

Mr. President, ladies and gentlemen,

I would like to thank the Mineralogical Association of Canada for this award. It is nice to see one's work published, but it is even nicer to have it recognized in this way. The paper was written, over a period of several years, with the support and encouragement of Professor Bob Ferguson, and it gives me particular pleasure to be able to publicly express my gratitude to him. I wrote the paper without any idea of where it would be published, and I would like to thank Dr. Louis Cabri for encouraging me to submit it to *The Canadian Mineralogist*, and displaying such a flexible approach to conven-

tional ideas of the ideal length of a paper. Editor Bob Martin and his assistant Sandy Doig saved me from numerous errors of fact and internal inconsistencies, and materially improved the text; I would like to thank them for the great deal of additional work that this short note caused them. Most of all, I would like to thank my wife Robin for her love, support and encouragement, particularly during those times when I felt that I could be interested in anything in the world *except* amphiboles. To conclude, it gives me great pleasure to accept the Hawley Medal for 1984; thank you.

Frank C. Hawthorne

THE PAST PRESIDENTS' MEDAL FOR 1984 TO PETR ČERNÝ

This year marks the third Past-Presidents' Medal of the Mineralogical Association of Canada to be awarded, and it gives me much pleasure to make the presentation to one familiar to most of us and a good friend of many of us, our respected colleague, Petr Černý.

Petr has, with his profound studies and writings on every aspect of granitic pegmatites over the past two decades, established a world-wide reputation as leader in this field. His research on pegmatitic rocks and minerals began in his native Czechoslovakia in the 1950s, and it was our great good fortune that he was able to emigrate to Canada in late 1968 despite, or perhaps spurred on by the Soviet invasion of his country that year. Not only was he able to leave Czechoslovakia under difficult circumstances, he was even able to persuade the Czech authorities that the dangers from wildlife in the Canadian wilderness required that he take his hunting rifle with him to Canada, so on his arrival at the Winnipeg airport, he duly carried with him his most precious possession!

It was not long after his arrival in Canada that he was able to visit his first Canadian pegmatites, those in the Winnipeg River area of southeastern Manitoba. The Věžná, Radkovice and Biskupice pegmatites that he had studied in his homeland are relatively fine grained; when he first saw the huge crystals of spodumene, beryl, feldspar and mica in the Winnipeg River pegmatites, he let out an ecstatic cry: "This is Pegmatite Paradise!"

Since his arrival in Canada in 1968 he has carried on an increasingly expanding program of field and laboratory investigations of granitic pegmatites and their associated granites with a large number of able graduate students and other collaborators. His most widely studied pegmatites have been those in the Winnipeg River area of Manitoba including, especially, the Ta-Li-Cs-Be Tanco mine deposit at Bernic

Lake. In recent years he has expanded his investigations beyond the Winnipeg River area to other areas of granitic pegmatites in Canada: to the western part of the Superior Province, the Yellowknife field and Baffin Island in the Northwest Territories, and central British Columbia.

In each of the areas his studies have embraced the petrology, mineralogy and geochemistry of the parent granitic rocks through the more progressively differentiated pegmatites; these reach their ultimate state in the complex mineralized pegmatites, typified by the Tanco deposit, which are rich in some or all of Li, Rb, Cs, Be, Ta, Nb, Ti and other uncommon elements and contain a dazzling array of fascinating minerals. The investigations spearheaded by Petr and supported by his collaborators have ranged all the way from regional field studies of the granites and pegmatites to the structure, zoning, mineralogy and geochemistry of the individual pegmatite bodies, to the fine details of the crystal chemistry of a wide variety of the individual minerals, including the descriptions of several new minerals. These results, described in over one hundred published papers, have profoundly enhanced our understanding of the nature of genesis of granitic pegmatites and their minerals.

Our Association was a direct beneficiary of Petr's wealth of understanding of granitic pegmatites in the form of a 1982 Short Course organized by him, with important contributions from other leading "pegmatologists" and, of course, himself. The resulting Short Course book makes available to interested mineralogists and geologists in the world at large an invaluable state-of-the-art publication.

Ladies and Gentlemen, it is with great pleasure that I present the 1984 Past Presidents' Medal of the Mineralogical Association of Canada to our distinguished colleague, Petr Černý.

Citation read by Anthony J. Naldrett

Mr. President, Professor Naldrett,
Ladies and Gentlemen:

It is with a feeling of deep gratitude and humility that I accept the Past Presidents' Medal today. Ever since the phone rang in my office and Louis Cabri gave me the news, I have been wondering what I have accomplished to deserve such a distinction. What troubles me first of all is that most of the time I feel like having earned my B.Sc. only yesterday, and barely starting to probe into the wonderful mysteries of mineralogy. Also, I have a bit of an identity problem. In the recent past, I was told on different occasions that I am an exploration geologist, geochemist, petrologist, crystallographer (actually, "crystallographist"), and somebody was even kind enough to recall that I have something to do with mineralogy! The best solution of this taxonomic problem may be the term coined by my graduate students, a pegmatologist.

Nobody is born a pegmatologist, I suspect, but I came rather close to accomplishing it. At the ripe age of five, I inherited a shoebox of assorted stones, collected and later abandoned by my older cousin. It included a sizeable chunk of pegmatitic K-feldspar. Four years later, my first field trip led me to Rožná, the type locality of lepidolite since 1785. After such an initiation, the die was permanently cast. So it came later quite naturally that I discovered my future Ph.D. locality only 5 km from that starting point of my field career: my beloved Věžná has kept me busy ever since, with its array of feldspars and zeolites, and many intriguing exotica such as beryllian cordierite, epididymite and stibiobetafite. My luck with excellent localities has continued ever since, and it has improved with age. The Tanco deposit and the surrounding pegmatite field are a prime example, and the other pegmatite-bearing terranes my students and I have been frequenting since the early seventies have also yielded an incredible wealth of fascinating places to study.

The making of a pegmatologist includes, of course, not only localities but mainly diversified trades. Structural crystallography is at the very foundation, deciphering the constitution of individual minerals. Textural studies reveal the relationships of minerals in primary zones, metasomatic units and small-scale assemblages. Petrochemistry, geochemistry and experimental petrology appear at this level, providing clues to the nature of pegmatite melts and their course of crystallization. The role of these disciplines expands as we go into regional zoning of pegmatite groups and their affiliation with granites. This also reaches into the realm of regional geological analysis, as the emplacement of fertile granites and their pegmatite aureoles is subject to strict metamorphic and structural controls. Ultimately, pegmatite fields themselves represent only



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segments of orogenic belts, or anorogenic igneous suites, that have their specific time and place in crustal evolution. A dyed-in-the-wool pegmatologist just cannot avoid getting involved in all of this, in his quest to understand all facets of his favorite subject.

However, it would take a maxi-genius to master all of the above disciplines. Thus, for a pegmatologist like myself, whose crystallography peaks out with Goldschmidt's two-circle reflecting goniometer, and whose understanding of plate tectonics comes from Strahler's first-year textbook, the ultimate *conditio sine qua non* is a co-operative spectrum of top-notch specialists. In this respect, it has been my great fortune at all stages of my career that I could associate with excellent teachers, colleagues and students. There are too many of you to be acknowledged individually, and to name a few would do injustice to the others. Let me use this opportunity to thank all of you whose advice, co-operation, specimens, laboratory results or field guidance have been of so much help and encouragement to me. A big share of this Past Presidents' Medal belongs to you.

Mr. President, dear friends, thank you again.

Petr Černý