SRM
INSTITUTE OF SCIENCE & TECHNOLOGY
(Deemed to be **University** *u/s 3 of UGC Act, 1956)*

REACH

WORLD ENVIRONMENT DAY 2024

3rd June to 10th June

THEME – LAND RESTORATION, DESERTIFICATION AND DROUGHT RESILIENCE

ORGANIZED BY

CENTRE FOR RESEARCH IN ENVIRONMENT, SUSTAINABILITY ADVOCACY AND CLIMATE CHANGE (REACH)
DIRECTORATE OF RESEARCH

SRM INSTITUTE OF SCIENCE AND TECHNOLOGY
KATTANKULATHUR – 603203

World Environment Day 2024

The primary objective of WED for this year is to rehabilitate deteriorated areas by implementing reforestation, sustainable land management practices, and utilizing indigenous plant species. To combat desertification, it is necessary to raise awareness, implement effective legislation, and adopt sustainable behaviors in order to reverse the process of land deterioration. Improving drought resilience involves implementing early warning systems, practicing water conservation, and cultivating drought-resistant crops. Nations are strongly encouraged to incorporate these topics into their domestic policy, fostering global collaboration and involvement of local communities. Research and innovation are essential for the development of solutions and the optimization of resource management.

World Environment Day 2024 was commemorated at SRM Institute of Science and Technology, Kattankulathur campus as a seven-day event, spanning from June 3rd to June 10th, 2024. The event was organized by the Centre for Environment, Sustainability Advocacy and Climate Change (REACH), in collaboration with the School of Public Health, the Medical College, the College of Agricultural Sciences, the School of Hotel Management, UHV cell, NSS, and the School of Pharmacy. The purpose of the event was to showcase and apply the interdisciplinary expertise of SRM IST's various departments in order to achieve a specific and tangible result. An important factor is that the environment is a matter of concern for everyone, and addressing environmental consequences requires collaboration across all sectors.

Inaugural and lamp lighting by Prof. B. Neppolian (Dean - Research), Dr. Veeragowthaman, (Dean - physiotherapy), and Prof. Paromita Chakraborty (Head - REACH) held in MBA hall, SRMIST on 3rd june 2024

Programme Schedule

Date	Time	Programme Name	Students/ Research Scholars/ Faculties	Location
Day 1 (June 3)	10.00 am	Workshop on Physiotherapy for a Healthier Lifestyle	Non-teaching Staffs	MBA Seminar Hall
	1.00 pm	Waste to Wealth – Competition	Teaching& Non-teaching Staffs	School of Architecture
Day 2 (June 4)	8.30 am	Tree Plantation	All SRMIST	SRM Rural Health Centre Mamendour
Day 3 (June 5)	8.00 am	Outreach on Tracking and Segregating Plastic from Trash	All SRMIST	Adayar River
Day 4 (June 6)	8.30 am	Rally	All SRMIST	SRMIST Campus
Day 5 (June 7)	10.00	Online Competition	All SRMIST	
Day 6 (June 8)	9.30 am	**Workshops** 1. Fireless cooking 2. Seed Ball Making 3. Terrarium 4. Resin art with dry flowers 5. Indoor plants and sale	Faculties and their children	SRM Urban farm Centre
Day 7 (June 10)	2.30 pm	**World Environment Day 2024** Celebration	All SRMIST	T. P. Ganesan Auditorium Mini Hall I

Awards for Faculties

1. SRM Clean Air research Award
2. SRM Green Environmental Award
3. SRM Phoenix award for reutilization of waste to value
4. SRM Revolutionary research on clean water sustainability Award

Awards for Research Scholars

1. Clean Air
2. Conservation of Greener Environment
3. Reutilization of waste to value
4. Revolutionary research on clean water

Competitions (Students & Research Scholars)

1. Students Outreach program towards Management of water/Plastic Pollution/Climate Action
2. Technological Innovation on Management of Water/Plastic Pollution/Climate Action
3. Awareness Video / Short Films on" Impact of Drought resilience & Desertification on environment"
4. Poster presentation on "Sustainable Technology for Restoration of land"
5. Slogan / Poetry Competition on "Organic farming and biodiversity"
6. Candid Clicks inside SRMIST – Best Phone Photography
7. Essay competition on "Land restoration techniques and their impact on Environment?"
8. Green to Heal – Cooking competition- a rejuvenating recipe
9. Debate on "Causes and remediation for infertility of agricultural land"
10. Environmental Audition on Best Practices (For Kids Under 18 Years)

DAY 1: WORKSHOP FOR SRMIST LABOURS

Number of Participants : 82 members

The program commenced with an initial session to underscore the importance of waste management in safeguarding our environment. Attendees were instructed on the adverse consequences of incorrect waste management on our environment, public well-being, and the worldwide ecology. In order to enhance the accessibility and clarity of waste segregation, we conducted demonstrations illustrating the proper categorization of trash into several groups, including recyclables, non-recyclables, organic, and hazardous waste. The interactive sessions effectively eliminated uncertainties and ensured the participants could confidently separate garbage in their regular activities.

Workshop aimed at promoting waste awareness among SRMIST campus labors and other workers held in MBA hall, SRMIST on 3rd june 2024

We provided instruction to the labor force regarding the significance of utilizing specifically designated waste receptacles, refraining from littering, and properly disposing of dangerous substances. Ensuring cleanliness and organization at waste collection stations is essential. In addition, they were instructed on the significance of promptly reporting any problems regarding garbage disposal facilities to the management. The program extended beyond simple classification and disposal; it advocated for sustainable habits such as decreasing the use of disposable plastic, reusing products whenever feasible, and lowering waste production through deliberate decision-making.

The Physiotherapy session began with an enlightening lecture on the impact of stress on both physical and mental well-being. Participants were informed about the several stressors they may face in their everyday work and the potential effects of these stressors on their overall well-being. In order to assist our workers in relaxing and efficiently coping with stress, the physiotherapy faculties educated them with a variety of relaxation techniques. The activities encompassed deep breathing exercises, stretching routines, and mindfulness meditation. Participants were urged to actively participate in these strategies, both during the class and in their daily lives. The physiotherapy session also aimed to alleviate prevalent bodily discomforts and pains that may arise from labor-intensive work.

Physiotherapy Session for SRM IST Laborers held in MBA hall, SRMIST on 3rd june 2024

Day 2: Tree Plantation Program

Number of Participants : 40 members

A tree plantation event was conducted on June 4th at SRM Rural Healthcare Centre, Mamandoor village, Chengalpattu to fulfill the dual purpose of appreciating the aesthetics of nature and strengthening our dedication to preserving the environment. This event represented a modest stride towards a more environmentally friendly and enduring future.

The ambiance was brimming with anticipation and fervor as individuals of various age groups united to create a constructive influence on our surroundings. We used meticulous deliberation in choosing the tree species for the plantation. This strategy enhances biodiversity and facilitates the optimal growth of newly planted trees within their native environment. The event served not only as a tree planting activity but also as a means to enlighten our community about the significance of trees in our ecology. We have knowledgeable specialists available to offer valuable information on the significance of trees in carbon sequestration, air purification, and the preservation of ecological equilibrium.

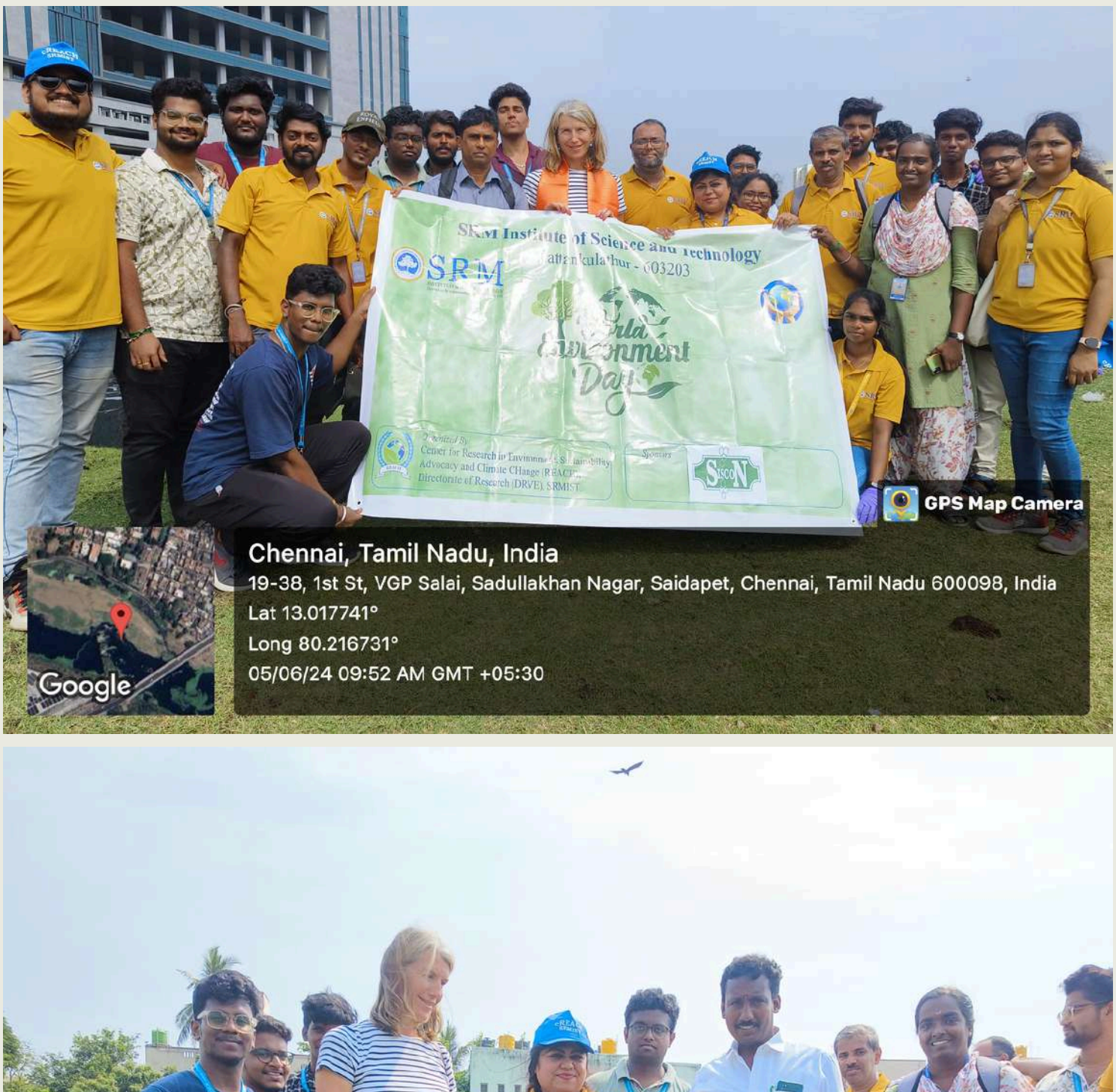
Tree planting campaign in SRM Rural Healthcare Centre, Mamandur village on 4th June 2024 as part of World Environment Day 2024

Attributing a significant portion of the success of our tree planting event to the active participation of the community is a significant accomplishment. Participants included families, students, and faculties of SRMIST all of whom came together to demonstrate their dedication to the preservation of the environment. It is encouraging to observe the cohesiveness and commitment with which everyone worked together to achieve a similar objective.

Day 3: Outreach Programme

Number of Participants : 30 members

Smart sensors, equipped with sophisticated imaging and chemical analysis capabilities, are capable of detecting and distinguishing different types of plastic waste in Adyar river. This automated segregation process facilitates efficient recycling and disposal, ultimately contributing to cleaner rivers and a more sustainable environment.



Installation of Smart sensor based plastic segregation model on Adyar river in the presence of Ms. Beate Langset, Counsellor, Norwegian Embassy, New Delhi and Mr. Mohan Raja, Municipal Councilor at Adyar riverbank, Saidapet, Chennai on June 5th 2024

We conducted a demonstration on the collection and segregation of plastic from a river, helping students understand the real-time challenges of implementing this working model on a larger scale. Additionally, we addressed the need for real-time research in society and provided a detailed understanding of the gap between lab-based technology and real-world application. Both guests shared insights about current technologies being implemented and discussed the research support from respective government sectors, which motivates future generations to willingly work on sustainable technology.

Day 4: Rally

Number of Participants : 120 members

We organized an impassioned gathering to enhance consciousness regarding environmental obstacles and stimulate constructive transformation inside our community. This rally demonstrated our strong dedication to protecting our planet for both present and future generations.

On the beautiful morning of June 6th, members of our community gathered at SRM Medical College, where they were decked with banners, placards, and props that were environmental-friendly. Students were carrying placards and banners that were embellished with appealing slogans and instructive messages on the necessity of sustainable practices, climate change, biodiversity loss, and waste reduction. Not only did the rally encourage passive involvement, but it also made it possible for people to actively participate. One of the most notable highlights was the participation of young people. Both their enthusiasm and their dedication served as a source of motivation for everyone.

Initiation of Rally with faculties and students gathered in front of the SRM Medical College on June 6th 2024

Students participating in the rally chanting the slogans raising awareness about the dangers of plastic pollution on June 6th 2024

Lecture 1: "Rooting for change - innovations in soil restoration" delivered by Mr. Hariharan Vembukrishnan, CDC department, SRMIST in mini hall 1, Dr. T. P. Ganesan auditorium on June 6th 2024

Lecture 2: "Environmental management system at SRMIST" given by Dr. S.Gopinath, from Department of Civil Engineering, SRMIST in mini hall 1, Dr. T. P. Ganesan auditorium

Lecture 3 on topic "Importance of biomedical waste management" given by Dr. J. Manonmoney from Department of Microbiology, SRM Medical college, in mini hall 1, Dr. T. P. Ganesan auditorium

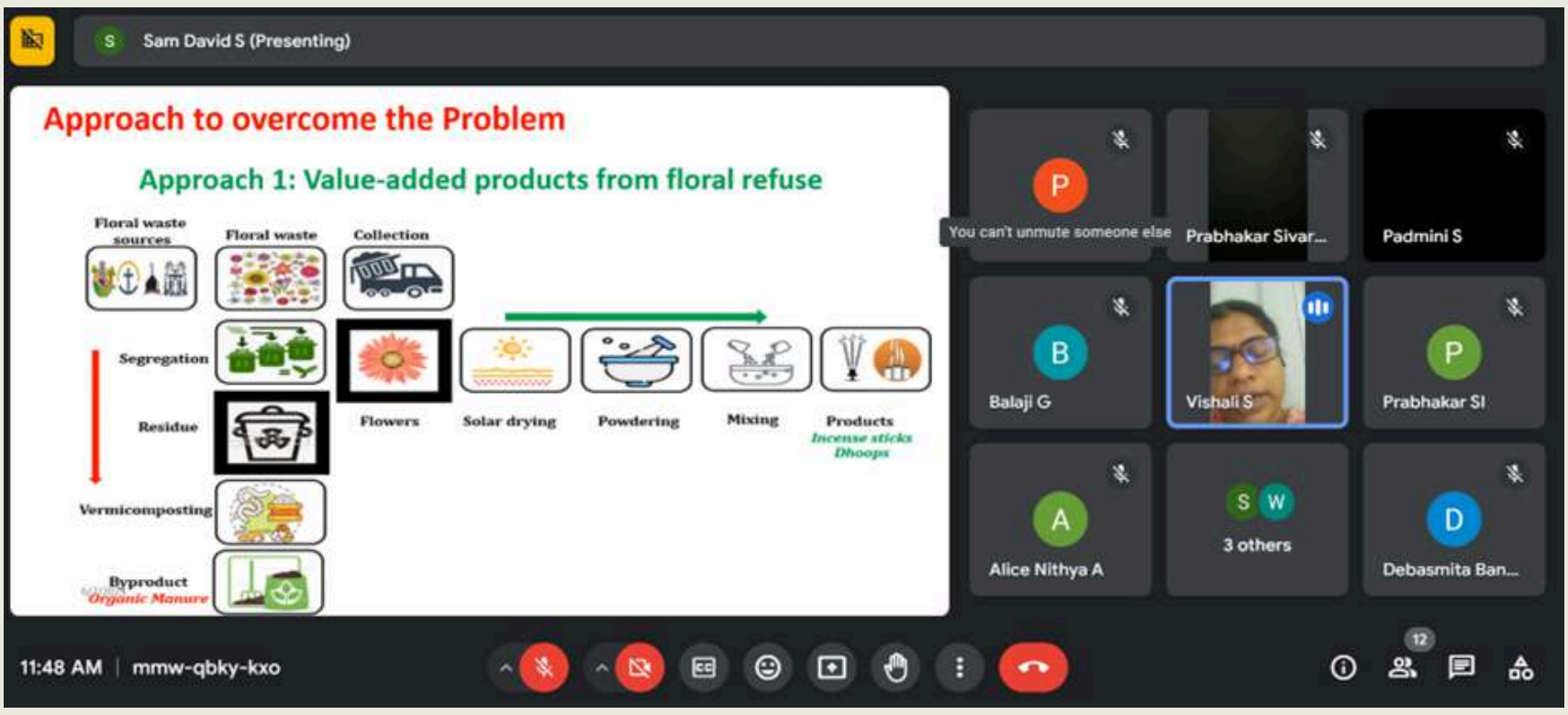
After the rally, we conducted three invited lecture sessions to further educate participants on environmental and waste management. The first lecture provided an overview of soil restoration needs and highlighted minor individual practices that can lead to significant environmental transformation. The second lecture focused on waste management processes and actions implemented at our SRM campus, demonstrating compliance with government standards. Through the rally and these lectures, students gained valuable insights into the necessary steps for achieving a sustainable environment at both individual and societal levels.

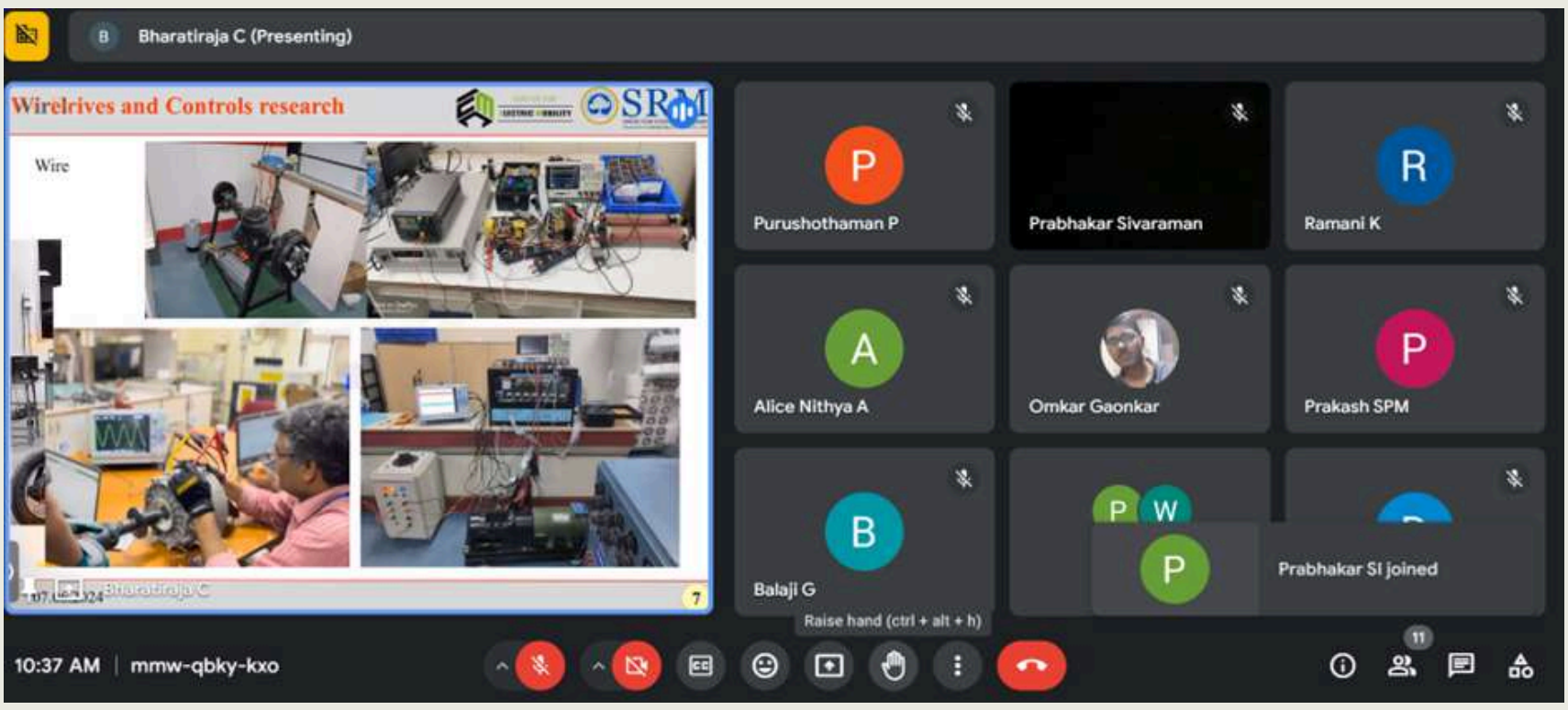
Day 5: Online competitions

Number of Participants : 13 faculties and 16 Research scholars.

The online competitions were particularly valuable as they allowed for a dynamic flow of ideas, questions, and potential solutions followed by a panel discussion which provided more interactive exchanges. Participants encouraged to share their research findings, practical experiences, and innovative solutions. This impassioned gathering of experts was a testament to the power of collaboration and shared knowledge.

Judges:
1) Dr. S. Prabhakar - Adjunct Faculty, Department of Chemical Engineering, SRMIST
2) Dr. P. Purushothaman - Associate Professor, Department of Civil Engineering, SRMIST
3) Dr. A. Alice Nithya -Associate Professor, Department of Computational Intelligence, SRMIST
4) Dr. Manju A - Assistant Professor, Department of Computing Technologies, SRMIST
5) Dr. Omkar Gaonkar - Confederation of Indian industry, New Delhi





Faculties and Research scholars shared their innovative research and ideas on sustainable technology on June 7th 2024

Day 6: Workshop for the children of SRMIST staff

Number of Participants : 60 members

1. Fireless cooking

We arranged a pleasurable and instructive fireless cooking session for the offspring of SRM Institute of Science and Technology (SRM IST) faculty. This distinctive occasion was created with the intention of highlighting the significance of making good dietary decisions and motivating our young participants to become conscious consumers and accountable guardians of the environment. The lesson commenced with an engaging discourse that facilitated children's comprehension of the correlation between their dietary selections and the environment. They acquired knowledge on the influence of food production, transportation, and waste on the environment. This established the groundwork for a more profound understanding of the importance of sustainable and eco-friendly cooking methods. Children were acquainted with the concept of fireless cooking, which entails the preparation of meals without employing conventional cooking techniques such as stoves or ovens.

Hands on training for children on fireless cooking conducted in Urban Farm centre, SRMIST on June 8th 2024

Engaging kids in a hands-on cooking experience was the most memorable part of the workshop. Through the use of fireless cooking techniques, children were able to produce a wide range of mouthwatering and nourishing foods under the direction of professionals in the culinary and nutrition fields. Prepared foods such as salads, sandwiches, and desserts that required little to no heat were included in this category.

Through this experience, they gained an understanding of the advantages of using seasonal and organic produce, as well as the significance of minimizing food waste by utilizing every component of an ingredient whenever it is feasible to do so. The presentation also highlighted the usage of reusable and sustainable kitchen utensils and containers, with the goal of reducing the amount of single-use plastics that are used. This was done in order to coincide with the Eco-friendly theme. An emphasis was placed on the significance of maintaining a balanced diet for one's general health, and the nutritional value of the dishes.

2. Seed Ball Making

A fun and instructive workshop on seed ball creation for the kids of SRM Institute of Science and Technology (SRM IST) employees was arranged. The purpose of this program was to raise a new generation of eco-champions by teaching the value of planting trees and practicing environmental care.

Seed Ball Making Workshop held on 08.06.24 at Urban Farm Centre, SRMIST

The objective of the workshop was to cultivate a strong bond between the children of SRM IST staff members and the environment, while also empowering them to create a meaningful and beneficial influence.

We anticipate that as these youthful environmental advocates mature, they will uphold the knowledge acquired during this workshop and emerge as advocates for afforestation and ecological preservation.

At the beginning of the session, there was a lively conversation regarding the significant function that trees play in terms of our ecology. Children were taught about the advantages of trees, which include the storage of carbon, the cleaning of air, and the preservation of habitat. In addition to this, they were made aware of the alarming rates of deforestation as well as the pressing necessity of reforesting our world. The participants were given an introduction to the idea of seed balls, which is a straightforward yet effective method of planting trees. They discovered that seed balls are a combination of seeds, clay, and compost that serve to safeguard seeds against predators and harsh weather conditions while simultaneously fostering successful germination. Children were encouraged to take an active role in the workshop by participating in the creation of seed balls. With the assistance of seasoned faculties, students created their very own seed balls by combining clay, compost, and tree seeds in a mixture. They not only felt more connected to nature as a result of this hands-on exercise, but it also implanted in them a sense of duty for the ecological system.

Children were encouraged to put their seed balls in specific locations on the SRM IST campus after they had completed the process of manufacturing their seed balls. They gained an understanding of the significance of using appropriate planting techniques as a result of this hands-on experience, which allowed them to observe the beginning phases of tree growth. Children were encouraged to share what they had learned with their classmates, family members, and friends, which ultimately resulted in the workshop having an impact that extended beyond the actual event itself.

3. Terrarium

Terrarium plant workshops are interactive sessions where participants learn to create and maintain their own terrariums. These workshops typically cover the basics of terrarium gardening, including plant selection, soil layering, and container choice. Attendees often receive hands-on instruction and all necessary materials, such as plants, containers, soil, and decorative elements. Workshops are suitable for all skill levels, providing a fun and educational experience for beginners and seasoned gardeners alike.

- **Terrarium plants are small, low-maintenance plants that thrive in the humid, enclosed environment of a terrarium, making them ideal for indoor gardening.**
- **Common terrarium plants include ferns, mosses, succulents, and air plants, each adding unique textures and colors to the miniature ecosystem.**
- **These plants require minimal watering due to the terrarium's ability to recycle moisture, creating a self-sustaining environment.**

Terrarium Plants workshop to children conducted in Urban Farm centre, SRMIST on June 8th 2024

4. Resin art with dry flowers

Resin art with dry flowers workshops are creative sessions where participants learn to encapsulate dried flowers in resin to create beautiful and lasting art pieces. These workshops typically include instruction on the basics of working with resin, such as mixing, pouring, and curing techniques. Participants received a variety of dried flowers and other materials needed to create their unique pieces, such as jewelry, coasters, or decorative items. The workshops emphasize the importance of proper safety measures when handling resin and provide tips for achieving clear and bubble-free finishes.

Additionally, resin art workshops are a great way to preserve sentimental flowers, such as those from special occasions, creating personalized keepsakes. The workshops provide a relaxing and enjoyable environment, fostering creativity and allowing participants to explore their artistic potential while creating beautiful and meaningful art pieces.

Children participating in the workshop on resin art with dried flowers at Urban Farm centre, SRMIST on June 8th 2024

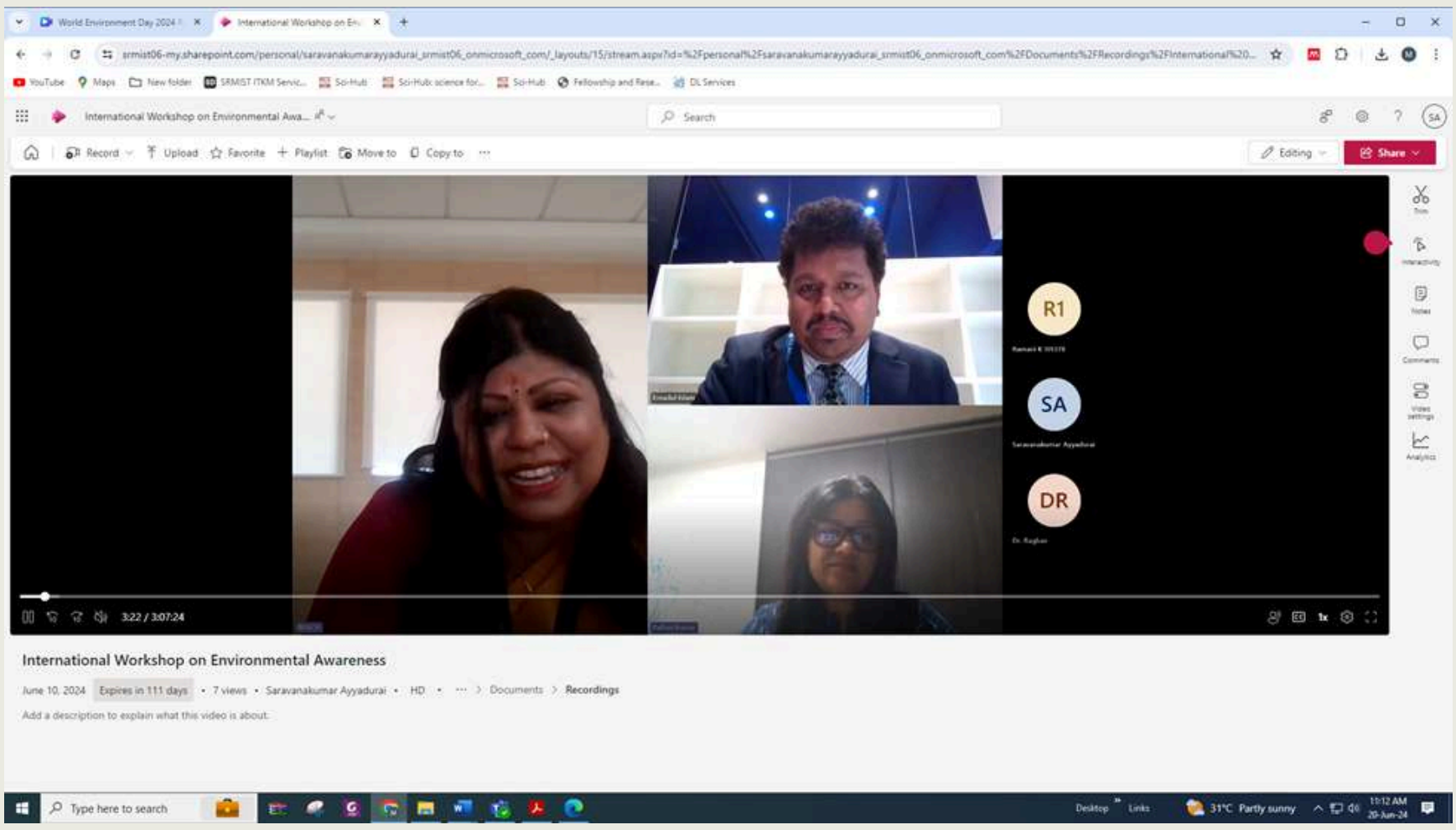
5. Cooking with flowers

Cooking with flowers is an ancient culinary practice that has seen a resurgence in modern cuisine. Flowers can add unique flavors, vibrant colors, and a touch of elegance to dishes, enhancing both their aesthetic appeal and nutritional value. Cooking with flowers can transform ordinary dishes into extraordinary culinary experiences. Not only do they provide aesthetic appeal and unique flavors, but they also offer various health benefits, making them a valuable addition to a balanced diet. With proper knowledge and care, edible flowers-based cooking can be a healthy habit among childrens.

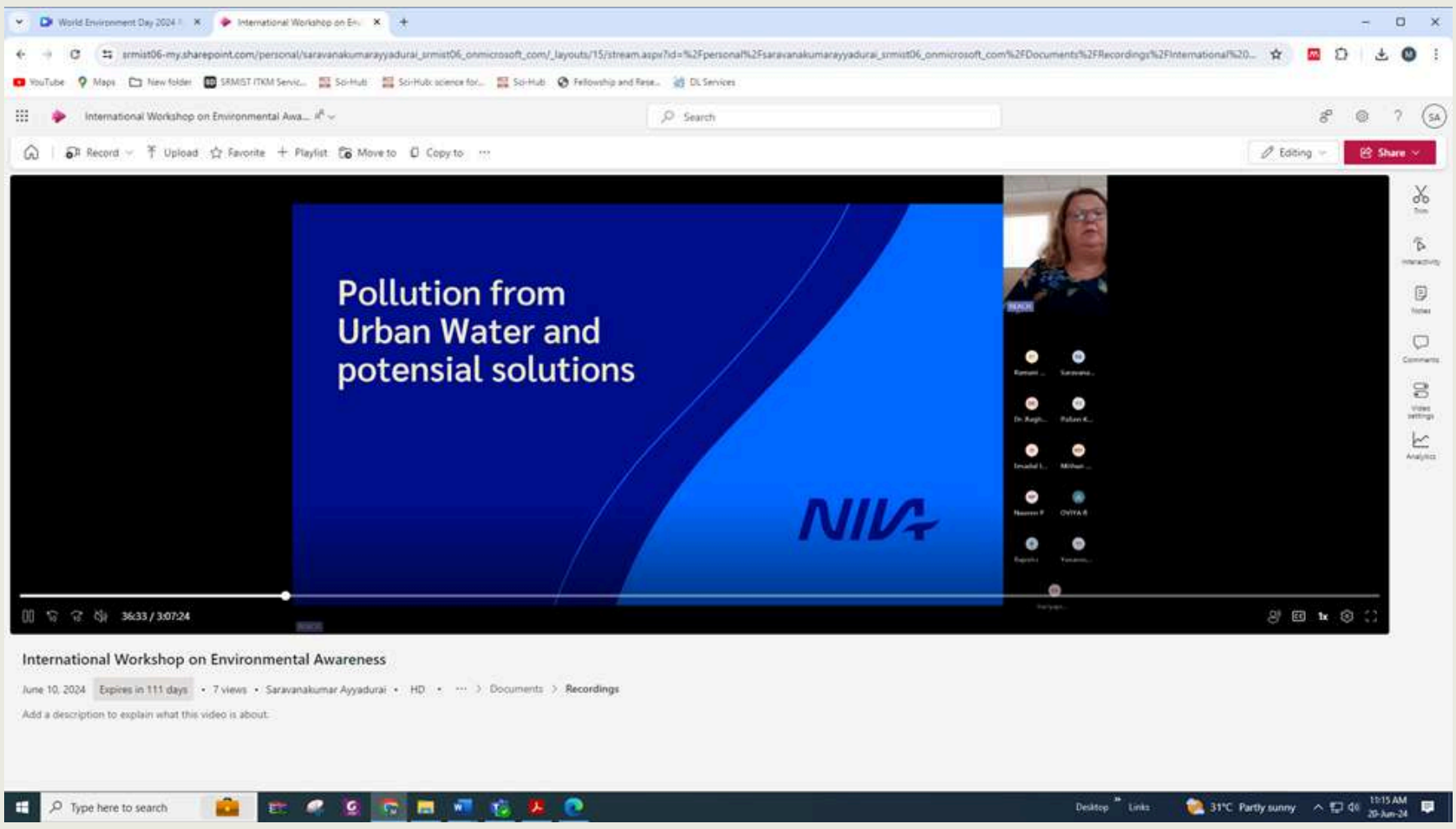
Children participating in the workshop on" Cooking with flowers" at Urban Farm centre, SRMIST on June 8th 2024

Day 7: WED 2024 International Workshop

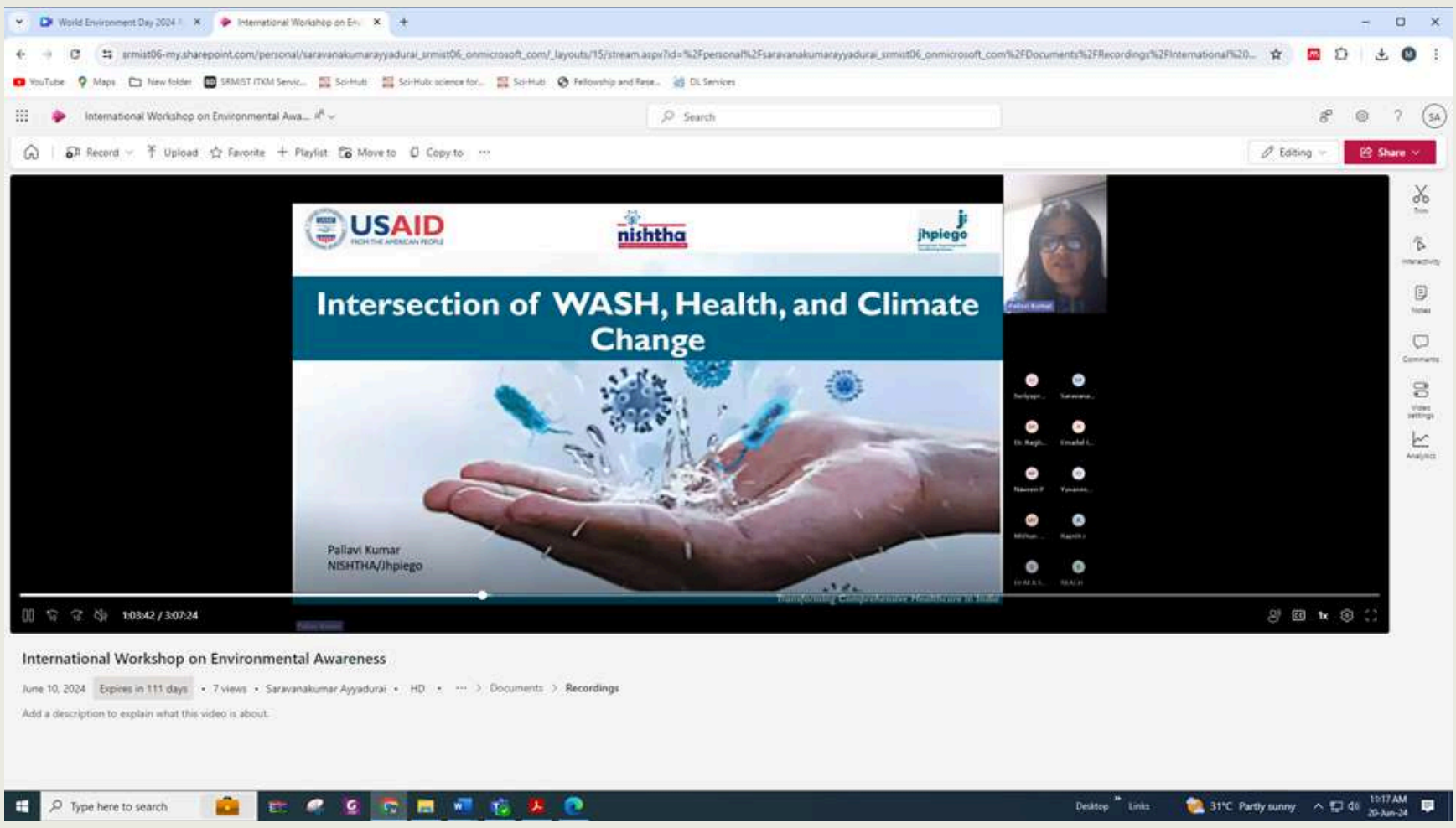
Urban water pollution is a critical issue, primarily caused by contaminants like chemicals, nutrients, pathogens, plastics, and sediments. This pollution affects human health and aquatic ecosystems, leading to problems such as eutrophication and biodiversity loss. Green infrastructure solutions, such as bioswales and permeable pavements, help manage stormwater and reduce runoff. Advanced wastewater treatment technologies and nutrient removal processes can significantly improve water quality. Policy and regulation enforcement are crucial for controlling industrial discharges and agricultural runoff. Public awareness and education programs encourage responsible behavior and proper disposal of pollutants. Innovative technologies like smart sensors enable real-time water quality monitoring. Source control measures, including reducing harmful substances and ensuring proper waste disposal, are essential. NIVA's research initiatives focus on urban water management, eutrophication, and microplastics to develop effective pollution mitigation strategies.



Introduction and Welcome address by Prof. Paromita Chakraborty



Ms. Kine Baek, Scientist at NIVA in Norway, delivered an exemplary talk on potential remedies to the pollution caused by urban water.

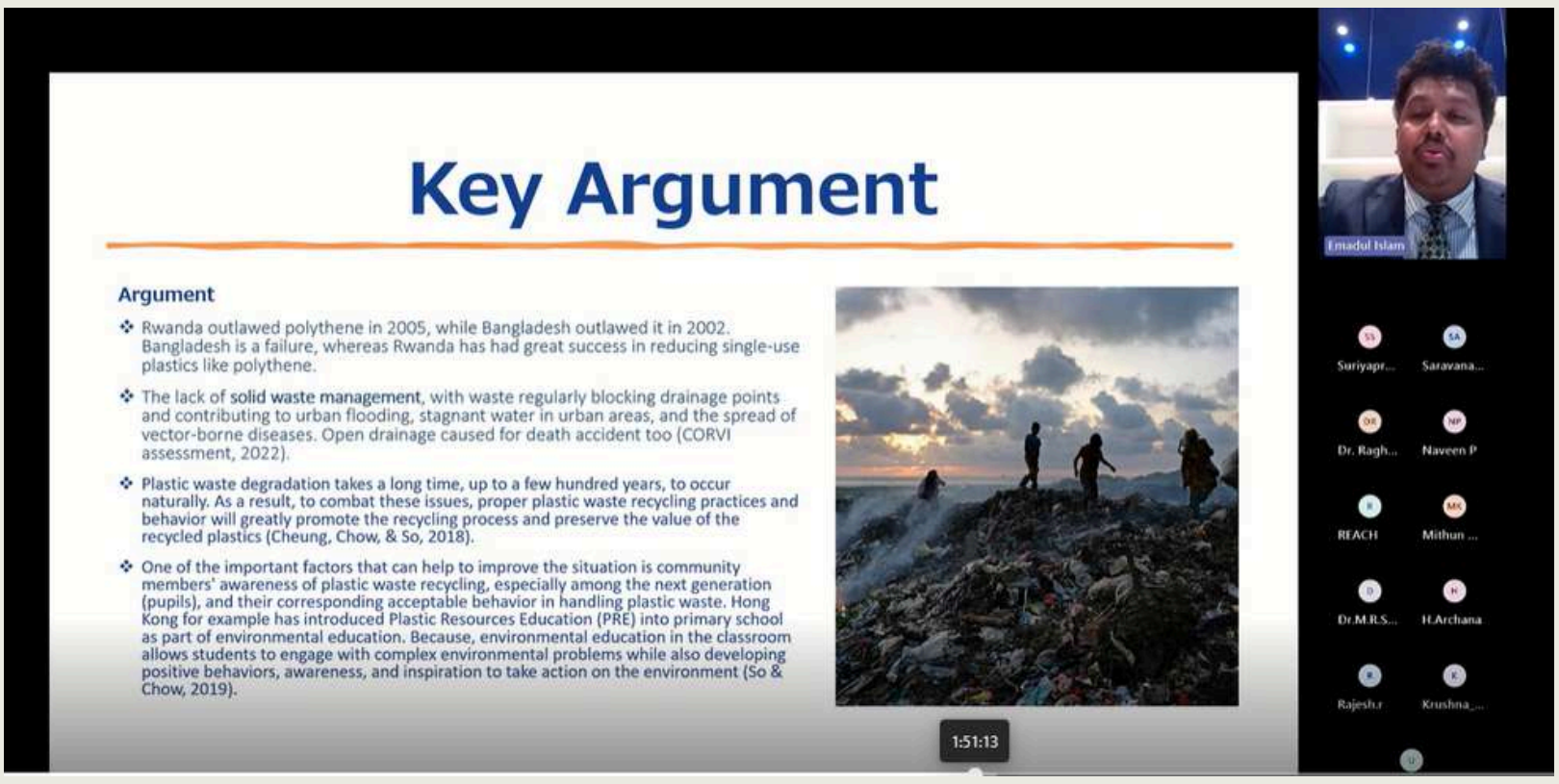


A featured presentation on the intersection between WASH, climate, and health delivered by Ms. Pallavi Kumar, Scientist, NISHTHA.

Environmental education plays a crucial role in changing perceived norms and influencing behavior intentions to control plastic use, which is essential for eliminating plastic pollution. In Japan, several strategies and practices employed to manage the plastic pollution.

Raising Awareness: Environmental education helps raise awareness about the detrimental effects of plastic pollution on ecosystems and human health. By understanding the impact, individuals are more likely to change their behavior.

Shifting Norms: Education campaigns can shift societal norms by promoting the idea that reducing plastic use is both necessary and socially desirable. When reducing plastic becomes a shared value, people are more likely to adopt sustainable practices.



Talk delivered by Dr. Emadul Islam, program advisor of Japan's Sasakawa Peace Foundation to eliminate plastic pollution

Encouraging Alternatives: Educating the public about alternatives to single-use plastics, such as reusable bags, bottles, and containers, can facilitate a shift away from plastic dependency.

School Programs: Incorporating environmental education into school curricula can instill sustainable habits in young people, who can then influence their families and communities.

Community Engagement: Workshops, seminars, and community activities can engage citizens in hands-on learning experiences about plastic waste management and reduction.

Policy Support: Education can create public support for policies aimed at reducing plastic use, such as bans on single-use plastics or incentives for using eco-friendly products.

By incorporating these strategies, environmental education in Japan effectively changed perceived norms and behavior intentions, leading to a significant reduction in plastic pollution.

WED 2024 – Valedictory Agenda

Date: 10.06.2024

Time: 02.00 pm

Venue: Mini Hall – 1, Dr. T. P. Ganesan Auditorium

2.00 pm to 2.05 pm	Invocation & Lamp Lighting Ceremony	
2.05 pm to 2.10 pm	Felicitation of the Chief Guest	
2.10 pm to 2.15 pm	Welcome Address	Prof. Paromita Chakraborty HEAD, Centre for Research in Environment, Sustainability Advocacy and Climate Change, Directorate of Research, SRMIST
2.15 pm to 2.45 pm	Chief Guest's Address	Dr. Purnima Jalihal Group Head – EFW & CEE Scientist – G National Institute of Ocean Technology, India.
2.45 to 2.55 pm	Summary Report of WED 2024	Dr. R. Suriyaprakash Scientist, Centre for Research in Environment, Sustainability Advocacy and Climate Change, Directorate of Research, SRMIST
2.55 pm to 3.00 pm	Lifetime Achievement Award	Dr. S. Prabhakar Department of Chemical Engineering SRM Institute of Science and Technology
3.00 pm to 3.55 pm	Prize Distribution	
3.55 pm to 4.00 pm	Vote of Thanks	Prof. B. Neppolian Dean (Research) Directorate of Research, SRMIST
4.00 pm	High Tea	

Live simply so that others might simply live
- Mahatma Gandhi

Lamp lighting by Prof. B. Nepolian (Dean - Research, SRMIST), Dr. Purnima Jalihal (Head - EFW & CEE, NIOT), Ms. Kine Baek (Scientist,, NIVA) Prof. Paromita Chakraborty (Head - REACH, SRMIST) held in mini hall 1, Dr.T P Ganesan auditorium SRMIST on June 10th 2024

Welcome address by Prof. Paromita Chakraborty (Head - REACH, SRMIST) held on mini hall 1, Dr.T P Ganesan auditorium SRMIST

Dr. S. Prabhakar, Emeritus Professor, Department of Chemical Engineering, SRMIST, received the Lifetime Achievement Award.

Dr. Purnima Jalihal, the Chief Guest and Head of Energy and Fresh Water at NIOT, delivered a presentation on Ocean Technologies for a Sustainable Environment in mini hall 1, Dr.T P Ganesan auditorium SRMIST

Chief guest Dr. Purnima Jalihal, Head of Energy and Fresh Water at NIOT explained about desalination plant which as a sustainable remedy for water scarcity in island area. She also discussed about interconnection between climate change and ocean dynamics.

Dr. R. Suriyaprakash, Scientist REACH, delivered the summary of the WED 2024 report

Prize Distribution for winner in several events organized by REACH, SRMIST held in mini hall 1, Dr.T P Ganesan auditorium SRMIST

As we conclude this remarkable week dedicated to Environmental Day 2024, we brim with a sense of accomplishment and immense hope for the future.

The World Environmental Day week (3rd to 10th June, 2024) has been a testament to the collective spirit of SRM Institute of Science and Technology. We've witnessed a vibrant display of knowledge, creativity, and unwavering commitment to protecting our planet. The awards presented to the participants serve as a well-deserved recognition of the exceptional work done . Let these awards be a source of motivation to continue our environmental advocacy beyond this week.

This is not the end, but rather the beginning of a continuous journey. We, the future generation of scientists, engineers, and changemakers, have the responsibility to translate the knowledge and enthusiasm garnered this week into tangible action. Let us carry forward the spirit of environmental stewardship, implementing sustainable practices in our daily lives and inspiring others to do the same.

Together, let's make SRM a beacon of environmental responsibility, a place where innovation thrives alongside ecological consciousness. Remember, the Earth is not an inheritance from our forefathers; it is a loan from our children. Let us ensure we return it in a better condition than we received it.

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