, he taught both at the undergraduate and graduate levels and had numerous management roles.

Tribute by Joan Manel Bruach, Pere Masqué, Valentí Rodellas and the Research Group of Environmental Radioactivity of Barcelona (GRAB) posted by GEOTRACES:

<https://www.geotraces.org/tribute-to-jordi-garcia-orellana/>

Obituary by the Universidad Autónoma de Barcelona: <https://www.uab.cat/web/sala-de-prensa/detalle-noticia/nos-deja-jordi-garcia-orellana-1345830290069.html?detid=1345864176263>

Myriam Sibuet, France († 26 July 2022)



Myriam was a deep-sea researcher and a pioneering woman in science. She led numerous cruises and led the deep-sea lab at IFREMER for years. Myriam was a member of the Scientific Steering Committee of the Census of Marine Life, a decadal program affiliated to SCOR between 2000 and 2010. She was also a full member of Working Group #76 on Ecology of the Deep-Sea Floor established in 1983. Myriam

was a meticulous echinoderm taxonomist and deep-sea ecologist. With the discovery of cold seeps on continental margins in the late 80s, her career had a turning point as she focused on topics such as chemosynthesis, biodiversity, ecology, and other processes in these rare

and heterogenous ecosystems. Myriam was always pushing for methodological improvements and technological innovations from beam trawl to submersibles. Myriam first dived in a submersible in 1976 during a technical test of Cyana, and she later contributed to the specifications of the submersible Nautilie and the ROV Victor 6000. Myriam has been instrumental for the development of deep-sea science, in France and beyond. She was an example who marked us with her curiosity, her dynamism, her team spirit, and her humanity.

Tribute by Lenaick Menot posted by IABO: <http://www.iabo.org/>

David Pugh, UK († 1 August 2022)



David Pugh was an Emeritus Fellow at the National Oceanography Center (NOC) in the UK. In 1984, David became Head of Oceanography, Hydrology and Meteorology for the UK Natural Environment Research Council (NERC). Part of that work involved serving as Secretary to the UK Government Inter-Agency Committee on Marine Science and Technology (IACMST) from the early 1990s until 2003. David spent considerable time working on international aspects of

oceanography, including leading the UK delegation to the Intergovernmental Oceanographic Commission (IOC) Assemblies, and becoming the Chairman of IOC in 2003-2007. He contributed much to the planning of IOC's 50th anniversary in 2010 and, linked to this, co-edited the book "Troubled Waters", which identifies the challenges facing international marine science and IOC's position within the UN system. The book explained how governments use science to establish ocean policies in issues such as marine pollution, exploitation, and hazards. SCOR, through former Executive Director Liz Gross led the book chapter on non-governmental organizations.

Obituary by NOC: <https://noc.ac.uk/news/memorial-david-thomas-pugh>

Michio Aoyama, Japan († 5 September 2022)



Michio Aoyama was a Visiting Professor at the University of Tsukuba since 2019 and before that a Professor at the Institute of Environment Radioactivity at Fukushima University. Michio contributed extensively to a variety of activities across marine biogeochemistry and radioactivity. He was a full member of SCOR WG #146 on Radioactivity in the Ocean which revisited progress 50 years after the first SCOR WG was established in 1959 on this topic. He was the co-chair of SCOR WG #147 working on the comparability of global oceanic nutrient data (COMPONUT) harmonizing global oceanic nutrients observations and data, and a

member of the Scientific Steering Group of the International Carbon Coordination Project (IOCCP) from 2013 to 2018 focusing on Nutrients Essential Ocean Variables for achieving global consensus on obtaining comparable and accurate nutrients data. His inexhaustible energy in organizing large international workshops, several global inter-comparison exercises and eventually successful lobbying for development, production, distribution and use of nutrients Reference Materials, changed our ability to understand the geochemistry of deep oceanic waters in relation to carbon and dissolved nutrients.