

Memorial to Carl Wilhelm Correns 1893–1980

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C. W. Correns died in Göttingen, Germany, on August 29, 1980. His long life was dedicated to the advancement of mineralogy and geochemistry through research, teaching, and active involvement in professional organizations, both national and international.

He was born in Tübingen, Germany, on May 19, 1893, the son of the well-known botanist C. E. Correns, and received the traditional and humanistic education in Tübingen, Leipzig, and Münster. His early interest in rocks and minerals led naturally to the study of geological sciences. He attended the Universities of Tübingen and Münster. His studies were interrupted by World War I. He served for four years as reserve officer. After the war he completed his education at the University of Berlin and received his Ph.D. in

1920. His dissertation dealt with petrographical and paleontological characteristics of a Devonian limestone.

After a short assistantship with Professor Erik Kaiser, he was employed by the Prussian Geological Survey from 1922 to 1926. He spent these years partly as a field geologist mapping an area of the Rheinische Schiefergebirge and partly as a guest researcher at the Kaiser Wilhelm Institut, where he worked with Professor Freundlich on problems of colloidal chemistry. The period at the Kaiser Wilhelm Institut was professionally very important for Correns. He recognized the need to apply physicochemical laws to mineralogical processes. This insight guided him throughout his life. His work has contributed significantly to change the field of mineralogy from a descriptive discipline to a more exact science.

Following his habilitation in 1925, Correns became "Privat Dozent" at Berlin University. In 1926 he was selected "earth scientist" for the German-Meteor Expedition and spent one year cruising the South Atlantic Ocean. On his return he accepted the call from Rostock University to build up a new department of geology and mineralogy. He became Ordinarius in 1930 and stayed in Rostock until 1938. During these years, his research focused on the clay minerals of the surrounding Mecklenburg soils and on core samples from the Meteor Expedition. Volume III of the *Reports of the Meteor Expedition* appeared in 1935 and 1937. These reports and the publication of *Entstehung der Gesteine* by T. Barth, C. W. Correns, and P. Eskola in 1939 established Correns as a leader in the new field of sedimentary petrology.

He set out to investigate the formation and transformation of minerals and rocks under land and sea-floor conditions. To this end he developed new methods for the study of fine-grained materials, as well as interesting laboratory experiments to observe the weathering of primary minerals. He evaluated the experimental results under strict adherence to physicochemical principles, thereby clarifying the complicated process of silicate weathering. His conclusions are still valid today.

In 1939 he was called to Göttingen to head the newly established Institute for Sedimentary Petrology. From 1941 until his retirement in 1961, he served as director of the School of Mineralogy (Mineralogische Anstalten) in Göttingen, which greatly expanded under his leadership. The first German Institute for Crystallography was added in 1949. A Central Laboratory for Stable Isotopes was established in 1962.

Following the footsteps of his famous predecessor V. M. Goldschmidt (Göttingen, 1929–1935), Correns began to revive geochemical research at Göttingen after World War II. Significant work on the geochemistry of F, Cl, Br, B, Zn, Pb, Zr, S, N, and C was done under his guidance. Consistent with his interest in sediments, which rested on the simple assumption that they cover 75% of the terrestrial landsurface, he also stressed the importance of the main rock- and mineral-forming elements and their behavior during weathering and sedimentation processes. Titanium was the element that fascinated him most. His last publication, before blindness struck him, was the chapter on titanium in the *Handbook of Geochemistry* (1978).

As a teacher, C. W. Correns was the type of a German Herr Professor at its best. His personality dominated and pervaded every aspect of the School of Mineralogy. He ruled with absolute power. However, the power was tempered by a strong sense of professional ethics and a warm consideration for the well-being of his staff and students.

His textbook *Einführung in die Mineralogie* (1949) helped a generation of students find their bearing in a bewildering mass of facts and names and grasp the underlying principles of rock formation and alteration. During the late forties he broke through the isolation that the Hitler Regime and the war had imposed on the German academic community and re-established many contacts with the outside world. A steady stream of international visitors and students passed through the Mineralogische Anstalten, greatly adding to the already stimulating and exciting atmosphere of this institute.

More than sixty Ph.D. candidates completed their theses under his guidance. He left them great independence in the execution of their task. Technical problems were handled by his assistants. But he was always available for discussion, eager to give advice, and ready with helpful suggestions. His knowledge of the literature was phenomenal, and his grasp of the whole field of mineralogy and geochemistry—modern as well as in its historic perspective—is matched by few living earth scientists. He shared his knowledge and experience freely with students and colleagues. In such sessions, he would listen carefully, sucking his indispensable pipe, or—if the subject pleased him—blowing puffs through an amazing number of smoke rings. Then he would comment, often throwing light upon a problem from a rather unexpected angle, or placing a topic in a wider context that would add to its significance. Usually the comments would be accompanied by a little anecdote, personal or historical, of which he kept an inexhaustible supply.

Frequent seminars and field trips, where the attendance of the teaching staff and the whole student body, graduates and undergraduates, was expected, provided not only academic enrichment and practical experience but also a means of personal contact between professor and students. Some of these contacts led to lifelong friendships. On his 70th and 80th birthdays, many of his former students and colleagues reunited at Göttingen to celebrate the Herr Professor, testifying to the lasting appreciation and gratefulness that C. W. Correns enjoyed among those he taught and inspired.

C. W. Correns held many honorary and administrative offices at the University of Göttingen and in professional organizations. He was president of the Akademie der Wissenschaften at Göttingen 1942–1949 and Dekan to the Math. Nat. Fakultät, Göttingen 1943–1944. From 1952 to 1958 he served as first vice-president and then president

of the International Association of Sedimentologists, from 1959 to 1963 as president of the International Commission for Geochemistry of IUPAC, and from 1968 to 1972 as president of the Commission on Petrology of the International Union of Geological Sciences.

Together with O. E. Erdmannsdörffer and H. Steinmetz, he founded the journal *Heidelberger Beiträge zur Mineralogie and Petrographie* in 1947. He became the sole editor in 1954 and held this office until his death. The journal has changed its name several times and is now published as *Contributions to Mineralogy and Petrology*. It has grown from what was an emergency solution of postwar publication problems to a highly respected international periodical. Correns also actively participated in the founding of *Geochimica et Cosmochimica Acta* and served as co-editor from 1951 to 1965.

C. W. Correns has received numerous honors and acknowledgments, including the Stille Medal of the German Geological Society (1963), the Grosse Bundesverdienstkreuz (1963), and the Roebling Medal of the Mineralogical Society of America (1976).

He was honorary member and honorary fellow of a great number of academies and societies. Honorary doctorates were bestowed on him by the Universities of Tübingen and Clausthal.

These honors gave him great pleasure but left him otherwise unaffected. He remained what he was: a true scientist whose profession was his hobby that he pursued with vigor until his eyes failed, an inspiring teacher who will live on in the grateful memory of his students and colleagues, and an excellent administrator with an eye for the human element in all his dealings and negotiations.

Above all, Carl Wilhelm Correns was a thoroughly human and fine man.

He is survived by his wife and close companion of almost sixty years, by two children, and by five grandchildren.

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