



AGS DISTINGUISHED SCIENTIST AWARD. GESNER MEDAL – 2002

Martin Gibling's achievements in geoscience research are extraordinary in both their breadth of focus and creative novelty. In addition to his excellence in scientific research, he is a humble, reflective, philosophical and unselfish man who has quietly exerted a profound influence on generations of students and colleagues over the past twenty years. This essay briefly outlines a few of Martin's many achievements and qualities that make him a very worthy candidate for this year's Gesner Medal.

Martin is a first class Geology graduate of the University of Oxford, UK (1973). He subsequently studied at the University of Ottawa where he received his PhD for a thesis concerning the Silurian-Devonian sedimentology and stratigraphy of Somerset Island, Arctic Canada (1978). Following three years teaching in Thailand during which time he conducted research on Tertiary oil shales, he joined the faculty of Dalhousie University in 1981.

Since arriving in the Atlantic Provinces, he has devoted his considerable energy and talents to understanding the local Carboniferous sedimentology and stratigraphy. In particular, he has first-authored or contributed to more than 40 key papers on the Tournaisian Horton Group, the Westphalian Cumberland Group, and the Westphalian/Stephanian Morien Group. However, the scope and significance of his work extends far beyond the confines of either conventional sedimentology or Atlantic Canada. Three examples from his local research amply illustrate this claim:

- (1) Martin's analysis of the sequence stratigraphy of the Sydney Mines Formation in the late 80's/early 90's undoubtedly ranks as the finest example of its kind ever undertaken in outcrop according to leading sedimentologists like M.R. Leeder (pers. comm., 1998). This work was well ahead of its time, beginning when sequence stratigraphy was still in its infancy and before the study of global change issues such as sea level and climate change became trendy in the geosciences. His study synthesized a huge volume of sedimentological observations and emphasizes both his meticulous approach to detail and also his creative ability to see the big picture.
- (2) More recently Martin has begun to seriously turn his attention to the famous fossil cliffs of Joggins, a site largely neglected since the seminal work of Lyell, Logan and Dawson. Martin and ex-student John Calder have been instrumental in re-igniting substantial interest in the Joggins fossil cliffs, bringing together a large, eclectic international team of geologists to explore the murky Carboniferous tropical forests in exciting new ways. The work has been supported from sources as diverse as NATO and Imperial Oil, and emphasizes the breadth of Martin's interests and his special ability to gently yet passionately enthuse others with a similar vision to his own.
- (3) Finally, it should be noted that Martin is no ivory tower academic. He is an able, pragmatic man, and very concerned that his research should be useful to his local community. This is well illustrated by his recent research project that analyzed the origin of acidic, hypersaline incursions in sub-ocean coal mines at Sydney which were disrupting mining activities and threatening lives. This work was funded by a large NSERC strategic grant (1995-98).

In addition to his local work, Martin also has a very active international research program. At various times he has collaborated with scientists on field projects in the UK, USA, Italy, Nepal, Thailand, Portugal, India and Australia. He has also twice been a visiting professor at the University of Wollongong, Australia (1988-9, 1994-5) and is currently taking a sabbatical at the University of Exeter, UK (2001-2). He is ranked by his peers as one of the most outstanding sedimentologists worldwide, and has served

at various times on the NSERC grant selection committee for Solid Earth Science (1996-1999), and acted as associate editor for several journals including *Atlantic Geology* (1993-present), *Sedimentology* (1995-present), *Journal of Sedimentary Research* (1999-present) and *Bulletin of Canadian Petroleum Geology* (1993-present)

Much of his research outlined above has of course been conducted in collaboration with Martin's many research students and post-docs. To date, he has successfully supervised 25 undergraduate honours students, 12 MSc and 6 PhD students. Of his postgraduate students, almost all have gone on to find employment in the geosciences (in museums, government, oil companies) even despite often graduating during downturns in geological employment market. This is surely an amazing tribute to Martin's ability to fire students with a passion for geology, and to his long-lasting commitment and concern for each individual's welfare; his ex-students certainly think so!

Martin's gift to inspire others is also clearly seen in his undergraduate teaching. It will come as no surprise to learn that Dalhousie students unanimously nominated him as Earth Science Professor of the Year in 1999. Martin's course feedback reports are always the envy of every professor. Here are some representative comments from past students: "Dr. Gibling is one of the finest professors I have ever had" (1994); "Dr. Gibling's personal enthusiasm... made this my most interesting course; he is always approachable and understanding, and always willing to help" (1996); "He is simply excellent!! The best professor I ever had! A pleasure to be taught by him"(1997). Martin is also very active in local schools, where he regularly gives talks to young kids about geology.

Outside his geological life, Martin has very many other interests, and a particular concern is the developing world. In the past, he has been an advisor to the World University of Canada concerning third world relief and development programs in SE Asia. A committed Christian, he has also worked with the Anglican Church's world relief program and has served in refugee camps in Thailand. He is a gifted violinist and leads worship at his church in Halifax.

A short document like this cannot do justice to Martin. He is an omni-competent individual with a contagious enthusiasm for geology. He has a passion to understand and always brings out the best in his students, colleagues and friends. In conclusion we whole-heartedly recommend him for his year's Gesner Award.