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# 6.5.3: COLLABORATIVE QUALITY INITIATIVES WITH OTHER INSTITUTION

- **3 2019 2020**
- **\*** 2018 2019
- **\*** 2017 2018
- **2016 2017**
- **\*** 2015 2016



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2019 - 2020



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<u>Collaborative activity</u>: Popular lecture Series on "Genomics Landscapes of tumours" in collaboration with Indian Women Scientists Association, Mumbai and Caius Research Laboratory, St. Xavier's College, Mumbai

Date: 11th July 2019





# Popular Science Lecture Series 2018-19

Organized by

Indian Women Scientists' Association, Vashi, Navi Mumbai

Supported by BRNS-DAE

In association with

Caius Research Laboratory, St. Xavier's College (Autonomous), Mumbai

Lecture on

"Genomic Landscapes of Tumors"

by

Dr. Manoj Mahimkar

Principal Investigator, Cancer Research Institute

Advanced Centre for Treatment, Research and Education in Cancer

Tata Memorial Centre, Research and Education in Cano Tata Memorial Centre, Kharghar, Navi Mumbai

Venue: MMR, First Floor,

St. Xaviers College- (Autonomous), Mumbai 5, Mahapalika Marg, Mumbai, 400001

**Date and Time** 

Thursday, 11th July, 2019, 3.00 pm

ALL ARE CORDIALLY INVITED TO ATTEND

Marke.



PRINCIPAL ST. XAVIER'S COLLEGE (AUTONOMOUS) MUMBAI - 400 001.

NAAC SSR Cycle 4 (2015-2020): 6 5 3 Collaborations



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<u>Collaborative Activity</u>: National Society of the Friends of the Trees, Mumbai – St. Xavier's College, Mumbai- National Seminar on 'Tree Ecology and Urban Forest Management"

Date: 13th February 2020

The Botany Department and National Society of the Friends of the Trees under the aegis of RUSA organized a national seminar on 'Tree Ecology and Urban Forest Management' on 13<sup>th</sup> February 2020. Registration and signing of participants and distribution of kit was done from 8.30 am at registration desk in front of college hall. The participants had their breakfast and sat for the seminar.

The compering of the whole seminar was done by Mr. Harsh Pant (Msc-II). The seminar was inaugurated by Dr. Rajendra Shinde (Principal) and Dr. Ashok Kothari (President, The National Society of the Friends of the Trees). Dr. B. Nagarajan, Scientist G, Institute of Forest Genetics & Tree Breeding, Coimbatore gave the keynote address on 'Making Trees in Indial: Addressing Conservation Solutions and Industrial Needs'. Dr. Nagarajan was introduced by our FYBSc visually challenged student Mr. Yagnit Vadhel.

Other renowned speakers included Professor Amit Lahiri, Chief Sustainability Officer, O. P. Jindal Global University, Delhi, who spoke on 'Ecologies, Communities & Markets: A Tale of Two Trees in the Western Ghats' through his presentation. Dr. Mandar Datar, Scientist C, Agharkar Research Institute, Pune, spoke on 'Forests of Northern Western Ghats: New Insights from Old Habitat'. Dr. H. S. Singh, Ex- Principal Chief Conservator of Forests, Gujarat State, gave an illustrated talk on 'Urban Forestry'. Dr. Advait Edgaonkar, Assistant Professor, Indian Institute of Forest Management, Bhopal gave a talk on 'Valuation of Ecosystem Services'.

After the inauguration of the seminar, the newly formed 'Botany Association of Xaviers' was inaugurated and a brief introduction of all the activities of the association was given by SYBSc student Anuskhka Agarwal (SYBSc). The Committee members included General Secretary Mr. Harsh Pant, Assistant General Secretary Ms. Anushka Agarwal, Treasurer Ms. Aditi Nimbalkar (Msc-I) and Events Head Ms. Shirin Khan (MSc-I), and coordinator Ms. Aqsa Majgaonkar (SYBSc). After the introduction, the committee members took a photograph in front of the stage.

Under the guidance of Dr. Vijaya Lobo (Botany Dept) around a theme of 'reuse, recycle and innovate', the MSc-I students Ms. Shirin Khan and Ms. Saloni Kothari kept exhibits of cloth materials, cloth bags colored with natural dyes, and also Eco-friendly lip balms, under their newly started brand 'Salrin' making use of natural dyes from fallen tree remains and naturally available resources to protect the environment and keep the consumer safe from harmful chemicals.

Also Ms. Jidnyasa Tare assisted by Ms. Aditi Nimbalkar exhibited 'Biojewellary' made from waster things aimed at keeping touch with nature, reuse and redecorate things. The things which



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are generally assumed as waste were reused as creative articles, eg. the pista shells were taken and keychains, earrings were made from it. Two ex-students Ms. Faahmida Khawja and Ms. Shalu Singh (ex-students) also brought some succulent plants in small pots as exhibits. The plants required very less water and could be kept for decorating rooms in office and house.

Mr. Praveen Kale, Assistant Curator of Blatter Herbarium also exhibited herbarium plant specimens and publications (books) of Blatter Herbarium which were kept even for sale.

The exhibition was kept open during the lunch time and during the tea breaks. The people were very enthusiastic in observing the exhibits, even a group of 15 Japanese students visited the exhibit stalls.

After the talks were over, a summary of the seminar was given by Dr. Sashirekah Iyer (former Head of Botany Dept, Mithibai College, Mumbai). After this a vote of thanks was given by Dr. Vijaya Lobo (staff, Botany Dept). Certificates were distributed after after the seminar got over.

About than 200 participants from various colleges, institutes, and NGOs including students, teachers, researchers, lay persons and activists attended and made the seminar a successful event.







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St. Xavier's College, Mumbai under the aegis of RUSA

in association with the

National Society of the Friends of the Trees

**National Seminar** 

# Tree Ecology and Urban Forest Management

Thursday, 13th February 2020 8.30 am to 4.30 pm in College Hall

- . Dr. Pheroza J. Godrej, President Emeritus, National Society of the Friends of the Trees.
- Dr. Rajendra Shinde, Principal, St. Xavier's College (Auto

#### Organizing committee:

Mr. Alok Gude, In-charge Head, Dept. of Botany, St. Xavier's College,

#### Coordinators:

- Dr. Parvish Pandya, Director- Science & Conservation, Sanctuary Nature Foundation; Former Associate Professor in Zoology, Bhavan's College, Andheri.
- Dr. Sashirekha Suresh Kumar, Former Head, Dept. of Botany, Mithibai College, Mumbai.

- Dr. Ashok Kothari, President, National Society of the FOT.
- Dr. Saraswathy Unnithan, Vice-President, National Society of the FOT. Dr. Arun Sawant, Vice-President, National Society of the FOT.
- Shri. Bharat Chovatia, Hon.Treasurer, National Society of the FOT.
  Dr. Smita Krishnan, Head, Dept of Zoology, St. Xavier's College,
  Mumbai.
- Mr. Kevin D'Cruz, Dept. of Botany, and Director, Xaviers Knowledge Centre, St. Xavier's College, Mumbai. Dr. Madhuri P. Hambarde, Dept. of Zoology, St. Xavier's College,
- Dr. Pushpa U. Sinkar, Dept of Zoology, St. Xavier's College, Mumbai.
- Mr. Conrad Cabral, Dept of Zoology, St. Xavier's College, Mumbai.
   Dr. Vijaya Lobo, Dept of Botany, St. Xavier's College, Mumbai.
   Dr. Sujata Deshpande, Dept of Zoology, St. Xavier's College, Mumbai.
- Mr. Saif Khan, Dept of Botany, St. Xavier's College, Mumbal. Dr. Rajdeo Singh, Dept of Botany, St. Xavier's College, Mumbal
- Mr. Praveen Kale, Assistant Curator, Blatter Herbarium









St. Xavier's College, Mumbai

under the aegis of RUSA

in association with the

National Society of the Friends of the Trees

organizes a National Seminar on

Tree Ecology & Urban Forest Management

Thursday, 13th February 2020







For registration visit: http://bit.ly/botsem2020





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#### About the College

St. Xavier's College Mumbal founded in 1869 by the Society of Jesus, has recently completed its 150 years of excellence in education. It was awarded academic autonomy by the University of Mumbal in year 2010-11. The college mission stands on its vision "Provocans ad volandum" with means 'challenging to fly'. It envisions the college, as a centre for professional innovation, personal integration, social inclusion, and academic excellence. The college endeavors to create an environment which generates a love of learning. habit of critical thinking, and the ability for accurate expression.

#### **Blatter Herbarium**

The plant collections from India and abroad made by Fr. Ethelbert Blatter, S.J., his associates and students, from the beginning of 20th century laid the foundations for one of the best herbarium of its time in Western India. It provides facilities for the study of Plant Systematics and has a well-stocked library on systematic botany. The Herbarium has received the Sir Ratan Tata Trust Grant to upgrade and to digitize the plant database.

#### The National Society of the Friends of the Trees

The National Society of the Friends of the Trees was founded in 1957. The activities of the Society include public lectures, exhibitions, sapling distribution and tree plantation programs through educational institutions, housing societies, corporate and government agencies. Annual events include vegetable, fruit and flower show, nature drawing competition for school children and a seminar. 'Vanashobha' the journal of the society is an annual publication devoted to environment conservation. Regular nature outings are conducted for its members throughout the year.

#### **About National Seminar**

A Tree increases biodiversity and supports many living plants and creatures by modifying the climate at micro level. It alters factors of environment such as temperature, solar radiation, humidity, and wind speed, in such a way that various other smaller trees, shrubs, herbs, animals, birds, insects, and microbes can carry out their life cycle in balanced way. The trees are an important resource in an urban settlement and mitigate the effects of urban heat island, sequester carbon, improve air quality, calm the mind, and reduce depression in people. Urban forests need proper planning of management, care, protection, and regular maintenance of operations. The requirements of different tree species differ in many aspects in juvenile conditions which makes its understanding crucial in order to plan the management process in a

specific manner. The national seminar aims to know and understand the importance of tree ecology for incorporation of correct management practices in urban forestry. Schedule of the Seminar Registration and Breakfast Inauguration by Dr. Rajendra Shinde 09 00am -Principal, St Xavier's College, Mumbai Dr. Ashok Kothari President, The National Society of the Friends of the Trees. Inauguration of Botany Association of Xaviers (BAX) Keynote Session: Dr. B. Nagarajan Scientist G, Institute of Forest Genetics & Tree Breeding, 10.30am Topic- Making Trees in India: Addressing Conservation Solutions and Industrial Needs.
Professor Amit Lahiri Chief Sustainability Officer, O.P. Jindal Global University (JGU) 10.30am 11.30am Topic-Ecologies, Communities & Markets: A Tale of Two Trees in the Western Ghats. Tea Break Dr. Mandar Datar Scientist C. Agharkar Research Institute, Pune 12.00pm -Topic-Forests of Northern Western Ghats: New Insights from LUNCH and Exhibition by Students Dr. H. S. Singh (IFS, Ret) 2.00pm -Ex. Principal Chief Conservator of Forests, Gujarat State.

Topic- Urban Forestry 3.00pm Dr. Advait Edgaonkar 3.00pm Assistant Professor, Indian Institute of Forest Management, **Topic-Valuation of Ecosystem Services.** Valedictory, Exhibition, Tea, and Certificate distribution







St. Xavier's College, Mumbai,

under the aegis of RUSA

in association with the

National Society of the Friends of the Trees

This is to certify that

Mr./Ms./Dr.

CALIDA FERNANDES

has participated in the National Seminar on

Tree Ecology and Urban Forest Management

held on Thursday, 13th February 2020

Dr. Ashok Kothari President NSFOT K.S.

Mr. Alok Gude Convenor delinte.

Dr. Rajendra Shinde





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<u>Collaborative activity</u> – **Monthly Webinar Collaboratory activity** The Internal Quality Assurance Cell (IQAC) of St Xavier's Institute of Education (SXIE) and St. Xavier's College (SXC)

Date: 24th June 2020

<u>About the progarmme</u>: The Internal Quality Assurance Cell (IQAC) of St Xavier's Institute of Education (SXIE) and St. Xavier's College (SXC) has organized <u>A Monthly Webinar Series</u> for strengthening wellness of the students and the faculty as we 'begin again'.

Different aspects of Wellness like physical, social, emotional and spiritual will be nurtured with every new webinar. Under this series, 7 Webinars have been organized from June to December 2020. One can participate in all of them or can opt to attend any 5 for receiving the E-certificate.

#### IQAC SXC-SXIE

# STRENGTHENING WELLNESS FOR BUILDING A HOPE-FILLED FUTURE SCHEDULE FOR INAUGURAL & WEBINAR SERIES SESSION 1

Friday, 26th JUNE, 2020, at 11:00 a.m. to 12:15 p.m.

#### CORE STRENGTHENING BY Ms PRATIKSHA PHADNIS

Sr. No.	Items	In-charge	Time duration
1.	Welcome to all by Program Co- <u>ordinators</u>	Kalpana Chavan Dr Seema Das	Starts at 11:00a.m. 02 mins
2.	Best wishes and Blessings	Fr Blaise	03 mins
3.	Best wishes and Blessings	(Dr.) Fr Keith SJ	03 mins
4.	Message for the Program	Dr Sosamma Samuel Principal, SXIE	03 mins
5.	Message for the Program	Dr Rajendra Shinde Principal, SXC	03 mins
6.	Vote of thanks Program Co-ordinators	Kalpana Chavan Dr Seema Das	03 mins
7.	Introduction to the resource person	SXIE Student	2 mins
8.	Session by Ms Pratiksha Phadnis Question and Answers		11:20 -12:10
9.	Vote of thanks	SXIE Student	12:15





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#### Internal Quality Assurance Cell (IQAC)

of



St Xavier's College, (SXC), (Autonomous) Mumbai



St Xavier's Institute of Education, (SXIE), Mumbai NAAC Re-Accredited 'A' Grade

Jointly Organises a Webinar Series On

#### Strengthening Wellness for Building a Hope-filled Future

For Academic Year 2020-21

Theme: Physical, Social, Emotional and Spiritual Wellness

Internal Quality Assurance Cell (IQAC): The Internal Quality Assurance Cell of the two Institutes believe in assuring and enhancing the quality of life of its stakeholders, especially students and faculty by strengthening the wellness of the overall personality.

What is Wellness? According to the World Health Organization (1948), "Health & Wellness is a state of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity". Thus, wellness can be understood as a positive, conscious, goal directed and evolving process of achieving a multidimensional and holistic lifestyle encircling emotional, social, physical and spiritual well-being.

About the Program: As Higher Education is realigning to the 'new normal', the Strengthening Wellness Program intends to postulate opportunities to foster positive outlook, resilience, harmonious wellness for building a hope-filled future of its students and teachers. This program aims to scaffold striving for academic, personal and professional excellence. IQAC has orchestrated stimulating resource persons and variety of themes to enhance the quality of life, zest for positive existence and contribute to wellness of the individuals and the community.

- Timing: Inaugural session and first webinar (26th June 2020) will be from 11: 00 a m to 12:15 p.m.
- · Subsequent webinars (July to December) will be from 4:00 p.m. to 5:00 p.m.
- Detailed schedule with the reading material will be sent to enrolled participants.
- No registration fee will be charged. Registration link will be open till  $24^{\rm th}$  June 2020.
- One can participate in all of them or can opt to attend any 5 for receiving the E-certificate.

Registration Link

Program Convenors:
Dr Rajendra Shinde, (Principal - SXC) & Dr Sosamma Samuel
(Principal- SXIE)
Program Coordinators:

Dr. Seema Das (SXC) & Ms Kalpana Chavan (SXIE)

For more details visit www.xaviers.edu ( SXC)/ www.sxie.info (SXIE)

Webinar Series

1) 26th June 2020: Core Strengthening

Ms Pratiksha Phadnis

Head of Dept. Physical Education & Sports, Govt. of Maharashtra's Ismail Yusuf College.

2) 24th July 2020:

Wellness & Coping with Adversities Dr Aamir Shaikh,

Founder, Health Care Consultant, Assansa Consultancy.

3) 28th August 2020: Wellness and Values

(Dr) Fr Keith D'Souza S.J.,

St. Xavier's College (Autonomous), Mumbai

4) 25th September 2020: Immunity Building & Wellness Dr Seema Das

44OD, Dept. of Life Science & Biochemistry, St. Xavier's College (Autonomous), Mumbai

5) 16th/24th October 2020: Wellness for life

6) 27th November 2020 Emotional Resilience and Wellness Dr Gomathi Shah.

Associate Prof, Centre for Education, Innovation & Action Research, TISS.

7) 18<sup>th</sup> December 2020: Wellness in Higher Education (Dr) Fr. Frazer Mascarenhas S.J.,

St Stanislaus High School

Contact us Ms. Kalpana Chavan: Mob: 9820817667/ Email: iqac.wellnessxaviers@gmail.com





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<u>Collaborative Activity</u>: Xavier's Institute of engineering - St. Xavier's College Mumbai -Data Science using R for beginners

Date:  $1^{st} - 5^{th}$  June 2020







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<u>Collaborative Activity</u>: Xavier's Institute of engineering - St. Xavier's College Mumbai - Experimental design and Optimization in Machine Learning

Date: 1st to 12th June 2020







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<u>Collaborative Activity</u>: Xavier's Institute of engineering - St. Xavier's College Mumbai -Course on Career booster

Date: 9th to 14th June 2020







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<u>Collaborative Activity</u>: SPECTRUM: A Collaborative Publication -Department of Life Sciences, Sophia College - Autonomous, Mumbai and the Department of Life Science and Biochemistry, St. Xavier's College - Autonomous, Mumbai – 2019-20

#### Summary of spectrum 2019-20

The 13<sup>th</sup> and 14<sup>th</sup> issues of Spectrum were brought out in the months of March and June respectively.

Expectedly, 'In the news' in both the issues featured information about the pandemic, Covid-19 and the lessons learnt from lockdown.

'Insight' talked about the role of the various cells-WBCs and lymphocytes- forming the 'army' of our body to combat infections, and role of gut microbes and the gut-brain axis.

'Science in daily life' gave the importance of saliva and the role of soaps and sanitizers as protectants against Covid-19 while 'Through the lens' presented pictures of a teak leaf skeletonized by a moth larva and the Malabar pit viper.

A question on infection and spread of a disease as well as a crossword on astronomy stimulated the Greys of the readers.

How to learn social distancing from *Drosophila* and other animals was featured in the section 'Long, long ago' of issue 13 while the 14<sup>th</sup> issue dealt with understanding evolution via fitness, natural selection, and survival of the fittest.

Excerpts from two books were included in 'Thought byte'- 'In viruses and man: a history of interactions' by Milton W Taylor, and 'Gorillas in the mist' by Dian Fossey.

**About Spectrum: Spectrum - Hues of Science,** is a newsletter published every 3 months for popularizing basic science amongst school children, class 7 and above. The newsletter is available free of cost to all on the link provided below as a soft copy. Limited hard copies are printed for each issue and circulated to schools and NGOs serving underprivileged children.

Initiated in March 2017 by a few academicians, it was made into a collaborative endeavour of the Department of Life Sciences, Sophia College - Autonomous, Mumbai and the Department of Life Science and Biochemistry, St. Xavier's College - Autonomous, Mumbai, under the DBT STAR college scheme. The collaboration was initiated with Issue 5, March 2018 and continues till date.

The newsletters have the following seven features:

• In the news (Current science/headlines/Bytes)

udps this (review article on any topic)

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- Science in daily life
- Stimulate your Grey
- Through the lens
- Long, long ago
- Thought Byte

The team comprises an Editorial Committee, Advisory Committee and Student assistants for design and layout. Faculty and students from both colleges contribute articles that are reviewed, edited, and published with due approval of the Advisory committee.

Spectrum archives available at - spectrumsciencemagazine.blogspot.in





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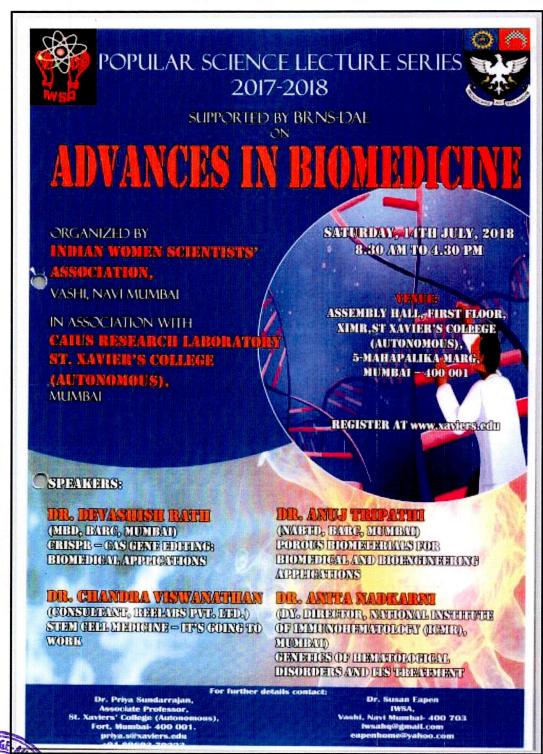
2018 - 2019



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<u>Collaborative activity</u>: Popular lecture Series on Advances in Biomedicine" in collaboration with Indian Women Scientists Association, Mumbai and Caius Research Laboratory, St. Xavier's College, Mumbai

Date: 14th July 2018



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IWSA Popular Science Lecture Series (2017-18)



#### Advances in Biomedicine

Organized by

Indian Women Scientists' Association, Vashi, Navi Mumbai Supported by BRNS - DAE

IN ASSOCIATION WITH



CAIUS RESEARCH LABORATORY, ST. XAVIER'S COLLEGE (Autonomous), MUMBAI

Venue

Venue: Assembly Hall, First Floor, XIMR St. Xavier's College(Autonomous) 5 – Mahapalika Marg, Mumbai – 400001.

Date and Time: Saturday, the 14th July, 8.30 AM to 4.30 PM

8.30 – 9.30 am Registration

9.30 – 9.45 am Welcome and Inauguration by Principal, St. Xavier's College

9.45 – 11.15 am Dr. Devashish Rath (MBD, BARC, Mumbai)
Popic: CRISPR – CAS GENE EDITING: BIOMEDICAL APPLICATIONS

11.15 to 11.45 am TEA

11.45 – 1.00 pm Dr. Chandra Viswanathan (Consultant, REELABS Pvt. Ltd.)
Topic: Stem Cell Medicine – Its going to work

1.00 – 1.45 pm LUNCH

1.45 – 3.00 pm Dr. Anuj Tripathi (NABTD, BARC, Mumbai)
Topic: Porous Biomaterials for Biomedical and Bioengineering Applications

3.00 – 4.15 pm Dr. Anita Nadkarni (Dy. Director, National Institute of Immunohematology

ICMR), Mumbai)

Topic: Genetics of Hematological Disorders and its Treatment

4.15 pm Vote of Thanks

Students, researchers and teachers are welcome to attend.

Register at www. xaviers.edu. Registration — Rs.100'- For students and Rs. 200'- for faculty.

Contact: Dr., Priya Sundamajan, St. Xavier's College, Mumbai (3969379223)

Dr. Susan Eapen, JWASA. eapenhome@yahoo.com



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<u>Collaborative activity</u>: 3 days Hands-on Faculty Workshop on "Integrating Applied Bioinformatics in UG- Life Science Education" in collaboration with Homi Bhabha Centre for Science Education, TIFR and Postgraduate Department of Biotechnology

Date: 27th to 29th September 2018

**Background:** The emergence of 'Modern Biology' in the post genome era has created a demand for researchers with interdisciplinary competencies in biology, statistics, and computer sciences. Even though bioinformatics as a course has been introduced in most undergraduate biology programmes, it is largely dealt with as a separate topic in the curriculum. This lack of integration of bioinformatic tools into life sciences education poses challenges with the development of a coherent understanding among students, especially for application-oriented courses such as biotechnology. One of the major barriers in effectively utilizing computational biology tools is the lack of training of the instructors involved in teaching these undergraduate courses. Many current faculty members were trained before the widespread use of bioinformatics and quantitative tools in life science research and thus need training in these interdisciplinary areas themselves.

#### Objective of the workshop:

- Building a general awareness among teachers about the available web-based applications and bioinformatics tools.
- Using a problem-solving approach to train teachers for utilizing the web-based bioinformatic tools.
- Sensitizing teachers for integration of bioinformatics in teaching-learning of undergraduate biology courses.
- Developing meaningful learning resources for students based on the exposure in the workshop.

**Title of the workshop:** 3 days Hands-on Faculty Workshop on "Integrating Applied Bioinformatics in UG- Life Science Education"

Collaborator: Homi Bhabha Centre for Science Education, TIFR under DBT-Star Scheme

**Participants:** Faculty members from Department of Biotechnology, Microbiology and pharmacy-from, 14 colleges of Mumbai university - 21

Date: 27<sup>th</sup> September 2018- 29<sup>th</sup> September 2018 Time: 9.00 am- 5:00 pm

Venue: P G Department of Biotechnology, Bioinformatics Laboratory, Knowledge Centre, XIMR Computer center

Resource Persons.

COLLEGE-MUROUS AMANUAL AND CHILD

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Dr. Aswin Sai Narain Seshasayi, Scientist, Department of Computational Biology, National Centre for Biological Science, Bangalore

Dr. Deepti Gupta, Visiting Fellow, Homi Bhabha Centre for Science Education, Mumbai

Ms. Norine Dsouza, Assistant Professor, PG Department of Biotechnology, St. Xavier's College (Autonomous), Mumbai

Dr. Shiney Peter, Assistant Professor, PG Department of Biotechnology, St. Xavier's College (Autonomous), Mumbai

Mr. Farhan Ali, Ph.D. Scholar, Department of Computational Biology, National Centre for Biological Science, Bangalore

Ms. Minal Nenwani, Research Project Fellow and Alumni Indian Institute of Technology, Mumbai







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3 days Hands-on Faculty Workshop on "Integrating Applied Bioinformatics in UG- Life Science Education" in collaboration Homi Bhabha Centre for Science Education, TIFR and Postgraduate Department of Biotechnology – 27th to 29th September 2018







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ST. XAVIER'S COLLEGE (AUTONOMOUS), MUMBAI

8

HOMI BHABHA CENTRE FOR SCIENCE EDUCATION, TIFR





FACULTY WORKSHOP
Under DBT STAR SCHEME
INTEGRATING
APPLIED
BIOINFORMATICS
IN
UG-LIFE SCIENCE
EDUCATION

27th to 29th September, 2018.

Venue: Knowledge Centre, SXC.

Resource:
Post Graduate Department of Biotechnology





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<u>Collaborative Activity</u>: Department of Life science, K.C college and Postgraduate department of Biotechnology, St. Xavier's College, Mumbai 3 days Hands-on Workshop on Animal Tissue Culture Techniques for UG Life Sciences Students.

Date: 29<sup>th</sup> – 31 January 2019

**Title of the workshop:** 3 days Hands-on Workshop on Animal Tissue Culture Techniques for UG Life Sciences Students.

Collaborator: Department of Life Science, K C College under DBT-Star Scheme

Participants: TY BSc- Life Sciences Students from K C College - 24

Date: 29th January 2019-31st January 2019

**Time:** 11:30 am- 4:00 pm

Venue: P G Department of Biotechnology – Laboratory and Animal cell culture facility

Resource Person. Shiney Peter

Animal cell culture techniques play an especially important role in drug discovery process. Understanding the concepts involved in *in vitro* culturing of animal cells at the undergraduate level is becoming a mandate in the current research scenario.

TY BSc Life Science curriculum (University of Mumbai) includes an introductory unit on animal cell culture. However due to lack of infrastructure and expertise, the practical aspects are not delivered at many colleges.

Under the DBT Star College Scheme, Department of Lifesciences, K C College approached PGDBT to conduct a hand- on workshop on animal tissue culture techniques for the final year students.

**Objective of the workshop:** To give TY BSc students a hands-on experience of primary tissue culture using an avian embryo model.

#### **Learning outcomes:**

This workshop was an initiative to introduce cell culture techniques to UG students. The understanding of cell biology as well as in vitro cell culture systems would be enhanced.



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**Follow up action:** Based on the feedback which was collected as a written document, we can initiate a summer school programme or short-term certificate programme on animal cell culture techniques for UG and PG students.







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Collaborative activity: Popular lecture Series on Genotyping" in collaboration with Indian Women Scientists Association, Mumbai and Caius Research Laboratory, St. Xavier's College, Mumbai

Date: 11<sup>h</sup> February 2019





# Popular Science Lecture Series 2018-19

Organized by
Indian Women Scientists' Association,
Vashi, Navi Mumbai
Supported by BRNS-DAE

In association with Caius Research Laboratory, St. Xaviers College (Autonomous), Mumbai

> Lecture on Gene Imprinting

by Dr. Nafisa Balasinor Scientist F.

ICMR-National Institute for Research in Reproductive Health Parel, Mumbai

> Venue: MMR, First Floor, St. Xaviers College- (Autonomous), Mumbai 5, Mahapalika Marg, Mumbai, 400001

Date and Time Monday, 11th February, 2019, 3.00 pm

ALL ARE CORDIALLY INVITED TO ATTEND

Hunds



PRINCIPAL
ST. XAVIER'S COLLEGE
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MUMBAI - 400 001.

NAAC SSR Cycle 4 (2015-2020): 6 5 3 Collaborations



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<u>Collaborative Activity</u>: National Society of the Friends of the Trees, Mumbai – St. Xavier's College, Mumbai- National Seminar on 'Climate, Rivers & Vegetation

Date: 14th February 2019

National Seminar Report: Botany Department and National Society of the Friends of the Trees organized a national seminar on 'Climate, Rivers and Vegetation' on 14th February 2019. Mr. Bittu Sahgal, founding editor, Sanctuary Asia gave the keynote address on 'Climate Change'. Other renowned speakers included Dr. Pradeep Srivastava, (retd) Senior Scientist, Medicinal and Process Chemistry Division, CSIR- CDRI, Lucknow, who spoke on 'Unique Biodiversity of southeast Asia and Bionics: A promising Future Ahead' through his scientoons. Dr. Milind Sardesai, Professor, Department of Botany, Pune University, spoke on 'Whether our forefathers were knowing the technique of sex alteration in plants?'. Mr. Murari Ratnam, Ex-Director, Central Soil and Materials Research station, Ministry of Water Resource, New Delhi gave an illustrated talk on 'Effect of climate on water resources. Dr. Ajit Sonakia, IFS (Retd) Principal Chief Conservator of Forest, Bhopal gave a talk on 'Global warming and Climate change'. Dr. Pravish Pandya, Director, Science and Conservator, Sanctuary Asia led the panel discussion to answer all the queries.

Some SYBSc students and all MSc-I Botany Students under the guidance of Dr. Vijaya Lobo also put up a small exhibition of plants and herbal cosmetics products, around a theme of 'reuse, recycle and innovate'.

More than 180 participants from various colleges, institutes, and NGOs including students, teachers, researchers, lay persons and activists attended and made the seminar a successful event.

The First Botany Department Magazine 'Acta Botanica' designed and made by TYBSc Botany students was released during the inaugural session. The TYBSc and MSc students volunteered and helped in various ways to carry out the huge task of seminar organization.

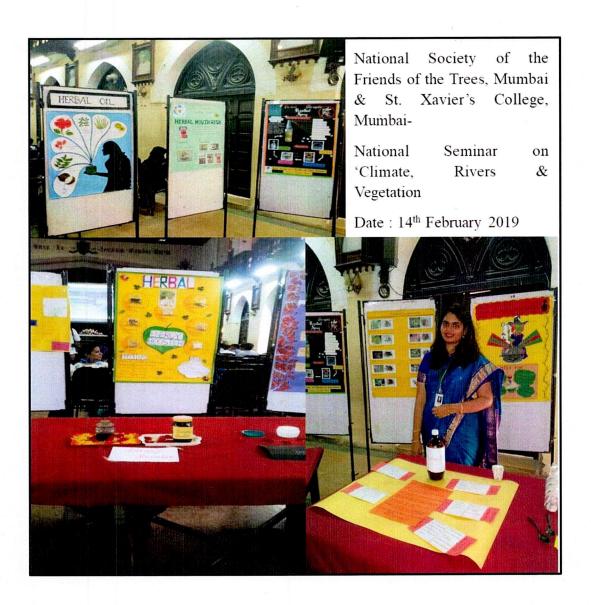




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National seminar on

# **Climate, Rivers & Vegetation**

Thursday, 14<sup>th</sup> February 2019 at St. Xavier's College (Autonomous), Mumbai

### Organizers:

St. Xavier's College (Autonomous), Mumbai

(NAAC re-accredited A:3.63; UGC "College of Excellence" from 1st April 2014)

in collaboration with

National Society of the Friends of the Trees

For details and registration visit: https://goo.gl/forms/maB3eH5vu2VYqB903







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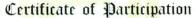


St. Xavier's College (Autonomous), Mumbai

in collaboration with

National Society of the Friends of the Trees

presents this



JPK Menon

for attending the One-day National Seminar on 'Climate, Rivers and Vegetation', held on 14th February 2019 at St. Xavier's College (Autonomous), Mumbai.

Dr. Rajendra Shinde

Principal

Convenor

Dr. Ashok Kothari

President,

N.S.F.O.T.



ST. XAVIER'S COLLEGE (AUTONOMOUS) MUMBAI - 400 001.

NAAC SSR Cycle 4 (2015-2020): 6 5 3 Collaborations



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<u>Collaborative Activity:</u> **SPECTRUM:** A Collaborative Publication -Department of Life Sciences, Sophia College - Autonomous, Mumbai and the Department of Life Science and Biochemistry, St. Xavier's College - Autonomous, Mumbai – 2018-19

#### **Summary of spectrum 2018-19**

The four issues of Spectrum in 2019, 9 through 12, showcased varied interesting articles on the seven themes. There were two articles on stress- one dealing with the neurotransmitter's serotonin and dopamine, and the other on antidepressants. The other 'Insight' topics dealt with the brain's noise filter, and the role of 'tau' proteins in Alzheimer disease.

'In the news' talked about imaging black holes and the preparation and launch of Chandrayan 2.

'Science in daily life' gave the aetiology of the rare hereditary disorder CIPA, neuromarketing-playing with consumer's brain and Artificial Intelligence in sports.

'Through the lens' familiarised the readers with pictures of Lady Margaret passionflower and the flower of *Smithia hirsuta* along with a picture of the cricket insect.

'Long, long ago' *featured* the staining techniques of Golgi and Cajal-Nobel prize winners in 1906, interesting information about mirror neurons and their role in mimicking behaviour and relation to empathy, and the composition and benefits of green tea.

Puzzles on triangles, Baobab trees and cryptogram as well as a biological crossword stimulated the reader's greys.

Review of a book, 'The gene machine: The race to decipher the secrets of the ribosome' by the Nobel Laureate Venki Ramakrishnan was one of the 'Thought bytes', the others being quotes from Mario Vargas Llosa (Nobel prize in literature, 2010) and Lal Bahadur Shastri and an excerpt from the book 'Poor Economics: A radical rethinking of the way to fight global poverty' by Abhijit V Banerjee.

The Dec edition was a special issue dedicated to Nobel Prizes, 2019 and highlighted the prizes in the field of Physiology/Medicine, Chemistry, Physics, Literature and Peace.

<u>About Spectrum</u>: Spectrum - Hues of Science, is a newsletter published every 3 months for popularizing basic science amongst school children, class 7 and above. The newsletter is available free of cost to all on the link provided below as a soft copy. Limited hard copies are printed for each issue and circulated to schools and NGOs serving underprivileged children.

Initiated in March 2017 by a few academicians, it was made into a collaborative endeavour of the Department of Life Sciences, Sophia College - Autonomous, Mumbai and the Department of Life Science and Biochemistry, St. Xavier's College - Autonomous, Mumbai, under the



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DBT STAR college scheme. The collaboration was initiated with Issue 5, March 2018 and continues till date.

The newsletters have the following seven features:

- In the news (Current science/headlines/Bytes)
- Insights (review article on any topic)
- Science in daily life
- Stimulate your Grey
- Through the lens
- Long, long ago
- 7. Thought Byte

The team comprises an Editorial Committee, Advisory Committee and Student assistants for design and layout. Faculty and students from both colleges contribute articles that are reviewed, edited and published with due approval of the Advisory committee.

Spectrum archives available at - spectrumsciencemagazine.blogspot.in





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2017 - 2018



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Collaborative Activity: Veruschka Foundation, Mumbai, an NGO working for differently abled children and Department of Life Science & Biochemistry and the Caius Laboratory for Interdisciplinary Research, St. Xavier's College, Mumbai - A two-day National Camp and Conference on "Know Better, Do Better Developmental Disabilities & You"

Date: 20th and 22nd January 2028

A two-day National Camp and Conference was organized on 20th and 22nd Jan. 2018 in collaboration with The Veruschka Foundation, an NGO working for differently abled children founded by dept. alumna Ms. Tatyanna Dias, the Desai Foundation for Change, the Department of Life Science & Biochemistry and the Caius Laboratory for Interdisciplinary Research, St. Xavier's College, Mumbai. The camp held on 20th Jan. 2018, was titled 'Know Better, Do Better' and kept open to members of the public to raise awareness about the facts and misconceptions about various developmental disabilities. Mr. Nitin Patil, Commissioner for Disability, Maharashtra State was the special invitee for the camp and interacted with the students and NGOs An exhibition on the same was arranged by FYBSc Life Science students as part of their dept. SIP activity. The One-Day National Conference held on 22<sup>nd</sup> Jan. 2018 was titled 'Developmental Disabilities and You', and was well attended and well received by all participants. It was inaugurated by Dr. Keki Turel, renowned Neurosurgeon. The event brought together children and adults suffering from autism, their families, caregivers, counsellors, doctors, research scientists, students, teachers and the layperson on one platform to share insights on the subject and benefit from it. The speaker's list is appended towards the end.





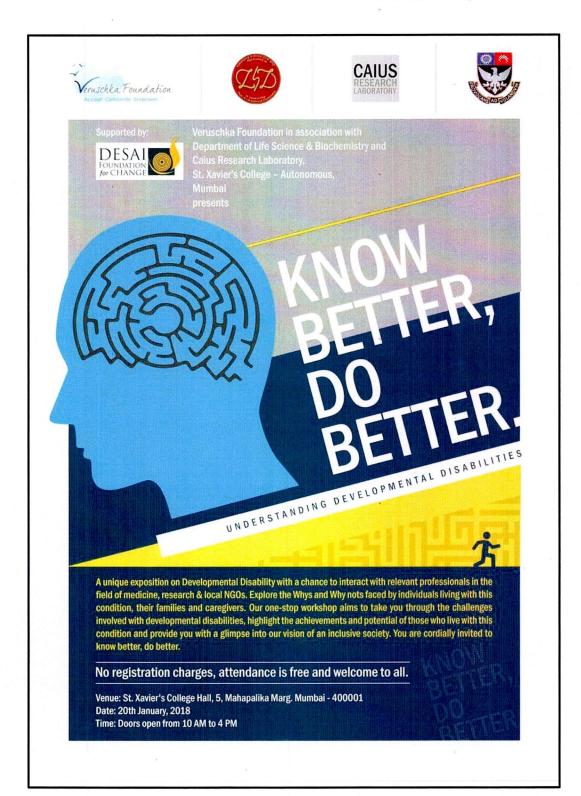
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#### St. Xavier's College (Autonomous), Mumbai Biowaves 2018: "Developmental Disabilities and You"

Conference Schedule - 22<sup>nd</sup> January 2018

8:45 am - 9:15 am	Registration & Breakfast	
9:15 am – 9:30 am	Inauguration by Dr. Agnelo Menezes Principal, St. Xavier's College	
9:30 am – 10:20 am	Session 1 – Looking into the brain through a microscope Moderator, Dr. Bhaskar Saha	
9:30 am – 9:50 am	Prof. Shubha Tole Tata Institute of Fundamental Research, Mumbai Title: Bullding brain circuitry	
9:50 am – 10:10 am	Dr. Tatyana Dias Veruschka Foundation, Mumbai Title: Human stem cells as a tool to study developmental disabilities	
10:20 am – 11:10 am	Session 2 – Examples Of What Works Moderator: Ms. Chaula Badiani	
10:20 am – 10:35 am	Dr. Anjali Joshi Fellow All India Occupational Therapists Association, Mumbai Title: Occupational Therapy: Training a child to become self-reliant	
10:35 am – 10:50 am	Dr. Yaashna Rajani Cloudnine Group of Hospitals, Mumbai Title: Speech, Language and Communication therapy - changing the world one word at a time	
10:50 am – 11:05 am	Ms. Fatima Shaikh Participating parent, Mumbai Title: Usaid's Journey	
11:10 am 11:25 am	TEA	
11:25 am – 12:10 pm	Session 3 – Medical Management: Current Trends Moderator: Dr. Sushama Nagarkar	
11:25 am – 11:40 am	Dr. Roopa Srinivasan Ummeed, Mumbai Title: Early Childhood Development and Disabilities: Role of Medicine, Mind and Matter	
11:40 am 11:55 pm	Dr. Shilpa Kulkarni Wadia Hospital, Mumbai Title; Medical management of developmental disabilities	





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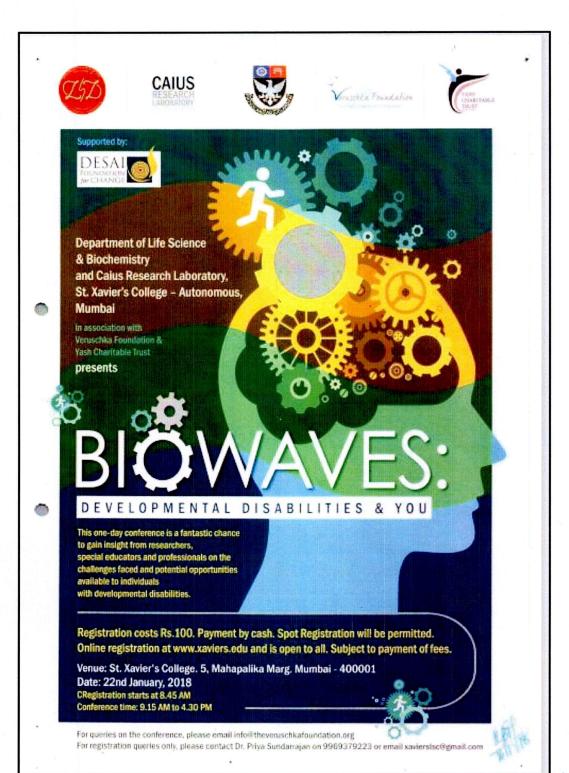




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<u>Collaborative Activity</u>: National Society of the Friends of the Trees, Mumbai – St. Xavier's College, Mumbai- National Seminar on 'SGNP' A Living Treasures amidst Concrete Jungle & Sustainable Urban Forest Management

Date: 8<sup>th</sup> February 2018

#### ST. XAVIER'S COLLEGE - (AUTONOMOUS), Mumbai

in association with

National Society of the Friends of the Trees organizes a National Seminar on

'SGNP" A Living Treasure amidst Concrete Jungle & Sustainable Urban Forest Management.

Date: 8th February 2018

Venue: St. Xavier's College Hall (Gr. Floor)

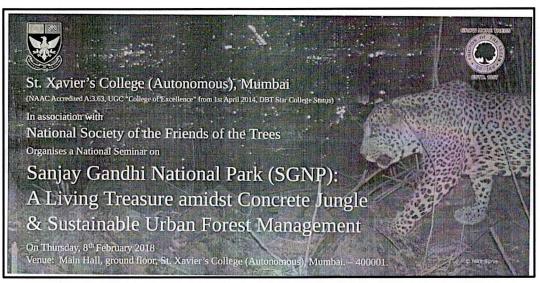
#### Schedule for Seminar

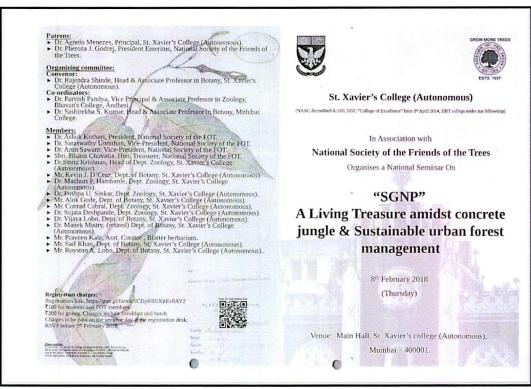
Timings	Events/ Lectures by	topics
08:30 a.m. to 09:00 a.m.	Breakfast and registration	
09:00 a.m. to 09:15 a.m.	Fr. Prashant Olalekar, S.J.	Prayer for Environment
	Dr. (Fr.) Anthony J. D'Souza S.J. Dr. (Fr.) Roy Pereira, S.J. Dr. Deepak Apte Dr. Ashok Kothari Dr. Rajendra D. Shinde Dr. Smita Krishnan	Inauguration
09:15 a.m. to 09:45 a.m.	Inaugural Speech Dr. Deepak Apte	Conservation issues of Urban Areas: Mumbai
10:00 a.m. to 11:00 a.m.	Dr. Vidya Athreya	Humans and leopards: Conflict or interactions?
	Mr. Nikit Surve	
11:00 a.m. to 11:15 a.m.	Tea break	
11:15 a.m. to 12:15 p.m.	Dr. Renee Borges	The Forgotten Pollinators: Urban Forests as Refugia
12:15 p.m. to 01:15 p.m.	Dr. Mayur Nandikar	Endemic Flora of Sanjay Gandh National Park
01:15 p.m. to 02:00 p.m.	Lunch	
02:00 p.m. to 02:45 p.m.	Dr. Anish Andheria	Creepy crawlies and other creatures of Sanjay Gandhi National Park
02:45 p.m. to 03:30 p.m.	Mr. Isaac Kehimkar	Butterflies of Sanjay Gandhi National Park
03:30 p.m. to 04:15 p.m.	Ms. Mugdha Karnik	SGNP- The Warli and other tribal settlement problems and new approaches to solve them
04:15 p.m. to 04:45 p.m.	Dr. Sashirekha Iyer	Rapporteur- Summary
	Dr. Agnelo Menezes	Valedictory function
04:15 p.m. to 04:45 p.m.	Dr. regilere iriellezes	-





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College profile:

St. Xavier's college was founded in 1869 by the Society of Jesus, a Christian Religious Organisation started by St. Ignatius of Loyola. Since its very inception, the Society has significantly contributed to the field of education throughout the world, inspired by a vision of the human, drawn from the life, teachings and personality of Jesus Christ. In India, it was St. Francis Xavier, after whom the College is named, who began the educational work of the Society of Jesus. St. Xavier's College looks upon itself as an academic community where scholars, both students and teachers, have the freedom and responsibility to communicate, evaluate and enlarge humankind's store of knowledge. The College stands for academic excellence and endeavours to create an environment, which generates a love of learning, a habit of critical thinking and the ability for accurate expression. The College was awarded Academic Autonomy by the University of Mumbai from the academic year 2010-11. Academic Autonomy places trust in the Faculty of St. Xavier's College to take up the responsibility of designing its own courses, framing its own syllabi and conducting its own evaluation for its students. For information on the various courses conducted refer to the following link: http://xaviers.edu/main/index.php/admissions-and-courses

Blatter Herbarium:
It was started at the end of the 19th century. By 1918 a very large number of plants were gathered by Fr. E. Blatter, S.J., his associates and students. The Herbarium was named after Fr. Blatter in 1941 and contains the largest private collection of flowering plants in Western India. It provides facilities for the study of Plant Systematics and has a well-stocked library on Systematic Botany. Herbarium has received the Sir Ratan Tata Trust Grant for upgradation and digitization of the plant database. Dr. Rajendra Shinde is the present Director.

The National Society of the Friends of the Trees:

The National Society of the Friends of the Trees (FOT), was founded in 1957.In the early years of India's Independence, eager to contribute to the country's well-being, a committed group of people, concerned about the preservation of forests, joined bands to create an awareness of the vital role that trees play in our lives, protect and preserve them, and propagate plantific. The Society was registered under the Societies Registration Act, 1950. The activities of the Society include public lectures, exhibitions, sapling distribution and tree-planting programmes through educational institutions, bousing societies, corporate and government agencies. Annual events include a Vegetable, Fruit and Flower Show, a nature drawing competition for school children and a seminar, Vanashobha, the Journal of the Society, is an annual publication devoted to environment conservation. Regular nature outings are conducted for its members

throughout the year. This year, the annual Vegetable, Fruit and Flower Show will be held on the  $3^{\rm sc}$  and  $4^{\rm sc}$  of February, 2018 at D.G. Ruparel College, Matunga

Aim and objectives of the seminar:

The Sanjay Gandhi National Park (SGNP) is a unique in being the only National Park in the world within the limits of a megapolis, Mumbai. Its area of 104 sq.km. is surrounded by human habitations on almost all sides. Two lakes situated in SGNP, - Tulsi and Vihar lakes, form natural water catchments and also supply part of Mumbai's potable water. The Park's biodiversity is greatly influenced by elements of the Sahyadri Hills to the east. The dominant habitat is forest – moist deciduous, semi-evergreen and also mangrove scrub forest. There are an estimated 1,300 species of flowering plants in the Park. The National Park is home to 35 species of mammals including about leopards, 274 species of birds, resident as well as migrant, 52 species of reptiles and a vast variety of invertebrates including 170 species of butterflies.

Over the years, the changes brought about by the urbanization of Mumbai have affected the survival of numerous species. This has led to tremendous environmental problems, which can be solved if the city moves from net consumers to net generators of ecosystem services. Through this seminar we attempt to deliberate, discuss, understand, and put forward some strategies to sustain SGNP.

- The eminent speakers include the following:

  Dr. Renee Borges, Professor at Indian Institute of Science, Bengaluru, 'Plant Insect interaction'.

  Dr. Mayur Nandikar, Scientist at Naoroji Godrej Centre for plant research (NGCPR), Pune, 'Endemic Flora of SNGP'.

  Dr. Yidya Atreye, Wild life scientist and faculty at IISER, Pune, and Nikit Surve, 'Human Leopards conflicts in SGNP'.

  Dr. Anish Andheria, President, Wild Life Conservation Trust, 'Creepy, crawlies and other creatures, of SGNP'.

  Dr. Supriya Jhunjhunwala, Advisor Coasts and Marine protected areas at GIZ, Cambridge, United Kingdom, 'Ecosystem services at SGNP'.

  Dr. Shubhalaxmi Vaylure, Founder & CEO, Ladybird Environmental Consulting LEP, 'Moths of SGNP'.

  Mr. Anwar Ahmad, Park director, SGNP, 'Management of SGNP: Practices and Problems'.

- and Problems



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<u>Collaborative Activity</u>: SPECTRUM: A Collaborative Publication -Department of Life Sciences, Sophia College - Autonomous, Mumbai and the Department of Life Science and Biochemistry, St. Xavier's College - Autonomous, Mumbai – 2017-18

#### Summary of spectrum 2017-18 (Spectrum-2018)

The four issues of Spectrum in 2018 dealt with diverse fields in the seven categories.

'In the news' talked about the loss of the iconic British scientist Stephen Hawking in the 5<sup>th</sup> issue and one of the finest Indian carcinologists Dr Boman Framji Chhapgar in the 7<sup>th</sup> issue, while 'Our very own special star'-the Sun- made it to the 6<sup>th</sup> issue.

'Insights' dealt with various topics like the wonders of naming our flora and fauna, sleeping patterns of animals, and epigenetics.

'Science in daily life' featured articles on mysteries associated with sleep, the science behind games like running, jumping etc, laughter and its benefits, and housing conditions and their relationship to health.

Our greys were stimulated by a quiz on constellations featured in national flags of 3 nations, a quiz related to the Persian thinker Avicenna, and puzzles on rectangles and numbers.

'Through the lens' featured a pleasing picture of the state flower of Maharashtra and birds from Rajasthan and the coastal area of India.

The dye Indigo, totipotency, Science books that changed the world (Origin of species, Principia Mathematics, the age of the Earth etc) featured in the section 'Long long ago'.

Thought Byte included excerpts from Darwin's Origin of species, A.P.J. Abdul Kalam's autobiography Wings of love and a short article on National Scientific Temper Day highlighting the work of social reformer Dr Narendra Dabholkar.

The December issue of 2018 was a special issue on Nobel Prizes and featured these prizes in the fields of Physiology/Medicine, Chemistry and Physics.

#### **About Spectrum**

**Spectrum - Hues of Science,** is a newsletter published every 3 months for popularizing basic science amongst school children, class 7 and above. The newsletter is available free of cost to all on the link provided below as a soft copy. Limited hard copies are printed for each issue and circulated to schools and NGOs serving underprivileged children.

Initiated in March 2017 by a few academicians, it was made into a collaborative endeavour of the Department of Life Sciences, Sophia College - Autonomous, Mumbai and the Department of Life Science and Biochemistry, St. Xavier's College - Autonomous, Mumbai, under the

NAAC SSR Cycle 4 (2015-2020): 6\_5\_3\_Collaborations



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DBT STAR college scheme. The collaboration was initiated with Issue 5, March 2018 and continues till date.

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- In the news (Current science/headlines/Bytes)
- Insights (review article on any topic)
- Science in daily life
- Stimulate your Grey
- Through the lens
- Long, long ago
- Thought Byte

The team comprises an Editorial Committee, Advisory Committee and Student assistants for design and layout. Faculty and students from both colleges contribute articles that are reviewed, edited, and published with due approval of the Advisory committee.

Spectrum archives available at - spectrumsciencemagazine.blogspot.in





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2016 - 2017



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<u>Collaborative Activity</u>: SPECTRUM: A Collaborative Publication -Department of Life Sciences, Sophia College - Autonomous, Mumbai and the Department of Life Science and Biochemistry, St. Xavier's College - Autonomous, Mumbai – 2016-17

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The team comprises an Editorial Committee, Advisory Committee and Student assistants for design and layout. Faculty and students from both colleges contribute articles that are reviewed, edited and published with due approval of the Advisory committee.

Spectrum archives available at - spectrumsciencemagazine.blogspot.in

#### Brief summary of Spectrum-2017 issue:

The first issue of 'Spectrum-Hues of Science' came out in March 2017, this issue had all the articles written by the editors and included a letter to the students inviting them to contribute articles to this newsletter. This was followed by three other issues in June, Sep and Dec, 2017. All the issues had articles under the first six feature headings, 'Thought Byte' did not feature in the issues of 2017.

'In the news' covered the history of the Indian Space Program as well as the work going on currently, the change in status of Pluto from a planet to a dwarf planet, information on restriction enzymes and CRISPR-CAS, and the work on understanding the molecular mechanisms of circadian rhythms by the Nobel prize winners in Physiology/medicine in 2017. The last article also talked about the relation of circadian rhythms to various health conditions



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'Insight' had articles on Biomimicry with a note on the birth of 'Velcro' adhesive, the microbiota inside our bodies, the physics behind squirrels not getting hurt when they fall, and the rational and irrational behaviour shown by humans.

'Science in daily life' dealt with topics ranging from the chemistry of cooking to relation between exercise, autophagy and body clean up. Other topics under this section were some interesting facts about memory and brain and an article on 'do trees have brains?

'Through a lens' carried pictures of a little egret and a butterfly, a Buckminsterfullerene and a related structure at Disney's Epcot Centre theme park, Florida.

'Stimulate your greys' succeeded in doing just that by means of a biology crossword, a puzzle based on a chemistry grid, an MCQ on science questions, and a puzzle on probability.

'Long long ago' featured an interesting story about the life of Alfred Nobel, Dr Barry Marshall's journey to receiving a Nobel prize in 2005, typhus fever and the naming of *Rickettsia prowazekii*, and the history of the symbol for zero.

Issues 2 through 4 reported some comments and responses from students about the newsletter.





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2015 - 2016



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Collaborative Activity: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) - India - Knowledge Café - One day progarmme for faculty members

Date: 11-03-2016 About the activity

Knowledge Café was organised by GIZ's CMPA project in partnership with Caius Research Laboratory, St Xavier's College, Mumbai, which provided a multi-disciplinary and cross sectoral platform to discuss future research and networking possibilities in coastal and marine biodiversity conservation and ecosystem management.

The context of the Knowledge Café was set by Dr. Rajendra D. Shinde (Vice Principal, St Xaviers College) and Dr. Neeraj Khera (Senior Technical Expert, GIZ). Mapping of the multidisciplinary and cross-sector expertise in the beginning of the session, enabled in setting the foundation for discussions, as the respective experts provided their insights into the current issues in coastal and marine biodiversity management. Mr. N. Vasudevan (Chief Conservator of Forests & Head of the Mangrove Cell, Forest Department, Government of Maharashtra) shared the existing and planned research and development work being undertaken by the Maharashtra Forest Department on mangrove conservation, estuarine pollution, and coastal livelihoods.

Professor J. B. Mistry, Dean, Xavier Institute of Communication highlighted the work done by his institute on communicating the environmental issues. Professor Mistry emphasised "the valuable contributions by GIZ's CMPA project in building a better understanding on coastal and marine biodiversity amongst media institutes, students and the faculty by introducing it in the mainstream curriculum." Dr. Pradeep Mehta from the Earthwatch Institute India, elaborated on the need "to take the science to the citizens and reaping the benefits of public participation and involvement in monitoring the work on conservation and management of coastal and marine areas, thereby, making the entire process less time-consuming, less expensive and, labour intensive." He also shared various examples and cases from his own work, as well as from different parts of the World, to underline how experts can use the support and involvement of citizen-science for conducting long term multidisciplinary research.

Dr Aeshita Mukherjee (Technical Expert, GIZ's CMPA project) provided insights into the research issues that are urgently needed to understand traditional knowledge and sharing the benefits of biodiversity use with the local communities. Dr Neeraj Khera (Senior Technical Expert, GIZ's CMPA project) provided an overview of the work carried in the state of Gujarat by the CMPA project such as baseline studies on two coastal wetlands, awareness and communication efforts to engage key stakeholders in coastal and marine conservation work. Besides the inputs provided by the resource persons, the participants provided a snapshot of their research interests and ideas, and also formed multidisciplinary groups to further brainstorm over their joint research ideas.

The knowledge café resulted in several research ideas developed by multi-disciplinary teams of experts, which addressed the pressing issues and challenges in managing coastal and marine ecosystems, and biodiversity management. The CMPA project will facilitate further

PRINCIPAL

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development of the research ideas by the faculty members and its application on the field. The participants found the knowledge café very innovative and enriching, and something to be carried out more often at their institutes. The ideas put forward by faculty members were truly diverse and multidisciplinary.



A Knowledge Café on Trends and opportunities for multidisciplinary and cross-sector research in Coastal and Marine Ecosystems

Date: 11-03-2016









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QIZ Biodiversity Programm

To:

Dr. Priya Sundarrajan Associate Professor

St Xaviers College

5, Mahapalika Marg, Mumbai, Maharashtra

Your reference NIL Our reference 11.9299.6/16/16 Date: 28-03-2016 Biodiversity Programme Office

Neeraj Khera Biodiversity Programme Senior Advisor

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GIZ Office New Delhi

21, Jor Bagh, New Delhi – 110 003 India

Subject: Your Contribution in organizing a 'Knowledge Café on Trends and opportunities for multidisciplinary and cross-sector research in Coastal and Marine Ecosystems" in Mumbai on March 11<sup>th</sup> 2016

Dear Dr. Sundarrajan,

Greetings from GIZ Biodiversity Programme!

I am writing this letter to formally thank you for your valuable contribution as an Organizer on behalf of St. Xavier's College for the "Knowledge Café on Trends and opportunities for multidisciplinary and cross-sector research in Coastal and Marine Ecosystems" held for the faculty from various colleges of Mumbai, on 11th March, 2016 at St. Xavier's College.

This Knowledge Café was organized by GIZ Biodiversity Programme in collaboration with the Caius Research Laboratory for Interdiciplinary research, St Xaviers' College under the project 'Conservation and Sustainable Management of Existing and Potential Coastal and Marine Protected Areas (CMPA)'. The project facilitates knowledge exchange on coastal and marine issues among the experts in a cross-sector and multidisciplinary group, and knowledge café is one of the instruments.

I look forward to working with you again on similar innovative ideas and events.

Yours sincerely

Hustine

**Dr. Neeraj Khera** Senior Advisor, Biodiversity Programme Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

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