



A Report on

SPECIAL LECTURE ON

Marie Curie

(Nov. 7, 1867-July 4, 1934)



**Topic: Life and Radiological Discoveries of Marie Curie: Role Model for
Women in Science**

Nov 17, 2018 (Sat), 3 pm

Jointly organised by

SOCIETY FOR RADIATION RESEARCH (SRR)

and

INDIAN WOMEN SCIENTISTS' ASSOCIATION (IWSA)

at

**ICICI Multi Purpose Hall, IWSA Head Quarters, Plot 20, Sector 10A, Vashi,
Navi Mumbai 400 703**

Report

Preamble

Life and Radiological Discoveries of Marie Curie have been a constant source of inspiration for the generations of scientific and non-scientific community alike. Inspired by the life of Marie Curie, Dr. Badri N. Pandey, Head, Radiation Signalling and Cancer Biology Section, BARC who is also the Secretary of the Society of Radiation Research wanted to dedicate the first talk of the Women Special Lecture series to Marie Curie and shared his wish with Dr. Rita Mukhopadhyay, Head, Gene Technology Section, Molecular Biology Division, BARC, Mumbai Section, Molecular Biology Division, BARC who is also an Executive committee member, Indian Women Scientists' Association, and they approached other IWSA Executive Committee members who agreed to organize this special lecture at ICICI Multi-Purpose Hall, IWSA Head Quarters, Vashi, Navi Mumbai Nov 17, 2018. The lecture is a narrative, informative and motivational especially for women scientists.

About Marie Curie

Marie Curie, a Polish physicist and chemist, is known for her pioneering research on radioactivity. She was the first woman to win a Nobel Prize. She is also the first person and the only woman to win a Nobel Prize two times and the only person to win a Nobel Prize in two different fields. She was also the first woman to become a professor at the University of Paris.

Marie Curie developed the theory of radioactivity, techniques for isolating radioactive isotopes, and discovered two radioactive elements, polonium (named in honour of her native Poland) and radium (Latin word for ray). She had immense belief that radiation can be used for treatment of cancer and it was under her guidance, the pioneering studies for the cancer treatment using radioisotopes were conducted. She is also the founder of Curie Institutes in Paris and in Warsaw. She is also remembered for the development of mobile radiography units to provide X-ray based services which served in the field hospitals and saved lives of over a million wounded soldiers during World War I.

Inspired by the discovery of X-Rays by Wilhelm Roentgen and the discovery of similar nature of radiation emitted by uranium by Henri Becquerel, Curie decided to investigate uranium rays as a possible field of research for a thesis. The Curies carried out most of their research in a converted shed which was poorly ventilated and was not waterproof. Completely unaware of the deleterious effects of radiation exposure, she handled radioactive substances unprotected.

Marie Curie died at a sanatorium in France, of aplastic anaemia which she contracted from long term exposure to radiation during her scientific research and during her radiological work during World War I. Curie did not patent the radium-isolation process because she wanted the scientific community to do their research without any hinderance.

Marie Curie's work not only upturned the well-established ideas both in physics and chemistry, but also contributed profoundly in social sphere in the twentieth and twenty-first centuries. Being a woman, she had to overcome several social barriers to accomplish scientific feats. Curie's role as a feminist precursor is emphasized in Françoise Giroud's Marie Curie: A Life.

About Indian Women Scientists' Association (IWSA)

IWSA was established in 1973 by a group of twelve leading women scientists and engineers. IWSA is a non-profit, non-government, non-political organization of women scientists and by women scientists. The Association not only brings women in science on a common platform but also provides opportunities for women in science to realize their true potential. IWSA promotes and organises several scientific activities such as scientific national and international conferences as well as workshops. IWSA and its branches also conduct research projects funded by government and private bodies such as monitoring health profiles in tribal population, effect of indoor pollution on health of tribal women, health awareness program and health check-ups for women from lower socio-economic groups. Other popular projects and activities of IWSA include- Science Laboratory/club, Community Health care centre, Education and Teachers' training program, need based scholarships for girl students pursuing science. IWSA also conducts job-oriented computer training, training of teachers, runs nursery schools, hosts day care facilities, library, working women hostel in its campus.

About the Workshop

Program schedule was finalised and brochure was prepared and was distributed to members of the Society, IWSA, as well as Scientists and students in BARC and Mumbai University. It was also published on website of SRR. Around 40 participants including Senior members of IWSA, Scientists from BARC, research students and graduate students attended the lecture.

SOCIETY FOR RADIATION RESEARCH (SRR)
and
INDIAN WOMEN SCIENTISTS' ASSOCIATION (IWSA)
organize
SPECIAL LECTURE ON



Marie Curie
(Nov. 7, 1867-July 4, 1934)

**LIFE AND RADIOLOGICAL DISCOVERIES OF MARIE CURIE:
ROLE MODEL FOR WOMEN IN SCIENCE**

Speaker: **Dr. Sunali Khanna**
Nair Hospital, Mumbai

Date/Time: **Saturday, 17th November, 2018, 3 pm**

Venue
ICICI Multipurpose Hall, IWSA Headquarters, Plot 20, Sector 10A
Vashi, Navi Mumbai 400 703

All are cordially invited

Overview of the Workshop

The program started with a welcome speech by Dr. S. Zingde, former Deputy Director ACTREC, and President Executive Committee, IWSA. Dr. Zingde also briefed about the foundation, vision, mission and vast spectrum of social and scientific activities of IWSA. This was followed a brief overview about the purpose and objectives of Society for Radiation Research by Dr Rita Mukhopadhyaya, Member, Executive Committee IWSA, and Head, Gene Technology Section, Molecular Biology Division, BARC, Mumbai. The lecture was attended Dr. Sudha Padhey, founder member of IWSA and several senior members of IWSA including Drs. Sunita Mahajan, Niyati Bhattacharya, Bhaktawar Mahajan, Sudha Rao, Srirupa Mujherjee among others. All the members of IWSA were felicitated by members of SRR by giving them a red flower bud as a token of appreciation and thanks. Following this, Dr. Shyamla Bhardwaj introduced the speaker Dr. Sunali Khanna to the audience. Dr Sunali Khanna, BDS, MDS (Bom), DNB, PGDHHM, PGDMLS, CCR, PhD, is President Asian Academy of Oral and Maxillofacial Radiology, Vice President Indian Academy of Oral Medicine & Radiology, Member National Academy of Medical Sciences (India) and is affiliated to Nair Hospital Dental College, and Municipal Corporation of Greater Mumbai. Dr. Sunali spoke about Life and Radiological Discoveries of Marie Curie. She elaborated the childhood, early education, career, personal life and struggles of Marie Curie. She also discussed about the discoveries of and scientific accomplishments Marie Curie and highlighted the fact that Marie overcame all the hurdles because of sheer perseverance and her passion for science and society. Dr. Sunali also inspired many young students to pursue their careers and dreams. The talk was followed by discussion. On behalf of SRR, the vote of thanks was proposed by Dr. Sagar Balla, Scientist BARC and member SRR. On behalf of IWSA, the vote of thanks was proposed by Mrs. Madhu Pahwa, Executive Committee Member, IWSA. Dr. Shyamla presented a memento to Dr. Sunali Khanna. As a part of tradition of IWSA, Mrs. Pahwa also presented a small tulsi plant to Dr. Sunali Khanna. Dr. Rita Mukhopadhyay presented a memento to Dr. S. Zingde, President Executive Committee, IWSA. The session was followed by tea and discussion.



Dr. S. Zingde, briefing about IWSA



Dr. Rita Mukhopadhyaya, briefing about SRR



Dr. Sunali Khanna delivering her lecture



Dr. Sagar Balla proposing the vote of thanks



Dr. Shyamla Bhardwaj presenting SRR memento to Dr. Sunali Khanna



Mrs. Pahwa presenting a small tulsi plant to Dr. Sunali Khanna



Dr. Rita Mukhopadhyaya presenting SRR memento to Dr. S. Zingde



Group photo with senior IWSA members

Report Prepared by: Mrs. Pooja Kamla Melwani, Scientist BARC, and Member SRR