

In Memoriam:**Peter A. Hacquebard
1918 - 2005**

by Mike Avery

Peter studied at Leiden University in the Netherlands, and obtained his PhD from the University of Groningen based on his research of the coal fields in the south part of the province Limburg in the Netherlands. He started his career after the chaotic times at the end of the second 'Great War' in Europe, by moving to Canada from the Netherlands. His first trip in Canada was in 1946 as an employee of Royal Dutch Shell to do field geology for petroleum exploration. After a brief meeting with the head of the coal division of the Geological Survey of Canada (GSC), he accepted the opportunity to establish a coal research lab in Sydney, Nova Scotia. By 1948 he had moved to Sydney and there assembled a team that became the backbone of coal petrographic research in Canada. Building this lab from scratch he soon began to make the first systematic petrographic descriptions of Canadian coals and demonstrated the usefulness of coal petrography to correlate seams. Based on his experience in Europe he introduced the concept and method of using reflected light microscopy on polished sections of coal rather than the mostly transmitted light microscopy on polished thin sections as used in the US at the time. He made the first investigations in Canada into the importance of studying vitrinite components and their effect on the technological properties of coal. Following up on work in the Maritimes Carboniferous Basin by Walter Bell to divide the rocks based on plant fossils, he made an early foray into palynology, which led to fundamental research on establishing a chrono-stratigraphic framework for these sequences. These were also applied to Carboniferous strata elsewhere in Canada.

In 1959 the coal research unit was moved to Ottawa. Although at that time rank determinations based on vitrinite reflectance were in their infancy, especially technologically,



Peter in the 1990s at GSC Atlantic.

the GSC coal lab under Peter established a well-founded system to apply this method to Canadian coals. He then began to apply this tool to regional rank assessments. Those applications were later widely referenced as some of the earliest papers that correlated vitrinite reflectance and hydrocarbon occurrences. This method was first used in eastern Canada and then in the Western Canada Sedimentary Basin. It resulted in often cited papers that showed that coalification of eastern Canadian coals was post-deformational as opposed to most of the western Canadian coals that are pre- or syn-deformational. The topic of depositional environment was of particular interest to Peter. His paper on the 'Petrography of Canadian coals in relation to environment of deposition' created much interest and necessitated him to translate it for German researchers.

In 1975 an opportunity arose for Peter to return to the east coast when an offshore drilling program was being developed to assess the submarine coal resources off Cape Breton. He established a small coal petrology lab at the GSC's offices in Dartmouth, NS and he became head geologist for the coal drilling venture, which added many data to the resource estimates of the area. This work was fundamental to establishing the Harbour Seam Donkin reserve as the thickest and best quality coal in the field. Today a new mine is being developed to extract this resource. After his retirement in 1985, Peter remained active in coal research, and continued publishing papers.

Aside from his total commitment to his family and work, Peter had a well known passion for sailing. He found the Bras d'Or Lakes a perfect place to indulge in this hobby. His family and social life often revolved around boating where ever he lived and it wasn't unknown for him to talk co-workers into lending a hand at boat launchings and such.

Personally, I miss the visits with Peter after conferences to have a chat and report on the attendance and science presented. If a scientist is measured by his contribution to his field and the enthusiasm he has engendered in others for the work, then Peter Hacquebard was a giant, and if a man is measured by his ability to draw the best from his co-workers, friends and family, then he was a giant twice over.

He is sorely missed by those close to him and his departure leaves a large gap in our lives.

To connect this brief outline of Peter's scientific career to his publication legacy you can access his annotated bibliography at www.cscop.org following the link to his memorial page. More biographic details can also be found at the CSCOP webpage.

His awards and other professional honors included:

- 1979 - Reinhart Theissen Medal from International Committee for Coal Petrology
- 1979 - Gilbert Cady Award from Coal Geology Division of the Geological Society of America
- 1980 - Doctor of Laws honoris causa
- 1995 - Walter A. Bell Medal
- 1998 - Honorary lifetime membership in TSOP
- 1998 - Hacquebard Medal established by CSCOP.

His service to scientific organizations and teaching included positions as:

- Chairman of the Coal Geology Division of the Geological Society of America
- President of CSCOP
- President of the Mining Society of Nova Scotia
- Distinguished Lecturer for the Canadian Institute of Mining and Metallurgy
- Visiting professor at Dalhousie University, Halifax



Peter at the helm on the Bras d'Or Lakes, 1954.

Photographs courtesy of Geological Survey of Canada - Atlantic archives.