

From Sandstone To Chaos: A symposium in honor of Gerrard V. Middleton on his retirement, 1996

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This issue of *Geoscience Canada* includes a collection of papers that were presented at a symposium in honor of Gerry Middleton at the Annual Meeting of the Geological Society of America, Northeastern Section, held at Buffalo, New York in March 1996. At that symposium 15 papers were presented, including the six published in this issue of *Geoscience Canada*. The theme of the symposium was "From Sandstone to Chaos" reflecting the great breadth of scientific contributions that Gerry has made over his long and productive career. This note presents a brief biography of Gerry and is particularly appropriate to *Geoscience Canada* as Gerry was this journal's founding editor.

Gerry came to Canada from Britain in 1954 following the completion of his Ph.D. at Imperial College, London. His first job as a geologist in Canada was with the California Standard Oil Company, in Calgary and Regina, where his work included field investigations on horseback in the foothills. After one year in the west he took up a position at McMaster University where he remained until his retirement. At McMaster, Gerry had the opportunity to flourish in his field and his influence extended well beyond his own laboratory. Through his participation in national and international geological organizations he helped shape the development of clastic sedimentology over the period of its major growth, particularly in Canada, into an active and important branch of the earth sciences.

Gerry is best known to the geoscience community for his research and, in particular, for bringing important work to the forefront of clastic sedimentology. In 1964 he organized a symposium on primary sedimentary structures and their hydrodynamic interpretation. The proceedings were published as SEPM Special Publication No. 12 and led the way to our modern understanding of primary sedimentary structures. Also that year he spent a sabbatical leave in the California Institute of Technology laboratory of Vit Vanoni where he conducted research that led to his benchmark papers on the mechanics of turbidity currents. The results of this research were published in the *Canadian Journal of Earth Sciences*, then a fledgling journal that benefited from his contribution of results of interest to the global community of earth scientists. This interest in turbidites led to the first SEPM Short Course Notes in 1973, including the extremely influential paper (with Monty Hampton) which provided the foundation for the understanding of sediment gravity flows by modern sedimentologists. The early 1970s also saw the publication of the first edition of *The Origin of Sedimentary Rocks*, co-authored by Harvey Blatt and Ray Murray, probably the most widely adopted text in sedimentology throughout that decade. His research continued and expanded over that decade. In 1976 he published a paper in *The Journal of Geology* on the interpretation of grain size distributions, a brilliant work that formed the basis of much discussion at many sessions and symposia. Through the 1960s to the 1990s, Gerry's enthusiasm for science has infected his many gradu-

ate students and together they have made diverse contributions to our understanding of the sedimentology of tidal settings, alluvial fans, deep sea fans, bedforms and stratification, and statistical applications to geology. Most recently Gerry has become interested in non-linear dynamics (chaos) and, in particular, its application to geological problems. Gerry has taught courses and written a book on chaos theory. With this great range of experience and expertise, his value as a resource to the geological community will not likely be duplicated for several generations to come.

Gerry has been honored extensively for his contributions. He was elected as a Fellow of the Royal Society of Canada in 1970, he received the Logan Medal of the Geological Association of Canada (GAC) in 1980, he has been awarded honorary memberships in both the Society of Economic Paleontologists and Mineralogists (SEPM) and the International Association of Sedimentologists (IAS), he has received the Pettijohn Medal from SEPM, and the Major John A'Deane Coke Medal from the Geological Society of London. Gerry has also served extensively for the societies and associations: President of the Geological Association of Canada (1987-88), Vice-President, International Association of Sedimentologists (1978-82), along with memberships and chairs of a variety of committees of GAC, IAS and SEPM. He has also served two terms on the Earth Sciences Grant Selection Committee for the Natural Sciences and Engineering Research Council of Canada.

In addition to all of the above, Gerry is a great guy! Those of us, like the authors, who were privileged to have had Gerry as a teacher (both undergraduate and graduate) and/or friend, grew to not only admire his scientific ability but also the man; his honesty, integrity and sense of humor are to be admired by all. In addition, he is always up for a few beers and less formal discussion after a class, discussion that could range from the future of sedimentology to human sexuality (in less technical jargon). We are very pleased to have had the opportunity to work with him over the years and we hope to continue to do so for years to come.

The papers presented in this issue of *Geoscience Canada* are just a sampling of those presented at the symposium in Gerry's honor. Like the symposium, this collection reflects the work of many of his friends and former students who have all benefited from Gerry in one way or another. The papers also reflect the state of a science that has built upon Gerry's many contributions.

Finally, we thank the contributors to this issue and the symposium, the reviewers of these articles, and Roger Macqueen, Editor of *Geoscience Canada*, for making this issue available and for his help and patience in bringing the papers to print. And of course, we thank Gerry Middleton for setting a standard for sedimentologists to strive for, and for all the good times that we have had and will continue to have with him.