Marie Curie: a passion for science, action and people

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The Royal Society of Chemistry

Chemistry Centre, Burlington House

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Manya Salomea Sklodowska was born on 7 November 1867 at 16 Freta Street, Warsaw

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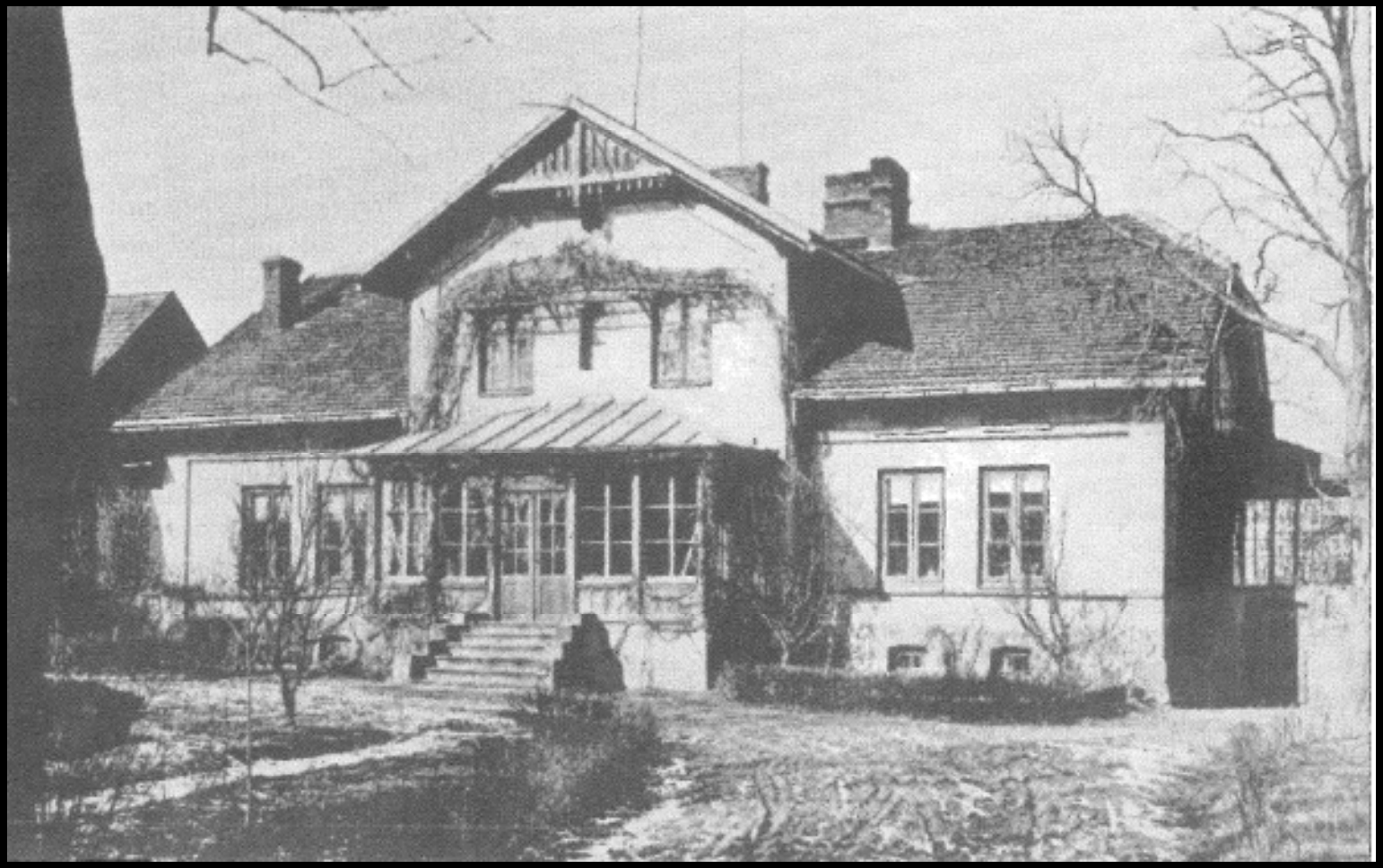
The Sklodowski children in 1870

Fig. 7. Maria Sklodowska en compagnie de ses sœurs et de son frère (en partant de la gauche): Zofia, Helena, Maria, Józef, Bronisława

The Szczuki family house where Manya taught as a governess in 1883



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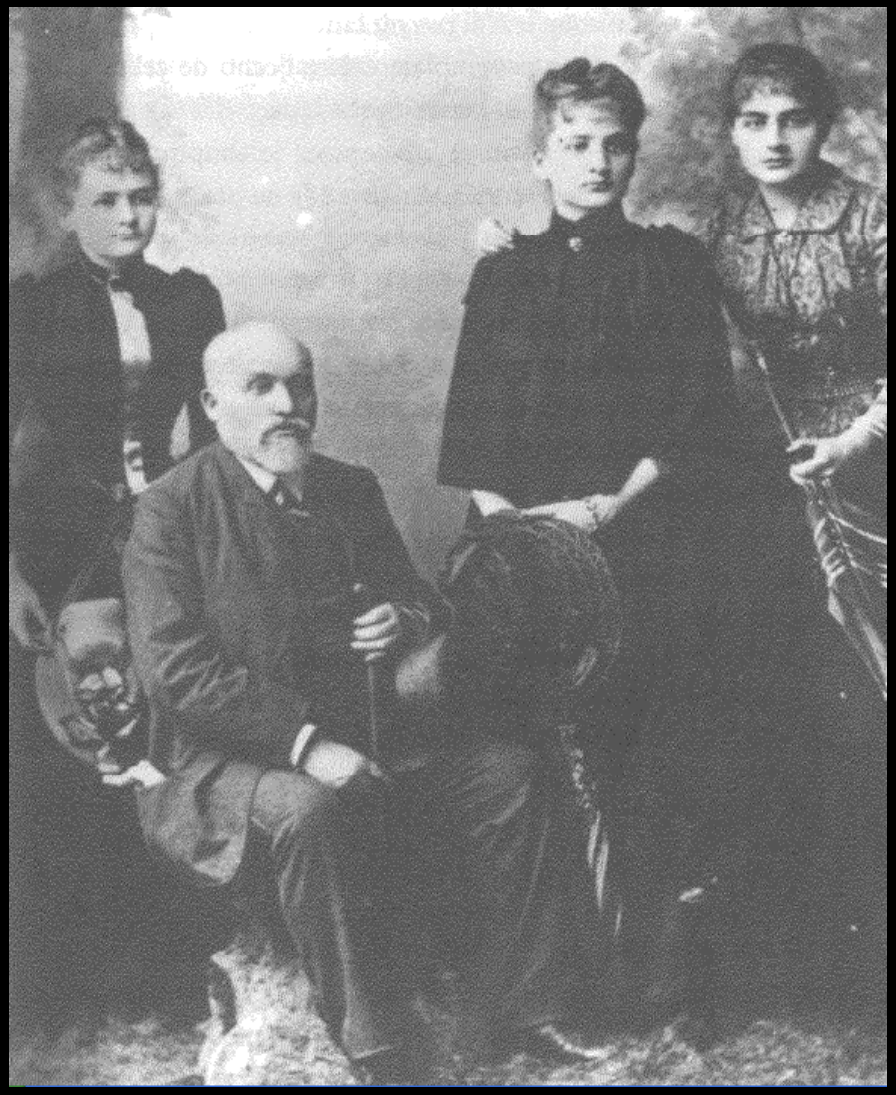
Wladyslaw Sklodowski with daughters Mania, Hela and Bronia in 1890



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Marie at the Dluski's apartment in Paris, early 1890's

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The Curie family: Jacques and Pierre with their parents

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Marie Curie in 1895

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Pierre and Marie after their marriage at the Curie's house in Sceaux

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X-ray photograph of Mrs Röntgen hand, probably 22 December 1895

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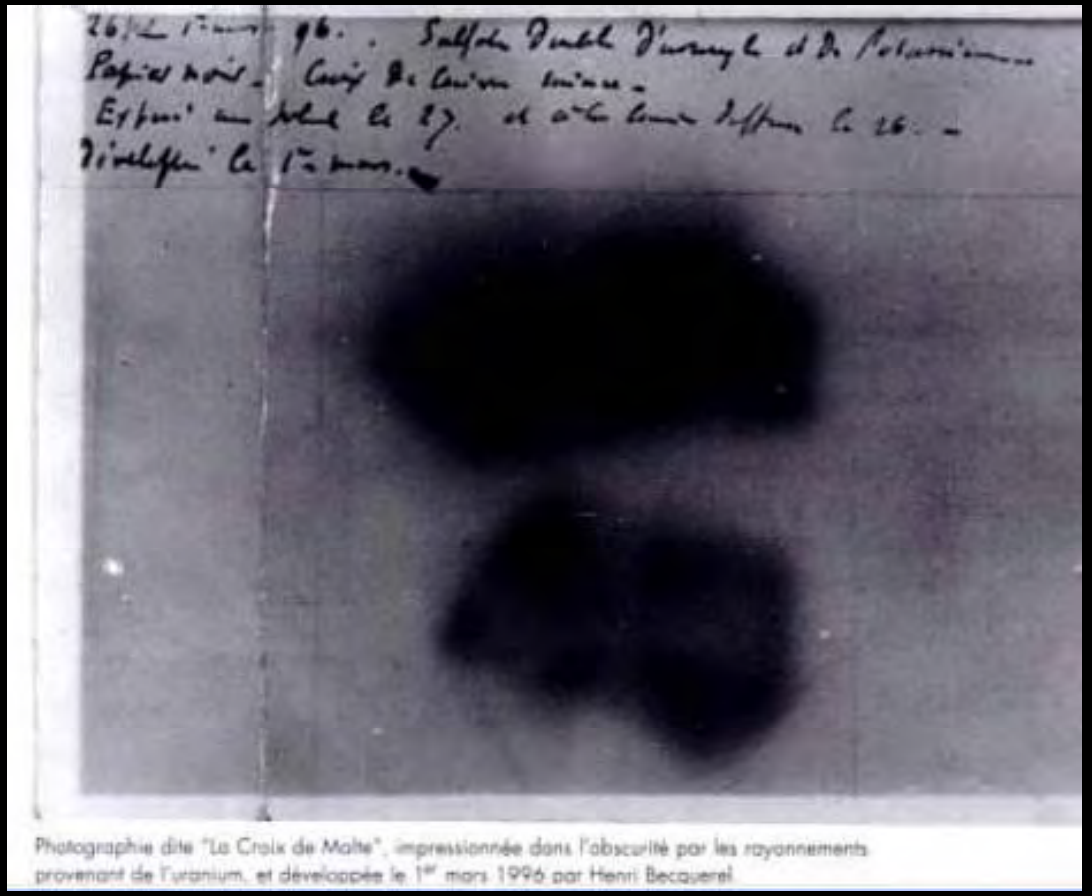
The discovery of Henri Becquerel, 1 st March 1896



Photographie dite "La Croix de Malte", impressionnée dans l'obscurité par les rayonnements provenant de l'uranium, et développée le 1er mars 1996 par Henri Becquerel

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Rebuilt instruments used by Pierre and Marie Curie

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The three seminal notes to the Comptes Rendus de l'Académie des Sciences in 1898

- 12 April: Search for substances other than uranium compounds render air conducting for electricity.
- 18 July: On a new radio-active substance contained in pitchblende.
- 26 December: « A very serious reason to believe that the new radio-active sbstance contains a new element to which we propose to give the name radium. »

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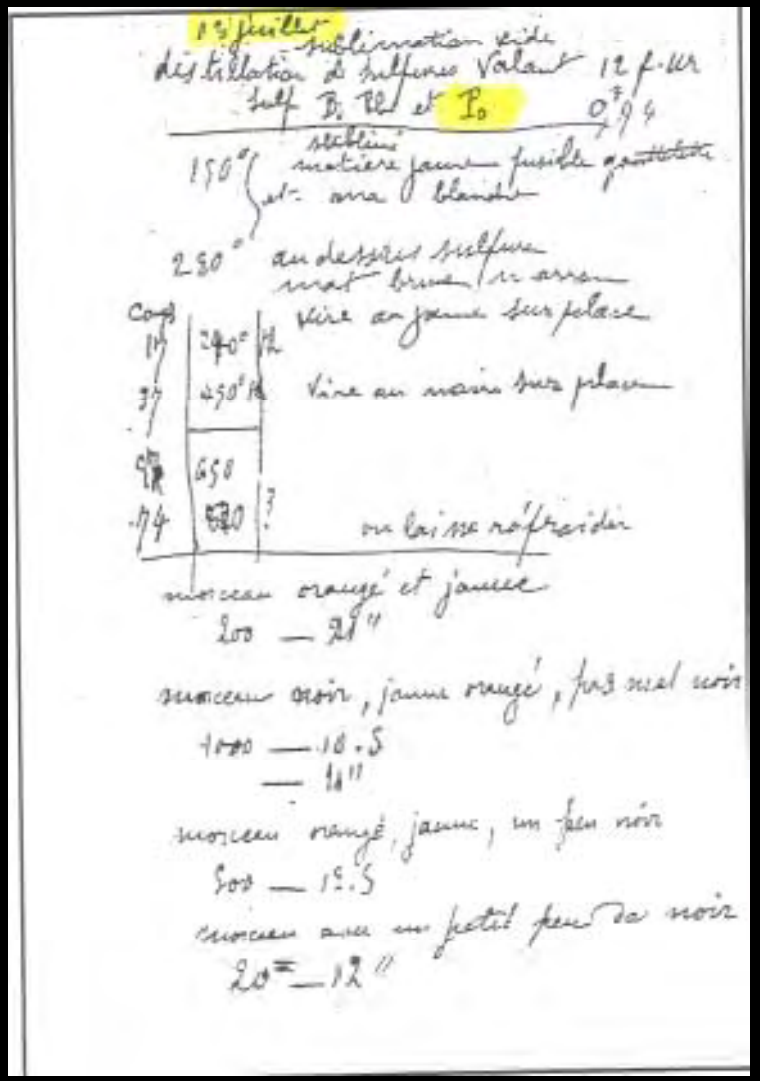
First mention of Polonium in Pierre and Marie lab notebook, 13 July 1898



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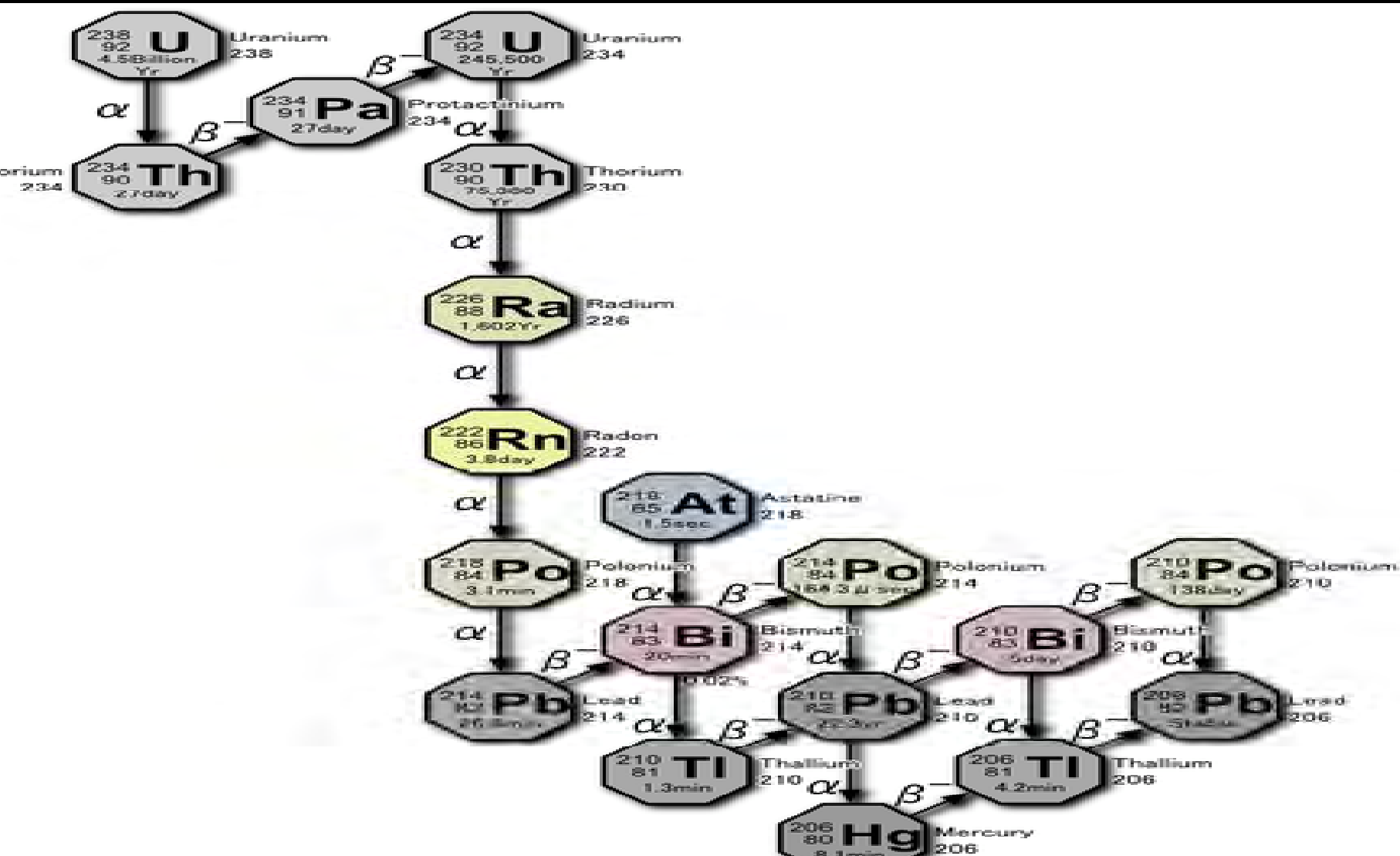
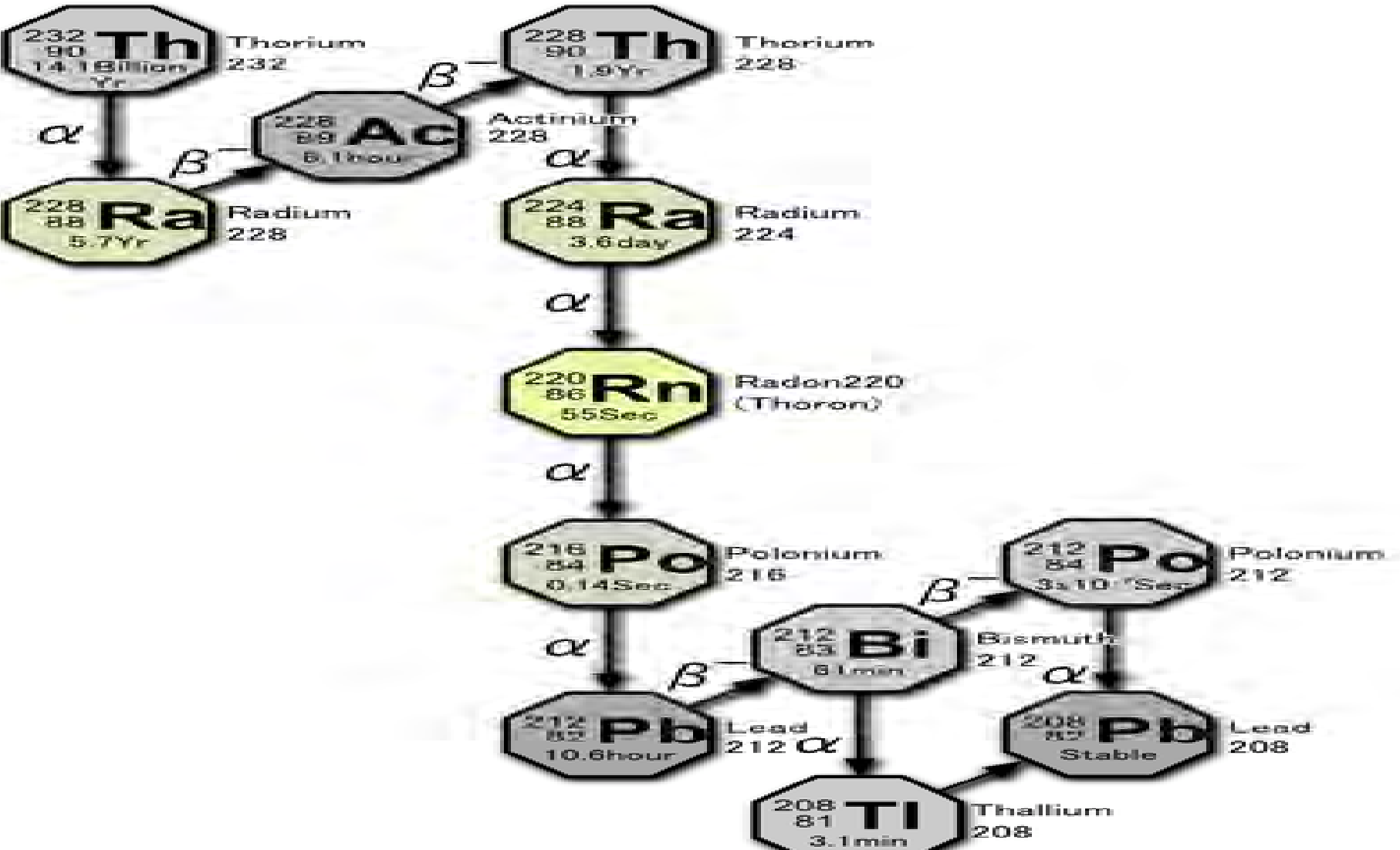
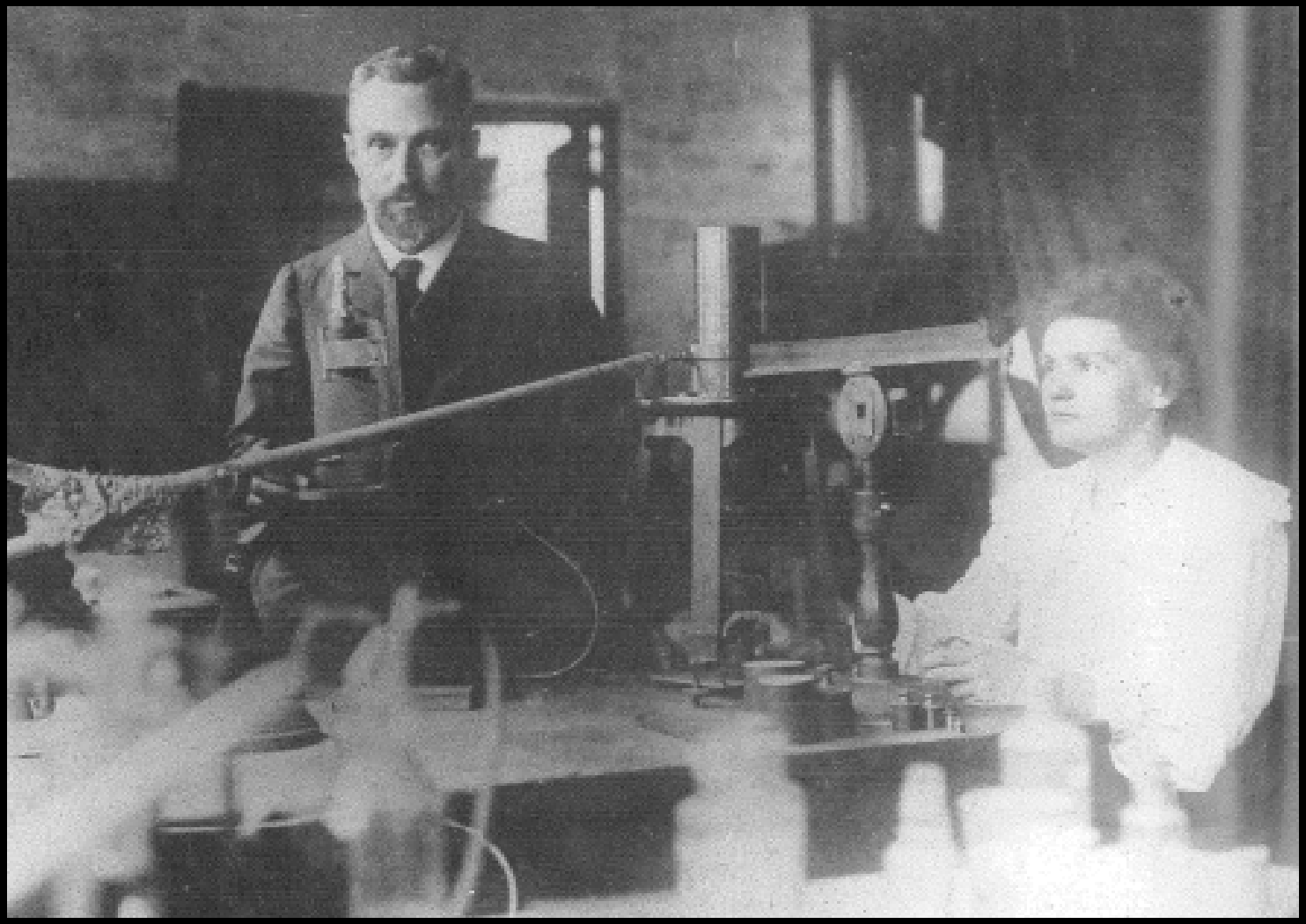
^{238}U radioactive decay chain



^{232} Th radioactive decay chain



Marie measures radioactivity with a piezoelectric quartz balance, 1899



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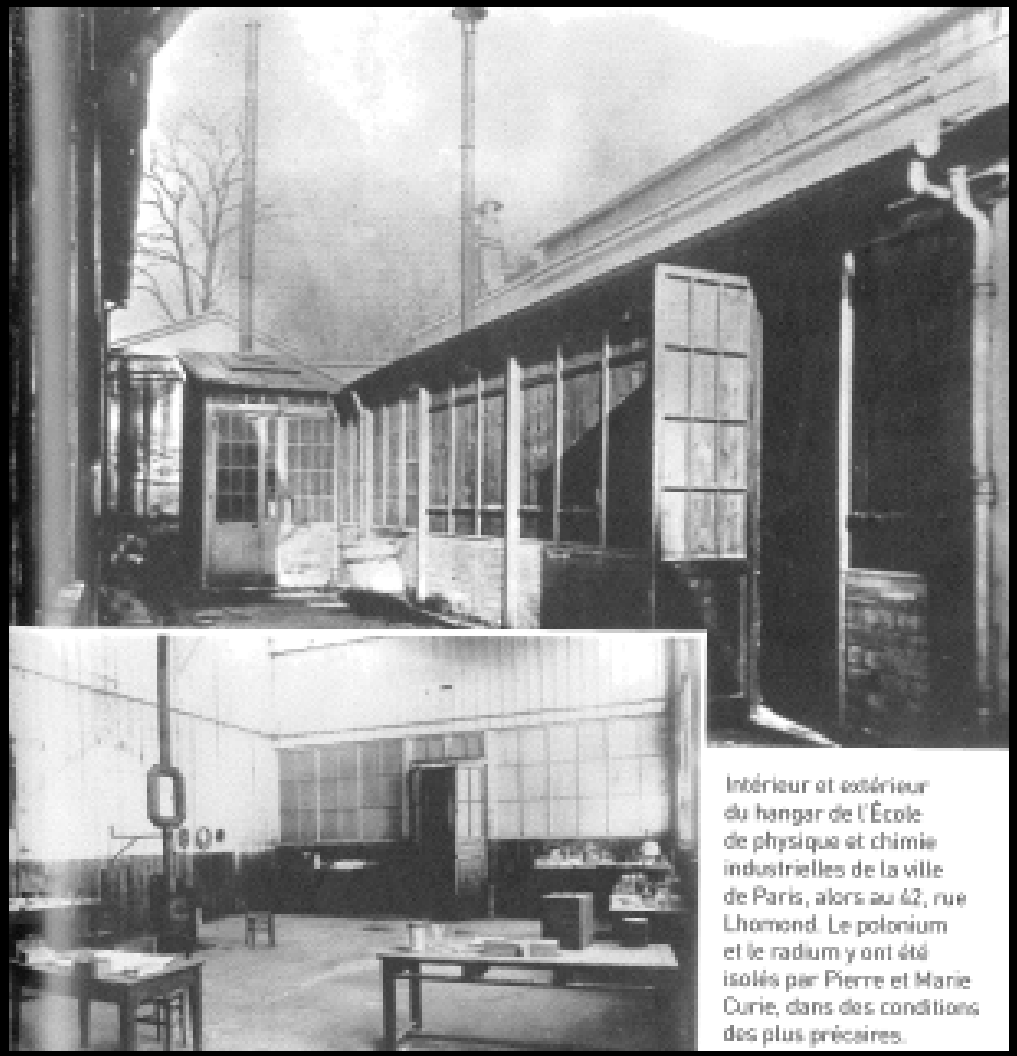
The famous « discovery shed » at the Ecole Municipale de Physique et de Chimie industrielle de Paris



Intérieur et extérieur du hangar de l'École de physique et chimie industrielles de la ville de Paris, alors au 42, rue Lhomond. Le polonium et le radium y ont été isolés par Pierre et Marie Curie, dans des conditions des plus précaires.

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Pierre and Marie in their Parisian laboratory in 1903

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Dr Eugène Curie with Irène

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Marie with Eve and Irène in 1905

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Radium patches

Fig. 20. Aiguilles au radium

Fig. 21. Collier contenant du radium

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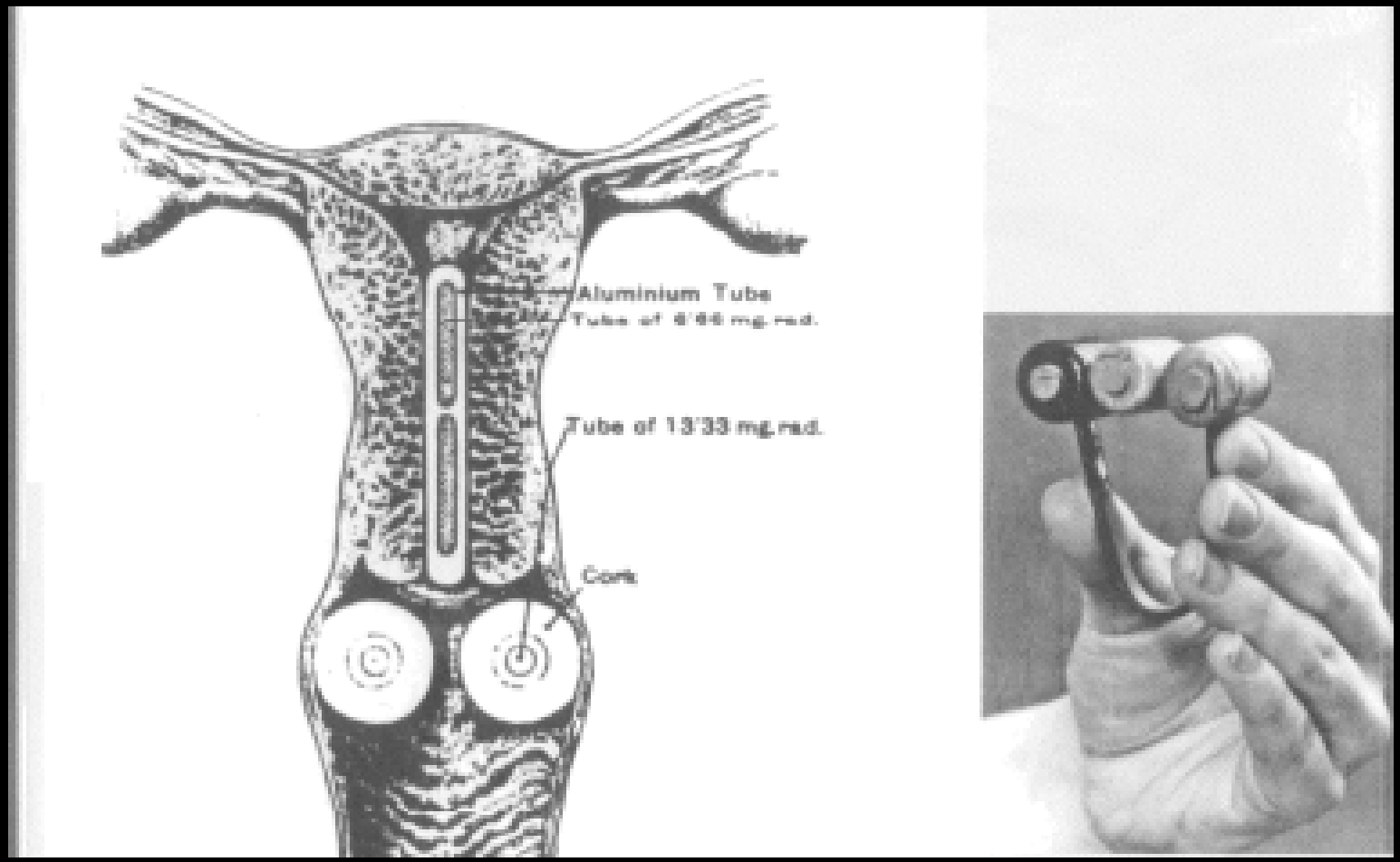
Radium tampons used for the treatment of cervix cancer, early 1900's



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Marie and Paul Langevin with some of their students at the girls' Ecole Normale de Sèvres

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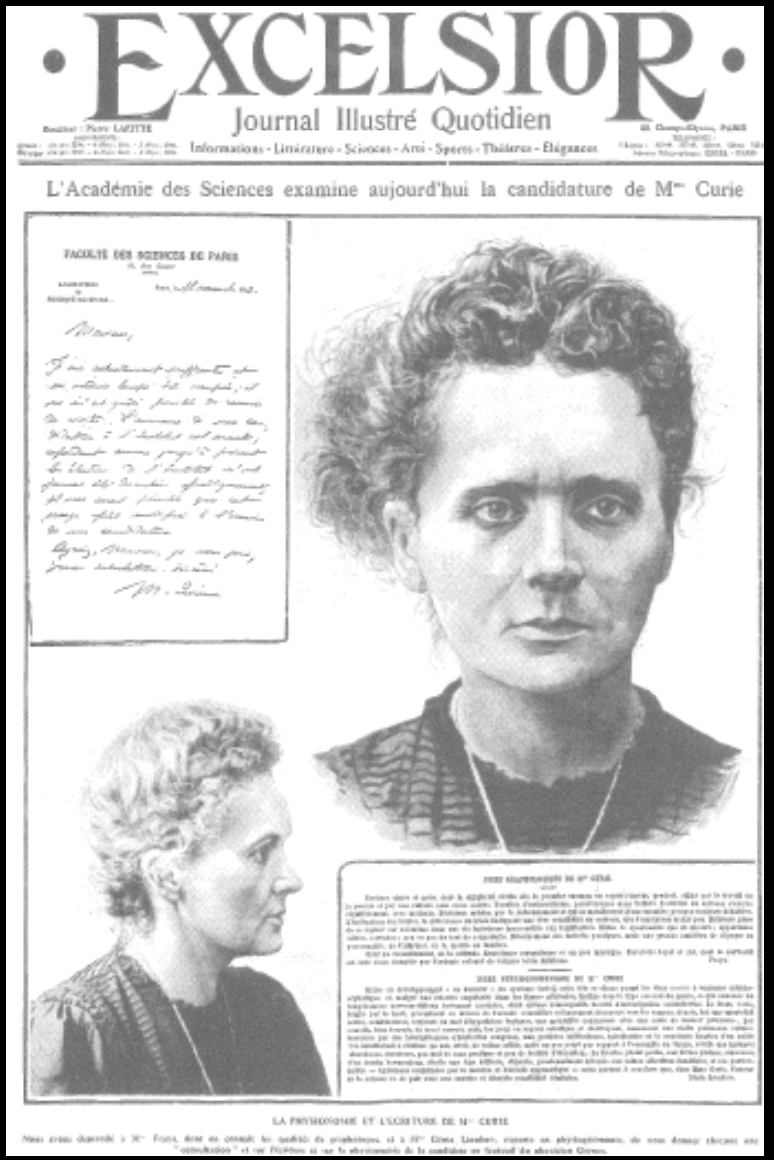
How does this foreign lady dare to want to become a member of the Science Academy, 11 January 1911!



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L'Académie des Sciences examine aujourd'hui la candidature de Mme Curie

FACULTÉ DES SCIENCES DE PARIS

LA PHYSIONOMIE ET L'ÉCRITURE DE Mme CURIE

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The 1911 first Solvay Conference

Les participants au congrès Solvay de 1911

Assis (de g. à dr.) : Walther Nernst, Marcel Brillouin, Ernest Solvay, Hendrik Lorentz, Emil Warburg, Jean Baptiste Perrin, Wilhelm Wien, Marie Curie et Henri Poincaré.

Debout (de g. à dr.) : Robert Goldschmidt, Max Planck, Heinrich Rubens, Arnold Sommerfeld, Frederick Lindemann, Maurice de Broglie, Martin Knudsen, Friedrich Hasenöhrl, Georges Hostelet, Édouard Herzen, James Jeans, Ernest Rutherford, Heike Kamerlingh Onnes, Albert Einstein, et Paul Langevin.

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Marie delivering her speech at the Nobel Academy banquet on 10 December 1911

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Marie in her laboratory, Rue Cuvier, 1912-1913

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The Curies and the « little Curies » during World War I

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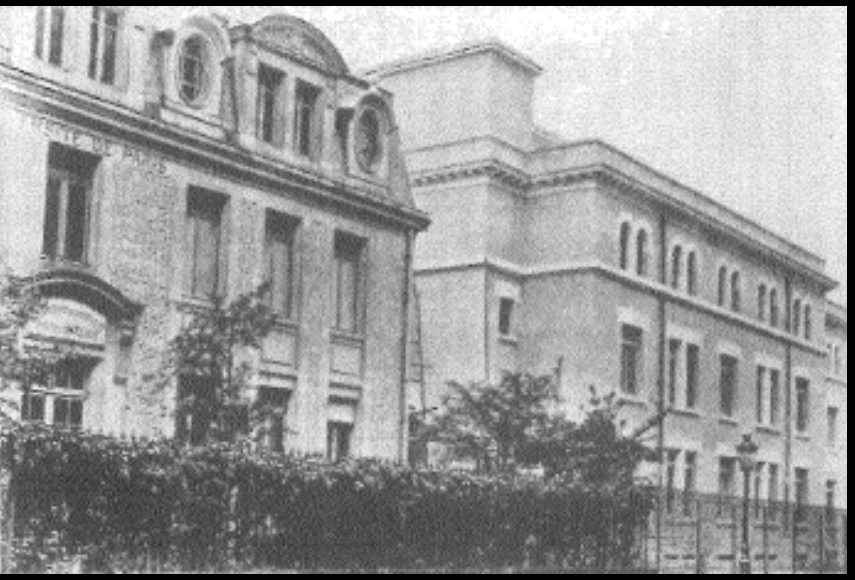
The Institut du Radium in the 20's and today in the 5th district of Paris



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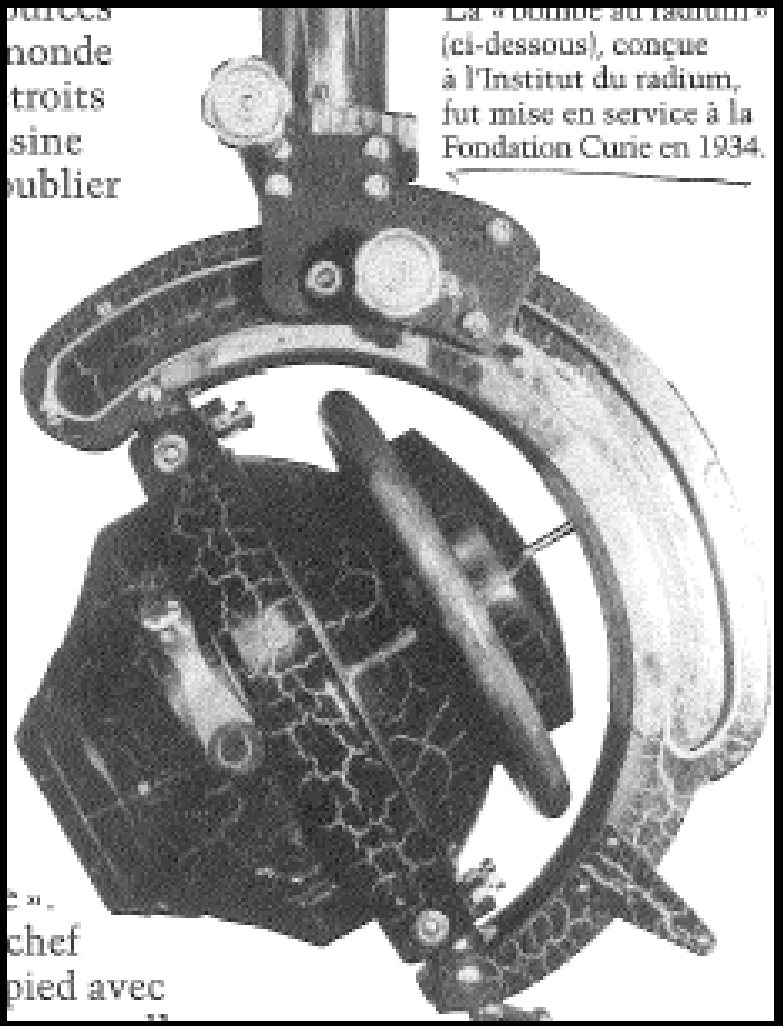
Curietherapy in the 20's (left) and the 30's (right)



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Marie with Marie Mattingly Meloney (Missy), 1920, 1921?

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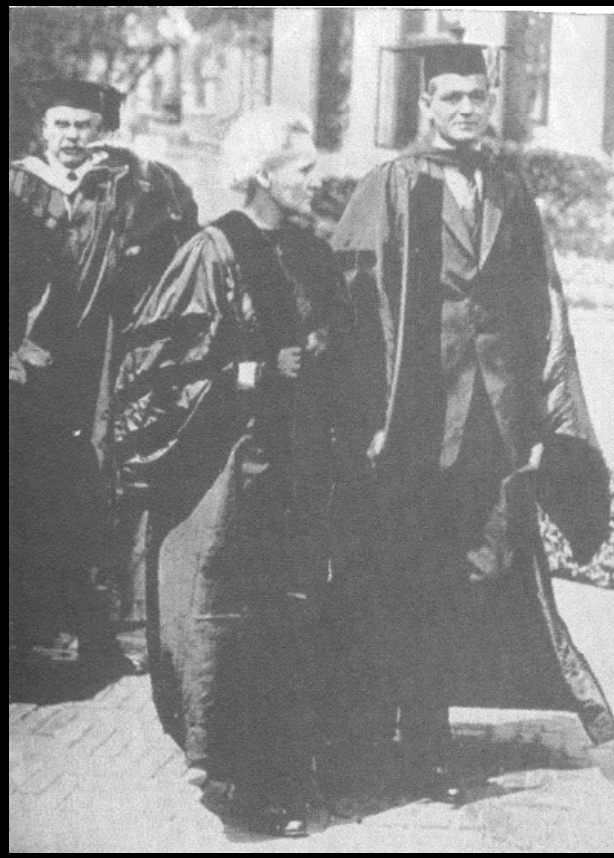
Marie, Irène and Eve first trip to the United States in 1921



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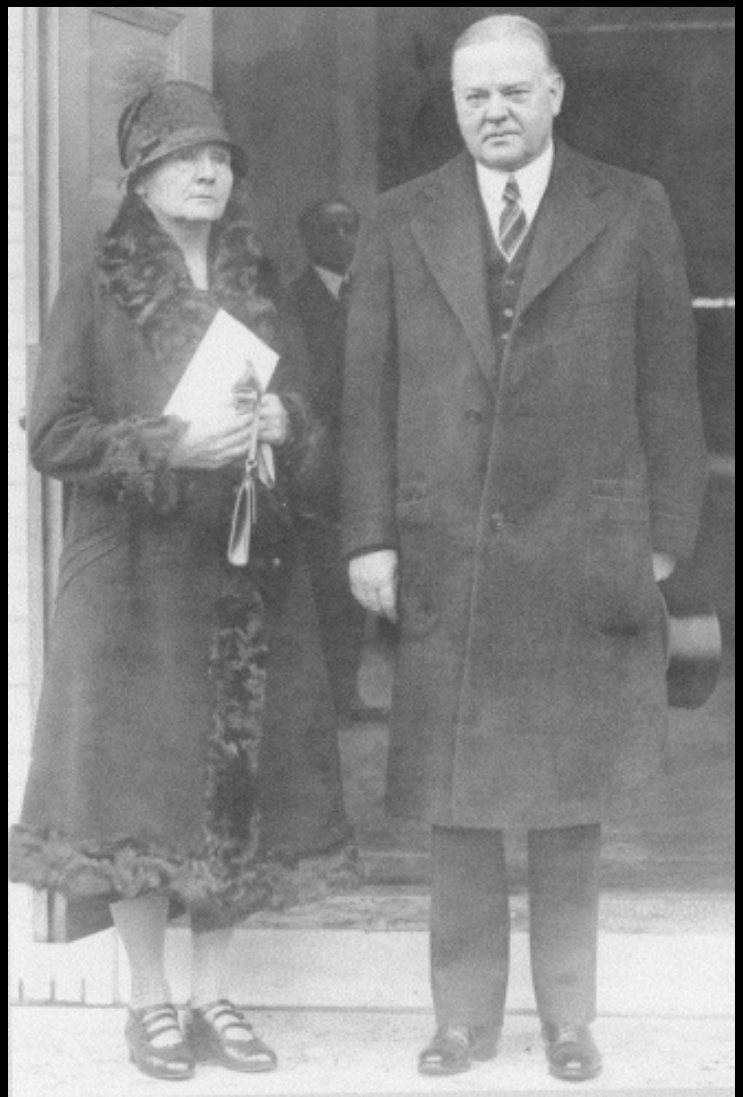
Marie with President Hoover, second trip to the United States, 1929



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The Radium Institue of Warsaw in 1930 and in 2001

MH14

Fig. 44. Édification de l'Institut du Radium à Varsovie (1930)

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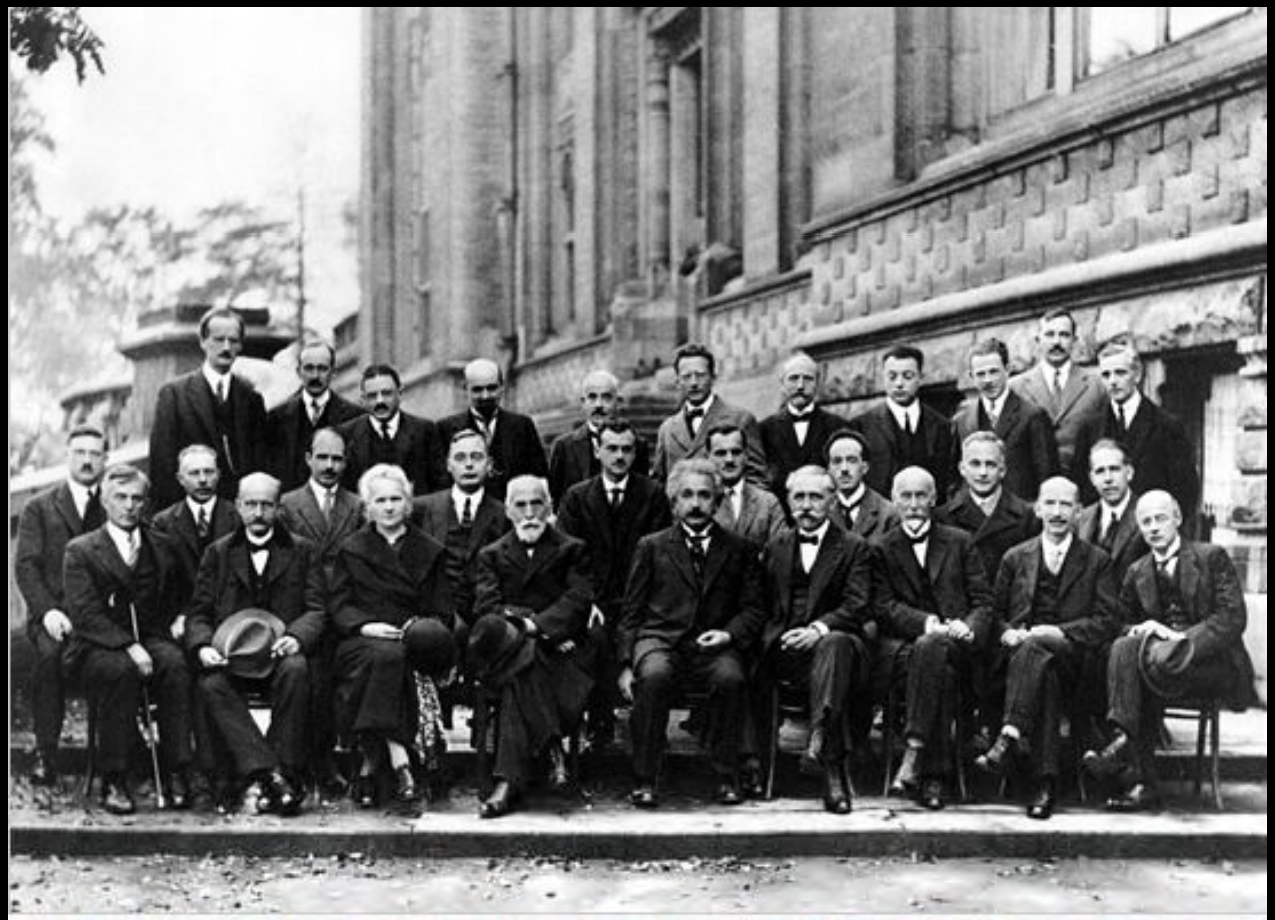
H14 Institute

Maggy Heintz; 16/03/2011

The 1927 Solvay Conference



A. Piccard, E. Henriot, P. Ehrenfest, Ed. Herzen, Th. de Donder, E. Schrödinger, E. Verschaffelt, W. Pauli, W. Heisenberg,
R.H. Fowler, L. Brillouin,
P. Debye, M. Knudsen, W. L. Bragg, H. A. Kramers, P. A. M. Dirac, A. H. Compton, L. de Broglie, M. Born, N. Bohr,
I. Langmuir, M. Planck, M. Curie, H. A. Lorentz, A. Einstein, P. Langevin, Ch. E. Guye, C. T. R. Wilson, O.W. Richardson

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The 1933 Solvay Conference

English: A group of scientists participated in the 7th Solvay Conference, Bruxelles (October 1933). Seated (left to right): Erwin Schrödinger, Irène Joliot, Niels Henrik David Bohr, Abram Ioffe, Marie Curie, Paul Langevin, Owen Willans Richardson, Lord Ernest Rutherford, Théophile de Donder, Maurice de Broglie, Louis de Broglie, Lise Meitner, James Chadwick. Standing (left to right): Émile Henriot, Francis Perrin, Frédéric Joliot, Werner Heisenberg, Hendrik Anthony Kramers, E. Stahel, Enrico Fermi, Ernest Thomas Sinton Walton, Paul Dirac, Peter Joseph William Debye, Nevill Francis Mott, Blas Cabrera, George Gamow, Walther Bothe, Patrick Blackett, M.S. Rosenblum, Jacques Errera, Ed. Bauer, Wolfgang Pauli, Jules-Émile Verschaffelt, M. Cosyns, E. Herzen, John Douglas Cockcroft, Charles Drummond Ellis, Rudolf Peierls, Auguste Piccard, Ernest O. Lawrence, Léon Rosenfeld. Absents: Albert Einstein and Charles Eugène Guye

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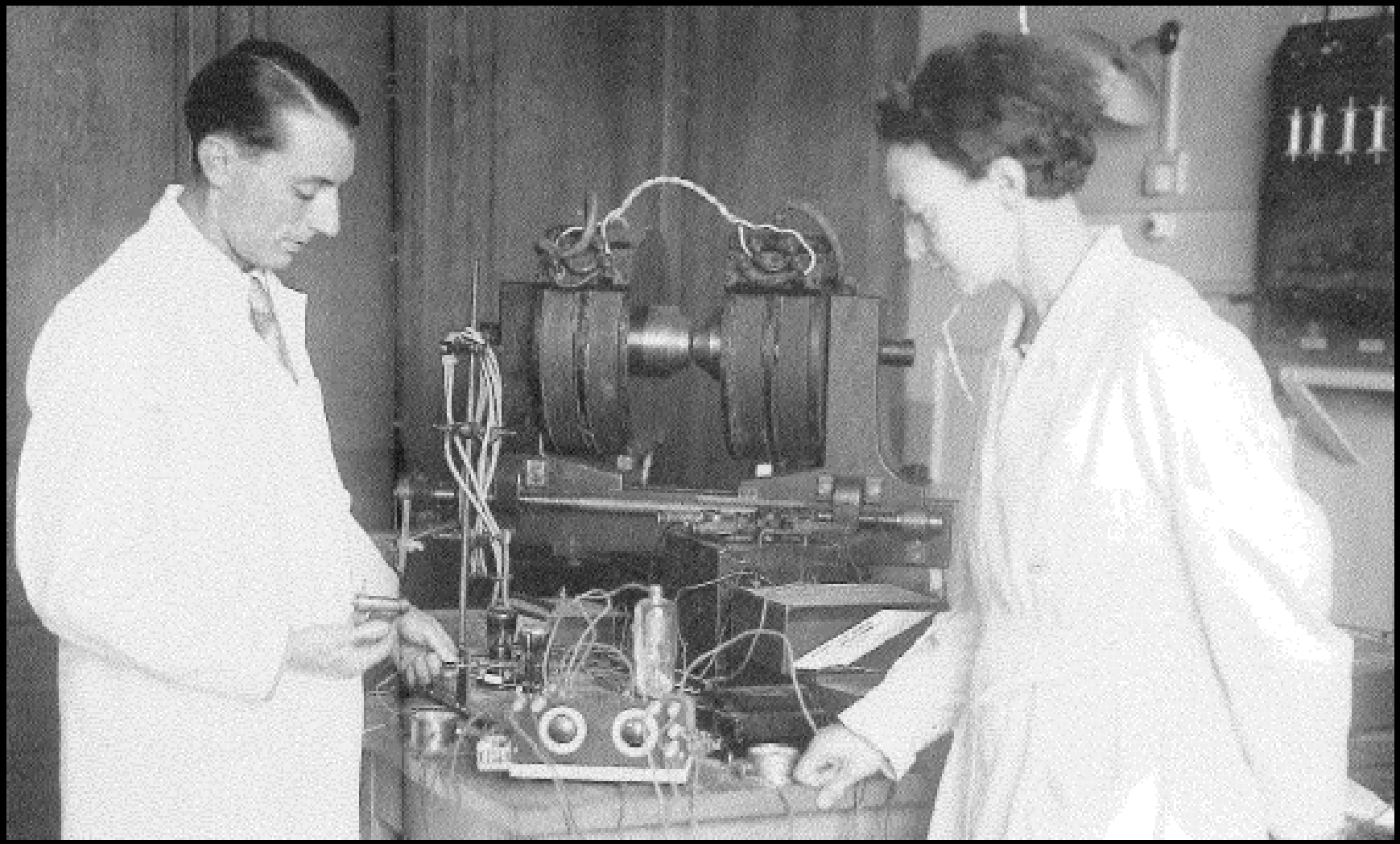
Irène and Frédéric Joliot in their laboratory, late 20's



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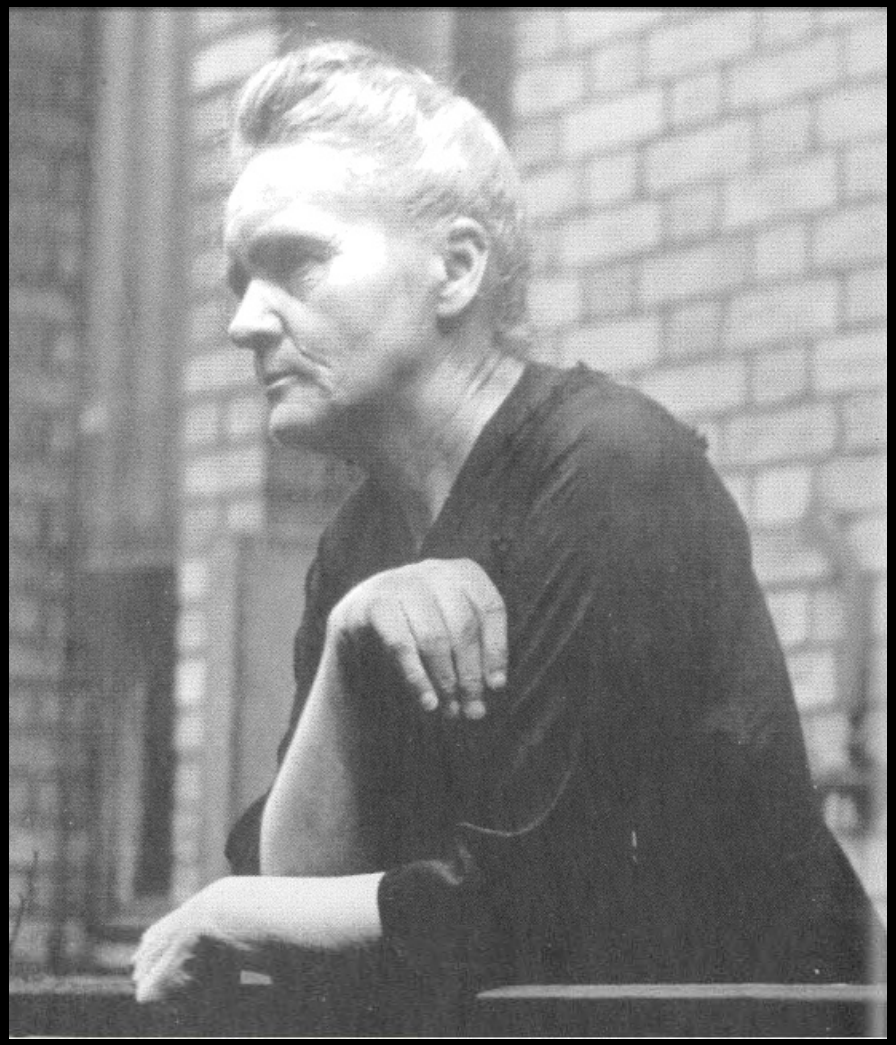
Marie at the Institut du Radium in 1932



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Marie and Albert in 1922, Geneva Lake

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Albert Einstein about Marie Curie

« She's cold as a herring… »

Swiss Alps, Summer 1913

« Standing up wholeheartedly for justice and for progress in politics and in social matters »

Watch Hill, Rhode Island, not dated

« Marie Curie is, of all celebrated beings, the only one whom fame has not corrupted. »

Not dated

« Twenty years of sublime and unclouded relationship… Her strength , her purity of will, her austerity,her incorruptible judgement-all these were of the kind seldom found in a single individual… The greatest scientific deed of her life- proving the existence of radioactive elements and isolating them – owes in accomplishment not only to bold intuition but to a devotion and tenacity in execution under the most extreme hardships imaginable, such as the history of experimental science has not often witnessed. If but a small part of Mme Curie strength of character and devotion were alive in Europe's intellectuals, Europe would face a brighter future. »

Memorial service, New York, 23 November, 1935

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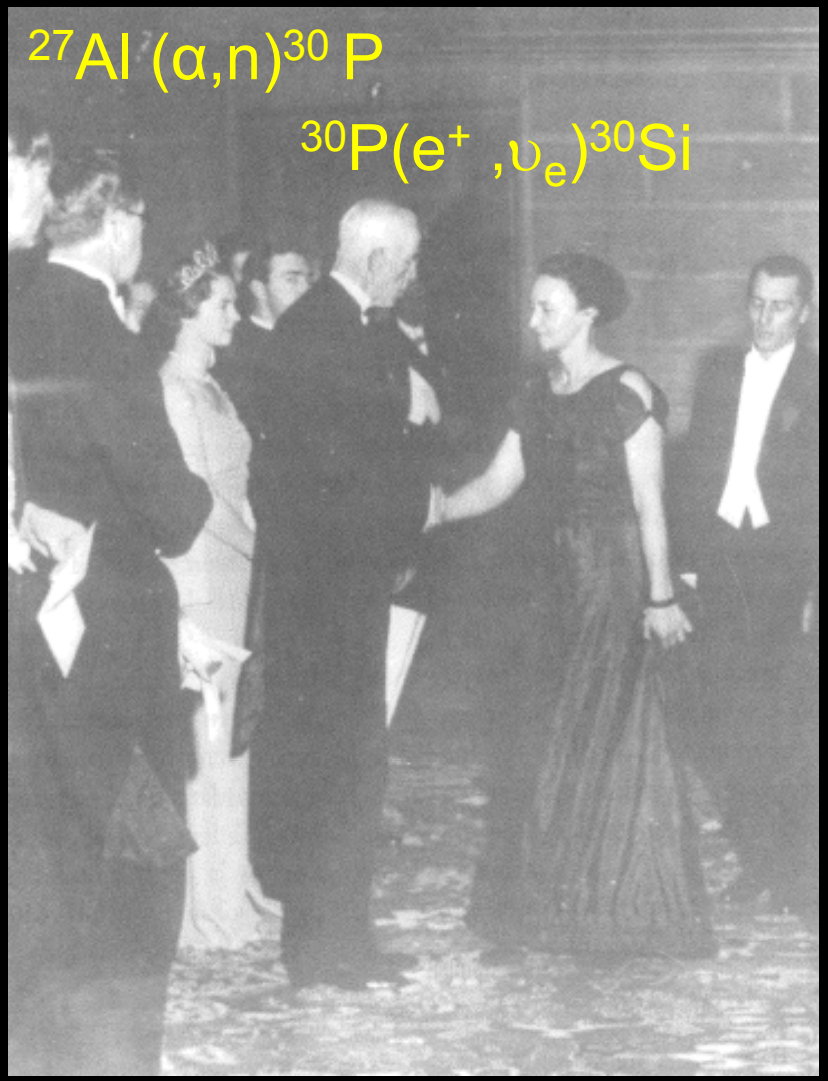
Pierre and Marie bodies are laid to rest under the dome of the Panthéon, 29 April 1995

Irène and Frédéric Joliot receiving the Nobel Prize of Chemistry from King Gustav V of Sweden, 12 December 1935



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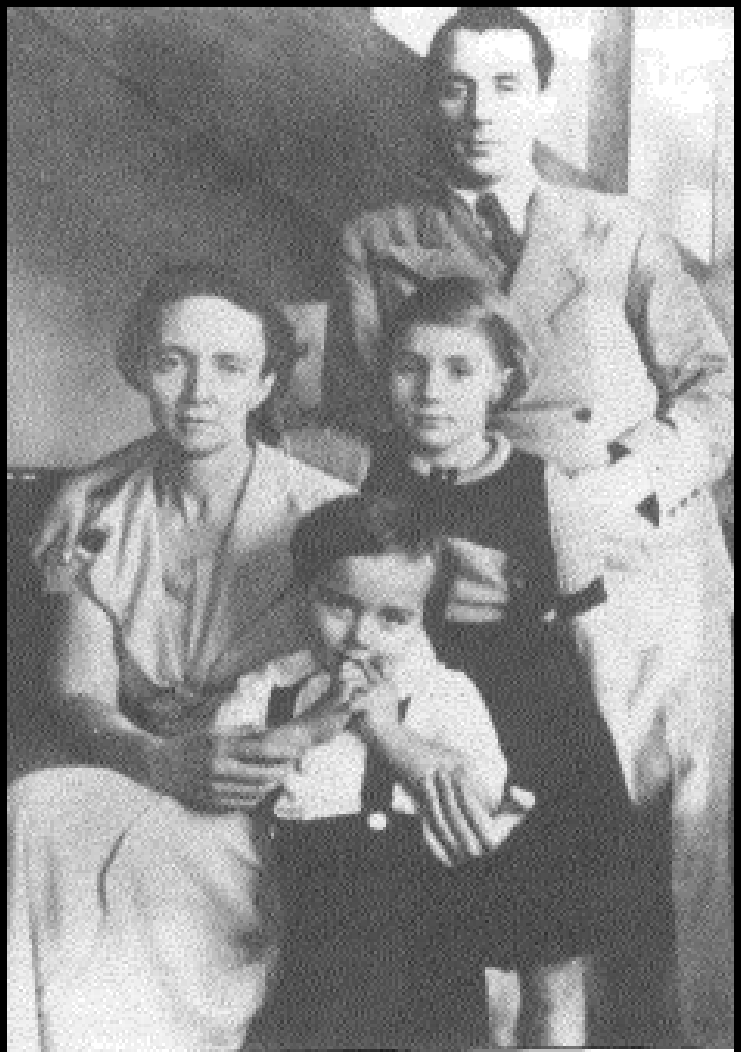
Irène and Frédéric Joliot with their children Hélène and Pierre in 1936



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Frédéric Joliot receives his academician's sword from Paul Langevin at the Sorbonne, 17 November 1945

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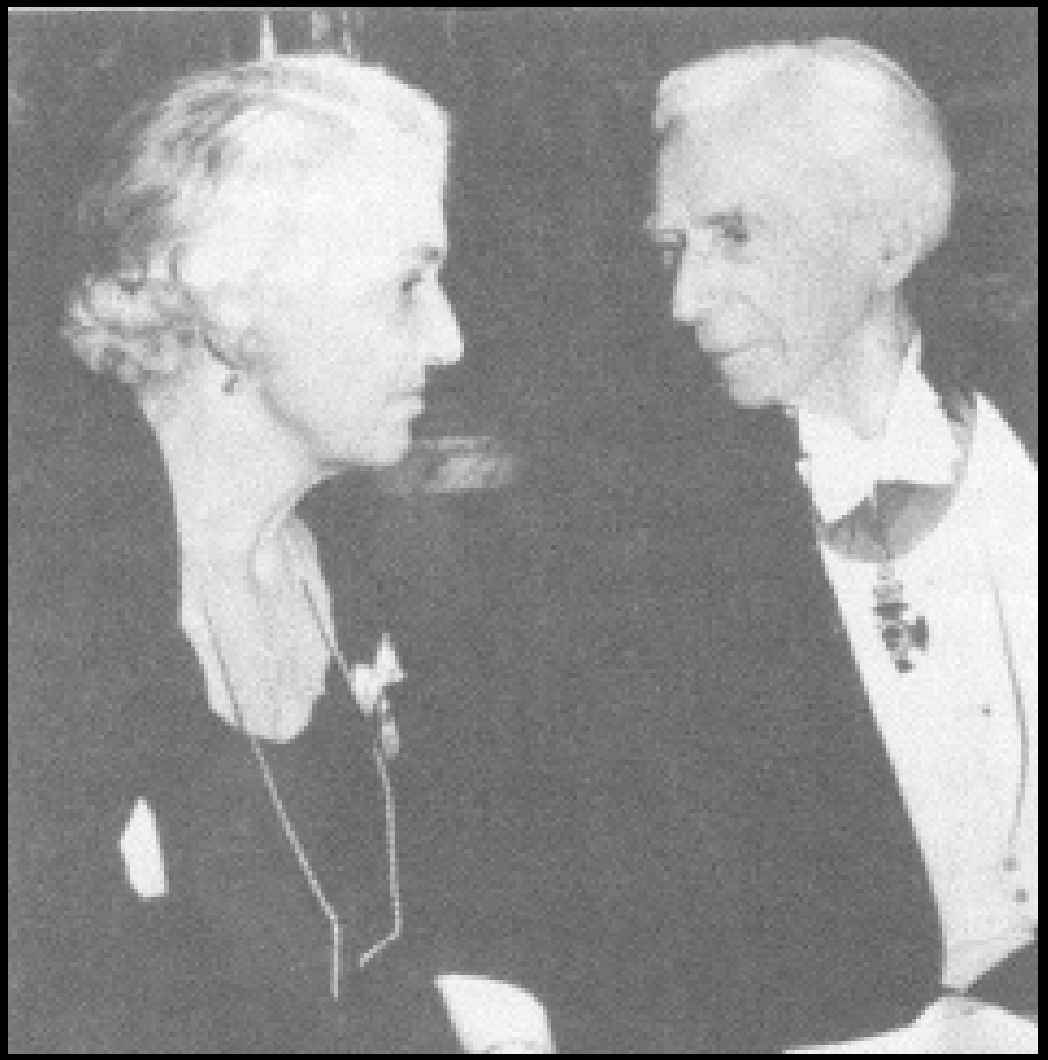
Irène with Bertrand Russel in Stockholm, 1950



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1. Juillet 1899