Philip W. Choquette 1930-2019

Phil Choquette, gentleman, geologist, researcher, scholar, singer, and friend to many, died on September 11, 2019 in his 90th year. His influence on the evolution of our science, particularly the origin of carbonate sedimentary rocks, will forever stand as his legacy. In spite of a speech impediment, he excelled in communication with his peers, especially in his written papers. Phil was a pioneer in the halcyon early days of carbonate sedimentology when everything awaited discovery.

He came from upstate New York, was schooled both there and in France, did his undergraduate studies at Allegheny College, and completed his graduate studies at The Johns Hopkins University. Phil attended Hopkins during the tenure of Ernst Cloos, Aaron Waters, and Francis Pettijohn, all of whom profoundly influenced his graduate research, and in 1957 produced an awardwinning Phi Beta Kappa Ph.D. thesis on metamorphosed carbonates. His fascination with sedimentary carbonates, however, began two years earlier and resulted in his first publication on the State College Oolite.

Following a brief period with the USGS, in 1958 he joined Marathon at its new research lab in Littleton Colorado, and spent 28 years there with his brilliant and dedicated colleagues who were working on all aspects of sedimentary geology. It was in this rarified atmosphere that he produced perhaps his most influential works.

So what was it in this man that separated him from most of his colleagues and earned their everlasting respect? Looking back, I think that it was his ability at synthesis, his lack of intellectual fear, and his incredible curiosity, to say nothing of his ongoing fascination with petrography and stable isotopes. The first major article was the seminal AAPG paper with Lloyd Pray (1970) on the classification, nomenclature, and interpretation of porosity in carbonate rocks. To enunciate such a topic, it was necessary to both understand and articulate the fundamental processes of alteration and to link them in an understandable and useful way. The authors succeeded such that it is still used today. The other publications were a series of articles on limestone diagenesis printed in Geoscience Canada in 1983, 1984, and 1987 that have been used by students and professionals worldwide. In working with Phil, we not only shared our experiences but were severe critics of each other's endeavors – he was a gentle guy but when it came to science, he was tough and exacting. My days working with him on these articles were some of the most gratifying scientific times that I have known.

Phil's other skills at synthesis were as an editor, especially of two books, 'Carbonate Petroleum Reservoirs' (Roehl and Choquette, eds. 1985) and 'Paleokarst' (James and Choquette, eds. 1988). The former was on the desk of most carbonate specialists worldwide. He seemed to have the uncanny ability to select the best contributions and to force the authors to relate their tales in the most succinct of ways.

During his days at Marathon he worked on carbonate reservoirs worldwide, especially in the Middle East, North Africa, Java, and the Mediterranean, as well as Alaska and the northern Rockies, together with the Illinois, Paradox and Permian, and Wind River basins in North America. Such vast experience gave him an incredible perspective on carbonate rocks. This allowed him to assess the evolving science and give counsel and advice to those of us working on rocks outside this sphere. He was certainly the 'go to' person for those at Marathon struggling with carbonate problems.

Phil retired from Marathon in 1986 but remained active at SUNY - Stony Brook and the University of Colorado for several years. He pursued his lifelong interest in the enigmatic problem of dolomite genesis, eventually publishing a landmark paper with Eric Hiatt (Sedimentology, 2008) on dolomite cements, a topic that had bedeviled most of us for many years.

During the Marathon years, and later at universities proper, he was a continuous inspiration to students. I watched him spend hours with graduates, carefully teasing out the problems they were facing and using his experience to gently push them into asking and answering critical questions in their research. During those times he always served as their equal, never the professor.

Phil was a strong supporter of SEPM. He was Councilor for Sedimentology (1981-1983), Associate Editor for JSP (1973-1984), served on almost all of the SEPM Standing committees, and co-organized carbonate research conferences for SEPM and other organizations. He also won awards: Honourable Mention for best paper (James, N. Ginsburg, R.N, Marszalek, D. and Choquette, 1976); and Honourary Membership in SEPM (2000).

As is often said about our human journey, 'a light has gone out' – but during its time Phil's light shone on his many friends and colleagues, improving us all. He will be sorely missed.

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