

MARGUERITE C. PEREY



Marguerite Catherine Perey was born in Villemomble, France, in 1909. As a child, she showed an interest in science and wanted to become a doctor. Her father's early death, however, left her family without the resources for such an education. Nonetheless, she received the degree, Diplôme d'État de chimiste, from École d'enseignement technique féminine (Womens Technical School) in Paris in 1929 and a Doctorat des Sciences from Sorbonne in 1946. From 1929 to 1934, she served as Personal Assistant (Preparateur) to Marie Curie at the Institut du Radium. In 1934, after Marie Curie died, she became a Radiochemist at the Institut du Radium. She was appointed Maitre de Recherches, Centre National de la Recherche Scientifique (CNRS) in 1946. Then, she took a position as Professeur titulaire de la Chaire de Chimie Nucleaire, at the Universite de Strasbourg and also director of Strassbourg's Nuclear Research Center, Strasbourg, France.

After Curie death in 1934, she did research under André Debierne and I.Joliot-Curie, both of whom suggested that she continue purifying actinium. She discovered the sequence of events that lead to the process known as the actinium radioactive decay series. This research inadvertently led to her most important discovery. She was aware of the existence of actinouranium, actinium-B, actinium-C, and actinium-D as part of the decay series she was trying to interpret. At that time, three elements were missing in the Periodic Table (which at the time contained 92 elements). One of these was Element 87. As she attempted to confirm her results of actinium radioactive decay, she found that other elements kept cropping up, disrupting the procedure. One of the elements was Element 87, with an atomic weight of 223. The element was highly charged, and the most electropositive of all the elements. Because of this property, she considered naming it catium (from cation, which is a term for positively charged ions). Because the word sounded too much like "cat" to her colleagues, she decided on francium in honor of her homeland and the place where the element had been discovered.

In 1960, she received the Officier of the Légion d'Honneur and the Grand Prix de la Ville de Paris. Two years later, she was elected Correspondante of the Académie des Sciences (Paris) and was the first woman to be elected to the Académie since its founding in 1666. Even Marie Curie had been unable to break the sex barrier. In 1964, she was awarded the Lavoisier Prize of the Académie des Sciences and the Silver Medal of the Société Chimique de France. She became a Commandeur of the Ordre National du Mérite in 1974.

In 1960, she was diagnosed with the cancer that would slowly kill her. After a fifteen-year struggle, she succumbed in Louveciennes, France, on May 14, 1975

References:

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