Biography of George Simon Ohm

Summary

Read the following summary and fill-in the gaps with the words from the box

current	*proportional*	*electrical*	*electricity*	*circuits*	*experimental*
current	*resistance*	*fixed*	*electrochemical*	*steady current*	*introversion*
current	*resistance*	*mathematical*	*voltage*	*metal wire*	*inversely*
electromotive	*length*	*voltage*			

Georg Simon Ohm was a German physicist born in 1789. He was a high school teacher and he carried out some research starting from the recently invented [1]..... cell, invented by Alessandro Volta. Using equipment of his own creation, Ohm determined that the [2]..... that flows through a wire is [3]..... to its cross sectional area and [4].....proportional to its [5]..... He became professor at the college at Cologne in 1817.

Ohm's main interest was current electricity but his experimental equipment was primitive. Despite this, he made his own [6]..... ....., producing a range of thickness and lengths of remarkable consistent quality and he also focused on the nature of electric [7]..... In 1827, he was able to show from his experiments that there was a simple relationship between [8]....., [9]..... and [10].....

This result represents the true beginning of [11]..... circuit analysis. Unfortunately, when Ohm published his finding in 1827, his colleagues did not accept his ideas, so he had to resign from his high-school teaching position and he lived in poverty and shame until he accepted a position at Nuremberg in 1833. In 1852 Ohm became professor of [12]..... physics in the University of Munich, where he later died.

Ohm's law stated that the amount of [13]..... ..... through a material is directly proportional to the [14]..... across the material, for some [15]..... temperature: I = V/R. Ohm had discovered the distribution of [16]..... force in an electrical circuit, and had established a definite relationship connecting [17]....., electromotive force and [18]..... strength.

He would receive no credit for his findings until he was made director of the Polytechnic School of Nuremberg in 1833. In 1841, the Royal Society in London recognized the significance of his discovery and awarded him the Copley medal. In 1849, just 5 years before his death, Ohm's lifelong dream was realized when he was given a professorship of Experimental Physics at the University of Munich.

However, why was his work not recognized during his life? There is not a definite answer but maybe many factors contributed to it. One factor may have been his [19].....; another was certainly his [20]..... approach to topics which at that time were studied in his country a non-mathematical way. [21]..... was not the only topic on which Ohm undertook research, and not the only topic in which he ended up in controversy.

LIVEWORKSHEETS