

## In Memoriam



**Owen Martin Phillips, 30 December 1930–  
13 October 2010;  
Honorary Fellow 1995–2010**

A tribute, reproduced by courtesy of Johns Hopkins University, Maryland.

Owen Martin Phillips, a Johns Hopkins University faculty member emeritus and world-renowned oceanographer, died on Wednesday, Oct. 13 2010 at his Chestertown, Maryland., home. He was 79.

He was world famous for devising a method for predicting and describing the shape of ocean waves, including giant waves, 10-storey upheavals of the sea surface, knowledge of which is essential for designing ships and drilling platforms capable of withstanding these destructive swells of water.

An engineer and scientist who probed the complex physics of fluids in motion, Phillips spent half a century at Johns Hopkins and was the chief architect of the school's Department of Earth and Planetary Sciences, formed in 1967. His work in fluid mechanics is widely recognized as having had a profound impact on the field, cutting across traditional disciplines and encompassing practical applications as disparate as the Earth's crust, its atmosphere and oceans.

"Owen was a true giant in the field of fluid mechanics for his contributions to oceanography and other geophysical flows. Much of our understanding of ocean waves can be traced to fundamental research done by Owen," said Darryn Waugh, chair of the Department of Earth and Planetary Sciences. "Owen had a huge impact on Johns Hopkins University. Not only did he play a major role in the formation of the Department of Earth and Planetary Science, and twice serve as chair, but he also was its first and longest-serving chair, during which time he guided its growth and development into an internationally recognized, interdisciplinary centre for research and teaching."

A prolific writer, Phillips authored more than 100 papers in his field. His 1966 book, *The Dynamics of the Upper Ocean*, is a standard reference volume for students struggling to understand waves and turbulence, and his 1991 volume, *Flow and Reactions in Permeable Rocks*, unified the chemistry and physics of

certain geological processes and is still used by students today. Many of his former students are now distinguished researchers worldwide.

Phillips was born on 30 December, 1930 in Paramatta, New South Wales, Australia. His father, a veteran of both world wars including the infamous Gallipoli landing and the 1917 Western Front, moved the family of six to a small country town in northern New South Wales in 1936, then to Sydney in 1944, where Phillips attended high school. In 1948, Phillips entered the University of Sydney in the engineering programme, which at the time was among the most rigorous academic training grounds in the world. He earned a B.Sc. in applied mathematics with highest honours in 1952. He finished his doctorate at Trinity College, Cambridge, in 1955.

He published his first scientific papers in 1955, and two years later joined The Johns Hopkins University as an assistant professor of mechanical engineering. That year, he also published a paper outlining his still-famous and influential theory on ocean wave generation. Three years later, he returned to Cambridge, accepting a position as assistant director of research in the Department of Applied Mathematics and Theoretical Physics. He discovered, however, that the field of oceanography was expanding much more rapidly in the U.S. than in the U.K, so he came back to Johns Hopkins in 1963 as a full professor of geophysical mechanics.

In 1965, Phillips was awarded the coveted Adams Prize by London's Royal Society for his first monograph, *Dynamics of the Upper Ocean*, published the following year. He was elected a Fellow of the Royal Society in 1968, at the age of 37. For the next 10 years, Phillips was chair of the newly formed Department of Earth and Planetary Sciences, and then again from 1988 to 1989.

He was awarded the Sverdup Gold Medal in 1974, was named the President of the Maryland Academy of Sciences from 1979 to 1985, and elected as Fellow to the American Meteorological Society in 1980 and the American Geophysical Union in 2006. In April 1998, hundreds of friends and colleagues packed Johns Hopkins' Shriver Hall auditorium to hear the world's foremost experts in fluid dynamics pay tribute to Phillips upon his retirement. Though admired for his research acumen and accomplishments, the turbulence expert was also beloved for his gracious charm, quick sense of humour and generosity of spirit.

"Owen Phillips was genuinely a renaissance man; a true polymath. He took a sincere interest in everyone in EPS, and he was unfailingly generous, especially

when it came to sharing his thoughts, ideas, and insights with colleagues and students,” said Peter Olson, a colleague of Phillips’ and a professor in the Department of Earth and Planetary Sciences.

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**Paley Johnson 12 February 1917–11  
February 2011;  
Fellow of Trinity 1962–2011**

A tribute from Stephen Harding DSc (Oxon), Professor of Applied Biochemistry and Biophysics, University of Nottingham, delivered at the memorial service, 19 March, 2011.

Last month Paley Johnson died after a long and highly respected life and career of scientific research and teaching. He was just short of his 94th birthday. I had the privilege of being his last Research Assistant and I thank his family and the College for giving me the honour of delivering this address on behalf of his family, friends and colleagues.

Paley had been a Fellow of Trinity since 1962 and, in 1997, as is customary, he addressed the Fellows on the occasion of his 80th birthday. In 2007 everyone was back again as he addressed the College on the occasion of his 90th birthday.<sup>1</sup> In his concluding remarks he showed he’d lost none of his wit by saying that he looked forward to presenting the 3rd lecture in the series—and to receiving his telegram from the Queen ‘if she also manages the extra ten years’.

Despite his distinguished academic career as a Colloid Scientist—where he became a world authority—Paley never forgot his roots in the North East of England. He was born and brought up in Durham, in the mining village of Middlestone, a few miles from Bishop Auckland. To his family’s delight he passed his 11+ exam, to win a scholarship at Alderman Wraith grammar school in Spennymoor. Times were hard in the North East and the Headmaster of the school had told the boys that the cost of a school book was the equivalent of a night’s wages for a miner. This impressed on young Paley the need to work hard at school; there he excelled and won a place at Trinity—without interview—to read Natural Sciences, supported by a State Scholarship. During tea-time

<sup>1</sup> <http://www.trin.cam.ac.uk/show.php?dowid=731>