GILBERT H. CADY AWARD

Presented to
Colin R. Ward

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University of New South Wales

Citation by Tim A. Moore

Invariably, when one thinks of mineral matter in coal, one thinks of Colin Ward. But Colin is no mere specialist mired in the details of a single aspect of coal geology – his expertise spans the breadth of coal science. Topics of papers authored by Colin also cover organic composition, geomechanics, mining hazards, coal seam gas, and the wide, wonderful and weird world of coal ash and its properties. Although Colin has spent almost forty years in academia, he has always worked closely with industry and is one of the few academics who truly value the inputs and contributions that industry can make. For this he is highly respected by industry professionals and continues to give workshops around the world.

Australia has been Colin's primary laboratory. Australia's coal deposits are the greatest in the world in terms of variety of coal ages, coal types, coal quality and all the resultant properties that arise from such a level of variation. Such variation might drive a mine manager or coal company CEO to drink. However, it gives the scientist a chance to see the full spectrum of variability in coal. For this reason, I believe Colin's deep and unique understanding of coal comes in part from his exposure to the coal measures of Australia.

Colin's curiosity has also carried him outside of Australia. In the early 1970s he worked and studied in Illinois. In the same decade he was one of the first to examine in detail the coal deposits of northern Borneo, in the Malaysian state of Sarawak, and later to work on the coal in Thailand (the infamous Mae Moh coal deposit and power plant). He has spent significant time in Kentucky studying, among other things, core logging in coal-bearing sequences. Since then, Colin's work has covered virtually every continent where coal occurs.

There are two publications of Colin's that stand out and should be mentioned. The first is the book "Geology and Coal Technology". Originally printed in 1984 it still stands out in terms of its scope. It covers the academic side of coal including depositional environments and petrographic composition as well as applied aspects such as coal quality variation and the implications this has for beneficiation. It is still used as a textbook to this day. The second highly significant publication is the paper "Analysis and significance of mineral matter in coal", published in 2002. This incredibly fine synopsis is consistently one of the most cited and downloaded papers in the history of the International Journal of Coal Geology.

Above and beyond his ability and breadth as a scientist, one of Colin's greatest attributes is that he is always willing to help those coming into the field as well as those already established. This probably explains Colin's extensive list of co-authors and has resulted in an impressive list of over 300 publications. It is for all of these accomplishments that Colin truly has earned the honour of receiving the Geological Society of America's Cady Award.

Response by Colin R. Ward

I would like to thank GSA very sincerely for the honour associated with this award, and also the respected colleagues who initiated and supported the nomination. The list of previous recipients is long and distinguished, and it is both a pleasure and a privilege to join such an illustrious group. Two previous recipients, Hal Gluskoter and John Ferm, served as mentors for me during study leave appointments, and several others have become collaborators and colleagues on different projects in more recent years. I have benefited many times from their wise counsel, as well as their friendship and support.

My involvement with coal geology began in my undergraduate days, which were supported by a scholarship from the Australian coal industry. As part of that scholarship I gained vacation work experience in activities such as drill core logging and underground mine mapping, and was introduced to the wide and wonderful range of coal quality parameters that need to be evaluated for different market applications. When I moved on to academic employment I thought it might be useful to look at the mineral matter in coal, rather than follow the more conventional fields of coal petrology or coal-measure sedimentology, and over the years that has turned out to be a very worthwhile focus for research activities. I have managed to work on coals from all of the continents except Antarctica, and have been to outcrops, mines, research centres and conferences in more than 20 different countries around the world.

Nobody wins an award like this alone, and I would like to acknowledge the large number of colleagues who have been involved in the different research and publication activities. I would particularly like to thank Lila Gurba, David French and Zhongsheng Li for their many and varied contributions, as well as the graduate students and technical staff who provided input to the research programs. I would also like to thank the referees of our various papers, for challenging our perceptions and, perhaps above all, for helping to keep us honest.

Coal is a fascinating geological material; in fact, there is no other rock like it on the planet. I have enjoyed looking into its properties over the years, and especially investigating the use of new technologies for coal evaluation. I have also enjoyed communicating the results to others in the industry and research communities. The Cady Award is a totally unexpected honour, and I thank the Coal Geology Division for the recognition it has bestowed.