

Nicolaus Copernicus 1473 - 1543

The Polish astronomer Nicolaus Copernicus is noted for his revolutionary theory of the heavens, now named the Copernican theory. He was born at Torun, now in Poland, on February 19th, 1473.

He was a quiet man, without great power, titles or wealth - an astronomer and a humanist, who observed, calculated and thought. His father was a gentleman 'who bought real estate and brought law suits' as is known from the Torun judicial records. His mother was the daughter of a wealthy Torun merchant. There were four children in the family. The father of Copernicus died when he was ten and the children were adopted by their maternal uncle, Lukas Watrenrode; he was a man of a strong character, who served the Church as a Bishop.

Lucas sent his nephew to the elementary school at Torun and later to the University of Cracow, where Copernicus became interested in the study of astronomy and accustomed to the use of astronomical instruments. Bishop Lukas was eager to provide for his nephew's future by having him elected as a Canon, but his first attempt was not successful and Copernicus was sent for further training to the University of Bologna. There he made his first recorded observation of the heavens - an eclipse of the star Aldebaran by the Moon in 1497. The same year he was elected a Canon of Frauenburg (now Frombork, Poland). In 1501 he returned to Italy under special leave of absence to continue his studies at the University of Padua. As the result of his education in Cracow and Italy, Copernicus may be said to have mastered all the knowledge of the day in mathematics, astronomy, medicine, theology and Greek.

He showed that the Earth revolved around the Sun





His work led to the new Gregorian Calendar

He returned to Poland in 1503 and took up residence in Frombork. In 1514 he was invited to give his opinion on calendar reform to the Lutheran Council. Copernicus asked the Council not to reform the calendar because the courses of the Sun and the Moon had not been determined with sufficient accuracy. Many years later, after the publication of his computation of the length of the tropical year, the calendar was reformed under Pope Gregory XIII.

While reading the works of Greek scientists, and analysing his own great number of observations, Copernicus concluded that the idea of the Earth moving around the Sun is preferable to the reverse. After many years of mathematical calculations he became convinced that his new idea was true, yet he was in no hurry to publish. His first short manuscript with this idea was privately circulated among friends in 1514. Not until 1540 did he consent to the publication of his complete work, On the Revolutions of the Celestial Spheres (De Revolutionibus Orbium Coelestium). Its main point was the so-called heliocentric system and it adopted the following order from the stationary Sun: Mercury, Venus, Earth with the Moon orbiting around it, Mars, Jupiter, and Saturn. He gave a mathematical description of the Earth's motion, including the precession of the equinoxes which is caused by the gyration of the Earth's axis.

A copy of his great work is believed to have been brought to Copernicus at Frauenburg on the last day of his life, May 2nd, 1543. He lived and died very lonely. It is said that before his death the poor old man's companion or nurse, Anna, had been driven from his home by socalled friends.

