Marie Curie Essay, Research Paper

Marie Sklodowska, as she was called before marriage, was born in Warsaw in

1867. Both her parents were teachers who believed deeply in the importance of

education. Marie had her first lessons in physics and chemistry from her father. She had a

brilliant aptitude for study and a great thirst for knowledge; however, advanced study was

not possible for women in Poland. Marie dreamed of being able to study at the Sorbonne

in Paris, but this was beyond the means of her family. To solve the problem, Marie and

her elder sister, Bronya, came to an arrangement: Marie should go to work as a governess

and help her sister with the money she managed to save so that Bronya could study

medicine at the Sorbonne. When Bronya had taken her degree she, in her turn, would

contribute to the cost of Marie’s studies.

Now, however, there occurred an event that was to be of decisive importance in

her life. She met Pierre Curie. He was 35 years, eight years older, and an internationally

known physicist, but an outsider in the French scientific community – a serious idealist

and dreamer whose greatest wish was to be able to devote his life to scientific work.

Marie, too, was an idealist; though outwardly shy and retiring, she was in reality

energetic and single-minded. Pierre and Marie immediately discovered an intellectual

affinity, which was very soon transformed into deeper feelings. In July 1895, they were

married at the town hall at Sceaux, where Pierre’s parents lived. Their life was otherwise

quietly monotonous, a life filled with work and study.

Persuaded by his father and by Marie, Pierre submitted his doctoral thesis in

1895. It concerned various types of magnetism, and contained a presentation of the

connection between temperature and magnetism that is now known as Curie’s Law. In

1896, Marie passed her teacher’s diploma, coming first in her group. Deciding after a

time to go on doing research, Marie looked around for a subject for a doctoral thesis.

Marie decided to make a systematic investigation of the mysterious ‘uranium

rays’. She had an excellent aid at her disposal – an electrometer for the measurement of

weak electrical currents, which was constructed by Pierre and his brother, and was based

on the piezoelectric effect.

In 1903, Marie and Pierre Curie were awarded half the .. In a letter to the Swedish

Academy of Sciences, Pierre explains that neither of them is able to come to Stockholm

to receive the prize. They could not get away because of their teaching obligations. He

adds, ‘Mme Curie has been ill this summer and is not yet completely recovered’. That was

certainly true but his own health was no better. The health of both Marie and Pierre

Curie gave rise to concern. Their friends tried to make them work less. All their

symptoms were ascribed to the draughty shed and to overexertion.

On 19 April 1906, Pierre Curie was run over by a horse-drawn wagon near the

Pont Neuf in Paris and killed. Now Marie was left alone with two daughters, Ir?ne aged 9

and ?ve aged 2.

In the last ten years of her life, Marie had the joy of seeing her daughter Ir?ne and

her son-in-law Fr?d?ric Joliot do successful research in the laboratory. She lived to see

their discovery of artificial radioactivity, but not to hear that they had been awarded the

Marie Curie died of leukemia on 4 July 1934.