his long, intensive research to establish a valid model for the origin of granites.¹

Marmo's admirable promptness and energy as well as his tall and 'slender stature always drew attention. As an active sportsman he had a good physical form—a circumstance that evidently contributed positively. Despite his many duties as Director of the Survey he allowed himself time also for petrological field work and prepared two petrological map sheets with explanatory texts. His liveliness and good knowledge of languages—in addition to Finnish and Swedish he spoke and wrote English, German, and Russian—effectively aided in the creation of human contacts and in his research.

Also his other merits bear witness of his capability. During the war besides other services he acted as the leader of a long range patrol and was promoted Captain in 1944 and Major of the reserve in 1967. His contributions to philately need especially be noted. He acted in various bodies of the philatelistic organization of Finland, as editor of the journal "Philatelia Fennica" and wrote articles.

Vladi Marmo was an outstanding man, not only as a scientist and leader but, also as a warm person with many friends. His sudden passing away, in the midst of his creative period, was a great loss for the geological research of Finland.

American Mineralogist Vol. 57, pp. 647–651 (1972)

MEMORIAL OF VICTOR BEN MEEN

July 1, 1910-January 7, 1971

A. D. TUSHINGHAM, Chief Archaeologist, Royal Ontario Museum, Toronto 5, Ontario, Canada.

Victor Ben Meen, the son of Benjamin and Mary (Tidy) Meen, was born in Toronto where he also pursued his schooling through elementary, secondary, and university levels. He received his B.A. in 1932, his M.A. in 1933, and his PhD. in 1936 in Mineralogy—all from the University of Toronto. He joined the Department of Mineralogy and Petrography as a lecturer in that year, a post which he

¹To obtain a copy of a selected bibliography of Marmo's work, order NAPS Document Number 01710 from National Auxiliary Publications Service of the A.S.I.S., c/o CCM Information Corporation, 866 Third Avenue, New York, N. Y. 10022; remitting \$2.00 for microfiche or \$5.00 for photocopies, in advance, payable to CCMIC-NAPS.

held until 1944, while pursuing additional post-doctoral studies at the University of Minnesota (1937) and the United States National Museum (1938). He became an Assistant Professor of Mineralogy in the Department of Geological Sciences in the University of Toronto in 1944 and progressed to full Professor in 1956.

As a practising geologist and mineralogist his talents and experience were early developed in working for the Department of Mines of the Government of Ontario from 1936–1944, of which he became Acting Provincial Assayer. In 1936, also, he began his work at the Royal Ontario Museum which became his chief center of activity even though he continued to teach in the University for many years. He became Director of the Royal Ontario Museum of Geology and Mineralogy in 1949, continued as Head of that section when it became a Division within a unified Museum and, after 1959, when its name was changed to Earth Sciences Division. Finally, when the divisional structure of the Museum was abolished in 1964, Dr. Meen was relieved, for the first time, of considerable administrative responsibility and, as Chief Mineralogist, was able to pursue those scientific and collecting aims which had apparently always been central in his thinking.

Through a large part of his career, Dr. Meen was of necessity concerned with the generality of geological and mineralogical matters but quite naturally he developed certain special fields of research of his own. His interest in meteorites led directly to the organization and direction of two expeditions to investigate Chubb Crater in Ungava, northern Quebec—in 1950 with the sponsorship of the Toronto Globe and Mail, and in 1951 in collaboration with the National Geographic Society. These were followed, in 1954, by a similar study of the Merewether Crater in northern Labrador, in collaboration with the National Geographic Society and the U. S. Air Force.

It was, presumably, his interest in meteorites which also made him the driving force behind the Museum's desire to have a planetarium; his travels in the United States, Europe, and Japan to seek out and evaluate the various types of equipment were a logical consequence. It was natural, also, that it should be he who, after interviewing scores of possible directors for the new facility, recommended the appointment of Dr. Henry King, at that time director of the London Planetarium. Finally, with the support of the University Department of Astronomy and the generous benefaction of Col. R. S. McLaughlin, the new Planetarium opened its doors in October, 1968, and has—since then—been one of the most popular and educational facets of the Museum's program.

Particularly in the last years of his life, Dr. Meen took responsi-

bility for a new task—the fostering of an interest in precious stones and the building of a gemmological collection for the Museum. He travelled widely throughout the world, studying the sources of precious stones: in 1960, to the ruby-and jade-rich areas of Upper Burma; in 1964-65 to Cambodia, Thailand, and Ceylon; in the summer and autumn of 1970 to gem-producing areas of the United States, new nephrite lodes in British Columbia, and new lapis lazuli deposits in the Canadian Arctic. He persuaded successive Museum directors to allot money for purchases and encouraged private donors to give or underwrite the cost of many fine stones. He became the friend and respected colleague of gemmologists all over the world, amateur and professional, and was trusted by dealers who would offer him fine stones in full realization that he would recognize their quality. The fine Mineralogical Galley of the Museum, which includes many excellent stones acquired directly or indirectly by him, is, in part at least, a tribute to his imagination and resolve.

It was, in fact, Dr. Meen's great interest in gem-stones which also led to what was, perhaps, his greatest triumph. For it was he who, after seeing the magnificent display of the Iranian Crown Jewels in the vaults of the Banki Markazi Iran in Tehran, conceived of a plan whereby that spectacular collection might be studied and published by the Royal Ontario Museum. The details of his negotiations with the officials of the bank (the custodians of the jewels), with government officials, and the Canadian Ambassador in Tehran cannot be described here; it can only be said that his proposal, submitted formally to the Banki Markazi on behalf of the Museum, was accepted within six weeks. It was obvious that Dr. Meen had made an excellent case for himself and the institution he represented and had convinced the Iranian government that they could entrust the study of this valuable and important collection to a foreign institution. Because of the excellent relations which he had built up with the leading jewellers of Canada over the years, he was able to persuade the Henry Birks Foundation to finance the Museum expedition for its three months of research in Tehran in 1966 and to subsidize the publication, in 1968, by the University of Toronto Press, of the results. The Crown Jewels of Iran with photographs by Leighton Warren, the Museum photographer, has had great popular appeal for its beauty and the glamour of its subject matter but has also won the acclaim of gemmologists and art historians for the completeness and the accuracy of its data. It is hardly surprising that there is already an Italian edition; that a special, beautifully bound, edition has been a favorite gift by the Central Bank of Iran to distinguished visitors; and that a Persian edition is scheduled for publication during the current year.



VICTOR BEN MEEN

The writer of this memorial was associated with Dr. Meen only from 1955 when he joined the staff of the Royal Ontario Museum as Head of the Art and Archaeology Division and, from 1964 on, as Chief Archaeologist. But for the past five years he enjoyed with him that peculiar relationship which exists between co-researchers and co-authors whose fields of specialization differ but who are working to produce a work which will be an amalgam of their knowledge. Our relationship, particularly that which finally led to the publication of the Crown Jewels volume, was a very happy one. No project could have been better organized than that which he headed, none could have been carried out with greater expedition, and brought to fruition in a shorter time. He was a generous and amenable co-author whose interests transcended the purely technical data on the gem-stones and came to encompass the history and social milieu of the jewellery and other objects which were encrusted with these gems. As the writer came to share Dr. Meen's love of the color, depth, limpidity, and purity of fine gems, so did Dr. Meen come to appreciate these same qualities in enamels-a purely man-made product. But, in addition to the importance of the Crown Jewels project in itself was the role it played in focusing attention on the Museum's growing gem collection and the international reputation of its keeper; it is hoped that the collection will continue to grow and will attain an excellence worthy of Dr. Meen's interest and knowledge.

Dr. Meen was a respected Fellow of the Mineralogical and Geological Societies of America and of the Geological Association of Canada; he was also a member of many similar professional and academic institutes, clubs, commissions, and councils. He was Honorary Director of the Gemmological Association of Canada, an Honorary Member of the Rochester Academy of Sciences (Geology Section), of the Mineralogical Society of the District of Columbia, and of the Montreal Gem and Mineral Club.¹

His premature death is a great blow to his hundreds of colleagues and his many friends. He is survived by his parents, a brother, Arthur, and two sisters—Mrs. W. E. White (Mary) and Mrs. J. F. Johnson (Dorothy); by his wife Thelma and three daughters—Heather (Mrs. David Crampton), Beverley (Mrs. Peter E. Casson), and Sharon (Mrs. George A. Constable).

¹ A bibliography of Meen's work may be obtained by ordering NAPS Document Number 01714 from National Auxiliary Publications Service of the A.S.I.S., c/o CCM Information Corporation, 866 Third Avenue, New York, New York 10022; remitting \$2.00 for microfiche or \$5.00 for photocopies, in advance, payable to CCMIC-NAPS.