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11:00 – 12:00

Talk by
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Tokyo Institute of Technology
Suzukakedai Campus
Genso Cube (S8), Lecture Hall (1F)



マリー・キュリーの科学への情熱 Marie S Curie and Her Passion in Science

マリー・S・キュリーは二つの放射性元素、ラジウムとポロニウムを発見し、20世紀前半の核物理、核化学のみならず、物質とエネルギーの解明に目覚ましく貢献しました。キュリー夫人は放射能の研究をして、ノーベル賞を受賞した最初の女性で、二度の受賞、さらに母娘二代の受賞者です。キュリー夫人が語り継がれる理由です。国際周期表年2019にあたり、現在わずか118元素に3つもキュリー夫人は関係しています。今や『イノベーター』と呼ばれています。ところが、偉大な教育者であることは案外知られていません。科学教育者としての新しいキュリー夫人像を描き『キュリー夫人の理科教室』に基づき科学教育者としての『新しいマリー・キュリー像』を紹介します。講演はキュリー夫人の人物・業績・科学教育の3観点から、パリ・キュリー博物館の協力も得て、新旧の写真をとりまとめ、スライドでマリー・キュリーワールドの世界へいざないます。現代の科学技術進展はかつてない急激な変化をもたらし、いやおうなく渦に巻き込まれる日常生活です。科学技術の理解とその利用抜きには21世紀を元気に生きていくことは出来ません。いまに生きる「新しいマリー・S・キュリー像」、特に「キュリー夫人の理科教室」(丸善)その授業記録と事実を基に科学的素養の涵養を、キュリー夫人像ならびに業績の現代の意義についてお話しします。

Marie S. Curie (1867 – 1934) is one of the scientific legends of the 20th century. She discovered two radioactive elements Radium and Polonium. She was the first female Nobel prize laureate and, furthermore, was awarded the prize twice. However, it is less well-known that she was a great science educator, too. According to the biography, *Madame Curie*, written by Eve Curie, her younger daughter, Marie Curie taught children her original science lessons for two years (1907 – 1908). In 1907, the course of science lessons, “*Leçons de Marie Curie*,” was organized for a few children in the age of 10. This course was called “*cooperative lessons*” and proved how innovative Marie Curie was as science educator facilitating young students to learn successfully. In her lessons she thought basic scientific logical thinking, how to extract essence from daily life phenomena and how to build a theory by the use of mathematical concepts. Among the students, Isabelle Chavannes (age 13) became later the world’s first female chemical engineer. Irène Curie, daughter of Marie and Pierre, also received the Nobel Prize in Chemistry, which made them the only mother-daughter pair who have received the Noble Prize in 117 years of Nobel Prize history. Other students who participated in the lessons succeeded as scientists or government scientific officers. Although “*Leçons de Marie Curie*” were just 2-year cooperative lessons, Curie was contented that her students cultivated a scientific sense, where research led to discovery of principles by observation and investigation.

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