

THE BERRY MEDAL FOR 1989 TO GUY PERRAULT

Members of the Association, Ladies and Gentlemen, the winner of the Berry Medal for 1989 is Guy Perrault. Guy was a very active member of the Association in the 1960s, a time of rapid expansion not only in MAC, but also in the Earth Sciences in Canada. Guy helped guide the Association through this period of growth and maturation, culminating in his tenure as President in 1968-69. In particular, he introduced the category of sustaining membership in MAC. This helped to stabilize our financial situation, and forged important links between MAC and other organizations whose major interests lie within the purview of our Association.

However, describing Guy's activities in such a fashion does not recognize his more intangible contributions both to the Association *and* to mineralogy and geology in Canada. Guy Perrault was born at Amos, Abitibi, Quebec, in a year that wasn't really all that long ago. He took his B.Sc. in Mining and Geology at l'Ecole Polytechnique in Montreal, and then moved to Toronto. His Masters degree involved the stratigraphy and sedimentology of the Scarborough Bluffs. His Ph.D. was the first detailed study of the iron formations of the Labrador Trough, involving both the general geology *and* the detailed mineralogy of the iron-rich rocks. During this time, he accumulated considerable experience in mapping and prospecting, and later worked for a time consulting as a supervisor of exploration programs.

Claiming that he could not get a decent game of chess in Toronto, he returned to Montreal on graduation. In 1956, l'Ecole Polytechnique was looking for three faculty members: a mineralogist, a geochemist and an economic geologist. The Department must have had a very astute Head at that time, because he hired Guy Perrault and got three faculty members for the price of one.

Not only did Guy have the expertise of three people, he did the research of three people as well. Crystallographers are aware of Guy as a man who has solved many difficult crystal structures. In mineralogy, he is infamous for his studies on minerals from Mont St. Hilaire. Geochemists and economic geologists are familiar with his work on gold deposits, particularly that focused on the development of effective exploration criteria.

Unlike many successful scientists, Guy has not shirked the administrative side of science. Since 1965, he seems to have continually been a department chairman or institute director, while maintaining an extremely active graduate program at l'Ecole Polytechnique. At the same time, his participation in

scientific committees, both at the Federal and Provincial levels, has been beyond the call of duty.

Throughout his career, Guy Perrault has contributed enormously to the MAC, both by formal Association activities, and through his scientific achievements across the complete range of disciplines spanned by the MAC. Members of the Association, Ladies and Gentlemen, I ask you to honor Guy Perrault, 1989 recipient of the Berry Medal.

Frank C. Hawthorne
Vice-president

Mr. President, my dear Frank, members, friends.

Thank you, Frank, for a most generous citation. Your reference to *sustaining members*, and the modest help I may have provided to the concept when I presided MAC, fills me with satisfaction



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because I notice that 20 years later, *The Canadian Mineralogist* still acknowledges support from a substantial list of sustaining members and the list includes the names of important research centers in mineralogy and the names of some of our most successful mineral exploration companies.

It is already seven years since Professor Leonard G. Berry, the namesake of the distinction now bestowed on me, passed away. It is very fitting that he should be remembered by this medal. It was my good fortune to preside over the affairs of the MAC at a time when Len was editor of *The Canadian Mineralogist*. Len was also a friend; his quiet and unassuming manner did not reveal his numerous accomplishments, nor did his eternal youth foretell of a premature passing away that took most of us by surprise.

Amongst accomplishments of my career, my two years as president of the MAC stand out in my mind as particularly meaningful. I learned of Canadian mineralogy and Canadian mineralogists; I learned that I was then becoming a small part of that Canadian tradition in mineralogy that included such names as Hawley, Peacock, Nuffield, Berry, Thomson, Jambor, Cabri and many others. I am now very proud to be consecrated today, second Berry medalist.

J'ai consacré les quinze années les plus excitantes de ma carrière à la minéralogie et à la cristallographie, et je crois avoir contribué à transplanter à l'École Polytechnique un petit peu de cette tradition canadienne d'excellence dans ces disciplines. J'ai eu, bien sûr, une stimulation par d'excellents professeurs, mais mon goût et mon ardeur pour la minéralogie et la cristallographie découlent aussi du fait que ces disciplines sont quantitatives. Au début de ma carrière, la plupart des disciplines en Sciences de la Terre en étaient à leurs premiers balbutiements quantitatifs, alors qu'on pouvait déjà réaliser en

minéralogie et en cristallographie des travaux de haute précision et conclure à un haut niveau de probabilité. Quelle magnifique plaisir que celui de prendre les 4200 observations d'intensité de diffraction *X* sur ce cristal de lemoynite et d'en tirer une structure cristalline et une superstructure (sens double entendu) qui donnent un facteur résiduel (observations sur calculs théoriques) de 7.9% (Le Page et Perrault 1976, *Can. Mineral.* 14, 132-138). Et j'en reconnais le mérite premier à Yvon Le Page.

Mineralogy and cristallography shall continue to be important cornerstones of geological sciences in the years to come. To mention only one point, there is no way we can determine all meaningful thermodynamic properties of all minerals, but there is a way to develop models for calculation of these properties based on their crystal structure.

I think I have served the MAC *via* advice on financing *The Canadian Mineralogist*. In retrospect, I am pleased to observe that in 1970, the bill from the University of Toronto press for the number of *The Canadian Mineralogist* just printed and distributed caused the MAC executive (and treasurer particularly) concern and shivers; now in 1989, the MAC executive and the Editor of *The Canadian Mineralogist* can look to the future with confidence and maintain an aggressive publication policy. That I should have been a modest part of this fills me with great satisfaction.

Monsieur le président, bien chers amis, c'est pour moi un grand honneur de recevoir aujourd'hui cette médaille Leonard G. Berry. Vous pouvez être assurés que je la chérirai pour le reste de mes jours, que je la montrerai toujours avec fierté. Soyez aussi assurés qu'il y aura toujours une place dans mon coeur pour l'AMC et pour tous les amis que j'y compte et qui auront fait un petit bout de carrière avec moi. Merci. Thank you.

Guy Perrault
Ecole Polytechnique