



PHOSPHORUS was the **1ST ELEMENT** to be **CHEMICALLY DISCOVERED**

Phosphorus was isolated by **alchemist Hennig Brand** in 1669 in Hamburg, Germany while looking for the fabled philosopher's stone to create gold.

With its ability to **glow in the dark**, technically called chemiluminescence, phosphorus created a never-before-seen light show and quickly became a sensation in European courts and fairs.

Phosphorus derives its name from the ancient Greek word "**phosphoros**" which means "**bringer of light**".



In 1769,

Johan Gottlieb Gahn and Carl Wilhelm Scheele proved that calcium phosphate is found in bones, successfully **obtaining elemental phosphorus from bone ash**, which continued to be the major source of phosphorus until the 1840s.

By 1840

the pioneering plant scientist **Justus von Liebig** had confirmed that **phosphorus played a crucial role in plant growth**.

In 1842,

Sir John Bennet Lawes patented a technique for **creating fertilizer by treating phosphate rock with sulphuric acid**, which marked the birth of the modern mineral fertilizer industry.

During the 1840s,

with growing demand for phosphorus as a fertilizer, production focused on **mining tropical island deposits of increasingly valuable bird and bat guano**.

By the end of the 19th Century

world guano reserves were depleted. Sedimentary **mineral phosphate ores became the main source**, with production greatly increasing by the middle of the 20th century.

