

# Puducherry Council For Science and Technology

## Activities 2022 -2023

Date of Establishment: 23.06.1998

Administrative Department: Department of Science, Technology and Environment

### **Objectives of the Council are:**

- ❖ To identify areas for the application of S&T to the developmental needs of this Territory.
- ❖ To advise the Government on the formulation of the policies .
- ❖ Financial assistance to pursuing research in the area of Science, Technology and Environment.
- ❖ Popularization of science among students and the public.
- ❖ The Council functions with the recurring financial support in the form of annual Grant-in-Aid (GIA) from the budget of the Administrative Department and programme specific non-recurring grants from DST, GOI.

# Structure & Manpower of the Council



# IMPLEMENTATION OF STI ECO SYSTEM COMPONENTS BY THE PUDUCHERRY COUNCIL FOR SCIENCE & TECHNOLOGY



# 1. RESEARCH & DEVELOPMENT

- Short Term research funding Programme

- Beneficiaries : Faculties of Academic & Research Institutions
- Thrust Areas- Basic scientific research, Agriculture, Health, IT, Environment & Water Resource Management
- Grant – 1 Lakh/Project      Duration- 1 Year
- Projects funded from 2010 to 2022 - 65 Nos
- User Access of final Research Reports:

Hosted in Deptl website - <https://dste.py.gov.in>

For this CFY Rs. 10/- lakhs has been allocated. 40 proposal were received, 25 proposals are to be placed before the expert committee as detailed below:

# LIST OF RESEARCH PROJECTS FOR THE YEAR 2023-2024 UNDER SCRUTINY

Sl. No.	Name of the Principal Investigator and Institution	Title of the Project
1	Dr. Rajaneesh Anupam, Associate Professor, Department of Biochemistry and Molecular Biology, Pondicherry University, Kalapet, Puducherry.	Detection of Shiga Toxin-Producing Escherichia coli (STEC) in Food Samples of Puducherry.
2	Dr. Anitha T.S, Assistant Professor, Dept. of Biochemistry & Molecular Biology, Pondicherry University, Puducherry.	Comparison on the levels of oxidative stress markers in acute and chronic kidney patients of Puducherry Population: A prospective case control study.
3	Dr. J. Ronald Aseer, Assistant Professor, Department of Mechanical Engineering, National Institute of Technology Puducherry, Karaikal.	Natural Fiber Based Sandwiched Ice Box for Fisherman Community Located at Coastal Puducherry Region.
4	Dr. R. Rukkumani, Professor & Head, Biochemistry & Molecular Biology, Pondicherry University, Puducherry.	Relation Between Water Composition & The Incidence Diabetes Mellitus – An Evaluatory Study in Puducherry.
5	Dr. K. Murugavel, M.V.Sc., Ph.D, Professor, Dept. of Veterinary Gynaecology & Obstetrics, Rajiv Gandhi Institute of Veterinary Education and Research, Kurumbapet, Puducherry.	Genetic Upgradation of non-descript Goats by Artificial Insemination – a training module for Empowering Rural Women of Puducherry.

6	Dr. N.Arul Jothi, PhD., Professor and Head, Department of Veterinary, Surgery and Radiology, Rajiv Gandhi Institute of Veterinary Education and Research, Puducherry.	A Novel treatment for Joint Ill with Autologous Peripheral Blood Mononuclear Cells in calves.
7	Dr. K.P.Mini, Principal Investigator, Department of Veterinary Pharmacology and Toxicology, Rajiv Gandhi Institute of Veterinary Education and Research, Kurumbapet, Puducherry.	Evaluation of Acaricidal activity of Tinospora cordifolia and Acorus calamus.
8	Dr. T. Ramanadane M.Sc. (Ag.), Ph.D., Professor, Seed Science and Technology Unit, Department of Plant Breeding and Genetics, Pandit Jawaharlal Nehru College of Agriculture & Research Institute, Karaikal.	Demonstration cum popularization of liquid bio-fertilizers to minimize the use of inorganic fertilizers by the farmers of Karaikal and Puducherry districts and reduce environmental pollution
9	Dr. V. Sundaram, Professor (Horticulture), Pandit Jawaharlal Nehru College of Agriculture and Research Institute, Serumavilangai, Nedungadu (PO) Karaikal.	Technology dissemination for Rejuvenating Urban Vegetable Production.
10	Dr. P.Saravanane, Ph.D., Professor, Dept. of Agronomy, Pandit Jawaharlal Nehru College of Agriculture and Research Institute, Karaikal.	Weed management with drone-based precision farming-An ecological approach.
11	Dr. M. Balachandiran, Assistant Professor, Dept. of Biochemistry, Mother Theresa Post Graduate and Research Institute of Health Sciences, Puducherry.	Effectiveness of multipronged intervention strategy on the prevention and management of anemia among the reproductive aged group of women at Puducherry.
12	Dr. K. Carthigayan, Lecturer in Physics, Women's Engineering College, Lawspet, Puducherry.	Seeding science awareness, environmental consciousness and scientific involvement among the school children in rural areas.
13	Thiru. C. Udhayakumar, Lecturer in Chemistry, Women's Engineering College, Lawspet, Puducherry.	Development of Sustainable and Eco-Friendly Environment Reducing The heavy metal Content In Electroplated Components of automobiles.
14	Thiru K.Ravikumar, Lecturer in Civil Engineering, Women's Engineering College, Puducherry.	Comparative study of Hardness of Rainwater and Ground water in Localities of Puducherry.
15	Dr. R. Kalpana, Professor, Department of Computer Science Engineering, Puducherry Technological University, Puducherry.	Prediction of Groundwater Quality Index using Ensemble Learning model.



16	Dr. Malaya Kumar Nath, Assistant Professor, Department of Electronics Communication and Engineering, National Institute of Technology Puducherry, Karaikal.	Assessment and Diagnosis of Fetal Structural Abnormalities by analysing Magnetic Resonance Imaging (MRI) and ECG Signal of the Fetus.
17	Dr. A. Venkadesan, Associate Professor, Department of Electrical & Electronics Engineering, National Institute of Technology Puducherry, Karaikal.	IoT-based Bifacial Solar-Powered Smart Water Pumping System.
18	Dr. P.Elango, Assistant Professor, Department of Information Technology, Perunthalaivar Kamarajar Institute of Engineering and Technology (PKIET), Nedungadu, Karaikal.	Artificial Intelligence / Machine learning for Traffic Optimization in U.T of Puducherry.
19	Dr. Natesan Payer Nadimuthu Assistant Professor of Botany, Tagore Govt. Arts & Science College, Puducherry.	Preparation of Big Trees Registry of Puducherry using conventional methods coupling with open access satellite imagery.
20	Dr. R. Karthikeyani , Assistant Professor, Department of Zoology, Tagore Govt. Arts & Science College, Puducherry.	Inventory and documentation of Urban Spiders (Arachnida: Araneae) and its conservation by creating awareness among community in Puducherry.
22	Dr. J. Presena, M.Sc., M. Phil., B.Ed., Ph.D., Assistant Professor & Head, Department of Biological Science, Indira Gandhi College of Arts and Science, Indira Nagar, Pondicherry.	Assessing Tree Biodiversity and its Restoration in Government offices of Puducherry, India: Implications for Sustainability and Urban Ecosystems.
23	Thiru. M. Gandhi Pragash, Assistant Professor, Department of Biotechnology, Indira Gandhi College of Arts and Science, Indira Nagar, Pondicherry.	Development of Bio-composite Materials from Solid Waste and Vegetable Waste.
24	Dr. V. Ravitchandirane, Associate Professor and Head, Department of Zoology, Kanchi Mamunivar Govt. Institute for Postgraduate Studies and Research, Lawspet, Puducherry.	Utilization of fish market wastes for vermin compost preparation and evaluation of its nutrient content.
25	Dr. Mahipal Singh Shekhawat, Assistant Professor, Department of Botany, Kanchi Mamunivar Govt. Institute for Post Graduate Studies and Research, Puducherry.	Soilless (Hydroponics) cultivation of <i>Coccoloba uvifera</i> (L.) L.: A Halophyte Tree for Coastal Restoration

# MAKE SCIENCE COMPETITIONS

- *Faites de la Science* means “**Make Science Competitions**”
- This is for School children for developing their scientific knowledge to international level by interacting with the student community of France. It is a French- Indian exchange that brings valuable results such as the propagation of the scientific culture and thinking to the Children of Puducherry.



# OBJECTIVES OF THE PROJECT

1. To expose the children of government schools in Puducherry to international standards of doing science based R&D projects.
2. To Collaborate with the University of Paris (South 11, ORSAY, Paris) for the *Faites de la Science* (Making Science Project) for technical collaboration of monitoring and evaluation of the projects.
3. To enlist students – participants to the International Edition of ***Faites de la Science*** for every year.
4. To expose the school children to latest technologies like Video Conferencing Systems so that they are better equipped and exposed to international standards in School science curriculum.
5. To create an opportunity for school children to interest “LIVE” with the school children of France through video conferencing and to participate in the International Exhibition being held at France as part of the culmination of the ***Faites de la science*** programme.

# Target groups with location specific information

- Children - Age group 12-16 years of both rural and urban areas.(students studying in Classes 7, 8, 9 & 11 or informal participants including drop out children etc.).
- Teachers (or) research guides.
- **Duration of the Project:**
- 10 Months :September 2022 –June 2023.



## 2. INSTITUTIONAL & HUMAN CAPACITY BUILDING



## Conference Funding

The Puducherry Council for Science & Technology is releasing partial financial assistance to the academic institutions of the U.T. of Puducherry on case to case basis for conduct of colloquia / seminars / conferences / workshops on S&T topics (National / International level). The Ceiling limit for release of grants to National event is Rs. 50,000/- and for International event is Rs. 1.00 lakhs



## Travel Grants

The Puducherry Council for Science & Technology release financial assistance as travel grants of Rs. 30,000/- to the faculty members of academic / research institutions in the U.T. of Puducherry on case to case basis to attend the National / International Conference / Seminars on S&T areas in order to enrich their knowledge.

Travel Grant supported by PCS&T for attending International Global Conference on Pharmaceuticals and Clinical Research at Paris, France during 14 – 16<sup>th</sup> November, 2022 to Dr. E. Selvakumari, Assistant Professor, College of Pharmacy, MTPGRI&HS, Puducherry.



# Science Exhibitions

Every year Regional and State Level Science Exhibition will be organised for 5 days by Dte. of School Education, in an Educational Institutions. A separate stall depicting the activities of the Department and its autonomous bodies, Science Models, Science Videos along with Mobile Science Exhibition Bus was arranged. Nearly 15000 school students and public will be benefited in the exhibition.



PCST/AKSCP Stall & MSEB  
Participation in Science  
Exhibition -2022 Organised by  
DSE from 28th Nov - 2nd Dec





# DSTE - PCS&T Participation in the Bharat Pride - National Science, Technology Industry EXPO, held on 09-03-2022 to 12-03-2022 at Hyderabad, Telangana.



The Scientific Officer, DSTE and Technical Assistant, PCS&T along with Atal Incubation Centre official and the following Puducherry startups delegates participated in the Expo.

- 1. M/s. Nevar Systems Pvt. Ltd.,
- 2. M/s. Flowget Solutions Pvt. Ltd.,
- 3. M/s. Aedaa Equipments Pvt. Ltd.,
- 4. M/s. Verob Camfe Pvt. Ltd.,
- 5. M/s. EX-OR Robotics Pvt. Ltd.,
- An amount of Rs. 5.90 Lakhs was sanctioned from the funds of PCS&T for Silver Category Stall Participation. The Expo was visited by public, various NGO's and student



# SWATCHATA ACTION PLAN ACTIVITIES BY PCS&T AS SNA OF NGC – EEAT OF MoEF&CC, GoI



Awareness Rally on Air and Water Pollution



Awareness Rally on curbing the usage of Single Use Plastics



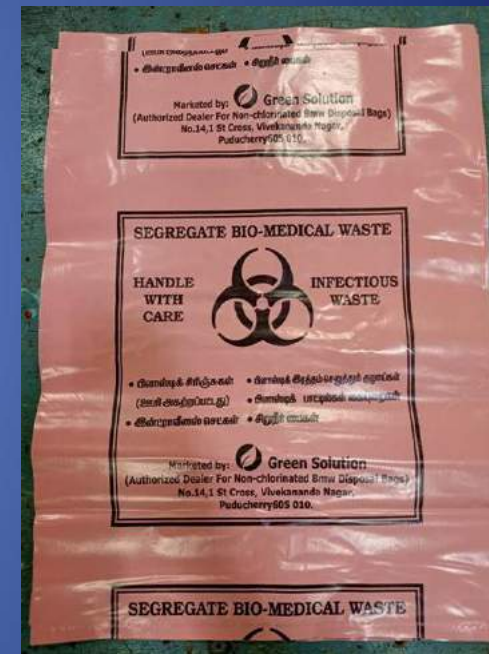
## Purchase of Cloth bags

Cloth/ Jute bags for public distribution to curtail Single use plastic carry Bags. Purchase of **10,000 Nos.** of Gada Cloth bag with semi handle for an amount of **Rs. 3,00,000/-** was purchased from the funds of SAP(MoEF&CC, GoI) for public distribution to avoid the usage of single use plastic bags. These bags are proposed to be disbursed to NGC Eco-club school students and public. Supply order has been placed with Womens Self Group through District Rural Development Agency.



# Distribution of Automatic Hands free Sanitizer dispensers and Non-Chlorinated Colour Coded bags to 20 primary Health Centres in the U.T of Puducherry.

Automatic Hands Free Sanitizer (HFS) 20 nos. was purchased at a cost of Rs.50,000/- and Non-Chlorinated Colour Coded bags (581 Kgs.) for disposal of Bio-Medical Waste from the funds of Swachhta Action Plan in the U.T.of Puducherry. These are proposed to be used in 20 Public Health Centres in the Puducherry and Karaikal regions through Department of Health and Family Welfare, Puducherry.





# SCHOOL WALL PAINTING

Painting of Environment Awareness Pictures in 55 Government School Walls of Puducherry region for an amount of Rs. 2,75,000 was done from the funds of Swachhta Action Plan (SAP) in the U.T. of Puducherry with the financial assistance of MoEF&CC (SSB cell), GoI.





## AWARENESS BUS STICKERS ON CURBING THE USAGE OF SINGLE USE PLASTICS

Awareness on curbing the usage of single use plastics among the public and the student community is being done by pasting awareness stickers in public places and state transport buses in the U.T. of Puducherry. 2500 Nos. of A3 size vinyl stickers in English and three regional Languages has been proposed to be printed and pasted at a cost of Rs. 2.00 lakhs.



# WATER FESTIVAL

PCS&T provided financial assistance of Rs. 30,000/- for the conduct of WaterFest'23 as a annual celebration around water, creating awareness on the water resources, its use and management as well as create.

Like every year, the festival started on 2<sup>nd</sup> Feb to 22 March 2023. WaterFest23 is organized by the All for Water for All collective, of which Svarnim Puducherry, Sri Aurobindo Society is an integral part.

# OBJECTIVES

The objectives of annual water festivals are to raise awareness across all sections of Puducherry's population and to improve their capacity to steward and manage their water resources and biodiversity. Volunteers, civil society organizations and local communities participated.





# GREEN SCHOOL PROGRAM

WORKSHOP - DO-IT-YOURSELF SUSTAINABLE SCHOOL CAMPUS

CONDUCTED BY CENTER FOR SCIENCE & ENVIRONMENT ON 17 MARCH'23



The Green School Workshop is meant to train students, teachers and other stakeholders of a school community, to use a do-it-yourself handbook on how to audit water, air, energy, waste and land use within school premises. This approach is expected to make the students and teachers come out of classrooms to count, measure, weigh, explore and analyse. The GSP does this by seamlessly fitting with the school's existing curriculum.



# WATER, SOUND & MOVEMENT

WORKSHOP TO INTERLINK THE SENSES & EMOTIONS WITH SCIENCE

5 EVENTS CONDUCTED BY MEMBERS OF LIVING WATERS MUSEUM





# WORKSHOP ON FOLDSCOPE

PCS&T in co-ordination with State Training Centre, Directorate of School Education, Puducherry organized a workshop on Foldscope with a Financial assistance of Rs. 35,000/-. Thiru. S. Rajkumar, State Training Centre, Puducherry delivered lecture on documentation of pollen grains through Foldscope and hands-on training on 18.01.2023. 100 students from District Institute of Education and Training (DIET), Puducherry participated and benefitted by this workshop.



# Conduct of Nature Camp

PCS&T as State Nodal Agency (SNA) released an amount of Rs. 1,40,000/- to Directorate of School Education, State Training Centre on 02.06.2022 for conduct of awareness programme of 2 days Nature Camp - 'Living with Nature without much Disturbance' for the Govt. School students in U.T. of Puducherry. The nature camp was conducted at Auroville Botanical Garden for Boys and Girls school students from 15<sup>th</sup> June 2022 to 18<sup>th</sup> June 2022.







**Implementation of Skill Vigyan State Partnership programme in Life Science  
and Biotechnology of Dept. of Biotechnology, Ministry of Science and Technology,  
GoI by PCS&T as State Nodal Agency**

<b>Sl. No</b>	<b>Name of the Programme Co-ordinator and Institute</b>	<b>Skill Vigyan Programme to be implemented.</b>	<b>Total GIA requested (in rupees)</b>
1	Dr. Joseph Selvin, Prof. & Head, Dept. of Microbiology, Pondicherry University, Puducherry.	Students Training , Technician Training , Refresher/ Faculty Training, Finishing School Programme.	2,61,55,000.00  GIA requested for three years
2	Dr. J. Thanislass, Prof. & Head, Dept. of Veterinary Bio- Chemistry, Rajiv Gandhi Institute of Veterinary Education and Research. Puducherry.	Technician Training Programme.	26,50,000.00  GIA requested for one years
<b>Total Amount</b>			<b>2,88,05,000.00</b>



30.09.2020:- Two Proposals submitted to DBT for an amount of Rs. 2,88,05,000/-.

27.11.2020:- Presentation of the two proposal before the Expert Committee of DBT.

09.09.2021:- DBT sought for additional Documents/ Information. The requested additional documents were sent to DBT by email on 09.09.2021.

21.12.2021:- DBT requested for updated financial documents. The requested additional documents were sent to DBT by email on 21.12.2021.

18.02.2021:- Follow up emails sent to DBT.

24.05.2022:- DBT sought for additional documents/ information submitted. The requested additional documents were sent to DBT by email on 24.05.2022.

25.08.2022:- Reminder request submitted for sanction. Sanction awaited.

24.11.2022:- DBT sought for revised qualification and proposal.

05.12.2022:- Resubmission of the Copy of Finance Documents.

03.01.2023:- Resubmission of Proposal modified for an amount of Rs. 3,13,25,000/-

as per National Skill Qualification Framework of DBT.

14.06.2023:- Email on the Contact details of the State Nodal Officer of PCS&T submitted to DBT.

DBT - Skill vigyan state partnership program will provide skill training under these categories:

- i. Skill training for students
- ii. Technician training
- iii. Faculty training
- iv. Entrepreneurship training.
- v. Biotechnology Finishing School Programme.

# 3.INNOVATION

(including activities under Patent information centres)

# Inauguration of Innovation Hub

The Innovation Hub was established at Dr. Abdul Kalam Science Centre and Planetarium (Dr.AKSCP) in collaboration with National Council of Science Museum (NCSM), Kolkata, Ministry of Culture, Government of India. The total estimate of Innovation Hub is Rs. 150 lakhs. The cost was shared between PCS&T, Government of Puducherry and NCSM, Kolkatta, Government of India on 50:50 sharing basis. Also the Operation and Maintenance estimate for the Hub for 3 years is Rs. 45 Lakhs @ Rs. 15 Lakhs/ year. This amount also will be shared between GoP and GoI on 50:50 sharing basis. The Innovation Hub will be the first of its kind in the U.T of Puducherry and surrounding districts of Tamilnadu. The Innovation Hub was inaugurated on 18.05.2022 on the occasion of International Museum Day.



Innovation Hub with a new gallery was added at the existing premises of the Dr. AKSCP. Innovation hub will help to engage school students in innovative and creative activities apart from providing opportunities for Hands-on S&T activities. The Facilities at the Innovation Hub are:

1. Discovery Hall
5. Kabad Se Jugad (build from scraps)
2. Hall of Fame
6. Idea Box
3. Idea Lab
7. Design Studio
4. Thod –Pod – Jod



# ACTIVITIES OF INNOVATION HUB MEMBERS

60 school & college students have enrolled as Innovation Hub Members. Two Junior Mentors have been recruited for this Hub to catalyse and nourish the budding scientists. Students did basic science projects under the subject of Physics, Chemistry, Bio-science, Mathematics and Robotics.

## Body Scrubber

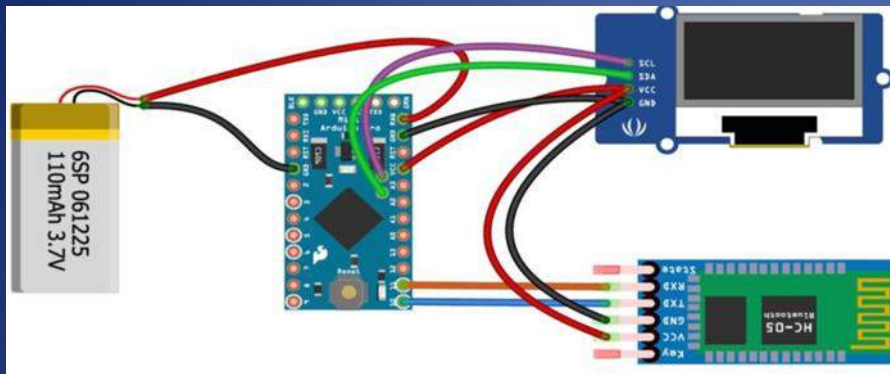


## Robotics





# Smart Watch (Pets Smart Belt)



**Pet owners couldn't keep regular track of the health of their pets**



**Handling the pH meter, students came to know about the solutions of pH values. By knowing the pH values they can identify the type of solutions whether it is acid, base or neutral. Here five different solutions (Ammonium Chloride, Magnesium Hydroxide, Sodium Bicarbonate, Acetic acid and water) were tested using pH meter and the obtained values are noted.**



# Visit of School students



## **Establishment of Patent Information Centre in the PCS&T**

06.08.2021:- Proposal submitted to DST with Project Estimate of Rs. 149 lakhs.

17.01.2022:- DST advised for revised proposal.

25.01.2022:- Revised proposal submitted with Project Estimate of Rs. 175 lakhs.

10.05.2022:- DST communicated EC in-principle approval for 2022 – 23 subject to structured revision of proposal for FY 2022 – 26. Further communication will be sent by DST regarding revision of various Heads of Budget for the FY 2022 – 2023.

02.06.2022:- PCS&T requested for the communication from the DST.

MoST, GOI, has assured for the establishment of PIC in Puducherry Council for Science and Technology during the conduct Science Festival at Ahmedabad 2022.

# **SANCTION AWAITED FROM DST, GoI**

# 4. Technology Deployment for Socio - Economic Development



# Kabutar app

Kabutar is an app that delivers information to your area. It is a social media platform for sharing geo location based information. It is a single stop information board single key board for users in any area.



# Benefits of using Kabutar app

- You can post invitation cards, greeting cards, messages, letters, leaflets, pamphlets, flyers, hand-outs, posters, banners, wall posters news, alerts, notifications, personal appeals, announcements, advertisements, classifieds or any other information targeting users in any area.
- You can also view cards displayed in your area or any other area. It helps you to know what's happening or trending or most talked about in your area or any other area.
- It is a digital alternative for notice boards, bill boards, hoardings, advertisements and classifieds in newspapers and magazines and other physical forms of information.
- It is very useful for both personal and business use. It is zero-waste, easy to use and cost effective method.

# 5. SCIENCE COMMUNICATION AND POPULARISATION



# Occurrence of Green Comet (07.02.2023)

PCS&T in co-ordination with Pondicherry Science Forum conducted awareness programme on 'Green Comet' at Dr. AKSC&P on 07.02.2023. Dr. R. Mathivanane, Professor & HOD, Department of Physics, Bharthidasan Government College for Women, Puducherry and Ms. A. Hemavathi, Vice – President, Pondicherry Science Forum, Puducherry delivered lectures on 'Green comet'. 100 Numbers of Students and public participated in the programme.



# Awareness Programmes

As a part of 75<sup>th</sup> Azadi Ka Amrit Mahotsav – Half-a-day webinar was organized by PCS&T on 27.04.2022 on the theme “Science & Society” under Vigyan Utsav programme of Department of Science and Technology (DST), for the month of April 2022. The programme was chaired by Smt. Smitha. R, I.A.S., Director-cum-Secretary (Science, Technology & Environment) / Member Secretary (PCS&T) – cum – chairperson (EC, PCS&T).

- i. Dr. A. Pouchepparadjou, Dean, PAJANCOA, Karaikal delivered talk under the title “Organic Farming and Society”.
- ii. Dr. Joseph Selvin, Professor & Head of Department, Department of Microbiology, Pondicherry University, Puducherry delivered talk under the title “Understanding Synthetic Biology for Skill Development”.
- iii. 80 students/public participated by Google Meet
- and also in live YouTube streaming.

Department of Science and Technology  
Government of India

Government of Puducherry  
Department of Science, Technology and Environment  
Puducherry Council for Science and Technology

75  
Azadi Ka  
Amrit Mahotsav

As a part of

Theme : Science and Society

Celebration of  
**Vigyan Utsav**

Date : 27.04.2022  
Time : 3.30 pm - 5.00 pm

**Chairperson**

Smt. Smitha. R, I.A.S.,  
Director-cum-Secretary  
(Science, Technology & Environment)  
Member Secretary-cum-Chairperson (EC, PCS&T)  
Government of Puducherry

**Speakers**

**Dr. Pouchepparadjou. A**  
Dean,  
PAJANCOA,  
Karaikal

**Dr. Joseph Selvin**  
Professor & H.O.D.,  
Dept of Microbiology,  
Pondicherry University

Join at : Google Meet id : tke-amvp-nsh  
Youtube link : <https://youtu.be/N6n04-448Vg>



## Dr. Abdul Kalam Birth & Death Anniversary Observance

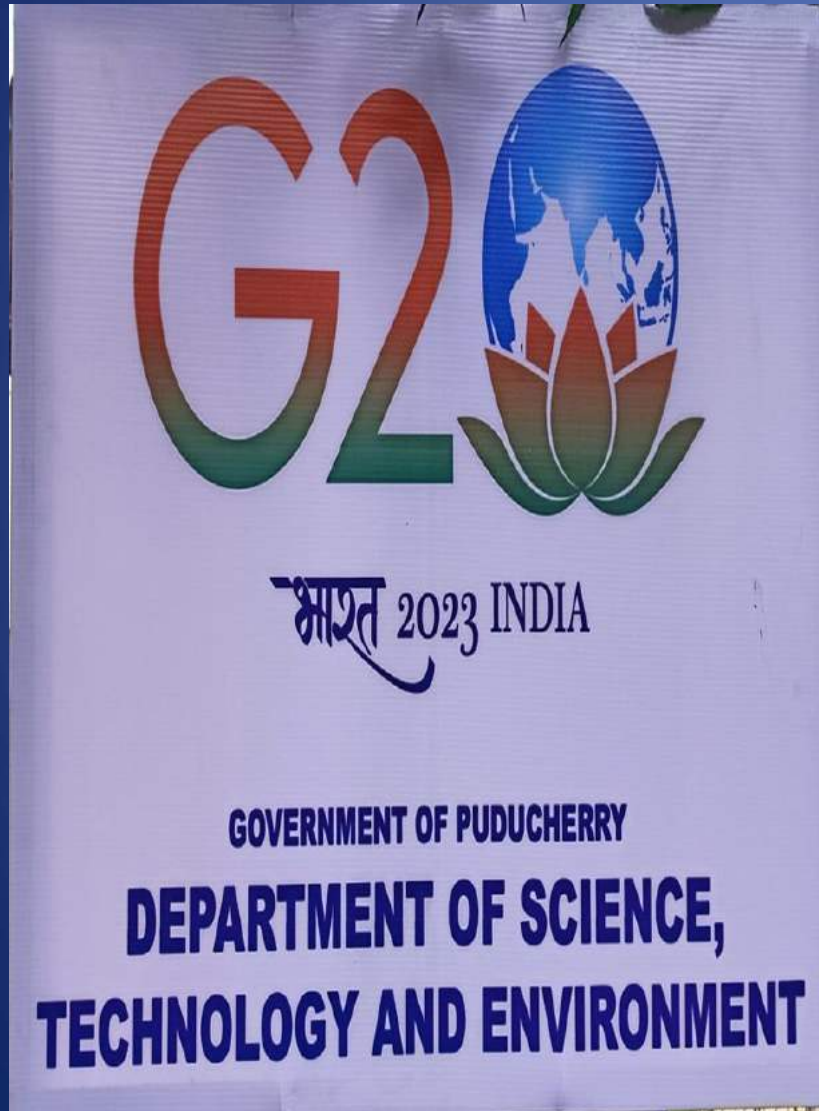
Every year, PCS&T is organising programme in remembrance of the achievements of the greatest Indian Aerospace Scientist, politician, Former President of India Dr. Avul Pakir Jainulabdeen Abdul Kalam on his Birth and Death anniversary on 15th October (1931) and on 27<sup>th</sup> July(2015) respectively at Dr. AKSC&P. The Statue laid at the Centre will be honoured by dignitaries followed by technical lectures to the students.





# G-20 Introduction

Seminar on G20 Awareness programme at Dr. AKSCP, Puducherry on 25.01.2023



# Seminar on G20 Awareness programme at Dr. AKSCP, Puducherry on 25<sup>th</sup> -27<sup>th</sup> January 2023



The resource person Shri. C. Baskara Rassou, Headmaster, CRN Government Middle School, Lawspet Puducherry delivered talk on G-20 awareness program under the title “One Earth, One Family, One Future”. Explained about Action Plan of G20 i.e LiFE stands for Lifestyle for Environments, Improving the finance, Green Effect, Avoid Plastics, Promote Nature manure, Solid waste management with eco friendly, Rainwater harvesting, Ground water level. G-20 priorities viz. Accelerated, Inclusive, Resilient Growth, Accelerating progress on SDHs, Technological Transformation & Digital Public Infrastructure, Multilateral Institutions for the 21<sup>st</sup> Century, Women-led development was also narrated which is very useful to the participants.



# Conduct of Elocution Competitions for School and College students on G20 themes

Elocution Competition was conducted for the School students from Class VI to X and College students under the title “One Earth, One Family, One Future” and “Disruptive Science for Innovation and sustainable development” at Dr. Abdul Kalam Science Centre and Planetarium, Puducherry on tamil and english language separately. Around 218 students participated from various schools and colleges in the elocution competition. Cash award and Certificates will be issued to the prize winners.





# G20 Cash award Prize Distribution Function

Cash Prize for an amount of Rs. 24,000/- from PCS&T along with Certificates were distributed on 08.02.2023 by the Director (DST&E) / Member Secretary (PCS&T) to the winners of Elocution Competition (English & Tamil) organized by PCS&T and PCCC of DST&E held on 25.01.2023 at Dr. AKSC&P for school and College Students under different Categories (Category I – VI to VIII Std. ; Category II – IX & X Std. ; Category III – XI & XII Std. and Category IV – College) to popularize the theme of Science Inception G20 Meeting ‘Disruptive Science for Innovation and Sustainable Development’ and ‘One Earth \* One Family \* One Future’ for College and School students respectively.



# Science Inception G-20 Meet – Organising Exhibition

The Secretary (Science, Technology & Environment), Director(DSTE) and other officials of DSTE & PCS&T participated in G-20 summit in which Department of Science, Technology & Environment in co-ordination with Information and Publicity, Puducherry G-20 meeting was conducted under the theme “One Earth, One Family, One Future” and “Disruptive science for innovative and sustainable development” funded and organized by Ministry of external affairs and Ministry of Science and Technology, GoI at Suganya Convention Centre, Puducherry on 30.01.2023. Three stalls by reputed S&T organizations like Pondicherry University, Vector Control Research Centre, French Institute of Puducherry, Atal Incubation Centre and National Institute of Technology Puducherry, Karaikal showcased their activities, prototype models and handouts of the organisations, their achievements and activities to the foreign delegates in the G20-S20 meet.







# Thulir Illams Inauguration

One Day inaugural event of Thulir Illam was conducted on 28.12.2022. 80 science club members and 20 science club volunteers attended the event at Dr. AKSC&P. Science talks, science projections, experimental demonstration on physical & biological science, quizzes etc., was conducted on that day. An amount of Rs. 22,000/- was sanctioned for this purpose.



**புதுவை அறிவியல் தொழில்நுட்ப மாமன்றம் - புதுவை அறிவியல் இயக்கம்**  
சமம் மகளிர் சுயசார்பு இயக்கம்  
கொண்டு வந்தது  
துளிர் இல்ல அறிவியல் குழுக்களுக்கான  
**எளிய அறிவியல் பயிற்சி முகாம்**

நாள் : 28-12-2022, புதன் திங்கள், காலை 10.00 மணி முதல் 4.00 மணி வரை  
இடம் : Dr. அருங்குறி கோளறங்கம் மற்றும் அறிவியல் அமையம், கண்டிபட்டை, புதுச்சேரி

**அறிவியல் விழிப்புணர்வு பாடங்கள் :**  
A. அத்திரா, S. சாந்தி, R. பரிமாணா  
சமம் இயக்கம்

**நுழைவு :** A. ஜேயராஜ்  
நுழைத்துரை : புதுவை அறிவியல் இயக்கம்

**முன்னிலை :** S. சேகர், P. சிவகாமி

**வரவேற்புரை :** R. மாரீழ்ச்சு  
பொதுச் செயலாளர், சமம் இயக்கம்

**நிதங்கவுரை :** R. மாரீழ்ச்சு  
பொதுச் செயலாளர், புதுவை அறிவியல் இயக்கம்

**நிதங்கவுரை :** திரு. **பி.டி.ருத்ரா கௌடு**  
இயக்குநர், மாநில கல்வித் துறை, புதுச்சேரி

**சிறப்புரை :** திரு. **இயக்குநர்**  
அறிவியல் தொழில்நுட்பம் மற்றும் கற்றல் துறை, புதுச்சேரி

**வாழ்த்துரை :**  
முனைவர் **R. மந்தானன்**, தலைவர், புதுவை அறிவியல் இயக்கம்  
முனைவர் **M. தாமோதரன்**, தலைவர், செயலாளர் AID India, சென்னை.  
திரு. **கி. சிவசாமி**, AID India, சென்னை.

**கதைக்கலாம் வாங்க :** Dr. S.A. வெங்கடசுப்ரமணிய நாயக்கர்  
பிரெஞ்சுத்துறை தலைவர், கருவீ மருமணி அரங்கம் பட்டிமன்றப் படி  
மற்றும் ஆய்வு நிறுவனம், புதுச்சேரி.

**நன்றிப்புரை :** R. ஜேயராஜ், பொதுமன்றம், புதுவை அறிவியல் இயக்கம்

**அறிவியல் செயல்பாடுகள் :**

- வானியல் செயல்பாடுகள் :  
முனைவர் **R. மந்தானன்**, புதுவை அறிவியல் இயக்கம்
- உயிர் அறிவியல் பரிசோதனைகள் :  
திரு. **க. காதலராஜன்**, மாநில செயலாளர், தமிழ்நாடு அறிவியல் இயக்கம்
- காந்த வலைவண்ணம் :  
திரு. **முருகன்**, தமிழ்நாடு அறிவியல் இயக்கம், கீழப்பம்.
- அறிவியல் வினாக்கள் :  
சென். A. ஜேயராஜ், புதுவை அறிவியல் இயக்கம்





# Azadi Ka Amrit Mahotsav - Har Ghar Tiranga Campaign 2022

‘Har Ghar Tiranga’ is a campaign under the aegis of Azadi Ka Amrit Mahotsav to encourage people to bring the Tiranga home and to hoist it to mark the 75th year of India’s independence. Around 867 General visitors, ex-servicemen and students visited Dr. Abdul Kalam Science Centre and Planetarium during Har Ghar Tiranga Campaign program organised by PCS&T from 11th August – 17th August, 2022





# Mobile Science Exhibition Bus (MSEB)

The Mobile Science Exhibition Bus (MSEB) was purchased to popularize science among students/ public particularly in the rural areas in Puducherry. Since then the bus is being taken to various schools as per the schedule given by the Directorate of School Education. Normally the duty is for two days in a week. Recently, the MSEB is renovated with the support of Dr. AKSC&P CSR partner M/s. EATON, Puducherry and the schedule for MSEB continues in the rural regions. A separate register is being maintained for monitoring the MSEB program.





# International Ozone Day 2022 Observance

Half – a- Day Training program to the Polytechnic Students commemorating the significance to preserve the Ozone Layer as a mark of the adoption of the Montreal Protocol also with Drawing Competition to the School Students on the theme for IOD 2022 was conducted on 16<sup>th</sup> September 2022 at Dr. AKSC&P, Puducherry.



  
 Government of Puducherry  
**Department of Science, Technology & Environment**  
  
 Puducherry Pollution Control Committee  
 Puducherry Council for Science & Technology  
 Puducherry Climate Change Cell  
 Puducherry ENVIS Hub

## World Ozone Day - 2022



### Drawing Competition

**Date:** 16.09.2022  
**Time:** 10:00 A.M.  
**Venue:** Dr. Abdul Kalam Science Centre & Planetarium, Lawspet, Puducherry  
**Theme:** 'Montreal Protocol@35: global cooperation protecting life on earth'  
**Category I:** VI - VIII Std  
**Category II:** IX - XII Std

### Guidelines

- Participants should carry their own painting/sketching stationeries and writing pad.
- Drawing/sketching paper will be provided.
- The competition is open for all the school students studying VI to VIII & IX to XII standard in Puducherry U.T. only.
- Students should bring their School ID card.
- Winners will be awarded with attractive cash prizes and certificates.





### Registration

- Registration starts at 9:00 A.M onwards.








 @ccpuducherry    Puducherry Climate Change Cell    @Puducherry Climate Change Cell    ccpuducherry









**List of seminars conducted by PCS&T during 2022-2023**

Sl.No.	Date	Name of the Event	Photo of the Expert	Name & Designation of Expert	Topics covered	Total no. of Participants	Webinar Photos
1.	25.09.2022	Birth Anniversary of Prof. Satish Dhawan		Dr. P. Ravikumar, Assistant Professor, Department of Physics, Tagore Govt. Arts and Science College, Puducherry	A transformational leader of the Indian Space Programme	60	
2.	06.10.2022	Birth Anniversary of Shri. Meghnad Saha		Dr. A. Sivagamasundari, Assistant Professor, Department of Physics, Tagore Govt. Arts and Science College, Puducherry	Scientific and Social contributions of Shri. Meghnad Saha	80	



3.	30.10.2022	Birth Anniversary of Shri. Homi. J. Bhabha		Dr. S. Sivakumar, Assistant Professor, Department of Physics, Bharathidasan Govt. College for Women, Puducherry	Homi.J. Bhabha's Thirst in Physics	60	
4.	07.11.2022	Birth Anniversary of Sir. C.V. Raman		Dr. I. Sankeeda, Assistant Professor, Department of Physics, Tagore Govt. Arts and Science College, Puducherry	Sir C.V. Raman on the topic "C.V. Raman – Nobel Laureates: Theory to Technology"	80	
	07.11.2022	Birth Anniversary of Marie Curie		Dr. Vanidha Dessingou, Assistant Professor, Department of Physics, Bharathidasan Govt. College for Women.	Marie Curie – A Remarkable Scientist	80	



5.	15.11.2022	Birth Anniversary of Dr. Birbal Sahni		Dr. Manisha Kumari, Assistant Professor, Dept. of Earth Sciences, Pondicherry University, Puducherry	Origin and Evolution of Life through Time	75	
6.	22.11.2022	Birth Anniversary of Shri. Edwin Hubble		Dr. madivanane, Associate Professor &HOD, Department of Physics, Bharathidasan Govt. College for Women	Shri. Edwin Hubble: The man who discovered the Cosmos	80	
7.	30.11.2022	Birth Anniversary of Sir. Jagadish Chandra Bose		Dr. V. Kumaresan, Assistant Professor, KMCPGS&R, Puducherry	Contributions of Sir. J.C Bose in the field of Plant Science	80	

# Mission LiFE 2022 - 2023



# LiFE

Lifestyle for  
Environment

In view of Mission LiFE being launched in the **75<sup>th</sup> year** of India's independence, a comprehensive and non-exhaustive list of **75 individual LiFE action across 7 categories** is identified.

(As on 09.09.2023)

Awareness was created in 46 line  
Departments involving 789 field officers  
Awareness events conducted - 2832  
Participants - 3,10,364  
Mission Life Pledges taken -2,80,923

7 categories  
of  
LiFE Mission





# DR. ABDUL KALAM SCIENCE CENTRE AND PLANETARIUM



**FUN SCIENCE GALLERY**



**MARINE LIFE GALLERY**



**OUTDOOR EXHIBITS**



**PLANETARIUM**



# Dr. Abdul Kalam Science Centre - Particulars of Monthly Visitors

*Particulars of Monthly Visitors for the period from 03.05.2015 to 31.03.2023*

Month	PLANETARIUM						SCIENCE CENTRE						Free entry	Total visitors	Total Fees
	Adults		Childrens		Foreigners		Adults		Childrens		Foreigners				
	Nos	Amount	Nos	Amou nt	No s	Amo unt	Nos	Amoun t	Nos	Amou nt	No s	Amo unt	Nos	Nos	Amount
2015-16	21695	433900	27652	276520	95	3800	27761	277610	31894	159470	173	3460	0	59828	1154760
2016-17	15003	300060	12374	123740	52	2080	19388	193880	14453	72265	95	1900	6552	40488	693925
2017-18	14611	292220	12065	120650	48	1920	19888	198880	14304	71520	109	2180	2375	36676	687370
2018-19	12729	254580	13196	131960	56	2240	16422	164220	14167	70835	84	1680	1401	32074	625515
2019-20	10041	200820	10844	108440	14	560	12998	129980	14060	70300	26	520	1036	28120	510620
2020-21	930	18600	340	3400		0	1994	19940	946	4730	2	40	0	2942	46710
2021-22	3715	37150	1916	9580	0	0	2535	50700	1290	12900	0	0		5383	110330
2022-23	11384	113840	8093	40465	28	560	3671	73420	2720	27200	18	720	913	20418	256205
								0		0		0		0	0
Total	90108	1651170	86480	814755	293	11160	104657	1108630	93834	489220	507	10500	12277	225929	4085435

# 6. STATE POLICIES

# Science Technology and Innovation Policy (STIP)

This STIP policy encourages the grass root level innovators and fosters the research developmental needs in the U.T of Puducherry. As per the advice of Department of Science and Technology, Government of India formulation of a separate Science Technology and Innovation Policy for the U.T of Puducherry is proposed.

- Accordingly, proposals were requested from five Educational Institutions for framing of draft STIP.
- Two institutes viz., (i) Ashank Desai Centre for Policy Studies, Indian Institute of Technology Bombay, Mumbai and (ii) Centre for Policy Research, Indian Institute of Science, Bengaluru have presented and submitted their proposal and presented their proposal during the month of April 2023. STI Policy framing is under process for the U.T. of Puducherry.



# U.T. of Puducherry



## Priorities

To create Centres of Excellence in the fields of Education, Research, Healthcare, Wellness, Rural Development, Livelihood, Skill Development, Entrepreneurship, Science and Technology, Sustainable Development, Sustainable Agriculture, Environment, Youth and Women Empowerment, Child Development, Governance and Administration.



## Challenges

### Industry:

1. Maintaining strong industry- University linkages across sectors.
2. Weak linkages across STI stakeholders, focusing on objectives **for effective STI stakeholders co-ordination to deliver and sustain best STI ecosystem in the U.T.**
3. Promoting start-up ecosystem in UT

### Geography and ecology:

1. The Puducherry U.T. is prone to many natural hazards like floods, cyclones and **Tsunami**. U.T. The Puducherry, Karaikal and Yanam regions are lying on the coast of Bay of Bengal and **are** influenced by North East Monsoon. The heavy rains/cyclones that occur under the influence of North East Monsoon sometimes **causes** heavy damage to life and property.

### Capacity and skill development:

1. Preparing higher educational, professional and social institutions to realize their full potential and promote research-based sustainable development **and to carry forward the existing status of "Knowledge Hub"**.

### Infrastructure:

1. Promoting and enhancing, centres of excellence in areas of STI.
2. **Focusing on Skill development and livelihood Opportunities.**
3. **Implementation of STI application to improve the quality of life of the people of the U.T.**
4. **To thrive to place the U.T. at best places in National Development Goals/Indices.**



## Needs

1. Taking initiative to sensitize institutes towards sustainability, contribute towards National Developmental goals, encourage value education, promote technology both as a vertical as well as a facilitator in the delivery of education, and to raise the quality benchmark to global levels and co-ordinate with the other state universities and promoting state- state coordination.
2. Funds for promoting research in S&T **and enhancement of skill development and employment opportunities** in the budget.
3. Need to craft a UT STI policy.
4. **Establishment of Institution of Excellence/ National Importance in the field of Medicine, Fisheries and Technology.**

## Setting up of Science Centre, Digital Planetarium & Innovation Hub in the Thirunallar Temple Town, Karaikal.

Two separate DPR's for setting up of Science Centre – Category III (Space Exposition Centre) with Digital Planetarium and for setting up of Innovation Hub in the Thirunallar Temple Town, Karaikal District, U.T of Puducherry under the SPoCS Scheme of the NCSM, MoC, GoI was submitted to Government for approval and for onward submission to Joint Secretary (Museums), Ministry of Culture, GoI for sanction towards execution of the project.

Land to an extent of 4.18 acres in Thirunallar Temple Town Project, Karaikal, Karaikal District was already allotted for this project and the same is under the possession of the Department of Science, Technology and Environment, Puducherry.

### Abstract:

Total cost of the Project: Rs. 17.26 Crores  
(Science Centre, Digital Planetarium & Innovation Hub)

Central share of the Project: Rs. 7.63 Crores  
(To be borne by NCSM, MoC, GoI)

U.T.P share of the Project: Rs. 9.63 Crores  
(To be borne by PCS&T, DSTE, GoP)





# DSTE – PCS&T – BHOOMI POOJA ON THE COMMENCEMENT OF EARTH FILLING WORK AT THE SITE OF SPACE POSITION CENTRE, INNOVATION HUB AND DIGITAL PLANETARIU AT THIRUNALLAR TEMPLE TOWN, KARAIKAL





# **PROPOSED ACTIVITIES FOR THE YEAR 2023 – 2024 IN ADDITION TO THE REGULAR SCIENCE, TECHNOLOGY AND ENVIRONMENTAL AWARENESS ACTIVITIES**

- Establishment of Space Exposition Centre, Innovation Hub and Digital Planetarium in Thirunallar Temple Town, Karaikal.
- Setting up of Patent Information Centre at Puducherry.
- Implementation of State Skill Vigyan Program funded by Department of Biotechnology, MoS&T, Gol.
- Setting up of SC/ST/Women cell in the PCS&T funded by DST, Gol.
- Implementation of programs under Science for Equity Empowerment and Development (SEED), DST, Gol.
- Implementation of Entrepreneurs programme with the support of DST, Gol