## 2009 MEDALS & AWARDS

# GILBERT H. CADY AWARD

### Presented to R. Marc Bustin



R. Marc Bustin
University of British Columbia

### Citation by Maria Mastalerz

It is a great honor to recognize R. Marc Bustin for his outstanding contributions to the field of coal geology. A graduate of University of Calgary and the University of British Columbia (UBC) in Canada, R. Marc Bustin has been a Professor of Geology at the UBC in Vancouver since 1979. My association with Marc started 19 years ago, when he offered me a postdoctoral position at UBC, but his diversified scientific research has been a major resource throughout all my professional career.

Bustin's contribution to coal geology is immense. His early papers on the Fraser River Delta peat deposits are still important references on modern peatforming environments. Those early papers already established him as an outstanding sedimentologist/coal geologist. His research on the role of stress and strain in the maturation of organic matter has been a major contribution in understanding graphite formation and is widely cited in the literature. His innovative research on the application of micro-techniques to study coal—microprobe and micro-FTIR - contributed new knowledge of maceral chemistry. Perhaps his greatest contribution to the science of coal geology is his pioneering work on coalbed methane, and gas, including carbon dioxide, sorption. With his graduate students and postdoctoral fellows, Marc addressed many key issues, combining field observations, laboratory experiments, and modeling. His

research in this field brought him a wide recognition not only in the scientific world but also in the industry, reflected in countless invitations to present short courses and give invited talks in North America and internationally. In my opinion, his outstanding recognition of the key research problems and providing creative solutions remain unparalleled in the field.

In addition to his outstanding contribution to coal research, Marc is a dedicated teacher and mentor. Since 1982 he has advised more than 40 students and several postdoctoral fellows. Many of these individuals hold important academic and industrial positions, a testimony to his abilities as a teacher as well as to the importance and timeliness of his research. He exhibits a finely honed intuition and a keen scientific imagination, and he masterfully instills these traits in his students and coworkers. We all continue to be inspired by his depth of knowledge, professionalism, and scientific intuition, and often seek his advice.

Bustin has also shown his commitment to coal geology by serving as Associate Editor of the International Journal of Coal Geology; reviewing countless papers for other scientific journals; working in various capacities in such organizations as CSCOP, ICCP, and GSA; and participating in the organization of scientific conferences, short courses, workshops, and other scientific events. He has received a number of national and international awards, including the Thiessen Award, the highest award presented by the International Committee for Coal and Organic Petrology.

R. Marc Bustin is a distinguished coal geologist, one the best of our time, and for his research, dedication to teaching, and service to coal-related professional organizations, it is an honor to recognize him with the Gilbert H. Cady Award of the Geological Society of America Coal Geology Division.

#### Response by R. Marc Bustin

It is great pleasure that I acknowledge and thank the GSA for the Cady Award. Past recipients of the award include the most respected coal scientists and engineers and I am truly honored to be considered in such esteemed company. My interests in coal geology goes back to the early 1970s when I was a naive student in the Canadian Arctic Islands with the Geological Survey of Canada under the tutelage of Drs. Hugh Balkwill, Ken Roy and Steve Hopkins. Their patience and encouragement are to a great extent responsible for my career choice and career values, and I here acknowledge and thank them. As a teacher I have had the good fortune to have had some remarkable graduate students, post doctoral fellows, and research associates and what success I have had as a researcher must at minimum be equally shared by them. Through the last 30 years I have had the remarkable good fortune to have had the best job, that of a professor at one of the great universities situated in one of the most beautiful cities in the world with access to adequate funds to pursue my curiosities. Such a great job and work environment was made possible by the tax payers of Canada and I hope that the Cady Award in some small way helps validate their investment in my research program over the last three decades.