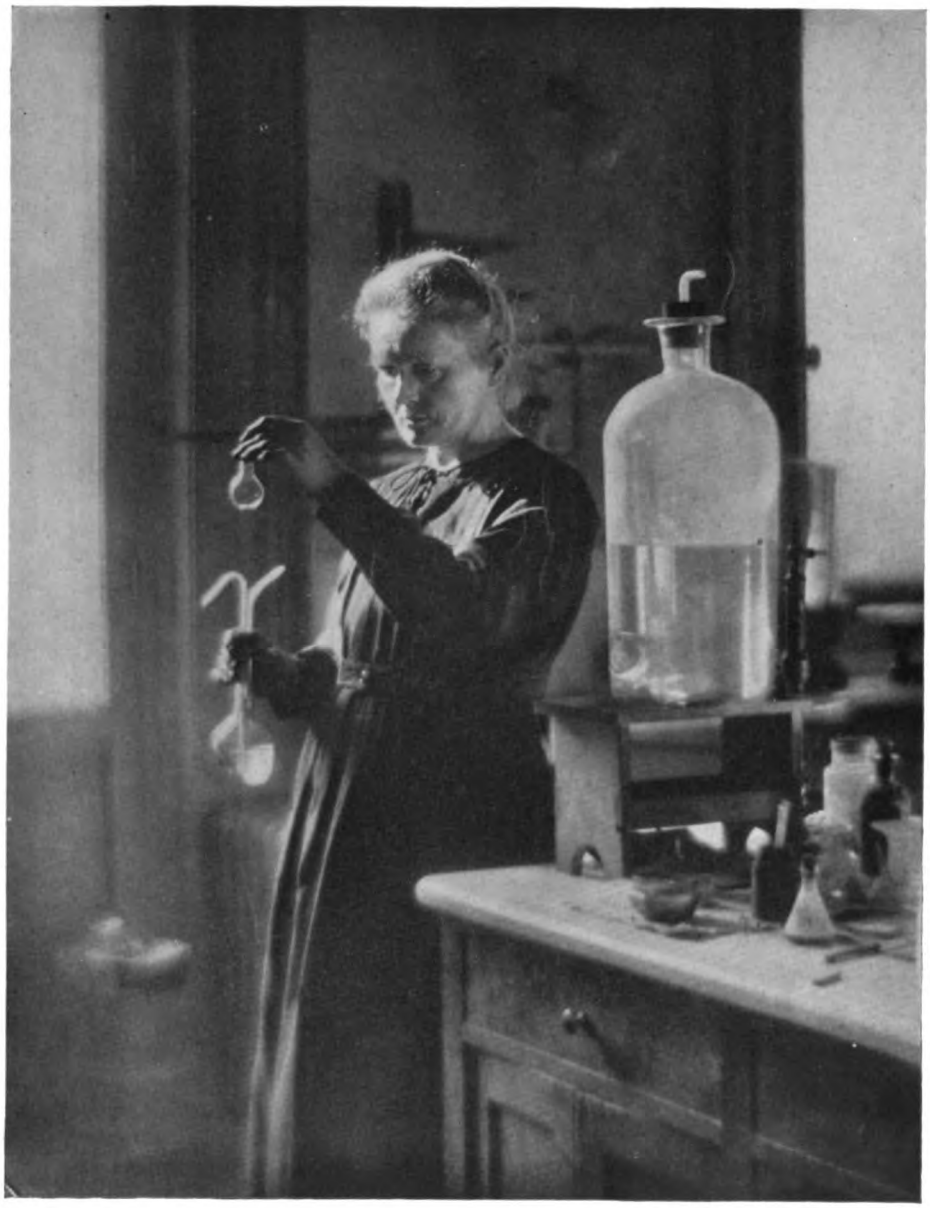


MARIE SKLODOWSKA CURIE

Honorary Fellow of the American Museum of Natural History and Honorary Member of the New York Mineralogical Club

A picture taken in her Paris laboratory shortly before her departure for America, showing her concentrated on her scientific investigations that have already enriched the world with one of the greatest discoveries of all time. With the gram of radium recently presented to her, Madame Curie will have the opportunity of pursuing her research under conditions not hitherto enjoyed, with results that may further amaze the scientific world and redound to the benefit of mankind

SCIENCE HONORS MADAME CURIE AT THE AMERICAN MUSEUM

ON the evening of May 17, in the Auditorium of the American Museum, which was packed to capacity, three scientific bodies,—the New York Academy of Sciences, the American Museum of Natural History, and the New York Mineralogical Club,—united to do honor to Madame Marie Curie, "a lady whose name," to use the eloquent words of Dr. George F. Kunz, who presided on the occasion, "will live long, long after those who have aspired to fame ostentatiously or otherwise, will all have passed away."

In addition to the tribute paid from the platform to the genius of Madame Curie by such distinguished scientists as Professor Henry Fairfield Osborn, Dr. Robert Abbe, Professor Alexander H. Phillips, Professor Michael Idvorsky Pupin, and Doctor Kunz, supplemented by the enthusiasm of an audience that gave warm expression to its appreciation of her achievements, two testimonials were presented to the discoverer of radium,—the one a certificate signalizing her election as an Honorary Fellow of the American Museum of Natural History, the other conferring upon her Honorary Membership in the New York Mineralogical Club. In bestowing the former, President Osborn said:

"My pleasant duty tonight is to extend the hospitality of the American Museum of Natural History to Madame Curie and to announce that, by unanimous vote of the scientific staff and unanimous vote of the trustees of this institution, we have elected Madame Curie an Honorary Fellow of the American Museum of Natural History. I have in my hand the certificate of membership and I would present this certificate to Madame Curie with the statement that she is the first woman to receive this honor; that it is given in recognition of her great discovery in the fields of physics, of mineralogy, and of chemistry; and that we give it with the greatest enthusiasm because of the fundamental character of her discoveries in these fields.

"Madame Curie, may I greet you as an Honorary Fellow of the American Museum of Natural History?"

In presenting the certificate of honorary membership in the New York Mineralogical Club, a ceremony which took place toward the close of the evening, Professor Phillips spoke as follows:

"The New York Mineralogical Club, by unanimous vote, at the annual meeting of the organization, on the evening of April 20, 1921, at the American Museum of Natural History, desiring to express its fullest appreciation of Madame Curie and her transcendent service to humanity through the discovery of radium in the year 1898, and many great contributions to radial knowledge since, hereby confers Honorary Membership, with life tenure appended thereto.

"It gives me great pleasure to present this, Madame Curie, and the three organizations that arranged this meeting are here to honor you, Madame Curie, and to show their appreciation of your great services to humanity."

Madame Curie then arose and, speaking with the modesty that is characteristic of greatness, said:

"I am very grateful to the New York Academy of Sciences, the New York Mineralogical Club, and the American Museum of Natural History, for this beautiful reception and for the recognition of my work.

"I cannot say how happy I am that I was permitted to be the discoverer of radium, but I would like to remind you of the names which are associated with this, of which you know many,—as Sir William Ramsay, Berthelot, Rutherford, Soddy, Becquerel, Abbe, etc.

"Then I would like to say how deeply I am moved by the beautiful progress

of the medical application of radium, of which you have just now heard from Doctor Abbe, and we must remember that the success of that is due, not only to the discovery itself, but also to the splendid efforts of distinguished specialists which were made and especially by Doctor Abbe, and we must be thankful to all of them, just the same as to the discoverer."

Dr. Robert Abbe, alluded to in Madame Curie's address and introduced by Doctor Kunz as "one of our first surgeons to use radium, and one of the first to realize that successful as he was with the knife, it was possible to avoid using the knife by using other means," had given earlier in the evening an impressive account of the therapeutic uses of radium.

"What is the present status of cancer *versus* radium and X-rays?" Doctor Abbe answered the question he had himself propounded:

"The biological science has furnished us with a classification of malignant diseases, which has gradually been modified to malignant and semimalignant —all of them antagonistic to life; some of them curable, some of them not *yet*. The obstructionist surgeon still says, 'If you speak of a wart or a small tumor, oh, I can cure that; I can cut it out or burn it out with caustic.' That sometimes helps the patient but never cures the disease. It simply removes it.

"Now we have put in our hands an invincible weapon, a little tiny tube of radium—no larger than a small penholder. The diseased tissue of a tumor isn't cut out; it isn't burned out; it is simply showered with a little fine peppering of radium energy,—little electrons of negative electricity. What happens? Nothing, for a week—but in a month, the tumor has gone. It has melted away, and thereby the disease has been made to cure itself.

"Now, as to the nature of the various things that radium will cure. The gravest forms of cancer in the smallest areas we can find it, say, no bigger than rice grains, are easily cured by radium. The diseased cells are restored completely and become part of a healthy structure, but in larger masses it is impossible to say at the present time that it can be cured. We can reduce it, but to say we can effect a cure is to claim too much. It takes so many years to demonstrate a cure that we wait patiently. The people cannot be more eager than the surgeons and doctors to find a remedy.

"Meanwhile, is it nothing that a wart can be cured? Is it nothing that a young woman had lost her beautiful singing voice? Then her breathing became obstructed as her larynx filled up with warts. Surgery has never been able to cure that. The warts always come back.

"Eight years ago a young woman with a beautiful singing voice and a throat full of such warts had a radium tube put in her throat for half an hour. Two months later the warts had gone. Today, after eight years, her voice is more beautiful than ever.

"Is it nothing that a little, three-year-old girl had a tumor growing in her tongue? Was it cancerous? No. *Lympho sarcoma* it is called; destructive to life but not cancerous. It was cut out; it came back. The surgeon knew it was a serious case. It was then burned out with caustics; it came back. Then there was a conference of surgeons and they said to the distracted mother of the child: 'There is only one thing now that surgery can do; we must cut the tongue out unless radium can save it.' That little, malignant tumor was pinched between two tubes of radium for twenty minutes. In six weeks, the tumor was gone. Two weeks ago I saw that young girl of thirteen years. She was the picture of health (she was three years old when the radium was applied), and her mother was perfectly happy.

"Is it nothing that a young man of seventeen with a tumor on his jaw should have been restored to health? Eighteen years ago, when I had one of the first two tubes of radium that Madame Curie allowed to come to America[1], a young man with a diseased jaw came to me. I used the radium for half an hour upon it. The jaw on one side was replaced by the tumor (destructive *Myeloid sarcoma*), and the teeth were loosened and separated. I put the radium upon the tumor and into it. In two months it was rapidly changing for the better; the bone was getting hard; the jaw was solid; the teeth were firmly embedded in the jaw. In six months the tumor had shrunken away. As years went by, that tumor and all indications of it utterly disappeared. Marvelous! That very large, solid tumor shrank back completely and the jaw became of normal size. That young man today is married and has four children, and his jaw is as solid and beautiful on the side where the tumor was as it is on the other side, and all the teeth are solid.

"Is it nothing that a gentleman, one of the best scientists in this country, came to me two years ago, with cancer of the eyelid? He had been unable to get it cured and was obliged to give up his work; would radium cure it? I used radium upon it for half an hour; today it is perfectly well. Last week he sent me a bundle of checks, gathered from the men with whom he is associated in his work, $308, given in gratitude to Madame Curie to swell that little fund for her. Life is full of dramatic incidents. When he was cured, he said, 'You didn't notice my other eye, Doctor? It is a glass one. I lost that eye when I was a boy.' Those are the dramatic things that occur every day. Thousands of the smaller tumors, many forms of what has always been considered incurable, are being easily cured by this wonderful radium. It seems reasonable to expect that if Madame Curie can be equipped with the beautiful laboratory that is being thought of, and can be free from distractions, so that she can work with her accustomed concentration in quiet, she will be able to reveal something new, something that will help all humanity,—the women of this country especially."

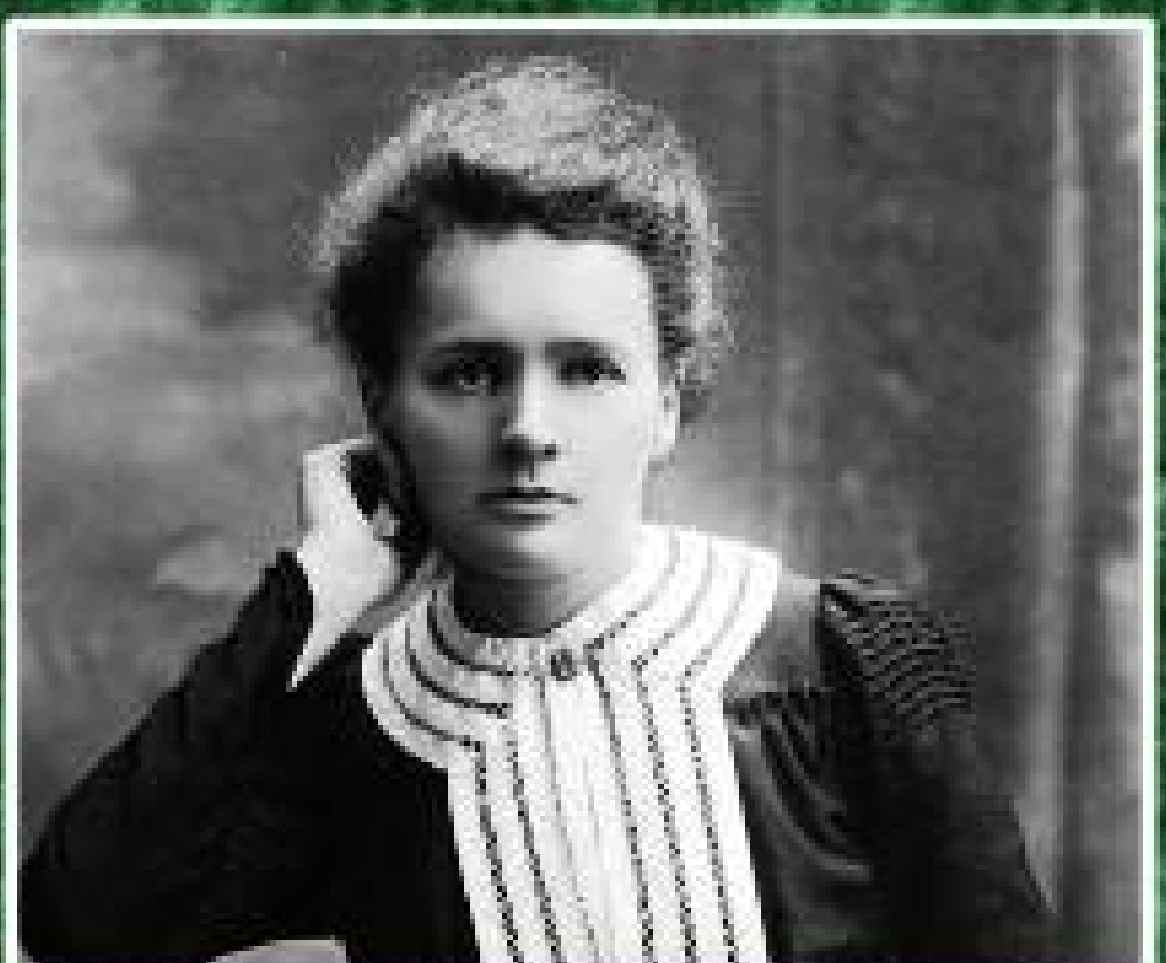
Professor Pupin in the course of his address pointed out that the radiation of radium is not like the radiation of an ordinary luminous body. Positive and negative electrons are sent out by it. "These projectiles furnish the physicist a new key to unlock the secret chambers of nature and to see things which he never dreamed of seeing. You can easily see that an electron like that, the diameter of which is ten thousand times as small as the diameter of an atom, is a beautiful projectile to hit an atom directly and make it vibrate and send forth the new light which we call X-rays, and today we are studying these X-rays with the same ease and the same accuracy with which we formerly studied ordinary light. And what does this reveal? Briefly stated, that in all probability, *matter is electricity*, because the atoms are made up of positive and negative electricity."

Those present listened with keenest interest to the presentation of the various aspects of the subject and rejoiced in being able to do honor to the discoverer of this new element, a woman who has been repeatedly designated "the greatest living scientist."

Considered from the standpoint of the chemist, the mineralogist, the physicist, or the physician, radium remains a substance surpassingly wonderful.

[1]Part of this first radium was presented to the American Museum of Natural History by Dr. Edward Dean Adams for the experiments carried on by Dr. George F. Kunz and Prof. Charles Baskerville. It was exhibited at the American Museum of Natural History at that time, the announcement bringing six thousand visitors in one day. This was the first radium used by the Memorial Hospital in its experiments upon cancer. Part of this is still in the possession of the Museum.

Honorary Member of the New York Mineralogical Club



Marie Sklodowska Curie

(1837-1934)

PROCEEDINGS OF SOCIETIES

NEW YORK MINERALOGICAL CLUB

On the evening of Tuesday, May 17th, 1921, a reception was given at the American Museum of Natural History, New York, to Madame Curie. At this meeting she was presented with a diploma conferring honorary life membership in the New York Mineralogical Club, which read as follows:

THE NEW YORK MINERALOGICAL CLUB

BY UNANIMOUS VOTE OF ITS MEMBERS AT THE ANNUAL MEETING OF THE ORGANIZATION ON THE EVENING OF WEDNESDAY, APRIL THE TWENTIETH, 1921, AT THE AMERICAN MUSEUM OF NATURAL HISTORY, DESIRING TO EXPRESS ITS FULLEST APPRECIATION OF THE EMINENCE ATTAINED BY HER IN THE FIELD OF SCIENCE, AND HER TRANSCENDENT SERVICE TO HUMANITY THROUGH THE DISCOVERY OF RADIUM IN THE YEAR 1898, AND HER MANY AND GREAT CONTRIBUTIONS TO THE SCIENCE OF RADIO-ACTIVITY HEREBY CONFERS UPON

MADAME MARIE SKLODOWSKA CURIE

HONORARY MEMBERSHIP, WITH LIFE TENURE OF ALL THE RIGHTS AND PRIVILEGES PERTAINING THERETO.

GEORGE F. KUNZ, President.
GEORGE E. ASHBY, Vice-President.
HERBERT P. WHITLOCK, Recording Secretary.
WALLACE GOOLD LEVISON, Corresponding Secretary.

SPECIAL COMMITTEE MADAME CURIE RECEPTION

Held at the American Museum of Natural History, Tuesday, May 17th 1921.

O. IVAN LEE	ALEXANDER H. PHILLIPS
AGNES VINTON LUTHER	HERBERT P. WHITLOCK
JAMES G. MANCHESTER	GEORGE F. KUNZ, Chairman.

A full account of the meeting has been published in *Natural History*, **21** (2), 162–165, 1921, under the title "Science honors Madame Curie at the American Museum."

NOTES AND NEWS

The Second Annual Meeting of the Mineralogical Society of America is to be held on December 29th, 1921, at Amherst, Massachusetts. Mineralogists intending to present papers at this meeting should send titles to the Secretary, Herbert P. Whitlock, American Museum of Natural History, New York City, as soon as convenient. It is hoped to publish the preliminary list of papers about December 1st.

Mr. George Letchworth English, for some years manager of the Department of Mineralogy and Petrography of Ward's Natural Science Establishment, has resigned from that position, but is retained in a consulting capacity. Dr. Alfred C. Hawkins, who has been engaged in crystallographic work for the Du Pont de Nemours Co., Wilmington, Delaware, has resigned from that company to join the staff at Ward's.

MME. CURIE CALLED GREATEST SCIENTIST

Professor Pupin Pays Her Tribute for Helping to Create New Theory of Physics.

BUSY DAY FOR THE VISITOR

Prediction Made That Her Research Will Serve to Hasten Cure of Cancer in All Forms.

To be hailed by a noted scientist as one of the greatest pioneers in the building of a new science was the honor received by Mme. Curie at a meeting and reception held for her in the American Museum of Natural History last evening. Dr. Michael I. Pupin, Professor of Electrical Mechanics in Columbia University and known throughout the world for his researches and discoveries, said that the knowledge of radio-activity which she had helped to reveal was founding a new structure of physics, in which all matter is electricity and each atom a perfect system of electrons.

Confidence that Mme. Curie would soon discover new means of fighting cancer with radium was expressed by Dr. Robert Abbe of New York, the first surgeon in America to substitute radium treatment for the knife in cancer treatment.

"Today we see a little chance of conquering this last great scourge that has afflicted humanity," said Dr. Abbe. "That cancer in its milder forms can be cured by radium is indubitable. Humanity demands a cure for the disease in its gravest and most malignant forms, but it will have to wait, for though success is coming, it is coming slowly. Within the next few years I am confident that Mme. Curie will be able to reveal something new in this remarkable agent that will help all humanity. In the name of all the sufferers who have been saved and in the name of humanity I thank her for what she has done and is to do."

Her unanimous election as an Honorary Fellow of the American Museum of Natural History was announced by its President, Henry Fairfield Osborn, at a meeting held by that body, the New York Mineralogical Club and the New York Academy of Sciences.

"You are the first woman ever to receive this honor," he said to Mme. Curie. "It is given in recognition of your great discoveries in the field of physics, mineralogy and chemistry, and it is given with enthusiasm on account of the importance of those discoveries."

"Greatest Living Scientist."

Dr. George F. Kunz, Honorary Curator of the Natural History Museum, who acted as Chairman, introduced Mme. Curie as the first woman to discover an element, and "the greatest living scientist." In her brief reply to those who praised her, she said:

"I am very happy in the progress which has been made in the study of radio-activity. I want to remind you of the great names that are connected with it, and to tell you how deeply moved I am by your words of tribute. I should like to remind you of the distinguished specialists who have devoted themselves to demonstrating the healing power of radium, and especially among them Dr. Abbe."

Professor Alexander H. Phillips of Princeton University recounted Mme. Curie's labors and described their significance. It was then announced that the New York Mineralogical Club had made her an honorary life member.

After the meeting there was a brief reception for Mme. Curie in the Memorial Hall of the Museum.

The chemists and physicists of America extended to Mme. Curie their greeting at a luncheon in the Waldorf. Dr. Francis Carter Wood, head of the Crocker Cancer Research Laboratory of Columbia University, described her as "the woman who has brought more comfort to human beings than any one of this generation."

Five organizations joined as hosts—the American Chemical Society, whose President, Dr. Edgar F. Smith, was toastmaster: the American Electrochemical Society, the Chemists Club and American sections of the Société de Chimie Industrielle ad the Society of Chemical Industry.

Speakig for the physicists, Dr. George B. Pegram, Dean of the Columbia University School of Mines, said that Mme. Curie's conception of radio-activity as a simple atomic property was the achievement of a great intellect.

"The appreciation of science by the women of America will be quadrupled by Mme. Curie's visit to us," said Dr. Robert B. Moore, chief chemist of the United States Bureau of Mines. "Thank God we are through with the chemistry of war and back to the chemistry of peace and good-will and healing. I bring to Mme. Curie, the mother of radium, the love, admiration and affection of the chemists of America."

Tells Cancer's History.

In delivering greetings from the medical profession, Dr. Wood said:

"Long before a chemist or physicist was alive the Egyptian physicians discovered a disease which they could not control. That disease, cancer, is today the last great fundamental problem in medicine; there is no other which we cannot in time conquer. By her pioneer work with radium Mme. Curie has made us a marvelous gift. I do not welcome her as a scientist, but as the woman who has done more to comfort human beings than any one who has made important discoveries in this generation."

Although Mme. Curie, her right arm in a bandage from the enthusiastic grip of the American handshake, declined to outline her plans for experiment with the $100,000 worth of radium which she is to receive on Friday from the hands of President Harding, her daughter, Mlle. Irene, gave an audience in her place to reporters yesterday.

Her daughter is no mean authority upon the subject of radium. Still in her early twenties, typically French and with naïve interest in all things American, she lectures upon her mother's discovery during the war to classes in Paris which included American medical officers and French doctors and college professors. According to her, Mme. Curie will use the American gift of one gram of radium in experiments to discover the methods by which this element can be used with safety in the treatment of ailments, particularly cancer.

"Do you think that radium ever will be used as an absolute cure for cancer?" she was asked.

"Yes, indeed, I do," she replied with enthusiasm. "Of course, I am not a doctor, and perhaps I should not discuss that side of the subject. But I do believe, and I think my mother holds the belief, that if cancer is treated as soon as the first symptoms are discovered and the case is properly diagnosed, that radium can effect a complete cure."

The New York Times
Published: May 18, 1921

Minerals Named after Members of the New York Mineralogical Club

The Element Curium (1944)

Marie Sklodowska Curie
(1867 – 1934)

Minerals Named after Members of the New York Mineralogical Club

Sklodowskite, Cuprosklodowskite

Marie Sklodowska Curie
(1867 – 1934)