



**AGS Distinguished Scientist Award. Gesner Medal 2014.
Dr. Cees van Staal**

As stated in the terms of reference, this award "is made to a person who has, through their own efforts (maps, publications, memoirs, etc.) developed and promoted the advancement of geoscience in the Atlantic Region in any field of geology and whose contribution has made an impact beyond the immediate Atlantic Region". Cees' work is exemplary in meeting these criteria.

Cees did his undergraduate degree in geology and physics at the Free University of Amsterdam in the Netherlands (1973-76) and a combined MSc degree in metamorphic petrology/structural geology and geophysics at the Free University of Amsterdam and Delft University of Technology (1976-1980). He then came to Canada to complete his PhD in structural geology & metamorphic petrology at the University of New Brunswick (1980-1984), where his thesis project was on the geology of the Bathurst area. He subsequently joined the Geological Survey of Canada and is now Senior Research Scientist, based in the Vancouver office of the GSC.

As part of his work with the GSC, Cees continued field mapping and structural studies in the Bathurst Mining Camp. His detailed micro- to macro-scale structural work was instrumental in developing the first stratigraphic framework for the Bathurst orebodies. His litho-geochemical work ultimately led to the recognition that the orebodies formed in a back-arc tectonic setting. At the same time, Cees branched out from northern New Brunswick and has made major contributions to geological interpretations in central Newfoundland, where he fearlessly tackled field work in remote and geological complex areas, assisted by many student assistants. He has supervised and directed the research of five postdoctoral fellows and 23 graduate students, most of whom were working in Atlantic Canada. Those who survived intact have gone on to make their own major contributions to our understanding of the geology of the Appalachian orogen and other parts of Canada.

Cees has had many collaborators throughout Canada, the USA, British Isles and worldwide, and is a leading international authority on the accretionary history of the Appalachian – Caledonide orogen, as well as on orogenesis associated with arc accretion. With Dewey, MacNiocaill, and McKerrow he produced a landmark paper in 1998 interpreting the present-day tectonic mosaic in

the southwestern Pacific Ocean as an analogue for the Appalachian-Caledonide orogen. He was one of the first to document the importance of the Salinic (Silurian) orogeny in the northern Appalachian orogen, and to establish the microcontinent of Ganderia as an important player in the orogen's history. His publication record to date includes over 100 peer-reviewed papers and book chapters, including 26 on which he is first author. He also has approximately 50 government publications, spanning 1986-2013, most of them on Newfoundland or New Brunswick. He also generated 40 geological maps, virtually all of them on areas in Newfoundland and New Brunswick. He also has over 200 abstracts and conference presentations.

One of Cees' most significant contributions was the publication in 2006 of the new lithotectonic map of the Appalachian orogen with Jim Hibbard, Doug Rankin, and Hank Williams. This map superseded the iconic map of Williams (1978) and like its predecessor, now hangs on the walls of many offices and geology departments worldwide.

Although now based in Vancouver, Cees continues to do field work in Atlantic Canada, and led field trips in Newfoundland and New Brunswick for the 2011, 2012 GAC-MAC meetings, and will do so again in May 2014 for the Fredericton meeting.

In summary, Cees van Staal is internationally recognised as a leading authority on the geology and tectonic evolution of the Appalachian-Caledonian Orogen, the paleogeography of Laurentia and West Gondwana between 650 and 300 Ma, and orogenesis associated with arc-accretion. He was awarded the Geological Association of Canada "Past Presidents' Medal" in 1999 and has presented numerous invited and keynote lectures all over the world. Over the years, Cees' work has provided us all with many new insights about the geology of Atlantic Canada. He has been and continues to be an excellent mentor for numerous high-achieving students and is a worthy recipient of the Gesner Medal.