

Cannizzaro and the Karlsruhe Conference

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Stanislao Cannizzaro

THE year 2026 marks the celebration of the bicentenary of the birth of the Italian chemist Stanislao Cannizzaro. He is regarded as one of the pioneers in the history of modern chemistry and also as one of the most symbolic intellectuals of nineteenth-century Europe. He was a soldier, politician and family man who still found time for chemistry. It is highly fitting to celebrate the impact of his life and endeavours.

Stanislao Cannizzaro, the fourth and youngest son of Mariano Cannizzaro and Anna di Benedetto, was born on 13 July 1826 at Palermo, Sicily. His father, Mariano, born in Messina, became a magistrate in Palermo, minister of police and later President of the High Court of Chancery. His mother was a member of a noble Sicilian house. At the time of his birth, Sicily was under the rule of the Bourbon King of Naples.

Stanislao was partly educated at home and partly at a native school where he excelled especially in mathematics. However, the school curriculum in Sicily at that time was under the control and direction of the priests. Sir William Tilden, in his memorial lecture on Cannizzaro, says — “*Education frowned on as a design of the liberals to revolutionise the state was so successfully discouraged that in 1837 it was calculated that 2 per cent of the rural population could read and not very much more of the dwellers in the towns.*” His studies at the school were temporarily interrupted by the cholera epidemic of 1837. He somehow recovered from it but lost two of his brothers.

At the age of fifteen, he entered the University of Palermo in order to study medicine under Professor Fodera. Here, there were no adequate facilities for experimental work, and without acquiring a degree, Cannizzaro proceeded to Naples in the autumn of 1845. At Naples, he met the famous physicist Melloni and worked in his laboratory for a short time. Later, Melloni sent him with a warm recommendation to Professor Piria, known for his chemical research on plant products at the University of Pisa. Piria proved to be an admirable and excellent teacher. The influence of Piria over the young Cannizzaro was such that he decided to devote his entire life to the study of chemistry. Of his life during this period, Cannizzaro says — “*During the two academic years spent in Piria’s laboratory, I received all my chemical education. In fact, most of the time I used to watch with concentration and silence, the dexterity and skill with which Piria carried out his experimental work.*”

Cannizzaro returned to Palermo in the summer of 1847 with the intention of continuing his studies at Pisa in the autumn. But the political situation took a rebellious turn against the oppressive rule of the Bourbons. At the end of the Napoleonic wars, there was a revolt against the Bourbon rule in Italy. The period is known as Risorgimento. This revolt was spearheaded by the revolutionary Giuseppe Mazzini in 1847.

Cannizzaro responded to this patriotic movement and joined the rebellion in Sicily. He became an artillery officer at Messina. After the fall of Messina, he was sent to Taormina with a government commission to oppose the advance of Neapolitan troops, but the revolution proved to be abortive, and Cannizzaro had to flee to Paris through Marseilles. Here, he was introduced to the renowned French chemist Michel Chevreul and worked in his laboratory until 1851, on the