



Israel C. White (*West Virginia*)

Born on a farm in Monongalia County, W.Va., in 1848, Israel Charles White became a pioneer and leader in many ways. He was a member of the entering class of West Virginia University when it opened in 1867. He received his A.B. degree in 1872, an A.M. in 1875, and his Ph.D. from the University of Arkansas in 1880.

His early professional career began with the Second Survey of Pennsylvania (1875–84). He then worked as an assistant geologist for the U.S. Geological Survey

between 1884 and 1888. His work with the Second Survey of Pennsylvania led to his becoming chair of geology at West Virginia University in 1876. The following year, he was appointed the first chairman of the newly formed Department of Geology, which was split from the Department of Natural Science. He left the department in 1892 to pursue full-time his work in a petroleum company that grew out of his research in oil occurrence.

White was appointed the first state geologist with the creation of the West Virginia Geological and Economic Survey in 1897. He directed the Survey until his death in 1927. Major accomplishments during his tenure included cooperative work with the U.S. Geological Survey to determine true meridians in every county, complete a set of topographic quadrangle maps covering the entire state, and establish gages on all principal rivers; and cooperative work with the U.S. Bureau of Soils to study, describe, and map soils in 48 of the 52 counties in the state.

The more than 22,000 pages of reports and maps published during the 30 years he directed the Survey stand as a testament to his energy and organization. Survey staff during this period averaged about 10 employees. Publications included 25 volumes describing the geology and mineral resources of 51 counties, and general volumes on oil and gas, coal, limestone and cement, clays, iron ores, salt, sandstones, forestry and wood industries, and the living and fossil flora of the state. The county reports with accompanying maps and data continue to be sold today, albeit in digital format.

In addition to his public and academic service, he worked as a geologic consultant for Hope Natural Gas Co. and the Baltimore and Ohio Railroad. During 1904–06, he made a survey of coal and oil resources in Brazil for that country's government. He was a speaker at the first White House Conference of State Governors on the subject of fuel conservation in 1908.

Instrumental in the founding of the Geological Society of America, he served as treasurer from 1892 to 1906 and president in 1920.

White is probably best known outside West Virginia as an early advocate of the anticlinal theory of oil accumulation. Although not the originator of the theory—he duly credited others for the idea—he tested the concept successfully with the drilling of the discovery well in the Mannington Oil Field in West Virginia. The effectiveness and role of the theory in development of the petroleum industry remains controversial to this day; nevertheless, it certainly was claimed as an important tool by the fledgling discipline of petroleum geology. White went on to become the second vice president and the third president of the new American Association of Petroleum Geologists.

Very active in the affairs of the AASG during its first two decades, White served as its second president from 1913 to 1915. He died in 1927 while still state geologist of West Virginia.

Biography adapted from Price (1963).