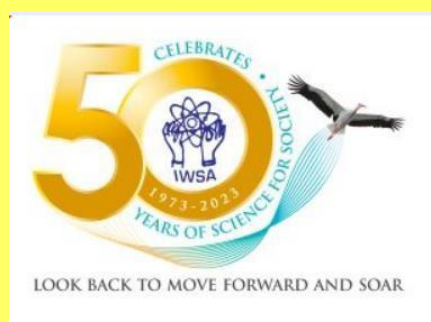




## CONCEPT NOTE ON IWSA'S GOLDEN JUBILEE YEAR LOGO AND THEME...LOOKING BACK TO LOOK AHEAD AND SOAR...



**IWSA TO US IS A LEGACY, GIFTED BY OUR VISIONARY FOUNDER MEMBERS..WE ALL NEED TO CHIP IN OUR ROLES TO LOOK BACK WITH GRATITUDE TO CARRY FORWARD THE MISSIONARY MARCH INTO THE FUTURE WITH INTEGRAL EFFORTS OF VALUE PRESERVATION TOWARDS CURRENT ADVANCEMENTS IN ACCORDANCE WITH GLOBAL REQUIREMENTS.**

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## **NOTE FROM IWSA PRESIDENT**

**Dr. Rita Mukhopadhyaya**



Indian Women Scientists' Association (IWSA) completes 50 years of service for society, aiming to impart scientific temper for a meaningful life as a responsible citizen. Through resilience and innovative thinking, we have ascended stronger in surpassing the challenges of the "COVID Pandemic" of 2020 and welcome this day with gratitude for all the accomplishments and learning lessons as well!

IWSA is the first association to be run by and for women in science. We have 11 branches across 5 states of the country. To fulfill our mandate for nurturing science and invoking scientific thinking amongst all strata of the society (kindergarten to Ph.D. and beyond) we have trodden onto online communications, upgraded some of the facilities e.g. e-Granthalaya, data centre, begun new activities e.g. mathematics olympiad for school students and expanded our green initiatives and environment awareness.

Mandate for women empowerment with skill development was implemented right from the inception and has added to our growth and welfare of the staff. The impact outreach (~20 K) through our mandate activities can be followed on our website (iwsa.net).

If our past journey comprised of bridging the gap between learning and the learners, the forward journey will be to merge the arts with sciences for holistic learning, with deep regards for the visionary founders and confidence in our future flag bearers.

We gratefully acknowledge the support of all our sponsors of the concluding event of our Golden jubilee celebrations "XV Triennial and III International Conference on Women in Science and Technology---Soaring on the Wings of Change"

My heartiest congratulations to all our past and present members of IWSA, the organisers of the yearlong Golden Jubilee Celebrations and especially for the successful completion of the aforesaid commemorative Conference held at the headquarters, Vashi, Navi Mumbai, during 11-13, June, 2023.

A handwritten signature in black ink, which appears to read "Rita Mukhopadhyaya". The signature is written in a cursive style.

Rita Mukhopadhyaya, PhD  
President, IWSA (2021-2023)

## **REMARKS BY IWSA TRIENNIAL CONVENOR**

**Dr. Lalitha Dhareshwar.**

Indian Women Scientists' Association (IWSA) is a unique organization founded by twelve committed women scientists in 1973 with a commitment to take science to the masses and bring a scientific temper in the society. This organization now comprises of more than 2000 members in its eleven branches spread over the country. The organization has also worked hard over the years to achieve its important objective of promoting the achievements of women in science and technology.



On the 13th of June 2023, we have completed fifty years. We have had a whole year of celebrations, starting from 13th June 2022, when we ushered the Golden Jubilee year by organizing an international conference with the theme- “One Earth- Rebalance Energy to sustain”- कटदबकम- which in vedic literature means- 'One Earth One Family'.”

The grand finale of this year-long celebration was marked by the XV Triennial and III International Conference on the theme- “Women in Science and Technology- Soaring on the wings of change” from 11th to 13th of June, 2023. This is an apt title, considering the large number of women who have risen to the highest levels in the various fields of Science and Technology.

The conference comprised of ten sessions, including thirty-three lectures by reputed women scientists and technologists. A wide range of areas in basic Sciences, Mathematics, Technology and Health sciences as well as a session on entrepreneurs and innovators were included. Invited lectures covered some of the topics in the frontiers areas of science and technology such as- Elementary particles, Click chemistry, Genome editing, Nano- technology, Accelerators, Space technology, Environmental science & Climate change.

There were two poster sessions for young and active researchers in which about seventy posters were presented, onsite and online. The best poster awards in each category were declared after scrutiny by an eminent panel of judges. I am happy to share that there was an outreach of about 200 participants.

We are thankful to Dr. N. Kalaiselvi, Director General, CSIR and Secretary, DSIR for the delivery of the Keynote address. Our conference tagline says- 'Look back to move forward and soar'. We take great pride in our historic achievements over the last fifty years. During the inaugural session of the conference, we were delighted to release a very important book on the history of IWSA, entitled- “The Fifty Year Saga of the Indian Women Scientists' Association”. Publication of this book was been supported by Pirojsha Godrej Foundation and we would like to place on record, our immense gratitude for this kind gesture.

The memories connected with all the work going on at IWSA was documented into an interesting film on IWSA and a trailer of same screened. This film had members telling us about the various anecdotes connected with the activities of IWSA, as they walked the path of selfless service, starting from our founder member, Dr. Sudha Padhye.

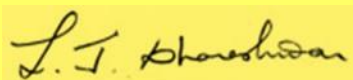
Another IWSA publication entitled “Millets for children: Rhymes, Recipes & Resources for All Ages” with the foreword by Dr. Mahtab Bamji, recipient of Living Legend award by International Institute of Nutrition and IWSA member, was also released by Mrs Mini Iype during the conference.

I thank the illustrious Advisory committee members who have time and again given good ideas. This conference would not have been possible without the hard work put together by the Co-conveners, members of the Scientific Program Committee as well as the Organizing Committee members. All the committee members have worked hard to make this conference a memorable one. I thank all the speakers and chairpersons who have given their valuable time in the process of knowledge sharing, during the conference.

On behalf of IWSA, I thank the Board of Research in Nuclear Science (BRNS) for their financial support for the conference. We thank Life Insurance Corporation of India, Nuclear Power Corporation of India Ltd and Board of Radiation and Isotope Technology for their support as well. We would also like to thank the several corporates such as – Tata Consultancy Services, Nucleus Office Parks, HiMedia laboratories Pvt. Ltd, Genotypic Technology Pvt. Ltd, Genie Laboratories Pvt. Ltd, Profab Engineers Pvt Ltd, Harekrishna Exports Pvt Ltd. etc., who have supported the conference.

I would like to end my message with a very beautiful quote by our member, Prof. Rohini Godbole, Physicist and Padmashri awardee, which states- “More than gender, the intellectual abilities and interests play a crucial role for girls who aspire to join science”!

With my best wishes to you all,



Dr. Lalitha Dhareshwar, Convener,  
XV Triennial and III International Conference of IWSA,  
Immediate Past President of IWSA,  
Former Raja Ramanna Fellow of DAE

## **LOOKING BACK AT IWSA**

In early 1970's, a few scientists got together and started thinking that it was not enough to work sincerely sitting in a laboratory, doing experiments, publishing work and living in an ivory tower. There was a major need to take Science to Society using Science and Technology for the upliftment of the "not so privileged" class of society and for women. In 1972, twelve founder members representing a wide spectrum of scientific disciplines and associated with different scientific institutions came together and **registered Indian Women Scientists' Association (IWSA) on 13th June, 1973 under the Society Registration Act and the Public Trust Act on 19th July, 1973.**

IWSA is an All India social welfare, voluntary, non-profit, secular, non-political charitable organization. It has eleven branches namely, Roorkee (1979), Hyderabad (1979), Pune (1980), Kolhapur (1982), Nagpur (1982), Delhi (1987), Kalpakkam (1987), Vadodara (1988), Amravati (2010), Bengaluru (2018) and Nellore (2018). IWSA has about 2000 life members; its head quarters is located in Vashi, Navi Mumbai, Maharashtra.

IWSA's Membership is open to all women with a background in S&T and Associate Membership is open for those interested in science and with a scientific temper.

### **Objectives**

- ✓ Take science to masses
- ✓ Develop scientific temper in society
- ✓ Promote scientific accomplishments among women scientists
- ✓ Understand the problems of women in sciences and provide solutions for women empowerment
- ✓ Be a representative body of women in S&T

## IWSA's MILESTONES

YEAR	EVENT
1973	Registration of IWSA on 13th June, 1973 under the Society Registration Act and the Public Trust Act on 19th July, 1973.
1974	With the aim of taking science to people, IWSA started "Science for Citizen" Library [SICILY] at Matunga, Mumbai. From 1974 to 1980, with the generous help of Tata Trust and Kelkar Trust, science books were purchased for school children. Thereafter a mobile library was started with popular science books. After some period these books were donated to the neighbouring schools.
1979	Establishment of Roorkee Branch of IWSA.
1979	Establishment of Hyderabad Branch of IWSA.
1980	Establishment of Pune Branch of IWSA.
1982	Establishment of Nagpur Branch of IWSA.
1982	Establishment of Kolhapur Branch of IWSA.
1986	Foundation stone ceremony of the hostel and other activities was held on 12th April, 1986, at the hands of well known social worker, late Padmashree Ms. Anutai Wagh.
1987	IWSA's building complex includes a Hostel, Day Care Centre, Nursery School, Community Health Care Centre, Library, Science Laboratory, IWSA office and a Committee Room. These were completed in September.
1987	A Science laboratory was started in 1987. The laboratory was renamed as IWSA's Dr. Sumati Bhide and Mr. Vasudeo Bhide Science Laboratory on 27th November, with funds from the Bhide family.
1987	Establishment of Delhi Branch of IWSA.
1987	Establishment of Kalpakkam Branch of IWSA.
1988	Establishment of Baroda Branch of IWSA.
1989	Naming ceremony of the IWSA Hostel as "Jitendra Mafatlal Mehta" Working Women's Hostel was performed on 9th January, by late Rev. Mother Teresa and late Shri Nana Chudasama, the then Sheriff of Bombay
1989	A new library was set up with generous financial support from Pirojsha Godrej Foundation and renamed IWSA's Pirojsha Godrej Foundation Science Library .
1991	IWSA's G. M. Abhyankar Day Care Centre was started on 12th January.
1991	Computer Training Centre was started in October 1991 and renamed as IWSA's Satish Haware Computer Education Centre on 7th May 2008.
1994	IWSA's Murli Laj Chugani Health Care Centre was started on 12th February.
1995	Training of Teachers (TOT): Pre-primary non-formal method of teaching programme was started in January.
1998	IWSA's new Shree Mahalakshmi Temple Charities Working Women's Hostel Wing was added on 13th June.
1998	IWSA'S Multipurpose Hall, for carrying out its multiple activities, was completed on 13th June 1998 with the financial support from ICICI Bank
1999	IWSA's Mrs. Indirabai Padhye Nursery School for tiny tots was started on 28th August.
1999	IWSA's Solar water heater system for the hostel was started.
1999	IWSA's Garden was initiated.
2001	The Directorate of libraries–Maharashtra State, Belapur, Navi Mumbai, selected IWSA's Pirojsha Godrej Foundation Science library as a <b>public library</b> for partial state grant-in-aid funding support.
2004	IWSA's Rainwater Harvesting system was constructed.
2010	Establishment of Amravati Branch of IWSA.
2013	IWSA's Nisargruna Biogas plant was built.
2015	Composting of garden waste was started.
2015	Incinerators for sanitary napkins were installed in the Hostel.
2017	A 21.75 Kwp solar electricity generating system "Tejomayee" was commissioned.
2018	IWSA's Learning Garden was inaugurated on Environment day.
2018	Establishment of Bengaluru Branch of IWSA.
2018	Establishment of Nellore Branch of IWSA.
2023	IWSA celebrates Golden Jubilee Anniversary of its establishment.



**MESSAGE FROM THE HONOURABLE PRIME MINISTER OF INDIA**



सत्यमेव जयते

प्रधान मंत्री  
**Prime Minister**

**MESSAGE**

It is most heartening to learn about the Golden Jubilee celebration of Indian Women Scientists' Association (IWSA). The organization of XV Triennial & III International Conference with the theme, "Women in Science and Technology—Soaring on the winds of change" celebrates the spirit of women-led development. During the course of the last five decades, IWSA has consistently worked towards taking science to the masses through programmes for women empowerment, developing a scientific temper in the society, as well as enhancing awareness about science and education.

Our scriptures say, "नारी तू नारायणी". Inspired by such glorious ideals, today the nation is witnessing an era of women-led development.

From Panchayats to Parliament, from space to start-ups, from sports to armed forces, women are leading from the front in every sphere of activity in the last few years. Even in the field of science and technology, women are making the nation proud through their efforts. Women are not just shaping their own future, but are also imparting a new direction to the nation.

While on the one hand, science and technology empowers women, it is also equally true that the increasing contributions of women in the domain enriches it greatly. So, our vision is that we should empower women through science and empower science with greater participation of women.

I am sure that the various sessions at the Conference will help young researchers to delve deeper into a wide array of topics and learn more about innovation and entrepreneurship from well-known women scientists. May the Conference promote scientific accomplishments of our women scientists to a wider audience and inspire many more young women to take up science.

Amrit Kaal is an opportunity to power India's growth through the immense potential of women with the vision of building a strong, self-reliant India. During this period, we aim to make India a powerhouse in science and technology. I am sure that Indian women will lead the way in realising this vision.

Heartiest greetings and congratulations to everyone associated with the Golden Jubilee celebration of IWSA. May the publication of the Book of Abstracts on the occasion capture the pride and glory of the occasion.

(Narendra Modi)

New Delhi  
ज्येष्ठ 19, शक संवत् 1945  
09<sup>th</sup> June, 2023

MESSAGE FROM THE HONOURABLE MINISTER FOR WOMEN AND CHILD DEVELOPMENT,  
MINORITY AFFAIRS, GOVERNMENT OF INDIA

स्मृति जूबिन इरानी  
Smriti Zubin Irani



मंत्री  
महिला एवं बाल विकास  
अल्पसंख्यक कार्य  
भारत सरकार  
Minister  
Women & Child Development  
Minority Affairs  
Government of India

**MESSAGE**

As the Indian Women's Scientists' Association (IWSA) celebrates its landmark existence of 50 years, I extend the Association my heartfelt congratulations on a half-century of service in galvanizing efforts that cultivate a gender-equitable scientific temper.

I firmly believe that it is due to the impassioned energies of IWSA and allied institutions that India produces more women graduates in STEM than many other major economies. Coupled with its objective to drive science to the masses, IWSA is a success story that stands at the intersection of multiple historically disadvantaged identities.

The Government of India has effectuated various policies that seek equalisation of gender representation in various realms- from asset ownership to science and technology. While on the one hand, interventions like the Science and Engineering Research Board-Promoting Opportunities for Women in Exploratory Research (SERB-POWER) provide grants and fellowships to encourage research and development activities among women scientists to bridge gender disparity in funding, on the other hand, others like Vigyan Jyoti seeks to inculcate school-going girls' interest in underrepresented areas of STEM. IWSA plays a pivotal role in complementing the government's efforts to realise outcomes on the ground.

Today, more than ever, science needs women's perspectives for change, advancement and inclusivity. IWSA's XV Triennial & III International Conference on 'Women in Science and Technology- Soaring on the Wings of Change' promises to be a thought-provoking session on women's contribution to the S&T field. I wish IWSA all the best in their efforts for a successful event. I fervently hope that the Association continues their work with renewed vigour as they enter this era of a Golden Jubilee.

  
(Smriti Zubin Irani)



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Resi.: 28, Tughlak Crescent, New Delhi-110003, Phone : 011-23011382



MESSAGE FROM THE PRINCIPAL SCIENTIFIC ADVISER TO THE GOVERNMENT OF INDIA

अजय के. सूद  
भारत सरकार के प्रमुख वैज्ञानिक सलाहकार  
Ajay K. Sood  
Principal Scientific Adviser to the Govt. of India



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**Message**

Indian Women Scientists' Association (IWSA), an organization with its main mandates of taking Science to Society, Science education, Community welfare and women empowerment, is set to complete fifty years on 13<sup>th</sup> June 2023.

On the occasion of the Golden Jubilee Celebration, IWSA is organizing the XV Triennial & III International Conference from 11<sup>th</sup> to 13<sup>th</sup> June, 2023. The theme of the conference is – "Women in Science and Technology – Soaring on the Wings of Change".

The theme of the conference, namely, to showcase the achievement of women scientists and technologists over a wide range of fields in Basic as well as Applied Sciences is very important. The session on entrepreneurship would be very engaging for the young women scientists and technologists, who would like to venture on their own, which is also the endeavor of Government of India to promote a culture of innovation and entrepreneurship. I am happy to see a large number of participants and poster presenters in the conference.

The Government of India continues to make serious efforts to bring more women into the fields of STEM. Conferences such as the one being conducted by IWSA would very well serve to achieve this goal.

My best wishes for the success of this conference.

(Ajay K. Sood)

Dated: 5<sup>th</sup> June, 2023

**XV TRIENNIAL AND III INTERNATIONAL CONFERENCE OF IWSA, 11 – 13 JUNE, 2023  
ORGANISING COMMITTEES**

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Director, Beam Technology  
Development Group, BARC

**Dr. Gagandeep Kang**

Professor, Department of  
Gastrointestinal Sciences,  
Christian Medical College,  
Vellore

**Dr. Hashima Hasan**

Senior Scientist, NASA

**Dr. N. Kalaiselvi**

Director General, CSIR & Secretary  
DSIR

**Dr. Mahtab Bamji**

Director, Dangoria Trust, Member  
IWSA

**Padma Shri Air Marshal Padma**

**Bandopadhyay**

Former Flight Surgeon in Indian Air  
Force

**Dr. Pheroza Godrej**

Chairperson, Godrej Archives Council

**Dr. Sudha Padhye**

Founder Member, IWSA

**Dr. Sunita Mahajan**

Chairperson, Board of Trustees, IWSA

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**Dr. Tessy Thomas**

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Systems, DRDO

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COMMITTEE**

**Dr. Lalitha Dhareshwar**

Convener, Immediate Past President, IWSA

**Dr. Shyamala Bharadwaj**

Co-Convener, Vice President, IWSA

**Dr. Asawari Rath**

Co-Convenor, Member IWSA, Scientific  
Officer G,

Advanced Tunable LASER Application  
facility, Beam Technology Development  
Group, BARC

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Secretary, Member Executive Committee,  
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**Dr. Suparna Kamath**

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Treasurer, Member, IWSA

**Dr. Rita Mukhopadhyaya**

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Head, RPAD, BARC, Member, IWSA

**Dr. Surekha Zingde**

Trustee, IWSA

**Dr. Sudha Rao**

Trustee, IWSA

**Dr. Bakhtaver Mahajan**

Trustee, IWSA

**Dr. Devaki Ramanathan**

Trustee, IWSA

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**Ms. Vijaylakshmi Tilak, Ms.**

**R. Bhuvaneshwari,**

**Ms. Tripta Tewari, Ms. Sukhvinder  
Sandhu,**

**Ms. Priya Jacob**

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Neurology, Apollo  
Hospitals, Nellore &  
Convenor, IWSA Nellore  
Branch

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Hyderabad & Co-Convenor IWSA  
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**Dr. Deeplaxmi Kulkarni**

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Honorary Scientist, ICT, Mumbai.

**Dr. Yasmin Khan**

Former Vice Principal (Science) and Associate  
Prof., Dept. of Life Sciences., Sophia College,  
Mumbai

## **Glimpses of IWSA @50**

Speech at Triennial  
Inaugural Program



Honorable guests on the dais, in the hall and friends,

It is lovely to see so many old-time friends today, an imp day for our IWSA and for many of us too, who have spent decades in this unique organization. It is unique, because largely financially, we manage on our own, via our many activities and donations from generous members and well-wishers, many of whom may be here too. Please remember, IWSA is NOT a scientific institution, though our objectives are to promote science. On behalf of all our trustees and members and on my own behalf, I extend a warm welcome to you all.

Narrating the work of the last 50 years in 7 to 10 minutes is not easy; you will have to excuse what will, by necessity be only a quick sketch. IWSA has travelled long and hard; we have had never ending discussions, arguments, once with tears too, but have still managed to hold tight together and stick to our objectives (ST, women empowerment, science to society) which were highlighted by earlier speakers. Some of us have interacted with nearly all the founder members, many of who were completely dedicated and committed to the objectives of IWSA. Besides our founders, there have been many others assisting them or working individually, late into night, causing family tensions, or travelling long distances from western suburbs to Vashi via harbour line. Here I am recalling Drs. Dhanu Vagani and Urmila Vakil. Some other prominent names which readily come to mind are those of Mrs. Vidya Randive who greatly assisted, who else, but our Dr Padhye in framing our Constitution and bye-laws. Significantly, these bye laws have stood the test of time and nearly 90% of the laws are unchanged. I can safely state that Dr. Padhye, sitting here, is a central pillar of IWSA, right from its inception to the current date. Others whose work we should acknowledge are Dr. Sunila Mathur, a dear friend too, who worked tirelessly, in the early years first with Dr. Padhye, visiting diff govt offices for many permissions for building this complex, and then with Dr. Bhide, when she laid strong foundations of our sc. Laboratory and was also the first convenor of Kal branch. Dr. Usha Thakeray gave shape to ECCE (early childhood care and education), then called as TOT (training of teachers), along with our strong, Dr. Sudha Rao, and Dr. Jayashree Nadkarni shaped our Health Care Centre, with Dr. Snehalata Gupte, and others. The list is very long, but I should not forget our Drs. Niyati B and Malati Mulki, both sitting here in the audience; while Niyati B continues to be our wise advisor, Malti gave impetus to diff env progs and has brought in many donations. Rashmi Rastogi currently in Bangalore, perhaps online today, helped in setting up our Computer Edu Centre along with our gentle and highly capable DR Sunita Mahajan, chairperson. There are many others that I want to acknowledge but in the interests of time, I cannot name each individual and so want to deliver collective thanks and acknowledge that we are standing on the shoulders of our founders and other colleagues, who have selflessly worked to build this institution. Sadly, we do not have many photographs of these stalwarts, or prominent mention in our Annual Reports or News Letters, or in films of these women of IWSA.

Now a few words regarding our beautiful complex and the different activities therein. It was built in two phases, and completed in 1998. For those who have an eye for architectural design, you will immediately appreciate the aesthetics and functionality of our building, which was designed by the late Mr. Subhash Padhye. Alas, we don't see such structures any more. Its size is also awesome for a NGO: the vision of our founders, especially Drs. Padhye, Shantoo Gurnani and Sumati Bhide, took into consideration the needs of the future and the critical issues that face this country, and especially its women; the material plans reflected these considerations and aspirations for the future.

Hence, at IWSA we have facilities of a hostel, day care center, nursery, science lab, computer and health care centres, a library and a hall, all under one roof. All these facilities were set up thanks to generous donations from our well-wishers. ..., our hostel, the nerve centre of IWSA, has received special attention over the decades—rules and sub committees formed by Dr. Padhye and colleagues, later refined by our Dr. Niyati Bhattacharyya, and others, needs a special mention. Later, the program for TOT (training of teachers), renamed as ECCE—Early Childhood Care and Education, was established. On reflection, you will observe that the development of these activities at IWSA follow the trajectory of the growth of a young child into maturity: when small, a baby needs care as in DCC, then graduates to the nursery; and these two cells, in turn, act as a training ground for our ECCE teachers. Since its inception highly committed teachers of ECCE impart lessons on diff aspects of child development to younger teachers. These four cells –hostel, DCC, nursery and ECCE, are in great demand, and last year our ECCE celebrated its 25 years anniversary with great pride.

Coming to the library, what started as a mobile circulating library with limited books has now a reasonably healthy collection in diverse fields; I understand that it will soon go virtual with national and international journals, with inputs from the Directorate of Maharashtra State library department. This facility will be free for our students. A special book collection for kids has been added recently in the library, and kids can read these in the appointed area which is surrounded by greenery.

Our computer lab in the initial stages had relatively basic software for students and seniors too. The idea was to equip needy students with skills that would allow them to apply for jobs in the IT field. Occasionally, we have seminars on more sophisticated topics in computer education, such as machine learning and AI. Now we have equipped the computer lab with up to date hardware and wish to convert it into a Data Processing Center. CEC also celebrated its 30 years recently.

Our Health care center, with a physiotherapist, dentist and homeopathy doctor, provides valuable services to the community. In addition, it holds a variety of camps, such as the annual cancer detection camp, the osteoporosis camp, yoga camp, and free dental checkups; a programme for the elderly in their golden years elicited good response. I should note that in the early years, rigorous research projects on the many dimensions of health were carried out by our members. Dr. Kamal Ranadive, our founder member and a Padma Bhushan awardee, and Drs. Thakeray and Snehalta Gupte. Both these research projects brought accolades for our members and for IWSA. Unfortunately, this res trend is absent now. Coming to our science laboratory, over the years, different programs have been organized to attract and motivate school and college students to science. The latest ongoing version for our school students is our Sc nurture prog. Here, students from socio economic weaker backgrounds from an adjacent school, regularly visit our science lab. Our dedicated members act as teachers of diff subjects and have been consistently nurturing these kids, since the last 15+ years. In addition, we have popular science lecture series supported by BRNS, and SAOL, for colleges and schools. (These lectures are by experts in different science areas, who expose and excite our students and teachers to the latest developments in a particular field.) Similarly, we have been celebrating diff important days with talks, walks, and a variety of activities. The field of science popularization is open for our younger enthusiastic members.

In addition, IWSA gives merit cum means scholarships to students and has a quarterly Newsletter.

And last but not the least, IWSA is lucky to have its beautiful grounds, which have been recently developed as a Learning Garden, with its interdisciplinary approach.

Friends, before I end, I would like to say that sustainability has become a buzz word today, but please note that at IWSA, we started our sustainable journey in early 1990s, with installation of solar water heaters in the hostel, rain water harvesting system, and a bio gas plant. The latter two need rehaling. More recently, we have installed solar panels to supply electricity. (As you walk around,

you may observe the absence of plastic bottles and many other small but important green steps ;) these are our small green gestures, and we try not to indulge in 'green washing'.

A few words on our branches: We have 11 branches and most of them are doing excellent work. Reports from Roorkee, Kalpakkam in TN, Nagpur, Hyderabad, Kolhapur, and Nellore are inspiring and noteworthy. The early convenors of many of these branches, such as Dr. M Bamji of Hyderabad, Dr. Kamallesh Suleebka of Roorkee, Anuradha Gadgil of Nagpur and Kalawati of Kalpakam, have laid down strong foundations of IWSA at these venues. Some of the noteworthy progs of these branches are: initiation of maths olympiad at Roorkee, focused env progs at Nagpur, Kolhapur and Kalpakkam. At Hyderabad, our Dr. Bamji sitting here earlier had focused on health and nutritional status of rural and urban populations.

Lastly, in tune with the theme of today's conference, after a stint of nearly 30+ years here, I would like to look forward and state a few points that we, members should dwell on:

- a) The recently started internship programs holds potential. It befits us to ensure that we steer it well;
- b) We have to strengthen existing programs, not merely by buying new equipment, but by re-strategizing, by roping in more students, more readers, and more clients;
- c) If we are initiating new programs (not at the expense of existing one), we try to inject a research component, which involves scholarly work and data collection, which, perhaps could bring about social impacts and policy changes. Here, we have much to learn from the exemplary work conducted by our old time members.
- d) We have to strengthen our membership, especially of retired scientists who can spare time and their expertise; and
- e) Last, we have to work on fundraising for repairs to our building, which is getting old.

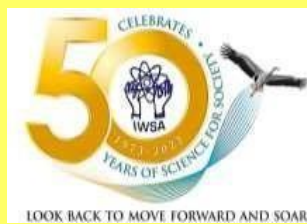
In closing, I would like to emphasize how truly distinctive IWSA has been. As an organization, it has been exemplary in showing how a group of committed colleagues can work together through consultation, debate and discussion. In today's polarized and fractured times, this is an organization that has shown how we can harness disagreement and forge consensus in order to move forward.

IWSA has also been unique because it has anchored its commitment to scientific activities. (In a realization that doing science requires social support.) Women need to have safe places to live in; safe places where their children can be cared for and nurtured places where they can gain new skills. If our society does not provide different forms of social and institutional support, we cannot expect women to be successful in science. In its various activities, IWSA has aimed to braid together this commitment to science and to supporting those who want to do science.

Thanks a lot for your patient hearing.

**Dr. Bakhtaver Mahajan,**  
**Secretary, Board of Trustees, IWSA**





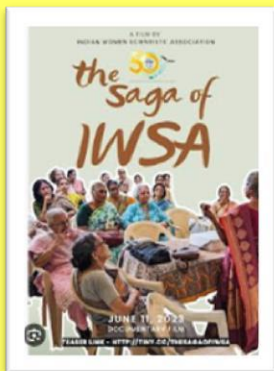
## XV Triennial & III International Conference of IWSA Conference Event Schedule 11<sup>th</sup> -13<sup>th</sup> June, 2023

### INAUGURAL SESSION : JUNE 11, 2023 - 9:30 am to 11:15 am


Opening Plenary	Name & Designations of Chairpersons / Speakers
<b>Inaugural Session</b>	Comperer: <b>Ms. Priya Jacob</b> , Member, IWSA EC
<b>Welcome Address</b>	<b>Dr. Rita Mukhopadhyaya</b> , President, IWSA
<b>Introduction About 'The Golden Jubilee Triennial International Conference'</b>	<b>Dr. Lalitha Dhareshwar</b> Convener, Past President, IWSA
<b>Keynote Address</b>	<b>Dr. N. Kalaiselvi</b> , Director General, CSIR, & Secretary DSIR
<b>Glimpses of IWSA @50</b>	<b>Dr. Bakhtaver Mahajan</b> Secretary, Board of Trustees, IWSA
<b>Release of the book</b> 'The Fifty Year Saga of the Indian Women Scientists Association'	By <b>Dr. Pheroza Godrej</b> , Chairperson Godrej Archives Council & Advisor, Godrej Mangroves
<b>Release of the Film on IWSA</b>	By <b>Dr. Sudha Padhye</b> , Founder Member of IWSA
<b>Release of the book:</b> 'Millets for children: Rhymes, Recipes & Resources for All Ages'	By <b>Ms. Mini Iyer</b> , Managing Director, LIC of India



**GLIMPSES OF THE INAUGURAL SESSION**



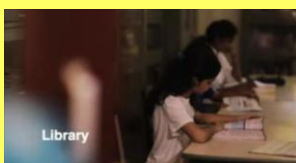
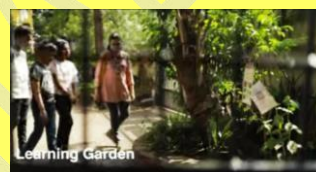
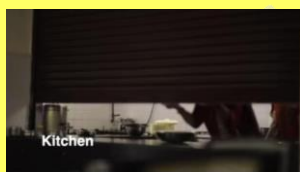
**Release of the Film on IWSA**



**By Dr. Sudha Padhye,**



This film is dedicated to the twelve Founder Members of IWSA



IWSA acknowledges the support given by Dr. Nootan Bhakal and Shri. Ketan Premani in making this film in memory of their brother Late Shri. Chetan Premani



In between 1969 & 1972, twelve women scientists came together and formed Indian Women Scientists' Association (IWSA) on 13th June, 1973

**SOME GLIMPSES OF THE IWSA FILM RELEASE**



<https://youtu.be/6QD6j9PIAMU> Inauguration link

## SESSION I: BASIC SCIENCES - 11:30 am to 1:00 pm, June 11, 2023

**Compered by** Dr. Sheela Donde, Member, IWSA  
**Chairperson** Prof. Meera Venkatesh  
Former Director, Division of Physical & Chemical Sciences, IAEA, Vienna, Austria

	Name & Designations of Speakers	Title Of Talks
<b>Speaker</b>	<b>Prof. Archana Sharma,</b> Principal Staff Scientist, CERN, Switzerland	Blue Sky Research, Corona Virus and Why Should I Care?
<b>Speaker</b>	<b>Dr. Chitra Seetharam Misra,</b> Scientific Officer, Applied Genomics Section, BARC, Mumbai, India	CRISPR technology – genome editing and beyond
<b>Speaker</b>	<b>Prof. Nandita Madhavan</b> Professor, Dept of Chemistry, IIT Bombay, Mumbai, India	Chemistry that Makes Molecules "Click"
	<b>Summary by the Chair</b>	



### GLIMPSES OF SESSION 1 ON BASIC SCIENCES



Prof. Archana Sharma



Dr. Chitra Seetharam Misra

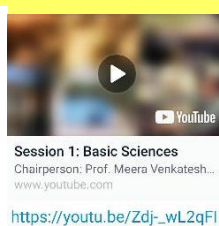


Prof. Nandita Madhavan



Dr. Meera Venkatesh

For more information kindly follow [https://youtu.be/Zdj\\_wL2qFI](https://youtu.be/Zdj_wL2qFI) for SESSION 1 Proceedings



**POSTER  
PRESENTATION  
SESSIONS**

**After noon on 11,  
12 and pre noon  
on 13 June, 2023**

**48 posters (On Site) and 15 posters (online)**

**Coordinated by** Dr. Sheela Donde, Dr. Suparna Kamath, Ms Sukhvinder Sandhu & Poster Committee - IWSA members

**Topics Covered:** *Biology, Health, Biotechnology, Environmental Science, Technology, Physics, Chemistry*

**SUMMARY REPORT - Dr. Sheela Donde**

Abstracts were invited from students of various colleges, universities and research institutions from all over the country, working in the fields of Basic Sciences, Biotechnology, Health, Environmental Sciences, Technology, Physics and Chemistry, Nuclear Science, and Space science. A total of **63 abstracts** were received before the given last date, out of which 49 abstracts were from the fields of Biological Sciences, and 14 abstracts were from the fields of the Physical Sciences. Students were then asked to prepare posters on the topics of their abstracts, as per the guidelines provided. Out of the **49 posters in Biological Sciences**, 37 were submitted as onsite posters and 12 were submitted as online posters. Out of the **14 posters in the Physical Sciences**, 11 were onsite and 3 were online. Both soft copies and hard copies of all the 63 posters were obtained from the poster presenters, and the hard copies of all the posters were displayed on poster boards from 9 am on 11<sup>th</sup> June till 4 pm on 13<sup>th</sup> June, 2023.

**Nine teams of Judges** were appointed for evaluating the **63 posters (7 posters per team, 7 teams for the Biological Sciences and 2 teams for the Physical Sciences)**. Each team consisted of **3 judges**, specialized in the areas covered in the 7 posters they had to judge. The selected judges were senior scientists from research institutes, universities, and colleges and some were well established entrepreneurs. Each judge was asked to independently evaluate each of the 7 assigned posters using the judging criteria provided, and submit his/her **independent report**. In addition, each team of judges, evaluating a set of 7 posters, was asked to submit a **collective team report** giving rankings to the posters.

All online posters were presented by the presenters, at the allotted time, to their respective judges with special arrangements being made for their online display, and real time question and answer session.

Posters of First rankers from the 7 teams of Biological Sciences were further evaluated by a new set of 3 judges, and **4 posters were selected by them for the Best Poster award**. Posters of First rankers from the 2 teams of Physical Sciences, were further evaluated by a new set of two judges, and **1 poster was selected for the Best Poster award**.

The 5 Best Poster awardees were asked to make a PowerPoint presentation of their work in front of the entire Conference audience, after which each of them was awarded a Certificate and a cash prize.

Panel of judges comprised of Drs. Neelam Shirsat, Aditi Joglekar, Debjani Dasgupta, K. Rajeshwari, Paramjit Anthappan, Jacintha D'souza, Kalpana Joshi, Shruti Dutta, Petra Sequeira, Seema Das, Unnati Padalia, Maitrayee Paul, Yasmin Khan, Hema malini Varadarajan, Jyoti Koliyar, Indira Priyadarshini, Nandita Madhavan, Shashwati Roy Majumder, Asawari Rath, Sridevi N, Priya R. L., Sheela Donde, Bhakti Pathak, Sudha Rao and Vibhuti Maru.



**On site and online poster presentations**

**SESSION 2 : MATHEMATICAL SCIENCES - 4.15 pm to 5:00 pm, June 11, 2023**

**Compered by** Ms.Manashi Chakraborty, IWSA member

**Chairperson** **Prof. Mythily Ramaswamy**  
NASI Senior Scientist, ICTS-TIFR, Bengaluru, & Adjunct Professor in Chennai Mathematical Institute, India

Name & Designations of Chairpersons/ Speakers		Title Of Talks
<b>Speaker</b>	<b>Prof. Aditi Sen De</b> Professor H, Physics, Harish Chandra Research Institute, Prayagraj (Allahabad), India	Technologies in the Quantum World

**Session Summary by the Chair**

Prof. Aditi Sen De, started her talk with examples of some mathematical problems, like prime factorization of any integer, which cannot be solved in polynomial time by classical computers. She pointed out that quantum computers can be very much faster. While the classical computer basic unit is binary, the basic unit in quantum computing is Qubit. 11 qubit quantum computers have already been studied. She then explained that quantum communication is much more efficient and faster and Quantum entanglement is the key ingredient but sharing entanglement over large distance is still a challenge. Q cryptography with security was mentioned. Governments efforts like National Quantum Mission and DST project QUEST were highlighted. The take away was that Quantum Mechanics is set to revolutionize computation and communication capabilities.



Prof. Aditi Sen De



Prof. Mythily Ramaswamy



For more information kindly follow our link <https://youtu.be/KXcnSBeYeY8>

For SEESSIONS 2 Proceedings



**SESSION 3 : HEALTH SCIENCES - 5.30 pm to 7.15 pm, June 11, 2023**

Compered by **Dr. Yasmin Khan**, IWSA member

Chairperson **Dr. Priya Abraham**,  
Senior Professor Dept. of Clinical Virology, Christian Medical College, Vellore, India

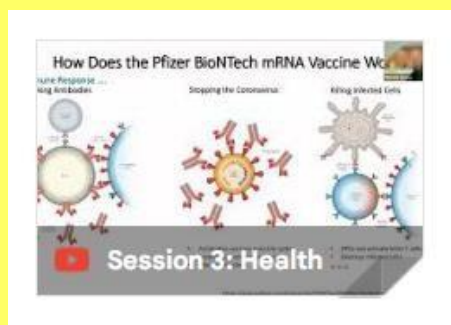
Name & Designations of Chairpersons/ Speakers		Title Of Talks
<b>Speaker 6</b>	<b>*Dr. Manjula Reddy</b> Chief Scientist, CSIR-Centre for Cellular & Molecular Biology, Hyderabad, India	Break to make: Dynamics of the bacterial cell wall
<b>Speaker 7</b>	<b>*Dr. Nivedita Gupta</b> Head, Division of Epidemiology & Communicable Diseases, ICMR, New Delhi, India	Learnings from Outbreaks of Viral Infections in the 21 <sup>st</sup> Century
<b>Speaker 8</b>	<b>*Dr. Michelle Gomes</b> Scientist, Cancer Early Detection Advanced Research Center (CEDAR); Knight Cancer Institute, Oregon Health and Sciences University, USA	mRNA Vaccines and Applications in Healthcare

**Summary by the Chair**



For more information kindly follow our link <https://youtu.be/DXUn58hNI>

**For SEESSIONS 3 Proceedings**



7:30 pm to 8.30 pm  
Cultural Programme  
11 th June, 2023

**Coordinator** : Dr. Nootan Bhakal, Treasurer, IWSA EC  
**Dance Drama** : 'Draupadi'  
**Concept and Choreography** by **Smt. Gayatri Subramanian**  
from the Guru G.V Ramani Natya Kala Foundation. Dances performed by her team.



**DANCE DRAMA: DRAUPADI**  
**Conceptualised and Choreographed** by **Smt. Gayatri Subramanian**  
from the Guru G. V Ramani Natya Kala Foundation.  
Dances performed by her team



DAY 2: JUNE 12, 2023 - 9:30 am to 11:10 am

SESSION 4: TECHNOLOGICAL CONTRIBUTIONS OF WOMEN

<b>Compered by</b>	<b>Ms. Madhu Pahwa, Secretary, IWSA EC</b>	
<b>Chairperson</b>	<b>Dr. Sulabha Kulkarni</b> INSA Senior Scientist, CMET, Pune, India	
	<b>Name &amp; Designations of Speakers</b>	<b>Title Of Talks</b>
<b>Speaker 9</b>	<b>*Ms. Keerti Rane</b> Director Level Principal Lead Program Manager, Microsoft, Seattle, USA	Challenges faced by Women in the Software Industry
<b>Speaker 10</b>	<b>Dr. K. Umasankari</b> Head, Reactor Physics Design Division, BARC, Mumbai, India	Women in Nuclear Energy
<b>Speaker 11</b>	<b>*Dr. Radha Bahukutumbi</b> Distinguished Scientist, Laboratory for Laser Energetics, University of Rochester, USA	Prospects for Fusion Energy through Inertial Confinement
<b>Summary by the Chair</b>		

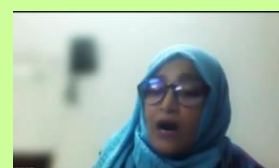
For more information kindly follow our link <https://youtu.be/CgGc4I9fZO8>

For SEESSIONS 4 Proceedings



**SESSION 5: ENVIRONMENTAL SCIENCE & CLIMATE CHANGE - 11:15 am to 1:00 pm**

<b>Compered by</b>	<b>Dr. Paramjit Anthappan, Jt. Secretary, IWSA EC</b>	
<b>Chairperson</b>	<b>Dr. Anuradda Ganesh</b> Chief Technical Advisor, Cummins India Pvt Limited	
	<b>Name &amp; Designations of Speakers</b>	<b>Title Of Talks</b>
<b>Speaker 12</b>	<b>*Dr. Gawsia Wahidunnessa Chowdhury</b> Professor, Dept. of Zoology, University of Dhaka, Dhaka 1000, Bangladesh	Plastic Pollution in River and Ocean: Towards Community Based Gender Equitable Solution
<b>Speaker 13</b>	<b>*Dr. Lee Kheng Heng</b> Section Head, Soil and Water Management & Crop Nutrition Subprogram, IAEA, Vienna, Austria	Nuclear and related techniques for climate smart land & water management
<b>Speaker 14</b>	<b>Prof. Deepa Khushalani</b> Professor, Materials Chemistry, Department of Chemical Sciences, TIFR, Mumbai, India	Climate Change & Environmental Science: Indian Scenario - How Bright is our Future?
<b>Summary by the Chair</b>		



Dr. Gawsia Wahidunnessa Chowdhury



Dr. Lee Kheng Heng



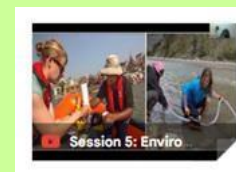
Prof. Deepa Khushalani



Dr. Anuradda Ganesh



For more information on Session 5, kindly follow our link <https://youtu.be/GI7S4fIY64c>



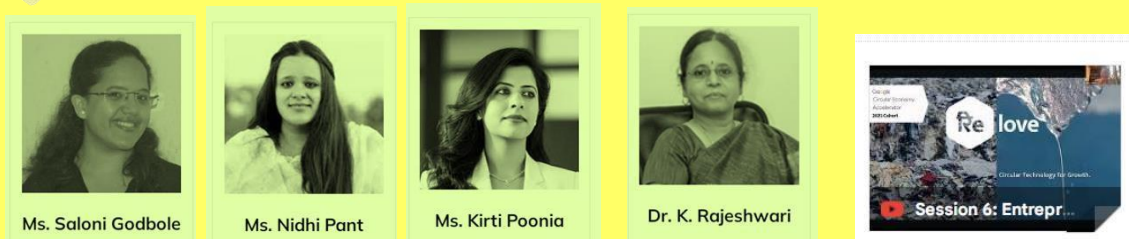
**SESSION 6: ENTREPRENEURSHIP AND INNOVATION- 4.15 pm to 5:30 pm**

<b>Compered by</b>	<b>Ms. Tripta Tewari</b> , Member, IWSA EC	
<b>Chairperson</b>	<b>Dr. K. Rajeshwari</b> Founder and Managing Director, Bioklone Biotech Private Limited, Chennai, India	
	<b>Name &amp; Designations of Speakers</b>	<b>Title Of Talks</b>
<b>Speaker 15</b>	<b>Ms. Saloni Godbole Tewari</b> Co-founder & CEO, Occamy Biosciences Pvt. Ltd, Mumbai, India	Entrepreneurship in the context of science and Women Soaring High on the Wings of Change
<b>Speaker 16</b>	<b>Ms. Nidhi Pant</b> Co-Founder, Science for Society, S4S Technologies, Mumbai, India	Technological solutions to address Poverty, Gender Inequality, and Post-Harvest losses in rural women farmers
<b>Speaker 17</b>	<b>*Dr. Kirti Poonia</b> Cofounder Relove, Mumbai, India	Circular Economy and Sustainability in Fashion Clothing

**Summary by the Chair**



For more information on Session 5, kindly follow our link <https://youtu.be/uwJ6PPX70Xg>



**SESSION 7: SPACE TECHNOLOGY- 6.00 pm to 7.30 pm**

<b>Compered by</b>	<b>Dr. P. Manjusree</b> , Treasurer, IWSA- Hyderabad	
<b>Chairperson</b>	<b>Ms. B. P. Dakshayani</b> Former Director, Flight Dynamics, and Space Navigation Group, ISRO Satellite Centre, Bengaluru, India	
<b>Name &amp; Designations of Chairpersons/ Speakers</b>		<b>Title Of Talks</b>
<b>Speaker</b>	<b>*Dr. Hashima Hasan</b> NASA Program Scientist for NuSTAR, the Keck Observatory & ADCAR, Deputy Program Scientist, James Webb Space Telescope, NASA HQ, Washington DC, USA	Unlocking the Secrets of the Early Universe with James Webb Space Telescope
<b>Speaker</b>	<b>Dr. Deepti Deobagkar</b> , Former ISRO Chair Professor, ISRO Space Technology Cell, Savitribai Phule Pune University, Pune, India	Societal Applications of Space Technology
<b>Speaker</b>	<b>*Dr. Ritu Karidhal</b> , Group Director of Mission Planning and Operations Group, ISRO, India	Challenges and experiences of Working in Mars Orbiter Mission

**Summary by the Chair**



For more information on Session 7, kindly follow our link <https://youtu.be/2d233QbBbD8>



<p><b>8:30 pm to 9.00 pm Cultural Programme</b></p>	<p><b>Textiles: Look back to move forward Designed by Dr. Hemalatha Jain and Compered by Ms. Paromita Guin</b></p>
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Our textile theme show "Weavers to Women" was indeed an apt tribute, weaving our mandate of taking science of textiles to the masses with community impact!

The fashion show was titled '**Heritage Textiles: Looking back to move forward.**' and subtitled - "Weavers to Women" The show was designed by Dr Hemalatha Jain and compered by Ms Paromita Guin. The arrangements for the same, student interns of SNDT Juhu were involved. A total of **38** models including IWSA life members and administrative staff took participated in the show.

Through this unique concept of our presentation we have successfully accomplished our intended objectives:

- 1) Felicitations to women who broke the glass ceilings for a causes they believed in through their thouhts, words and deeds, while they draped the heritage attires in the journeys of their lives.
- 2) Taking the science and efforts in the making of our textiles (sarees).. " product to craft weavers" ..
- 3) Setting an exemplary trend for future prospects to soar high on wings of innovation and change!

Kuddos to the journey initiated by our President Dr. Rita Mukhopadhyaya, weaving us all in togetherness for execution, through which we all came together and also learnt to appreciate our potential strengths of diversity and collaborations to move on with progression!



Newsband - Vashi witnessed a captivat...  
Vashi witnessed a captivat...  
www.facebook.com

[https://m.facebook.com/story.php?story\\_fbid=pfbid031KwJvJcnRPh7rvxGFcEdL3XqfbVbqTkBdiYBuNkYDjJbuLM2Kv6qntpd1XAct78Ll&id=100063739400038&sfnsn=wiwspwa&mibextid=RUBz1f](https://m.facebook.com/story.php?story_fbid=pfbid031KwJvJcnRPh7rvxGFcEdL3XqfbVbqTkBdiYBuNkYDjJbuLM2Kv6qntpd1XAct78Ll&id=100063739400038&sfnsn=wiwspwa&mibextid=RUBz1f)



**SOME GLIMPSES AND MEDIA REPORTS OF FASHION SHOW**

Women scientists showcase Indian handloom sarees in fashion show for IWSA's golden jubilee celebration




Entrepreneur Revives Karnataka's Forgotten ...  
Textile expert Hemalatha J...  
www.thebetterindia.com

<https://www.thebetterindia.com/319900/textile-expert-revives-rare-ancient-handloom-weaves-in-karnataka/?fbclid=IwAR2xvDmDMJzsqLeI8DK8hzzzt-ELXbcchPsvHXhys3Z4ETsJz080ocPjT74>

12:16 pm


The sarees for the textile show included Jamdhani, Phulkari, Patteda anchu, Kunbi, Banarasi, Sambalpuri, Bomkai, Pasapalli, Bichitrapuri, Kanchipuram, Madisar, Baluchari, Kantha, Patola, Bandhani, Kashuti, Maheshwari, Paithani, Madhubani, Patola, Gara, Coorgi, etc. and the exemplary women honoured included **Chandramukhi Basu** in a Lucknowi Chikankari Saree from Uttar Pradesh, **Charusita Chakravarty** in a Banaras Saree from Uttar Pradesh, **Veronica Rodrigues** in a Shalu from Uttar Pradesh, **Ketayun Dinshaw** and **Janaki Ammal** in a Kanchipurams fom Tamil Nadu, **Indira Nath** in a Kotpad from Odisha, **A. Lalitha** in a Sambalpuri from Odisha, **Rupabai Furdoonji** in a Pasapalli from Odisha, **Viswanathan Shanta** in a Bomkai from Odisha, **Tarabai Modak** and **Ramabai Ranade** in Paithanis from Maharashtra, **Sudha Gungal** in a Bhagalpuri from Bihar, Begum Rokeya Sultana in a Bhagalpuri from Bihar, Kamal Randive in a Gadewal from Telangana, **Iravati Karve** in an Ikkal from Karnataka, **Shanta Rao** in a Mysore silk from Mangalore in Karnataka, **Anandibai Joshi** in a Patola from Gujarat, **Hansa Mehta** in a Bandhani from Gujarat, **Rinti Banerjee** and **Rajeshwari Chatterjee** in Parsi garas from Gujarat, **Lady Abala Bose** in a Jamdhani from Bangladesh, **Kadambini Ganguly** in a Jamdhani from Bangladesh, **Archana Sharma** in a Baluchari from West Bengal, **Asima Chatterjee** in a Dhaniakhali from West Bengal, **Bibha Chowdhary** and **Debala Mitra** in Kanthas from West Bengal, **Bindu Bambah** and **Anna Mani** in phulkaris from Punjab, **Kamala Sohonie** and **Sumati Bhide** in Chanderis from Madhya Pradesh, **Abun Samuel** in a contemporary Pochampally from Andhra Pradesh, **Annutai Wagh** in an Ikkat from Andhra Pradesh, **Sarala Devi** in a Kasuti from Karnataka, **Mary Poonen Lukose** and **Darshan Ranganathan** in Patteda Anchus from Karnataka, **Silverine Swer** in Mekhala Chaddar from Assam, **Bimola Kumari** in Manipuri attire from Manipur, **Tage Rita** in Galo from Arunachal Pradesh and **Savitribai Phule** in a Maheswari Madhya Pradesh.

Paromita compered the show excellently, beginning with introduction of a Saree, its significance and importance in India, meaning associated with its design, fabric and color and importance of colour . This was followed by introduction of the vision, mission and activities of the Punarjeevana Trust, founded by Dr. Hemlata Jain. She guided the participants to catwalk the stage with a brilliantly crafted commentary blended with a visual display of backdrop and accompanied with an instrumental music track, leaving the audience spellbound.



Indian Woman Scientists' Association, leading names in ...  
Indian Woman Scientists' Associatio...  
www.youtube.com

<https://youtu.be/XcmXi1-Blxc>



Entrepreneur Revives Karnataka's Forgotten ...  
Textile expert Hemalatha J...  
www.thebetterindia.com

<https://www.thebetterindia.com/319900/textile-expert-revives-rare-ancient-handloom-weaves-in-karnataka/?fbclid=IwAR2xvDmDMJzsqLeI8DK8hzzzt-ELXbcahPsvHXhys3Z4ETSJzO8OocPjT74>

12:16 pm

**DAY 3: JUNE 13, 2023 - 9:30 am to 10:30 am**

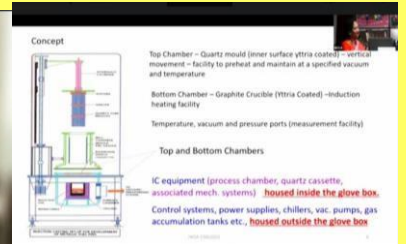
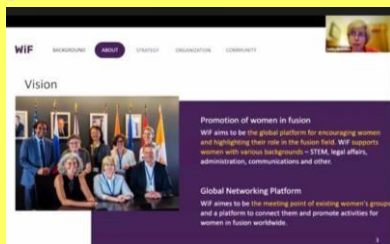
**SESSION 8: NUCLEAR SCIENCE AND TECHNOLOGY**

<b>Compered by</b>	<b>Ms. Vijaya Tilak</b> , member, IWSA EC	
<b>Chairperson</b>	<b>Dr. Sunita Mahajan</b> Chairperson, Board of Trustees, IWSA	
<b>Name &amp; Designations of Chairpersons/ Speakers</b>		<b>Title Of Talks</b>
<b>Speaker 21</b>	<b>Dr. Kitheri Joseph</b> , Associate Director, Metal Fuel Reprocessing Group, IGCAR, Kalpakkam, India	Metal fuel, pyroprocessing and waste management: a brief perspective
<b>Speaker 22</b>	<b>*Dr. Sehila Gonzalez de Vincente</b> Global Director, Fusión Programme, Clean Air Task Force, Boston, USA.	Nuclear Fusion - an attractive zero carbon source of energy

**Summary by the Chair**

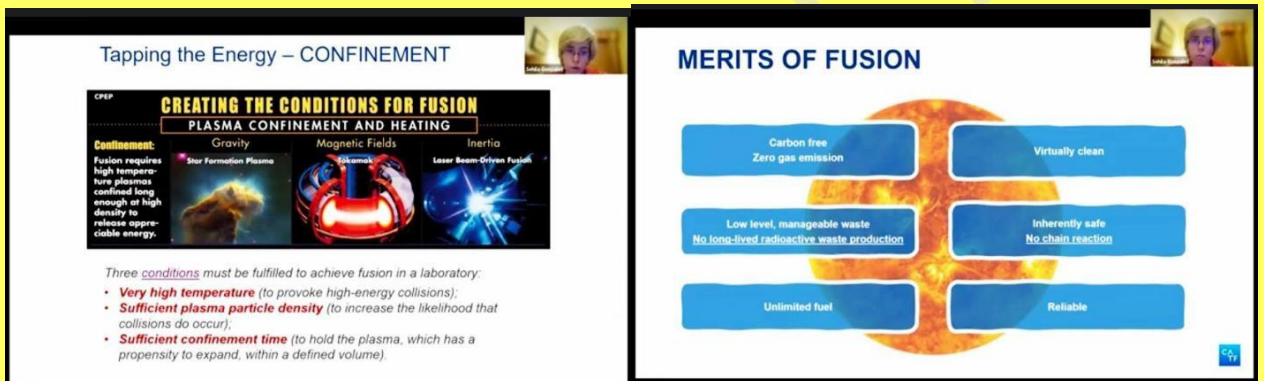
This session was chaired by Dr Sunita Mahajan and compered by Ms Vijaya Tilak.

There were two speakers, **Dr Kitheri Joseph**, Associate Director, Metal Fuel Reprocessing Group, IGCAR, Kalpakkam, India and Dr Sehila Gonzalez de Vincent, Global Director, Fusion Programme, Clean Air Task Force. Dr Kithery Joseph talked about ‘Metal Fuel, pyro-processing and waste management, a brief perspective.’ She discussed about how to produce fuels for nuclear fast reactors from treating the spent oxide fuels from light weight reactors into metal fuels to be irradiated into fast reactors. She described a new technique of pyro-processing, a high temperature electrochemical fuel processing technology for recycling the spent oxide fuel into metal fuel for fast reactors. Metal Fuel slugs containing Plutonium were produced by gravity casting process at NFC, BARC and supplied to IGCAR blanket slugs (932) mm long. She also talked about Iron Phosphate glass which is sturdier than normal glass. In addition to to Fuel fabrication and pyro-processing, lab experiments were demonstrated for the immobilization of simulated nuclear waste of fast reactors.



**Dr Sehila Gonzalez** gave on line lecture about 'Nuclear Fusion – an attractive zero carbon source of energy'. It was a very interesting topic, very apt in the present situation of reducing Carbon footprints. She explained about nuclear fusion, occurring when two light Atomic nuclei combine to form a heavier nucleus, and releasing energy simultaneously. This combination occurs only when the particles are sufficiently energetic to overcome the Coulomb repulsive force, for which a high temperature state called plasma, needs to be reached. Advantages of fusion is that zero gas emissions, clean, no long-lived radioactive waste, unlimited fuel. Dr Sehila also explained difference between Nuclear Fission and Fusion. Conditions for fusion require very high temperature plasma. This requires very highly complex systems producing more energy through fusion reactions than that required to maintain the plasma. The research in fusion reactors is being carried out by 35 countries together. The first reactor may materialise in 2035.

Thus, this was a very fruitful session discussing about management of nuclear waste management and nuclear fusion which is a zero- carbon proposition.



For more information on Session 5, kindly follow our link <https://youtu.be/NN13yDSVOb0>



**SESSION 9 : FELICITATION OF IWSA MEMBER ACHIEVERS - 11:00 am to 1:00 pm**

**Compered by**

**Dr. Nootan Bhakal, Treasurer, IWSA EC**

**Chairperson**

**Dr. Sunita Mahajan, Chairperson, Board of Trustees, IWSA**



Session 9: Felicitation of IWSA Members Achievers

Chairperson : Dr. Sunita Mahajan

www.youtube.com

<https://youtu.be/Ak5dfemPH3g>

1:18 pm



**OUR ROLE MODEL FOUNDER MEMBERS**

**Dr. Sudha Padhye**

In gratitude for always being there with us as a Guardian Angel in all our trials and tribulations, and for all the encouragement and motivation given in need based situations, and most importantly playing the crucial role of nurturing this Institution to its present stature.

**Dr. Lalit Narurkar**

In gratitude on the joyous occasion of IWSA completing 50 years on the path of spreading Science awareness in the Society, a dream fulfilled and for being an integral part of the team to conceptualise IWSA and its visionary impact.

**SENIOR MEMBERS WHO IMMENSELY CONTRIBUTED TO IWSA ACTIVITIES**

**Dr. Mahtab Bamji**

In gratitude for gracing this joyous occasion of our IWSA's Golden Jubilee celebrations and to acknowledge the guidance given to us during this period, besides encouragement to follow our mandate of spreading Science awareness in the Society.

**Dr. Niyati Bhattacharyya**

In gratitude for the unbounding, remarkable energy and dedication to IWSA's cause, besides the perennial flow of support, appreciation and guidance for progression in accordance with mission and vision of our organisation.

**Dr. Anuradha Gadkari**

In gratitude for gracing this joyous occasion of our IWSA's Golden Jubilee celebrations and to honour the guidance given to us during this period, besides encouragement to follow our mandate of spreading Science awareness in the Society.

**Dr. Usha Thakare**

In gratitude on the joyous occasion that our IWSA is completing 50 years on the path of spreading Science awareness in the Society, we sincerely appreciate your contributory role in being especially instrumental in nurturing our ECCE course in the initial stages. On this momentous day, we honour you for all the guidance you have given us.

**IWSA MEMBERS WITH EXEMPLARY CAREERS FROM HEAD QUARTERS AND BRANCHES**

**Dr. Anuradda Ganesh**

In recognition of contributions in the field of Thermo Chemical Conversion of biomass, alternate fuels in engines, solid and liquid waste to energy and energy management.

**Dr. Bindu Menon**

In recognition of contributions in the field of Neurosciences and providing specialised neurological services, treatment & awareness of stroke in the free medical camps in remote villages of Andhra Pradesh.



**Dr. Jyotirmayee Mohanty**

In recognition of contributions in the field of Supra Molecular / Bio-molecular assemblies, Fast Photophysical and Photochemical processes, Synthesis and Characterization of Surface-Functionalized Metal Nanoparticles.

**Padmashri Dr. Rohini Godbole**

In recognition of contributions in the field of Elementary Particle Physics, especially hadronic structure of high energy photons that has implications for design of future electron proton colliders .

**Dr. Nupur Bahadur**

In recognition of contributions in the field of Photocatalysis and Photo-electrocatalysis and resourcing these efficient technologies for waste water management.

**Dr. Seema Purohit**

In recognition of contributions in the field of Computer Mathematics and Statistics and building educational institutions.

**Dr. Shubhada Nayak**

In recognition of contributions in the field of Microbiology research and spearheading academic institution towards excellence in holistic education.

**Dr. Susan Eapen**

In recognition of contributions in the field of Plant Biotechnology and Transgenic Plant research. As one of the early women in plant tissue culture technology and recognition amongst the world's top ranking scientists.

**Dr. Niranjana Chavan**

In recognition of contributions in the field of Mangrove Ecology and conservation of coastal resources which has made an immense impact leading to medicinal and nutritive values of the mangrove fruit.

**Dr. Gita Sharma**

In recognition of contributions in the field of Virology, training, development of diagnostics technologies & as one of the early women virologists in the country.

**Dr. S Kalavathi**

In recognition of contributions in the field of High Pressure Physics; for fostering, teaching and assisting career developments of many educationally deprived children.

**Dr. Saswati B Roy**

In recognition of contributions in the field of Front End Nuclear Fuel Chemistry, from milling of ores to conversion of the separated material into nuclear grade.

**Dr. Archana Sharma**

In recognition of contributions in the field of High Power Microwave, Flash X-ray, and Industrial Electron Beam Accelerators. Your work has been recognized Internationally along with 74 other women engineers.

**Dr. Dhanashri Sagar Patil**

In recognition of contributions in the field of Botany and spreading awareness for environmental protection, education, motivation to develop mangrove tourism and public gardens for empowering women.

**Dr. Shobhona Sharma**

In recognition of contributions in the field of Malaria research and Immunology particularly for work on identifying antibodies to develop natural immunity to malaria to impact future vaccine development.

**Dr. Mangala Narlikar**

In recognition of contributions in the field of Mathematics & for simplifying maths teaching for educationally deprived children.

**FIRST CONVENORS OF BRANCHES TILL YEAR 2000.**

**Dr. Kamallesh Sulebka from Roorkee**

On the joyous occasion of IWSA's Golden Anniversary we wish to honour you for being one of the first members to start a new branch and take IWSA on a National level.

**Dr. Leela Bhosale from Kolhapur**

On this momentous day of IWSA is completing 50 years on the path of spreading Science awareness in the Society, we wish to honour you for being one of the first members to start a new branch and take IWSA on a National level.

**SESSION 10 : PRESENTATIONS BY "BEST POSTER" AWARDEES – 2.00 pm to 4:00 pm**

**Compered by** Dr. Maitrayee Paul, IWSA member

**Chairperson** Dr. Devaki Ramanathan,  
Member, Board of Trustees, IWSA

**Distribution of Prizes to Winners of "Best Poster" Presentation**

The names of the Best Poster awardees are as follows:

1. EVOS2... **Biodegradation of polyhydroxybutyrate based bioplastic by an indigenous tropical marine Actinomycete**

**Anjulal**, Mamata Singhvi, Rajendra Patil, Smita Zinjarde  
Department of Biotechnology (with jointly merged Institute of Bioinformatics and Biotechnology),  
Savitribai Phule Pune University, Pune, India [anjulal.h@gmail.com](mailto:anjulal.h@gmail.com)

2. BIOL4... **Aloe vera (L.) Burm. f. extract ameliorates diabetic and obesogenic milieu in WNIN/GR-Ob rats through the restoration of  $\beta$ -cell function and lipid metabolism**

**Deora Neha** 1, Sunitha M.M 2, Satyavani. M 3, Harishankar. N 3, Vijayalakshmi. Mookambeswaran A 1, Venkateshan Vijayalakshmi 2, Venkataraman Krishnan 1  
1 Centre for Bio-Separation Technology, Vellore Institute of Technology, Vellore, Tamil Nadu, 2 Stem cell Research, National Institute of Nutrition, Hyderabad, Telangana, 3 Animal facility, National Institute of Nutrition, Hyderabad, Telangana, India [neha25deora@gmail.com](mailto:neha25deora@gmail.com)

3. HEOL1... **Caregiver Burden, Quality of life and Depression: A comparison between older and younger caregivers of primary palliative care patients in Kerala**

**Dr Arsha V R (ArshaKochuvilayil)**, Dr Ravi Prasad Varma, Achutha Menon Centre for Health Science Studies, Thiruvananthapuram, India [arshavr@sctimst.ac.in](mailto:arshavr@sctimst.ac.in), contactarshavr@gmail.com, rpvarma@sctimst.ac.in

4. TEOS3..... **Design and development of functional amyloid-based hydrogels as a versatile drug-delivering depot**

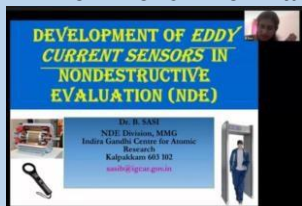
**Komal Patel** and Samir K. Maji  
Department of Biosciences and Bioengineering, IIT Bombay, Powai, Mumbai, India

5. TEOS6... **Development of Eddy current sensors for quality control of Nuclear components**

**B.Sasi**, S. Thirunavukkarasu and Anish Kumar Non-Destructive Evaluation Division, Indira Gandhi Center for Atomic Research, Kalpakkam, 603102, TN, India [sasib@igcar.gov.in](mailto:sasib@igcar.gov.in) ; [sta@igcar.gov.in](mailto:sta@igcar.gov.in) ; [anish@igcar.gov.in](mailto:anish@igcar.gov.in)



For more information kindly follow our link <https://youtu.be/idviJgzR5WI>



**Message to  
"Scientists of  
Tomorrow"**

**Ms. Marja Einig,**  
Deputy Consul General, Consulate of the Federal  
Republic of Germany in Mumbai



For more information kindly follow our link  
<https://youtu.be/idviJgzR5WI>



**VALEDICTORY SESSION - 4.30 pm to 6:00 pm**

<b>Compered by</b>	Ms. R. Bhuvaneshwari, Member, IWSA EC	
<b>Chairperson</b>	Dr. Shyamala Bharadwaj, Vice President, IWSA	
	<b>Name &amp; Designations of Speakers</b>	<b>Title Of Talks</b>
<b>Valedictory Address</b>	<b>Dr. Archana Sharma</b> Director, Beam Technology Development Group, BARC, Professor, HBNI, Mumbai, India	BARC Technology Solutions for Sustainable Development
<b>Feedback and Concluding Remarks</b>	<b>Dr. Surekha Zingde</b> , Member, Board of Trustees, IWSA <b>Dr. Sudha Rao</b> , Treasurer, Board of Trustees, IWSA	



For more information kindly follow our link <https://youtu.be/idviJgzR5WI>



## TRIENNIAL CLOSING REMARKS

**Dr Surekha Zingde**

**Trustee, IWSA**

Good evening friends,

This is the concluding session of the XV Triennial and III International Conference of IWSA. An event which marked the closing of the yearlong celebrations of the 50 year milestone of our IWSA.

Over the last two days you have heard the story of the inception of IWSA and its 50 year saga and celebrated with us the members of the IWSAHQ and its 11 branches the achievements of the many women who are soaring on the wings of change. The book on the 50y history of IWSA, an immense effort by Lalitha, Devaki, Bakhtaver M, Niyati Bhattacharya and several of our senior members would not have been possible without their deep commitment. The film showcasing the 50y Saga of IWSA was spear headed by Nootan Bhakal. These two compilations together placed the past five decades of IWSA in a nutshell. The book on Millets by our members lead by Vijaya Chakravarty, Sweedle Shivkar under the guidance of Dr. Susan Eapen was an apt contribution of IWSA for the International year of Millets

We at the IWSA HQ have made efforts to bring together in person & online all our members, well wishers, donors and the many who have contributed to our mandate to take science to society.

**Our motto for this year has been to look back to look forward and soar.**

So in this **concluding session we now look back over the past two days.**

This is an opportune time to say thank you to all who joined us for this event.

Our founder member, Dr. Sudha Padhye, your warm smiles of happiness is an acknowledgement that we have made your dream come true. We look forward to your continued guidance over the years that follow.

The Association has reached its 50<sup>th</sup> year and is now embarking towards its platinum jubilee.

Dr. Padhye has at the Felicitation of the IWSA Member Achievers very aptly shared her thoughts on how IWSA should function to meet the mandates of the founders. Thank you Madam.

Dr. Ruma Ghosh, from Kolkatta thanked all the IWSA members for organizing a wonderful 3 day event, where she saw and learnt from all the senior and junior colleagues how to work as a team. The lectures from invited speakers covered a topics from basic scientific concepts to applications, entrepreneurship, women in different scientific spheres and space missions too.

The Triennial has been possible with the national and international scientists joining us to share their science with us and showing us that Women can be at the helm of their professions. We at IWSA express our immense gratitude to them for joining us.

The main member behind this effort was Dr. Shyamala Bharadwaj who identified the speakers, connected with them from the very beginning to the final lectures. **This series of lectures was the main backbone of the program.** Thank you very much for your efforts Shyamala.

For the participants with their posters, I thank you all for the efforts you have put in to show case your work and we hope that you have benefitted from the feedback received from all the other participants. Thank you so much for considering this forum for presenting your work. We have all learnt a lot from each one of you.

It has been wonderful to meet with several of the members from our branches in Kalpakkam, Baroda, Amravati, Kolhapur, Hyderabad who could come in person and those who joined us online. Dr. Jemimah, & Shivakami, from K, Dr. Hema from B, Dr. Deepalakshmi from Amravati, Dr, Nirajana and Dhanashri from K, Dr, Ratna, Gita , Dr. Bamji from H. Thank you for joining us to celebrate the 50y of IWSA.

Any scientific event without a break can really break you. But this was not to be. The beautiful dance performance choreographed by Smt Gayatri Subramaniam and the dance performed by her excellent young team of dancers enthralled all of us.

Our own Textile show which brought together young and old across IWSAHQ walking the ramp stole the show. Thank you Rita for this event. It is apparent that it is never too late to walk the ramp. In every event we **have strong leaders from the front and some strong quiet ones from behind the scenes.**

You have had the opportunity to hear our President, RM our Vice President, SB and our Convenor LD and several of our Trustee members who have been steering this event.

This is an opportune time to acknowledge the immense efforts of **our strong quiet ones.** We would be lost without them. Dr. Suparna Kamath who along with Sukhvinder Vini Sandhu, Dr. Sheela Donde, and the team handling the abstract, posters and you name it, Priya Jacob for the souvenir, Vijaya Tilak, Tripta Tewari from the badges to the awards, they have been working quietly to ensure that we have all the requirements in place. Handling of the registrations, the continuous dialogue with the participants, and the printers, the event managers, River route would not have been possible without their continuous push and constant supervision.

Our volunteers at the registration desks managed the many who arrived on the first day. Your patience and warm greetings ensured our guests were well received.

The excellent arrangements by Madhu Pawha and her team for the arrangements in the hostel and the food courts. Their constant supervision ensured everything was perfect.

Our staff in the administration and accounts, lead by Sangita Potdar and Vaijayanti Bhosekar we could not have done it with you. All our other staff from the different activities have joined in to contribute with their efforts too.

Each and every member of our IWSA staff have come forward willingly to ensure these three days went on smoothly

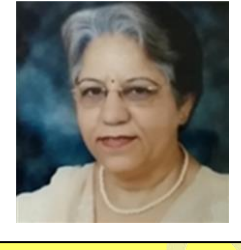
This event has been possible with financial support from our sponsors, TCS, LIC, BRNS, and many others, some of them joined us on our campus with their stalls. IWSA expresses their participation with many thanks. We have made new friends in this process

In closing, this year would not have been possible without the perseverance and passion with which Dr. Lalitha Dhareshwar, Chairperson of the GJC and Convenor of the Conference has ensured that the 50<sup>th</sup> year of IWSA will be remembered. I request you all to please join me in giving her a standing ovation.

Thank you one and all. We will meet again soon.

## POEM ON IWSA

Ms. Madhu Pawha, Secretary, IWSA



आओ आओ साथियों,  
मिलकर बोलो ।  
इवसा हम सबका प्यार है ।  
बिना एक सपना , डॉ. सुश्री शिंदे ने लेकर १२  
विह्वलाओं के साथ ।  
बनायेगे एक गर्लस हाॅस्टल लेकर सबको साथि हस्ते में,  
छेया के,  
क्षेत्र या है । एक ही विं  
उद्देश  
के वक्ता का प्रचार ।  
संरी ची उडान । हदन हो या  
रात  
करना है ब का ही का । हूहम  
५० के  
जाना है १००+ तक ।  
क्या सोच हो कौन करेगा  
?  
अहम कैसे तु करोगे ।  
आओ आओ बढ़ते चलो लेकर  
सबको साथि ।  
बनाना है इवसा बलवान । इवसा हम सबका  
प्यार है । इवसा हम सबका प्यार है ।  
क्योंकि इवसा हम सबका प्यार है

## **TRIENNIAL PRESS RELEASE REPORT**

In the early seventies, 12 women scientists from various scientific disciplines and different scientific institutions of Mumbai had realized that it was not fulfilling enough to only conduct laboratory experiments and publish from ivory towers. There was a dire need to convey the ethos of science and technology for the upliftment of women and the underprivileged class of society. So, they came together and registered Indian Women Scientists' Association (IWSA) on 13th June, 1973. **Thus, IWSA completed fifty years of dedicated service to Science and Society on the 13th of June 2023.**

IWSA, a non-profit organization with a goal to take science and scientific practices to the society, completed 50 years of existence recently. As the grand finale of the year-long Golden Jubilee Celebrations (GJC), the *XV Triennial & III International Conference of IWSA* titled '**Women in Science & Technology Soaring in the Wings of Change**' was organised on hybrid platform at IWSA's ICICI Multipurpose Hall in Vashi, Navi Mumbai from 11th to 13th June 2023. It was truly a unique conference showcasing women of excellence in STEAM and how multidisciplinary sciences converge on a common vision for dissemination of knowledge. It was heartening and inspiring to have one of the 12 founders Dr. Sudha Padhye, grace the occasion in person so as other life members Ms Kumudini Balakrishnan, Drs. Mehtab Bamji, Niyati Bhattacharyya, Sunita Mahajan, Sudha Rao, Devaki Ramanathan, in their eighties, Drs. Bakhtaver Mahajan, Susan Eapen, Surekha Zingde, Lalitha Dhareshwar, Ms Madhu Pahwa, in their seventies energetically participating in the conference. There were close to 200 participants including members and other mid-level scientists and students. IWSA has 11 branches and close to 2200 members (iwsa.net).

The conference began with the befitting keynote speaker, Dr. N. Kalaiselvi, Director General, CSIR Laboratories and Secretary DSR. She outlined the efforts and policies of the government to support and encourage women scientists to excel and grow in their professional career ladders. Two seminal books and a film on IWSA were released during the inaugural session. The book entitled 'The Fifty-Year saga of the Indian Women Scientists' Association' describing the journey of IWSA over the five decades through interesting narrations and photographs, was released by Dr. Pheroza Godrej, Chairperson, Godrej Archives Council & Advisor, Godrej Mangroves. She applauded the efforts of IWSA in spreading science to the societal level, especially in fostering young students in science and assured support from the Godrej Foundation in future. The second book entitled 'Millets for Children: Rhymes, Recipes and Resources for All Ages' describing the various millets and their nutritive values through play way was released by Ms. Mini Ipe, MD, LIC of India. She congratulated IWSA for publishing this book as a tribute to the International year of millets. The 30 minute film on IWSA activities was released by clicking the link button by Dr. Sudha Padhye and later felicitating the film maker Mr. Sourav Datta.

Speakers of first day spanned over recent Noble prize winning subjects of CRISPER, Click chemistry, to Quantum world, Polynomials, mRNA vaccines and others. Second day showcased technological contributions of women in nuclear energy, prospects in fusion energy, challenges of women in Mars Orbiter Mission, secrets of early universe with James Webb Space Telescope to societal applications of space technology. While there was one session to listen from young entrepreneurs & innovators, another stirred up discussions on mitigating challenges as women in software industry. Shift in outlooks, flexible timing, work from home alternatives, restarting after breaks in career due to motherhood were discussed. The poster sessions provided opportunity to several (48 posters on site and 12 posters online) young women scientists to showcase their work, interact in person with subject experts and meet role models. Four posters were adjudged as best based on several criteria set by the judges. Golden Jubilee awardees and member achiever awardees were announced and felicitated by the Trustees on the final day.

All three days there were multi state gastronomic delights served to soothe body and mind. The evening cultural programs subtly highlighted the need to have a holistic approach in life. Young students of Smt Gayatri Subramanian of Guru G.V. Ramani Natya Kala Foundation performed 'Draupadi'. On the eve of 50<sup>th</sup> birthday of IWSA thirty seven models (members and supportive staff) walked as famous Indian women scientists of the 19<sup>th</sup>, 20<sup>th</sup> & 21<sup>st</sup> centuries for the show titled 'Heritage Textiles: Look back to move forward'. Conceptualized by Dr. Rita Mukhopadhyaya, President, IWSA, this unique show was put together by young talents from SNDT University, Juhu and ITM, Kharghar, under the guidance of Dr. Hemalatha Jain, founder Punarjeevana Trust, and a participant in the conference. The onward journey and growth of the association was marked by planting a sapling of *Stericulum varieta* a symbol of unity in diversity as like the essence of members of IWSA.



TRIENNIAL 2023 PRESS RELEASES

**SEMINARS, WORKSHOPS & CONFERENCES**

**Indian Women Scientists Association (IWSA)**  
Celebrating 50 Years of Service for Society

**XV Triennial & III International CONFERENCE**  
on  
**11<sup>th</sup> June, 2023 - 13<sup>th</sup> June, 2023**

**Women in Science & Technology Soaring on the Wings of Change**

Venue: IWSA's ICICI Multipurpose Hall, Sector 10A, Plot No. 20, Vashi, Navi Mumbai

Registration Open at: [www.iwsa.net/annual-conference/](https://www.iwsa.net/annual-conference/)  
Contact us: 9320632284  
Registration closes on 10<sup>th</sup> June, 2023 at 05:30 pm  
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**Beed boy out of town, to be detained on return**

Mohammed Akhbar@timesgroup.com

Chhatrapati Sambhaji Nagar: A bandh called by some right-wing organisations in Ashli town of Beed district on Friday in protest against a 16-year-old boy's social media post regarding Aurangzeb was peaceful. Police said no untoward incident was reported in the town during the bandh, during which most trade and businesses remained closed. The teenager had subsequently deleted the post.

Three days ago, the display of Aurangzeb's posters in Ahmednagar district and a social media post glorifying Tipu Sultan in Kolhapur had triggered violence. Keeping this in mind, the Ashli police registered an FIR against the teenager who is currently out of the town.

The police also contacted a relative of the boy and informed him about the fallout of the post and the FIR. "The boy will be detained when he returns to the town and produced before the child welfare committee for a remand in a correction facility meant for children," an officer said.

This PDF was uploade To Telegram channel\_LBS Newspaper platform ([@LBSNEWSPAPER](https://t.me/LBSNEWSPAPER))



**XV TRIENNIAL & III INTERNATIONAL CONFERENCE OF INDIAN WOMEN SCIENTISTS' ASSOCIATION (IWSA)**

**on Women in Science & Technology Soaring on the wings of change**

11th to 13th June, 2023 Venue: IWSA'S ICICI Multipurpose Hall Sector 10A, Plot No.20, Vashi, Navi Mumbai

Registration open at : <https://www.iwsa.net/triennial-conference>  
<https://www.youtube.com/@indianwomenscientistsassoc6218>  
<https://www.facebook.com/profile.php?id=100075640548&mbextid=ZBWKwL>

**IWSA celebrates Golden Jubilee with three-day international conference**

The Indian Women Scientists' Association (IWSA) is celebrating its 50th anniversary with a three-day international conference. The event is being held at the ICICI Multipurpose Hall, Sector 10A, Plot No. 20, Vashi, Navi Mumbai, from June 11 to 13, 2023.

The conference is a significant milestone for the organization, which has been dedicated to promoting women's participation in science and technology since its inception in 1973. The theme of the conference is "Women in Science & Technology - Soaring on the Wings of Change".

The event will feature a variety of activities, including seminars, workshops, and a fashion show. It will also provide a platform for women scientists from across the world to share their research and experiences. The conference is expected to attract a large number of participants, including scientists, students, and professionals from various fields.

**श्रीलता शरदकानी संशोधनात्मक प्रगती सरकारी संस्थानों में प्रेरक संकेतिकावली**

श्रीलता शरदकानी, एक प्रमुख वैज्ञानिक, ने अपने शोध कार्य में प्रगति के संकेतिकावली को प्रदर्शित किया। यह अवसर विशेष महत्वपूर्ण है, क्योंकि यह न केवल वैज्ञानिकों को प्रेरित करता है, बल्कि समाज में भी जागरूकता फैलाने में मदद करता है।

**Women scientists showcase Indian handloom sarees in fashion show for IWSA's golden jubilee celebration**

By Indrani Basu

Vashi witnessed a captivating fashion show where senior women scientists proudly showcased themselves in beautiful women Indian handloom sarees. As part of the Golden Jubilee Celebration of the Indian Women Scientists' Association (IWSA), the three-day international conference held at the association's premises, provided a platform for 37 women senior scientists to take centre stage and mesmerize the audience with their catwalk.

The fashion show was organized in collaboration with Punarjeena, a trust dedicated to promoting local crafts and providing sustainable livelihoods to artisans. The aim was to promote sarees woven and designed by local weavers from across India. The event displayed over 20 varieties of sarees, including Banarasi Silk, Chanderi, Kanjeevaram, Baluchari, Dhakai Jamdani, Mysore Silk, Patola, herloom Gara, Phulkari, Ikkal, Bomkai, Kolpad, and even revived sarees like patola (arch).

The esteemed women scientists of the IWSA had the honour of wearing sarees representing legendary and prominent female scientists of India, such as Dr. Anandibai Joshi (the first Indian woman to obtain a medical degree), Dr. Hansa Mehta (the first female Vice-Chancellor of Baroda University), Dr. Ashima Chatterjee (the first female recipient of a Shanti Swarup Bhatnagar Prize in Chemical Science), Dr. Kamala Sothonee (the first Indian woman to receive a PhD in a scientific discipline), and many others.

The scientists expressed their appreciation for Dr. Hemlatha Jain, President of Punarjeena, for her dedication and sincere efforts in empowering weavers and artisans across the country.

Dr. Rita Mukhopadhyaya, President of IWSA, commented on the prestigious event, stating, "As part of the year-long Golden Jubilee Celebration of the Indian Women Scientists' Association (IWSA), we are organizing the XV Triennial & III International Conference from 11th to 13th June 2023 at our association premises. The theme of the conference is 'Women in Science and Technology - Soaring on the Wings of Change'. We have successfully connected with hundreds of lady scientists offline and online, and a large number of women scientists and technologists who have achieved remarkable heights in their scientific and technical professions will be speaking at the event."

**इंदिरा बसु: महिला वैज्ञानिकों ने भारतीय हाथोद्योग के शरारों को प्रदर्शित किया**

वशी में एक आकर्षक फैशन शो में वरिष्ठ महिला वैज्ञानिकों ने अपनी सुंदर भारतीय हाथोद्योग शरारों को प्रदर्शित किया। यह कार्यक्रम IWSA के स्वर्ण जयंती उत्सव का हिस्सा है।

**Swami Vivekananda Foundation, Navi Mumbai**

**Spiritual Retreat**  
On Sunday, 26th July '23  
From 9 AM to 10 PM

To be conducted by Swami Vivekananda, Founder, Swami Vivekananda Foundation, Navi Mumbai.

Kindly register your name by calling 89199 57672

**III International Conference successfully concludes with active participation of women scientists from around the world**

By Indrani Basu

The XV Triennial and III International Conference of the Indian Women Scientists' Association (IWSA), held at the ICICI Multipurpose Hall, Sector 10A, Plot No. 20, Vashi, Navi Mumbai, from June 11 to 13, 2023, was a resounding success. The event was attended by over 100 women scientists and technologists from across the world, including India, the USA, Germany, Bangladesh, and France.

The conference was a significant milestone for the organization, which has been dedicated to promoting women's participation in science and technology since its inception in 1973. The theme of the conference is "Women in Science & Technology - Soaring on the Wings of Change".

The event featured a variety of activities, including seminars, workshops, and a fashion show. It provided a platform for women scientists from across the world to share their research and experiences. The conference was a great success, and it is expected to attract a large number of participants in the future.

**IWSA meet on 'Women in Science & Technology'**

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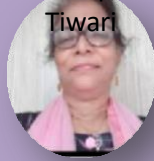
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## **LOOKING AHEAD AT IWSA TO SOAR....**

‘Coming together is the beginning, keeping together is progress, working together is success’.

In togetherness we marched our journey till gold.....we look forward to strive with tireless wings in the forthcoming decade towards the diamond timeline, with the same zeal and enthusiasm as our founders conceptualised the vision of IWSA and executed its mission with passion.

We appeal for integrated efforts of one and all to come forward and become our members, render their volunteering time and support our activities through philanthropic donations to make IWSA more worthy of its cause.

Do visit our website [iwsa.net](http://iwsa.net) or write to us with specified subject on [iwsahq@gmail.com](mailto:iwsahq@gmail.com).



This Proceedings is Compiled by Triennial and IWSA Secretary

on behalf of

Organizing Committee

IWSA's XV Triennial and III International Conference 2023 on

**Women in Science & Technology Soaring in the Wings of Change'**



Courtesy: Google



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