

Memorial of Carl Wilhelm Correns May 19, 1893–August 29, 1980

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Carl Wilhelm Correns, Roebling Medalist 1976, died on August 29, 1980 in Göttingen, Germany, at the age of 87. He was born in Tübingen on May 19, 1893 as the son of the well-known botanist Carl Erich Correns. In 1912 he began to study natural sciences, especially geology and mineralogy in Tübingen and later on in Münster. After the First World War he continued his studies in Berlin where he received his Ph.D. in 1920.

He found a position as a geologist at the "Preussisches Geologisches Landesamt" in Berlin. At the same time he worked together with H. Freundlich on problems of colloid-chemistry at the Kaiser-Wilhelm-Institut für physikalische Chemie where he substantially deepened his knowledge of thermodynamics as well as experimental techniques.

In 1926–27, he participated in the German Atlantic Expedition on board the M.S. Meteor. The main aim of this expedition was to collect and investigate deep-sea samples from the southern Atlantic Ocean. In 1927, he was nominated "Extraordinarius" to organize a geology and mineralogy department at the University of Rostock, where he received the full professorship in 1930. Here, he mainly investigated the "Meteor"—sediments for which he developed methods in a pioneering way. He also knew how to apply the then new X-ray techniques on fine-grained clay-rich sediments. He further tried—by means of relatively simple but meaningful model experiments—to verify the complex reactions that occur during chemical weathering and thus he created a basis for a new approach towards a better understanding of chemical weathering.

In 1938 he was offered a chair at the University of Göttingen in order to install the first Sedimentpetrographisches Institut in Europe and to continue on a larger scale the investigation which he began in Rostock. In 1942 he was also appointed Director of the Mineralogisch-Petrographisches Institut.



After the Second World War, his main effort was to revive geochemistry in Germany, the crystal-chemical basis and the minor element approach which had been laid by V. M. Goldschmidt during 1929–1935 in Göttingen. Correns and his students investigated the geochemistry of the elements F, Cl, Br, B, Zn, Pb, Zr, S, N and C. However, his own main interest remained the chemical processes of weathering and diagenesis.

In 1951 he declined a call from the Max-Planck Institut für Silikatforschung in Würzburg. In 1959, he established the Zentrallabor für die Geochemie stabiler Isotope in Göttingen, until then an almost unknown field of research in Germany.

Correns' scientific work comprises about 130 publications, quite a number of which could be characterized as being "classic". Two text-books should be mentioned: one—*Einführung in die Mineralogie*—first published in 1949 (the second in 1968 has also been translated into English and French), and the other published with Barth and Eskola in 1939—*Die Entstehung der Gesteine*—in which Correns discusses the formation of sedimentary rocks. This chapter can still be regarded as outstanding and it is mainly to his merit that this field has developed from a more or less descriptive to a quantitative accurate natural science.

Correns was one of the founders of *Geochimica et Cosmochimica Acta* and he served the journal as editor till 1965. Furthermore, until his death he was editor-in-chief of the *Contributions to Mineralogy and Petrology* for 26 years and due to his efforts the journal became a leading international publication organ.

In recognition of his fundamental contributions to earth science he received honorary doctoral degrees from the Universities of Tübingen and Clausthal. He was member and honorary member of many scientific societies and academies and honorary fellow of the GSA and MSA. He was honored with various medals, including the Roebing medal which he regarded as the most important for him.

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¹ To receive a copy of the complete bibliography, order Document AM-82-195 from the Business Office, Mineralogical Society of America, 2000 Florida Avenue, N.W., Washington, D. C. 20009. Please remit \$1.00 in advance for the microfiche.