

ACCEPTANCE OF THE ROEBLING MEDAL OF THE
MINERALOGICAL SOCIETY OF AMERICA

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Mr. President, Professor Ramsdell, Fellows, Members and Guests of the Mineralogical Society of America:

The letter from your President bearing the news that the Council had selected your former editor as the recipient of the Roebling Medal came as a distinct and startling surprise. Such a special honor can be accepted only with an expression of sincere appreciation and deep humility. When one surveys the list of past recipients and their accomplishments and the possibilities among those present worthy of this distinction, the thought comes to mind that in this particular instance the Council has given a very liberal interpretation to the term "meritorious." Nevertheless, I am indeed deeply grateful for this generous recognition of services rendered during the extended period I have been privileged to serve you.

At the beginning of every worthy undertaking fond hopes are expressed and tentative goals assigned by the founders of an organization for possible future attainment, and at irregular intervals an inventory is taken to review accomplishments and note what progress, if any, has been made towards those desired ends. I believe this is an opportune time to reflect on some of the major events that have marked the progress of our Society as revealed by the Journal during the past four decades. I am well aware that on previous occasions Dean Kraus in his presidential address in 1920 spoke on the events that led to the founding of the Society, and at the annual meeting in 1929 spoke on the progress made by the Society during its first decade. With your kind permission I should like to add certain additional observations and comments and thus bring the very interesting narrative up to date.

Our older members may recall that the Journal, *The American Mineralogist*, antedates the founding of the Mineralogical Society of America by $3\frac{1}{2}$ years. The first issue appeared in July 1916 under the editorship of Wallace Goold Levison, with Edgar T. Wherry as one of the associate editors. Wherry succeeded Levison as editor during the three-year period 1919 through 1921.

The project of publishing the magazine originated with the Philadelphia Mineralogical Society. Other mineralogical organizations were invited, and the New York Mineralogical Club and Mineral Collectors Association designated their secretaries to serve as associate editors of a journal devoted "to promote mineralogy as a hobby as well as a science." It was established as a medium of exchange of notices of proceedings of



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the various local mineralogical societies, and as an outlet for popular and semi-technical papers on mineral localities and new occurrences, as the subscribers were to a large extent mineral collectors, museum curators and laymen with a love of minerals as an avocation. However, it was the hope of the founders to enlist the assistance of serious students of mineralogy and quite a few short, technical papers were contributed by professional mineralogists.

In passing it should be emphasized that due credit should be given those early pioneers of the Journal who with very little capital but undaunted courage saw a pressing need and met it.

An unusually impressive issue during this early period was the June 1918 number commemorating the 175th anniversary of the birth of Abbé Haüy. In that issue eight papers by eminent mineralogists record the life, scientific contributions and influence of this distinguished crystallographer.

The records show that the first suggestion of organizing a separate society of mineralogists and petrographers was made by A. N. Winchell in January 1913 in a letter sent to those especially interested in mineralogy and petrography, but the replies were of such a varied character that a postponement was decided upon. But the desirability and need of a separate organization grew rapidly and the question came up again at the meetings of the Geological Society of America at Albany in December 1916, and a small group of six decided to launch an active campaign looking toward the formation of a Mineralogical Society of America. The entrance of the United States in the World War caused another delay, and it was not until the winter meeting of the GSA in 1919 that the organization meeting was held in the Mineralogical Museum of Harvard University on December 30. At that meeting the decision was also reached for the newly formed Society to take over and enlarge the small journal which was having financial difficulties, so that beginning with the January 1920 issue *The American Mineralogist* became the official publication of The Mineralogical Society of America.

It became obvious that with this new affiliation the policy of the Journal would require drastic changes. As it was now the official publication of a national scientific organization, the standing of the Society both here and abroad would be judged largely by the type of articles that were accepted. In other words, the editorial sights had to be raised if our Journal was to be considered on the same plane with similar European periodicals.

It can be truthfully stated that during this transitional period the task of maintaining an equitable balance between semipopular and technical contributions was an extremely difficult one, and the editor was fre-

quently caught in the cross-fire of criticism from partisans of both sides. Perhaps I can clarify this by quoting a sentence from a letter I received in January 1930: "I would just as soon that you stop mailing the same, I am just as well off without it, as with it." But this acid criticism was completely neutralized by another letter received somewhat later from one of the original fellows of the Society, and again I quote: "*The American Mineralogist* continues to improve from year to year for which all of us can thank you." And so the struggle continued for a period of years, but the ultimate goal was always kept in sight.

The growth of the Journal during this early period was extremely slow, as the mounting costs of publication soon equaled the increase in dues from a slightly increased membership. It was not until the Society received from Col. Washington A. Roebling a handsome endowment that the Journal took on a new lease of life and advanced to a new and higher plateau of endeavor.

Perhaps some of you have forgotten what appeared at the time as a passing remark in a letter that initiated this generous gift. The incident is recorded by Palache in his acceptance speech of the Roebling Medal. The letter to Col. Roebling called attention to the publication in 1925 of two special numbers, one by Michigan and one by Harvard, which were largely financed by the institutions furnishing the material. Palache asked the Colonel what he thought of this arrangement and expressed the hope that the time would come when *The American Mineralogist* would be sufficiently endowed to be able to publish papers without the author or his institution having to bear the charges and concluded (and I quote): "I would invite your earnest consideration of this suggestion for a movement to secure a permanent fund which would be ultimately not less than \$50,000." Colonel Roebling did not reply to this letter but within a few days he transferred to the treasurer of the Society 45 one-thousand-dollar municipal bonds bearing 5% interest, with the suggestion that the whole or part of it be devoted to the publication of the Journal, which in his words "has been conducted on too narrow a margin." This magazine, he continued, "is the life of the Society. Its perusal is a pleasure to all lovers of minerals." The effect of that liberal gift was reflected in subsequent enlarged issues and more liberal allowances for illustrations.

The first suggestion of the desirability of establishing medals or awards to recognize unusual achievements and stimulate interest in mineralogy was made by E. H. Kraus in December 1929 at the Washington meeting, in his address in which the activities of the first ten years of the Society were reviewed. This suggestion led to the appointment of a special committee at the Toronto meeting in 1930 and the establishment of the

Roebbling Medal, which was presented for the first time to Charles Palache in 1937, and awarded annually since then, with five exceptions—1939, 1942, 1943, 1944, and 1951.

More recently, in November 1949, the Council authorized the granting of the Mineralogical Society of America Award to recognize an outstanding contribution or series of contributions published by the recipient at the age of 35 years or less. This recognition became operative in 1951.

The passing years again brought marked increases in publication costs, and once more the Society was in need of additional financial assistance in order to maintain the pace and meet the increasing demands of a growing periodical. To meet this situation two methods were employed with marked success. From time to time large special numbers were issued, the excess cost of which was borne by the institution or organization submitting the manuscripts, or in part by friends and associates of those to whom these special issues were dedicated. Thus, the staff of the Geochemistry and Petrology Branch of the U. S. Geological Survey assumed responsibility for one special issue, aggregating 36 articles; the University of Michigan for three issues, totaling 41 articles; and Harvard University for eight issues, comprising 130 articles.¹ These bargain issues for the members of the Society did not entail additional strains on our treasury. Also, a grant of \$1100 was obtained from the National Science Foundation to aid in printing one of the special issues—the Ross-Schaller number.

The second source of additional income to meet publication costs came from the parent organization, the Geological Society of America, through grants by their Council from the Penrose Fund. This began with an initial grant of \$1500 in 1934 and continued annually on this level through 1941. Then as the need became more pressing the grant was very generously increased almost annually, and if my totals are correct, and I believe they are, we have received during the 23 intervening years slightly over \$86,000. Truly a very generous and discerning parent, and for this timely assistance our Society is extremely grateful and expresses its deep appreciation.

At this point the question may well be raised as to the tangible returns, to the science in general and to the members of the Society in particular, that these expenditures have produced. The Council in the early twenties appointed a Committee on Nomenclature and Classification of Minerals in an attempt to establish uniformity in spelling of mineral names and to clarify a number of other matters of general in-

¹ Another Harvard issue is now in press and will appear this year as the November-December number.

terest, such as the use of standard abbreviations for optical properties and proper adjectival endings of chemical elements used for modifiers to mineral names. The Committee, with a personnel that has varied over the years, is still at work and has reported some gratifying results.

In the beginning it was the hope that possibly some international agreement might be reached with several leading European mineralogical societies, but it soon became apparent that this was impossible. However, through numerous exchanges with a similar British committee and with the cooperation of the authors of the new Dana edition it is gratifying to note that a number of worth-while agreements were reached which have produced greater uniformity among the English-speaking countries than had previously existed.

In the early days of the Society while our membership still included a large number of mineral collectors and laymen, a rather persistent demand came to the editor's desk for a publication of a complete Directory of American and Canadian Mineral Collections. This prodigious task was entrusted to Samuel G. Gordon of the Academy of Natural Sciences of Philadelphia, at that time one of our associate editors. Through questionnaires mailed to institutions and numerous personal letters, he accumulated data for about 700 public and private collections, representing the most recent and authoritative information obtainable, listing alphabetically by states the location, the approximate number of specimens, and when the collections were open for general inspection. This fund of information was made available to our readers in five successive installments, which were then rebound in a single reprint for more convenient distribution.

World War II presented a number of pressing needs. One of these related to the efficient use of the diamond in industry. This situation was rendered especially acute through an interruption of the supply of wire-drawing dies formerly produced in the low countries and France. As the cutting power of the diamond is based upon an intimate knowledge of its crystallographic and structural properties, the crystallographers were invited to co-operate with industry in an attempt to solve some of the difficulties and accelerate production. With Dean Kraus as organizer and chairman, three symposia on the diamond were held and the 24 papers, prepared by specialists conversant with the varied uses of the diamond, were published in 1942, 1943, and 1946. The reaction to this series of papers was very gratifying as reflected in the unusual demand for reprints both here and abroad.

About the same time (1945) another very conspicuous issue made its appearance in the form of the 264-page *Symposium on Quartz Oscillator Plates*. These extremely valuable and timely contributions on the geology

of quartz crystal deposits and on the inspection, grading, cutting and testing of thin quartz wafers were made possible largely through the efforts of Drs. Frondel, Parrish, Gordon and their associates. Likewise substantial financial assistance was received from the Reeves Sound Laboratories and North American Philips Company to help defray the heavy expenses involved in the printing of this very large and highly illustrative number. The issue contains 14 authoritative articles and the demand for copies from individual organizations not on our regular mailing list has been so great that it has been reprinted three times.

At the November 1948 meeting of the Council, the late Professor Peacock (then President) reported that the University of Toronto had decided to terminate the *University of Toronto Studies* and that no practical way had been found to continue the publication of *Contributions to Canadian Mineralogy*. In order to preserve the continuity of the Canadian journal, our Council agreed to devote annually a regular issue of *The American Mineralogist* to a collection of papers by Canadian mineralogists. This policy was continued for seven years, first under the editorship of M. A. Peacock and more recently with L. G. Berry in charge. During this period, 1949-1955, *The American Mineralogist* had the opportunity to assist our Canadian colleagues through the publication of 112 articles, aggregating about 1000 pages.

As you no doubt have been informed, ways and means have been found, through the organization of the Mineralogical Association of Canada, to re-establish their journal, known now as *The Canadian Mineralogist*. We wish them success in this undertaking, as there appears to be sufficient available material to justify expanding outlets for mineralogical papers.

In conclusion, in summarizing the achievements of the Journal from the time it became the official publication of the Society through 1956, may I quote a few figures, realizing that quantity is not always a true measure of scholarly performance. However, it is still necessary at times to employ tangible measurable units and speak in terms of the number of printed pages. It may be of some interest to note that in your Journal 25,633 pages of mineralogical literature have been printed, including 2191 main or major articles received from authors at home and abroad. This figure includes complete accounts of 184 new minerals described in detail for the first time. In some years 25 to 30 manuscripts were received from contributors residing beyond our own borders, testifying to the influence of the Journal in distant lands.

An inspection of the scope of subject matter treated reveals an amazing range of topics, from the composition and structure of meteorites that have come to us from outer space, to the mineral-chemical composi-

tion and alteration products of the components comprising the crust of the earth, and even extends, to quote a title of a paper published in March 1943, to "Some petrological concepts and the interior of the earth."

The Society owes an expression of sincere thanks for the valiant service performed by Dr. Fleischer, who since 1941 has had charge of the section "New Mineral Names." His critical remarks and sound judgment in evaluating the propriety of proposed new mineral names have been of immeasurable assistance to our profession. As an indication of the value of this service, at the close of the first ten years of his tenure his report shows that of 164 new names proposed, only 77 appeared to be valid, the others were shown to be identical with previously known minerals, or unnecessary names for varieties, or based on insufficient data. In short, there were more mineral names discredited than valid species established.

This, then, is a brief summary of some of the accomplishments thus far. I am quite certain many of you will recall other important events that could have been included, but time will not permit further extensions. I hope, however, that in the topics selected I have stressed the fact that considerable progress has been achieved; the Journal has grown in prestige and stature, and this progress has been brought about through excellent team-work and the loyal cooperation and support given the editor and his associates by the officers and the various committees of the Society. If the past is any indication of what the future has in store, we may look forward with confidence to even greater achievements in the years to come.