

investigations on diffusion. Making use of recent formulas of Einstein, he showed how it was possible to use the diffusion coefficient to determine the size of large molecules. Secondly, he got interested in the connection between chemical structure and physical properties. He translated the text-book of Smiles with that title from the original English; this became the standard work on the subject in German. After a short stay in Berlin, he was called in 1912 as full professor of mycology to the Technische Hochschule in Prague. But at the outbreak of the war his friend Haber, who in the meantime had become director of the Kaiser Wilhelm Institut for Physical Chemistry in Berlin, had him transferred there, where he worked on the improvement of the cloth and rubber material for gas masks. After the war he returned shortly to Prague, but in 1921 he was made director of the newly founded Kaiser Wilhelm Institut of Textile Chemistry. Here, as direct neighbor of Haber, he found himself in an ideal position. He was rid of the teaching he disliked. He was at the head of a laboratory, which he could organize, and at the same time he could work with industry, consulting and advising. His laboratory devoted half its work to technical questions, but half of it was devoted to purely scientific problems. Herzog succeeded in picking out young men who were destined to make their place in chemistry. Ewald, now professor in Stuttgart; Polanyi, now professor in Manchester; Mark, now professor in Vienna; Schmid, now in Freiburg in Switzerland; Smekal, now in Halle; Bergmann in Dresden, now in New York, and Weissenberg worked there. The problems selected bore on the fundamentals of textile structure as the clue to its properties. And so Herzog started the new tool, x-ray investigation of structures, on natural organic matter. The concept of fiber structure (Polanyi) was born here, and investigations on the structure of textile-fibers, wood and chitin were made.

A large group of investigations centered around the strength of fibers and gave rise to a group of papers on gliding and stretching of metals, which have contributed greatly to our understanding of the strength of metals. Of course, purely chemical problems were not neglected.

In recent years, the depression forced the curtailment of the purely scientific work, as the institute was mainly supported by industry. A large part of Herzog's time began to be occupied with the search for money to keep the institute up. But he did not neglect his own work and turned again his attention to the fundamental question of the structure of glasses and liquids, to the nature of viscosity and the like. He was also editor of an Encyclopedia on the technology of textile materials. His list of publications contains 52 articles for 1901-1914, 91 articles from 1921 on.

In the fall of 1933 he was retired from his position and accepted a professorship at the reorganized University of Istanbul (Constantinople, Turkey). At the beginning he felt the change very strongly, but seemed after some time to get better accommodated to it. In the beginning of 1935 Mrs. Herzog, who was suffering from a chronic knee ailment, and he went to Zurich in Switzerland for medical treatment. His own health was bad. Since the war he had been suffering deeply under the general conditions of the world. His idealism and scientific attitude felt deeply hurt by the hate and unreason rampant everywhere. In a fit of depression he took his life on February 4.

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### MEMORIAL TO CHARLES DARWIN

PERMISSION to erect a memorial to Charles Darwin in the Galapagos Islands to commemorate his visit there 100 years ago, according to *The Christian Science Monitor*, has been granted to the Darwin Memorial Expedition by President Velasco Ibarra of Ecuador. The memorial, it was indicated, will be in the form of a scientific research station, the establishment of which "would make available to present-day natural scientists from all over the world an opportunity to study at first-hand Galapagos flora and fauna, whose primitive state is to-day as completely remote from the encroachments of civilization as it was upon Darwin's epochal sojourn there a century ago."

In addition to the scientific research station, a monolith will be erected on Chatham Island, one of the most important of the group. This monolith will bear commemorative bas-reliefs on each of its four faces and will be topped by a replica of the bronze bust of Darwin now in the hall of biology of the American Museum of Natural History. Dedication of the memorial has been fixed for September 6.

Arrangements for the memorial were made with the Government of Ecuador by Dr. B. W. von Hagen, leader of the expedition, who is now in Ecuador carrying on ethnological, geographical and biological surveys of the coast and hinterland.

### RECENT DEATHS

EDWARD SALISBURY DANA, tutor and professor of physics at Yale University from 1874 until his retirement as professor emeritus in 1918, curator of mineralogy from 1875 to 1920, died on June 16, in his eighty-sixth year.

DR. LEÓN M. GUERRERO died on April 13. The Executive Board of the National Research Council of the Philippine Islands have passed resolutions in his memory which refer to his work in the following