# **DEPARTMENT OF BIOTECHNOLOGY**

# 2017-18

World Environment Day has been started celebrating as an annual event on every 5<sup>th</sup> of June since 1973 in order to raise the global awareness about the importance of the healthy and green environment in the human lives, to implement some positive environmental actions as well as to make aware common public that everyone is responsible for saving his environment. On behalf of this, Department of Biotechnology, St. Mary's college had organized a one week programme from 5<sup>th</sup> June to 12<sup>th</sup> June 2017 on the theme "plastic free environment". The students and staff were advised to bring worn out and useless plastics from their home and it was given to a private agency for recycling. Whole hearted co-operation of teachers, non-teaching staffs and students made this endeavor a great success.



### WORLD BLOOD DONORS' DAY CELEBRATION

Blood donors' forum – Department of Biotechnology, NSS unit St. Mary's college in collaboration with IMA had organized a voluntary blood donation camp on 14<sup>th</sup> June 2017, Wednesday. The camp was started at 9:30 am at the Jubilee Hall and continued till 2:30 pm. Prior to the donation the participants were subjected to a medical examination like checking up their weight, heamoglobin count and blood group. A few participants lack the recommended level of Hb count, and Doctors present at the camp gave proper advices for them to maintain recommended level of Hb.

On the same day, an invited lecture was conducted on the importance of blood donation by Mr. Tiny Francis, a philanthropist who donated blood for the needy more than hundred times. The talk was very inspiring and he urged everybody to donate blood for the people during their needs.





## WORLD DAY TO COMBAT DESERTIFICATION AND DROUGHT (2017-18)

The World Day to Combat Desertification and Drought has been observed since 1995 to promote public awareness relating to international cooperation to combat desertification and the effects of drought. As part of this, Department of Biotechnology, St. Mary's College had organized a talk by Saranya Mohan, Alumni, St. Mary's College on the topic- Phytoremediation on 19<sup>th</sup> June 2017. She explained the recycling of waste water collected from the college cafeteria using water hyacinth. The recycled water was observed to be of agricultural grade where the pH, BOD and COD were reduced upon comparison with the waste water.



### SCIENCE EXPRESS – VISIT (2017-18)

Science Express was an innovative mobile, science exhibition organized by Department of Science and Technology (DST), Govt. of India. Science Express was a mobile, 16 coach AC train with science oriented exhibits travelling all over India, with the objective of arousing scientific interest among the young Indians. Science Express had reached Thrissur railway station on 5<sup>th</sup> July, 2017. All the students of II<sup>nd</sup> DC Biotechnology, accompanied by 2 staffs; Ms. Malathi V.M., and Prasanna R. Kovath had reached the destination. There were a lot of articles, posts, manuscripts, pictureS, still and moving models that made the students aware of the climatic changes throughout India, due to global warming.

There were many efficient volunteers who took in charge of explaining the exhibits and it covered many areas like Pollution, Wildlife, Nature Conservation etc. There were also subject related topics that exhibited cancer cell, stem cell, neurology etc., which highlighted the importance of Biotechnology in human health. The exhibition was found to be worthful and informative for the student community.



**WORLD NATURE CONSERVATION DAY (2017-18)** 

World Nature Conservation day is celebrated every year on July 28<sup>th</sup> across the world, in order to raise awareness that a healthy environment is the foundation for a stable and productive society. To ensure the well-being of present and future generations, we all must participate to protect, conserve, and sustainably manage our natural resources. As part of this, Department of Biotechnology, St. Mary's college has taken a step to initiate the establishment of "bottle garden" in the department. All the students were asked to bring useless plastic bottles cut appropriately and packed with soil and manure as to grow the plants. Seeds of green chilly, garden pea and amaranthus were mainly used for setting up garden. There was active participation from students and staffs in setting the bottle garden.



#### ANEMIA AND WOMEN: PREVENTIVE MEASURES

The blood donors forum was inaugurated by Smt. Praseetha, Consultant Dietician, Daya general hospital, Thrissur on 15<sup>th</sup> September 2017. The forum was inaugurated by distributing seeds of leafy vegetables to the students of our department. The inauguration of blood donor's forum was followed by a talk on the topic "Anemia and Women: Preventive Measures". The talk focused on several facts regarding the anemia in women. Women are especially likely to develop iron deficiency anemia for several reasons. First, women aged 12 to 49 lose blood approximately once a month during their periods. Iron is needed to make the new blood that replaces the blood lost with each menstrual period. The risk of anemia is higher among women with periods that are especially long or include very heavy bleeding. Some women also lose iron from uterine fibroids that bleed slowly, or from bleeding caused by using certain intrauterine devices (IUDs) for birth control.A diet plan was recommended by Ms. Praseetha for the young ladies of the college to retain an

optimum level of Hb. The diet plan included Leafy greens, Meat and poultry, Liver, Seafood, Beans, Nuts and seeds etc.



### INTERNATIONAL DAY FOR THE PRESERVATION OF OZONE LAYER (2017-18)

The ozone layer, a fragile shield of gas, protects the Earth from the harmful rays of the sun, thus helping preserve life on the planet. To remind the importance of ozone and controlled use of ozone depleting substances, every year 16<sup>th</sup> September is celebrated as International Day for the Preservation of the Ozone Layer. The controlled use of ozone depleting substances has helped protect the ozone layer for our future generations, but have also contributed significantly to global efforts to address climate change. Furthermore, it has protected human health and ecosystems by limiting the harmful ultraviolet radiation from reaching the Earth.

In connection with "International Day for the Preservation of the Ozone Layer" Department of Biotechnology, St. Mary's College, Thrissur had organized a poster exhibition on 26<sup>th</sup> September 2017 based on the theme "Caring for all life under the sun". Students from both under graduate

and post graduate programme had exhibited many posters. The posters pointed out various aspects of Ozone layer depletion. The exhibition was a huge success with the active participation of students and faculty from other departments too.



### WORLD ALZHEIMER'S DAY OBSERVATION (2017-18)

World Alzheimer's Day, September 21<sup>st</sup> of each year, is a day on which Alzheimer's organizations around the world concentrate their efforts on raising awareness about Alzheimer's and dementia. Contributing to this international cause, Department of Biotechnology, St. Mary's College, Thrissur had organized a visit to Alzheimer's day care centre, "Smrithipatham". This government Alzheimer's day care centre provide consolation to the local Alzheimer's patients residing at kurukkanpara, Kunnamkulam.

The students accompanied by teachers had visited "Smrithipatham" on 28<sup>th</sup> September 2017. The visit has led to a sound interaction between the students and the inmates. The students created a quality time with the inmates by singing songs and performing dance. The inmates were given

food packets and other eatables like biscuits. The inmates had thoroughly enjoyed the visit and the students had a real time experience with Alzheimer's patients. This visit had helped to create awareness among students about Alzheimer's and dementia.



# **ASSOCIATION INAGURATION 2017-18**

The activities of Biotechnology Association for the academic year 2015-2016 were flagged off by the official Inauguration function held on  $3^{\rm rd}$  October 2017 by Dr Naijil George Assistant Professor , St Joseph College Irinjalakuda. The inaugural address was followed by a research talk on "Various aspects of Neuroscience".



## **SWACHH BHARAT MISSION (2017-18)**

Swachh Bharat Mission (SBM) or Clean India Mission is a campaign in India that aims to clean up the streets, roads and infrastructure of India's cities, smaller towns and rural areas. The campaign was officially launched on 2 October 2019, the 150th anniversary of the birth of Mahatma Gandhi, by Prime Minister Narendra Modi. On account of this, students and staff of

Department of Biotechnology, St. Mary's College, Thrissur had organized a cleaning campaign within the premises of college.

The staffs had made an effective participation towards this programme by cleaning the staff room. All useless and worn out products were cleared from the department and lab, every nook and corners were dusted, mopped and cleaned thoroughly. The class-rooms were cleaned by students. The staffs and students had taken a vow to keep the department, lab, class-rooms and even the premises of college very clean and tidy.



## **FOOD PACKETS (October 2017)**

Everyday a large number of homeless, poor people who cannot afford a decent meal, line up in the streets. Every man, woman and child wait for their turn to pick up the left overs of meal thrown out by the hotels and restaurants. As a helping hand to this cause, Department of Biotechnology, St. Mary's College had arranged for food packets to the most needed people in and around the city.

We were able to provide a meal to 125 needed people on 6<sup>th</sup> October 2017. This venture was a blessing and enabled to have at least a decent meal for those who often struggles to meet two ends.



## **COMMEMORATING HAR GOBIND KHORANA (2017-18)**

Department of Biotechnology, St. Mary's College had commemorated the 96<sup>th</sup> birthday of Har Gobind Khorana, renowned Indian-American biochemist, who won Nobel prize in the field of Genetics. A seminar was organized in part of this on 13<sup>th</sup> November 2017 by Prasanna R. Kovath,

Assistant professor, Department of Biotechnology. The session depicted the early life, academic brilliance, discoveries and achievements of Har Gobind Khorana.





## WORLD DIABETES DAY OBSERVATION (2017-18)

India, carries a considerable share of the global diabetes burden. Studies in different parts of India have demonstrated an escalating prevalence of diabetes not only in urban populations, but also in rural populations as a result of the urbanization of lifestyle parameters. The prevalence of prediabetes is also high.

To draw the attention of people towards diabetes, an issue of paramount importance, 14<sup>th</sup> November of every year is observed as World Diabetes Day. As part of this, Department of Biotechnology, St. Mary's College had organized a seminar on the current scenario of Diabetes. Shilpa T M of 1<sup>st</sup> MSc Biotechnology conducted a seminar on diabetes. Seminar was very informative and helped in gaining knowledge about diabetes, its types, diagnosis and treatment. The seminar was very useful and informative and had helped in keeping this issue firmly in the public and political spotlight.





## WORLD AIDS DAY OBSERVATION ((2017-18)

"The HIV/AIDS epidemic has put the spotlight on deep-rooted constraints that hold people back in many areas of life. Traditional attitudes and behaviors change gradually, sometimes over several generations. This epidemic gives us no such luxury of time."HIV is the virus that causes AIDS. It

damages your immune system, making it easier for you to get sick. HIV stands for Human Immunodeficiency Virus. It's a virus that breaks down certain cells in your immune system (your body's defense against diseases that helps you stay healthy).

To wane this tough situation of our community, The invited talk was conducted by Mr. P.K. RAJU, Technical Assistant and District Health Officer, DMO office, Thrissur. The talk was very inspiring and he urged us to do our part by being thoughtful when choosing our words and to use supportive rather than stigmatizing language when talking openly about HIV.







## **BLOOD DONATION CAMP (December 2017)**

A blood donation camp was organized St. Mary's College, Thrissur to acknowledge World AIDS Day on 1<sup>st</sup> December 2017. The program was conducted in association with Red Ribbon Club and collaboration with Indian Medical Association. A strict diet chart was given to students two weeks before the blood campaign. An overwhelming number of volunteers from different department of

our college has participated in this campaign. Even, parents of the students too had participated in the blood donation campaign.

Refreshments were provided to the students who were part of the camp. The Volunteers took immense care to meet the requirements of students after donating the blood, so as to avoid any mishaps in the campus.



INAUGURATION OF SCIENCE POPULARIZATION PROGRAMME (2017-18)

"SWASTHA SHUDHI" – SUSTAINABLE, INNOVATIVE AND SCIENTIFIC SOLID

WASTE MANAGEMENT.

The Science Popularization Programme "Swastha Sudhdhi" – Sustainable, Innovative and Scientific solid waste management organized by Department of Biotechnology, St. Mary's College, Thrissur was officially inaugurated by Dr. D. Girija, Professor and Head, Department of Agricultural Microbiology, KAU, Vellanikara. This programme on 'Solid waste management' was supported and sponsored by KSCSTE. The inauguration was followed by booklet release and distribution of vermicomposting kit by Mr. K. Mahesh, Municipal Councilor, Ward no.12, Thrissur. Dr. Sr. Magie Jose, Principal and Dr. Sr. Meena K. Cheruvathoor, Vice Principal, St. Mary's College, Thrissur, felicitated the function. The department distributed 50 vermicomposting pots to the Vishwas Kudumbashree unit, Kariattukara and Udayam and Sagaram Kudumbashree unit, Mylipadam and flats. This was followed by an exhibition on various composting methods by Clean city group, Thrissur group.

As part of this programme, the department is planning to organize various seminars, exhibitions and competitions, throughout this academic year, to create awareness among the public about the importance of in situ waste management.



#### NATIONAL YOUTH DAY OBSERVANCE (2017-18)

National Youth Day is celebrated in India on 12 January on the birthday of Swami Vivekananda. The theme of 2018 is 'Sankalp Se Siddhi', attainment through resolve. In 1984 the Government of India declared the day as the National Youth Day and since 1985 the event is celebrated in India

every year. It was a great decision of Government of India taken in the year, 1984 to celebrate the birthday of great Swami Vivekananda as a National Youth Day every year. The National Youth Day is observed all over India at schools and colleges, with processions, speeches, recitations, music, youth conventions, seminars, Yogasanas, presentations, competitions in essay-writing, recitations and sports on 12 January every year.

To ignite the minds of youth of our college, the Red Ribbon Club in association with the department of biotechnology has organized a talk by Mr. Reji Jacob, Superintendent Of Police &Assistant Director Of Kerala Police Academy, Thrissur. He had served Kerala Police for more than two decades and been awarded Chandrasekaran Nair Gold Medal and Presidents Police Medal in 2016. The talk was very inspiring and powerful and also inspired the students to embark on a successful journey.



### **FOOD PACKETS (January 2018)**

"Food for The Poor" began in 2015 as a part of the "Year of Mercy" and has received huge appreciation from all arenas of the community. This venture serves the poorest in and around Thrissur city. Extending a helping arm to this cause, Department of Biotechnology, St. Mary's

College, Thrissur had arranged for food packets and was given to 117 deserving people. The students of both UG and PG courses as well as the teachers brought an extra pack of lunch to distribute among the needy. By 11.am on 12<sup>th</sup> January 2018 the food packs were collected in the college and handed over to the volunteers for distribution.





NATIONAL GIRL CHILD DAY CELEBRATIONS (2017-18)

(GENDER SENSITIZATION PROGRAM)

National Girl Child day is celebrated in India on 24<sup>th</sup> January2018. The department of Biotechnology has organized a talk on legal aspects regarding the protection of Girl child and Women by Adv.Nithya Sugunan LL. B, LL.M.

The talk emphasized the protection and support from law to a female as a fetus, at infancy, childhood and adolescence stage, women issues, gender discrimination, crimes against women, senior women issues etc. Awareness was also given to our students about how to react in public.



NATIONAL SCIENCE DAY CELEBRATIONS (2017-18)

SIRIUS – A GLOWING PATH FOR SUSTAINABLE FUTURE THROUGH SCIENCE AND TECHNOLOGY National science day celebrations 2018 was officially inaugurated by Dr. M P Sujatha, Principal Scientist and Head, Dept. of Soil Science, KFRI, Peechi on 12<sup>th</sup> February, 2018. The program was supported by Department of science and technology (DST), New Delhi and sponsored by Kerala State Council for Science, Technology and Environment (KSCSTE) with an amount of 15,000 INR. She had delivered and helped in creating a platform for understanding soil nature and various methods to equip ourselves for finding solutions to today's acute environmental challenges and to achieve sustainable development and greener societies.

On 15<sup>th</sup> February, 2018 various Intercollegiate competitions like oral presentation, poster making competition, Debate competition and Craft making competitions were also arranged A field visit to IMAGE (Indian Medical Association Goes Eco-friendly), a state-of-the art Common Biomedical Waste Treatment and Disposal Facility at Palakkad was organized on 19<sup>th</sup> February, 2018.

