

The logo for 'Conference Report' features a large, bold, black letter 'C' on the left. To its right, the words 'Conference Report' are written in a bold, black, sans-serif font. The text is partially enclosed by a series of overlapping, light gray square outlines that create a grid-like effect around the letters.

150 Years of Madam Curie: The Great Humanist and Scientist

The National Seminar on “**150 Years of Madam Curie the Great Humanist and Scientist**” was held on 9th September 2017 at the Conference Room (2nd Floor) of Birla Industrial and Technological Museum, 19A, Gurusaday Road, Kolkata to celebrate the 150th birth anniversary of Marie Curie. The event was organized by the Institute of Science, Education and Culture (ISEC) in collaboration with Birla Industrial and Technological Museum (BITM).

In the absence of Dr. E. Islam, Director of the BITM, Prof. Santanu Das, the Secretary of the ISEC delivered the Welcome Address. He made a brief sketch of the life and works of Marie Sklodowska Curie, popularly known as Marie Curie or Madam Curie who was born on November 07 1867 in Warshaw, Poland, a part of the then Russian Empire. Later she was married to Pierre Curie in 1895 and became a French citizen. The Curie family still holds the record of possessing Nobel prizes by five persons. In 1903, she got Nobel prize in Physics sharing with her husband, Pierre Curie, and Henry Becquerel, while she got the 2nd one in Chemistry in 1911. In fact, she was the 1st lady to receive Nobel prize and also the 1st and only person so far to receive this prize in two different subjects. Her daughter, Irene Curie jointly with her husband, Frederic Joliot-Curie received the Nobel in Chemistry in 1935. Also husband of her other daughter Eve Curie, namely Henry Labouisse, received Nobel Peace prize in 1965. Marie Curie coined the term

‘radioactivity’ and discovered two elements, ‘Polonium’- named after her native country, Poland, and ‘Radium’. After prolonged research, she could isolate the radio isotope, radium.

Apart from her immense scientific contribution, Marie Curie is remembered for her humanist attitude throughout her life. She and also her husband Pierre, used to refuse awards and medals, led a moderate life style and were well known for honesty. Curie refrained from patenting the discovery made to promote all round development and research in that area. She always insisted that gifts need be made to scientific institutions so that research works would be carried out uninterruptedly. Following her humanist attitude and the way of leading life, Albert Einstein remarked, “... **She was probably the only person who could not be corrupted by fame.**” She died on July 04 1934 suffering from Aplastic Anemia- a type of cancer caused by exposure to radioactivity. This noble person was voted the “**most inspirational woman in science**” as per the poll conducted by the “New Scientist”.

Prof. Anil Kumar Ghosh, the President of ISEC, gratefully remembered the great soul of Madam Curie in his Introductory Speech, and expressed his grateful homage to this humanist scientist. He thanked BITM to collaborate with the Institute of Science, Education and Culture (ISEC) to organize this seminar, and urged the participants to try to follow the footsteps of Marie Curie.

In the 1st Technical Session, Prof. Manoranjan Khan of Jadavpur University was the Chairman. Keynote Address was delivered by Prof. Dr. Susanta Lahiri of Saha Institute of Nuclear Physics, Kolkata on “**Radium to Radium: A Hundred Years Cycle**”. Prof. Lahiri, a noted researcher in Nuclear Chemistry, visited the House and Laboratory of Madam Curie upon invitation, and spent five hours with the descendents of Marie and Pierre Curie and had dinner with them. He shared his thrilling experience during the visit to the Laboratory and the Living Place where Curie worked and spend her days. He reviewed the discovery of radioactivity, the difficulty faced by the researchers to extract radium, different radioactive substances and their applications, etc. during the last one hundred years. He discussed about the medical applications of radioactivity and remarked that half life of the therapeutic radioactive elements should be very less to treat a living body.

In the 2nd Technical Session, Dr. Purabi Mukherjee of ISEC was the Chairperson. Prof. Sumitra Chowdhury, Secretary of Bangiya Vigyan Parishad and Ex-Principal, Victoria College, Kolkata talked on the topic, “**Uncompromising Scientist Madame Curie**”. Prof. Chowdhury narrated the hardship faced by Marie Curie since her childhood. Her wish to study science was almost perished. However, she struggled to get admitted in a far off place to study science. Her strong determination made her overcome the hurdles faced. Her humane face was also prominent when she made a mobile X-Ray van to treat personnel during the days of World War I. She also applied radio-therapy that time for medical treatment. She helped in different ways many persons during her life. She never applied for patent for her discoveries, and dedicated her findings to the mankind, and here lies her legacy.

The 3rd Session was chaired by Prof. Dulal Mukherjee. Dr. Amlan Ray of Variable Energy Cyclotron Centre, Kolkata deliberated on “**Great Contribution of Marie Curie in Twentieth**

Century Physics”. Dr. Ray also made a brief overview on the personal life and hardships faced by Marie Curie. As Curie family took part in the movement for freedom of Poland and struggled against the ruling Tsar of Russia, they faced lot of difficulty in those days. However, Marie Curie overcame those obstacles and carried out her investigations along with her husband, Pierre. Dr. Ray briefly outlined the science existent during the days of Curie, and overviewed atomic theory, structure of atom, binding energy, availability of less sensitive instruments during that time, etc. Even then, it is astonishing to follow that Curie couple could do intense work to isolate small quantity of radioactive substance from its ore. To carry out their work, they even made a gas ionization counter, and some other facilities. After the sad sudden demise of Pierre, Marie was under distress condition, but with her commitment to undertake scientific investigations, she gradually steered cleared of the shock, and again devoted her for the pursuit of science. In this way, Marie Curie left behind her a rich culture of scientific attitude and temperament.

After each deliberation, there were interactions among the speakers and the audience, and the respective session chairpersons summed up the sessions. Finally a Vote of Thanks was given by Prof. Santanu Das, Secretary of ISEC. He thankfully mentioned the role of Dr. Swapna Mukherjee, Convenor, Seminar Sub-Committee. The contribution of Prof. Anil Kumar Ghosh, President of ISEC and Dr. E. Islam of BITM, Kolkata deserved special thanks. He expressed sincere gratitude to all the learned Speakers and session chairpersons to make the seminar a grand success. The interactive audience was also given heart-felt thanks. Special thank was also given to Mr. Rajat Kanti Pratihar, other members of ISEC and all other support staff of BITM.

(A few photographs of the seminar are in back inside cover)

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