



Alhazen

965-1040

Alhazen was a 10th Century Muslim scientist who made significant contributions to the fields of optics, physics, astronomy, mathematics, ophthalmology, and visual perception.

Alhazen's most famous work is his seven volume treatise *Kitab al-Manazir* (*The Book of Optics*). In it, Alhazen analyzes a host of optical phenomena, including reflection, refraction, magnification, and aberration. He also gave the first clear description and correct analysis of the camera obscura and pinhole camera.

In *The Book of Optics* Alhazenaso described the process of sight, the structure of the eye, image formation in the eye, and the visual system. His most original anatomical contribution was his description of the eye as an optical system. It was his comparison between the eye and the camera obscura which brought about his synthesis of anatomy and optics, which forms the basis of physiological optics.

The Book of Optics had an enormous impact on Western science centuries after its publication, influencing the work of scientists such as Roger Bacon and Johannes Kepler.