



Caroline HERSCHEL

(1750 – 1848)

Caroline was the first woman to discover a comet.

She helped discover the planet Uranus, and also discovered nebulae on her own. She was the first woman officially recognized in a scientific position, as well as the first woman to receive honorary membership into Britain’s prestigious Royal Society.

Caroline Herschel made a significant contribution to the field of astronomy. Many of the comets she discovered are named for her, as well as a lunar crater (C. Herschel) and an asteroid (Lucretia).

Caroline’s Childhood

Caroline was born in Hanover, Germany, as Karoline Lucretia Herschel on March 16, 1750. She was one of six children, and her nickname as a child was ‘Lina’.

At the age of ten, Caroline became ill with a disease called typhus, which stunted her growth, so that she never grew past four-foot three. Caroline’s mother did not have many ambitions for her daughter, and thought that she would only be a maid, when she was older. Life was not very exciting.

Training as an astronomer

However, Caroline moved to England at the age of 22, to join her brother, William. At that time, he was working as a musician, and he also had a strong interest in astronomy. He helped Caroline to develop her singing and also trained her to be his assistant in his astronomy work.



Sir William Herschel and Caroline Herschel



During this time, Caroline also learned mathematics, and she also started to make her own investigations and observations too.

In 1781, William discovered the planet Uranus, and credited Caroline for her help in this discovery. William was then knighted by King George III who appointed him as court astronomer, and Caroline decided to spend all her time and energy on astronomy.

Caroline's Astronomical Discoveries

Although Caroline had been assisting her brother for years as an apprentice, her own skills as an astronomer were now being truly recognized. She made several important discoveries.

Caroline discovered new nebulae in 1783; Andromeda and Cetus, and 14 more nebulae soon after.

In 1786, she discovered a comet using her new telescope, (a 27-inch focal length Newtonian telescope, and a gift from her brother). This discovery was important as she was the very first woman to have done so.

In 1787, King George III employed her as William's assistant officially, complete with a modest salary (£50 per year) and making her the first woman to be paid for scientific services.

Caroline also cross-indexed the existing star catalogue compiled by England's first "astronomer royal", John Flamsteed, listing the details of more than 550 stars that had not been included in the original catalogue, leading to the publication of the 'Catalogue of Star' by the Royal Society in 1798.



Caroline Herschel's telescope

Later Years

After her brother William got married in 1788, Caroline was free from many of the household chores and responsibilities and had more time for astronomy.

Caroline made many discoveries independently of William, and continued to work alone on a number of the astronomical discoveries which helped her become famous in the scientific world, including the rediscovery of Comet Encke in 1795.

After her brother William’s death in 1822, Caroline returned home to Hanover, Germany, and continued to write, carrying out extensive work on their catalogue of nebulae.

Caroline Herschel died on Jan. 9, 1848. She wrote her own epitaph, the inscription on her tombstone reads; “The eyes of her who is glorified here below turned to the starry heavens.

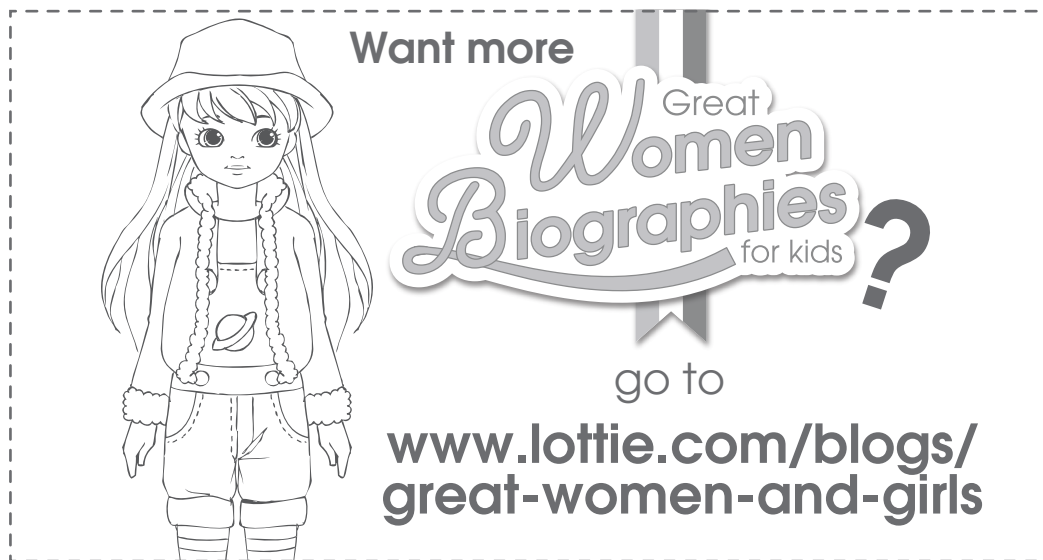
Honours and Awards

Caroline received many honours and awards for her work.

She received the Gold Medal of the Royal Astronomical Society on February 8th, 1828.

In 1835, she became the first woman to receive honorary membership to Britain’s Royal Society as well as election in to the Royal Irish Academy.

At the age of 96, she was recognised for her many scientific achievements and awarded the Gold Medal for Science by the King of Prussia, in 1846.



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