



TAMILNADU SCIENTIFIC RESEARCH ORGANISATION

Pudukkottai, TamilNadu, India. www.tnsroindia.org.in



Indian Journal of Natural Sciences



James Clerk Maxwell FRS FRSE
(June, 13, 1831 – November, 5, 1879)
His most important achievement is the
theory of electromagnetism



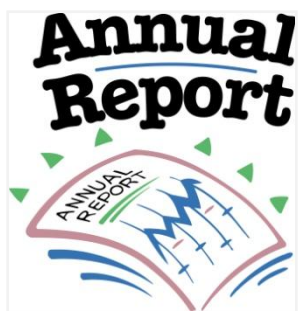
Tamil Nadu Scientific Research Organisation
Pudukkottai, Tamil Nadu, INDIA
www.tnsroindia.org.in

ISSN
JUNE 2019
VOLUME - 9
ISSUE - 54
ISSN 0976-0997

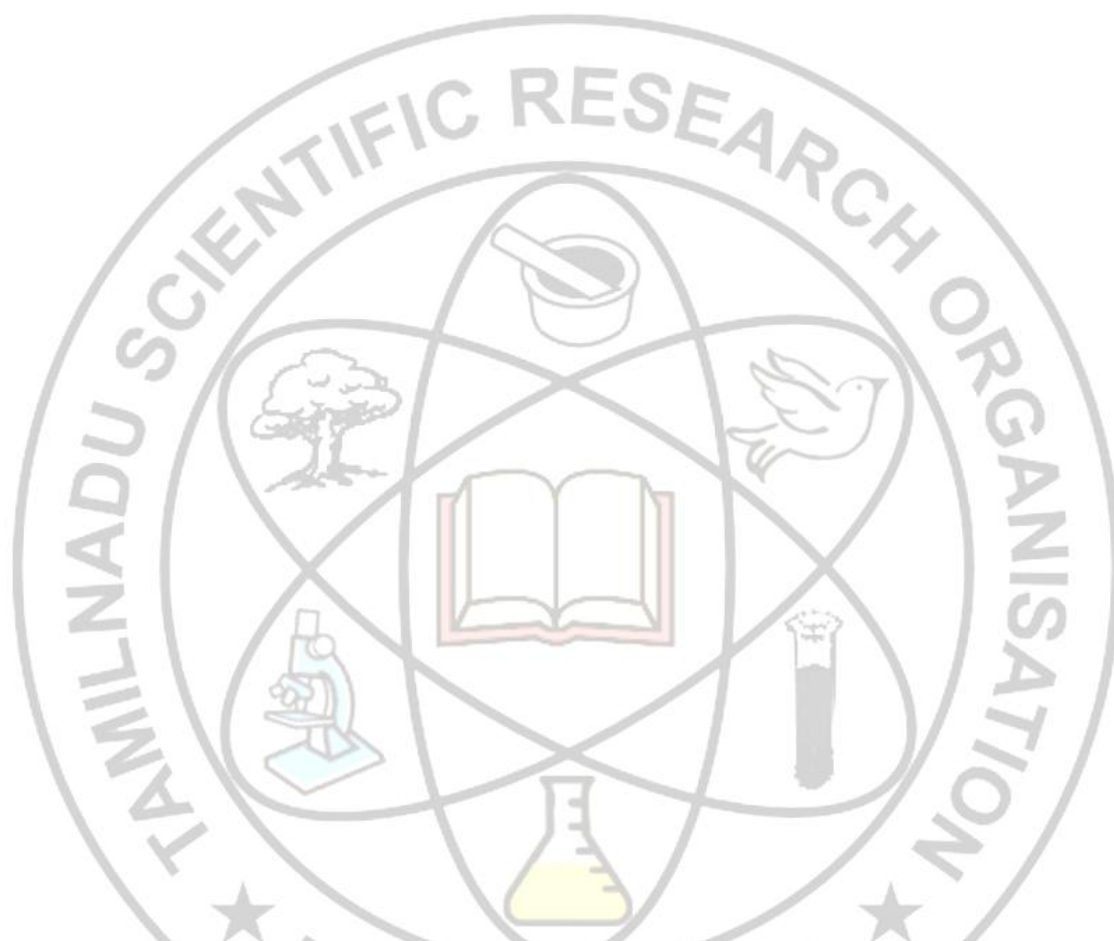


ANNUAL REPORT

2018 - 2019



ANNUAL REPORT 2019



Cover Design : KKN Pictures, Pudukkottai.
Printed at : SP Xerox, Pudukkottai.
Pub.S.No dited by : TNSRO/PDKT/024-2019
Edited by : S.Vijikumar
Published by : TamilNadu Scientific Research Organisation #39,Mura
Bhavan,Koodal Nagar, Rajagopalapuram Post,
Pudukkottai 622003,TamilNadu,India.
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Citation : Twenty Second Annual Report: 2018-2019
TamilNadu Scientific Research Organisation, 2019



22nd Annual Report

Forward



We have great pleasure in presenting you 2018-2019 annual report of **TamilNadu Scientific Research Organisation (TNSRO)**. TNSRO is a registered institution, which is duly registered by the govt. of Tamilnadu under Indian Trust Act. TNSRO was started on 1997 by a group of social and scientific volunteers for the welfare of down trodden people. An institution has carried outstanding multi disciplinary activities in the field of science and society development. TNSRO has got registration from Income Tax department for 12A and 80G exemption under act 1961. TNSRO is a catalog organization working for the development of lower strata through the scientific application. Our organization to promote the advancement, transfer and sharing of scientific knowledge, science education, raise public awareness of sustainable development issues by launching co-operative activities with major groups. The institution is working for the application of science and technology in rural villages in Pudukkottai dist. Our main aim is to conserve our nature and propagate the simple scientific techniques for rural prosperity among the rural and scientific community since 1997.

In this mentioning period we could able to reach the unmet, unloved, uncared and unwanted communities through various programs with the support of government and from self-generated Local Communities contributions through fees. Since we keep the community in designing of an intervention through proposal preparation, implementation, monitoring and evaluation we could able to achieve the desires and demands of the disadvantaged more comprehensively. In the mentioning year we considered huge need of climate change effect on the disadvantaged communities in their poverty eradication programs and livelihood sustainability. Considering this we have organized ourselves in energy and environment conservation, climate change mitigation practices and combat against exploitations. In harnessing the rich inherited knowledge and experience of poor we have planned to accommodate the most vulnerable and deprived communities in capacity building, cadre building and socio-economic and political empowerment. TNSRO in its journey through the development of disadvantaged sections continues with the support and coordination of humane people like you and local grant agencies. I am extremely indebted to present this annual report to the communities, supporters for the year 2018-2019. Because of communities participation our interventions have explored new corners. Our sincere and honest pledge to all of you and request the continuation of supports in the coming years as well. Together we would reach new heights and make productive changes in the lives of the deserved. Our institution has received Govt of Tamilnadu Best Institution Award (**Ariger Anna Award-State First Prize**) for 2011 environmental conservation and educational activities.

I am extremely happy that this 2018-2019 period is a truly one of the big mile stone of our institution. Many of the programmes closely benefited to the community. I express my hearty thanks to all donors, Govt. departments, Panchayat raj institutions, NGO friends and our institutional members for their valuable involvement for our achievements. We would continue to comply with the norms and regulations and legal aspects to demonstrate our transparency and accountability of the organization.

S.Vijikumar
Director

1.About us

TNSRO created a greater impact through various types of programmes in different field with the aspects of science and society development. Research and development programmes for villages. i.e. Water resource management, health and hygiene, forest and environment management and social welfare of the rural people. And also TNSRO has been organizing seminar and training workshops related our target issues. Publish and co-publishes books, reports and documents collection for information services, creates and supports other research and social networks of co-operating institution. A multi disciplinary team of TNSRO workers along with the experienced technical and other supporting staff are now pursuing their research and development, social awareness programmes in view of the various development problems of the target area.

The people of Pudukkottai dist. are economically, socially and educationally very backward, it is officially announced by the Govt. of Tamilnadu most of our target groups are belongs to SC/ST/MBC and their families earn livelihood by working as agricultural and constructional labours. The organization is encouraged in the service of the society by popularizing and enhancing public and students understanding of modern science & technology through interactive, popular lecture, exhibit, science club and research activities, thereby creating a scientific temper and social strength. The other sphere of our activity involves planning organization and contact of innovative activities towards education, Social Welfare, Health and Medicine, Rural Development through the scientific approach. The organization is thus involved in the planning organization and execution at rural development programmes.

The overall objective at the TNSRO is to provide expertise and assistance to rural maser in building their capacity to reduce poverty, tackle environmental problem, and assure responsibility for their health and pursuer education. The organization has developed infrastructures consisting at social workers, medical personals, and Para-medicals, to act with a holistic approach. Since India's seventy percent population lives in villages, the key to its long term growth and all round development lies in the development at its rural sector. Despite India's massive development achieved during the last decades, vast number of people still lives in object poverty, often without accepts to basic health care education, clean drinking water and sanitation, employment opportunities.



2. Organization Profile

1	Name of the Organization	TAMILNADU SCIENTIFIC RESEARCH ORGANISATION
2	Acronym	TNSRO
3	Registered Address	No.11, NAGAPPA ROAD, ARIMALAM – 622 201. Pudukkottai ,TamilNadu
4	Administration office Address	No. 39,Mura Bhavan, Koodal Nagar Rajagopalapuram Post,Pudukkottai-622003 TamilNadu,India
5	Phone Nos.	04333-261088, 9952886637, 8778365515
6	E. mail Website	tnsroindia@gmail.com www.tnsroindia.org.in
7	Legal status (a) Nature of the organization (b) Registered Act (c) Regd.No. (d) Place of Registration	Registered Voluntary organization TRUST Indian Trust Act 1982 No:542/BK4/97 dated: 31.10.1997. District Registrar Office, Pudukkottai
8	Income Tax Registration (a)Tax Exemption Registration (b)80GG Registration No. (c)12AA Registration No. (d) Place of Registration (e) PAN Card No.	1961 6162E(33)/2002-03, 29.10.2002. 6162E(33)/2002-03, 29.10.2002. Commissioner of Income Tax-I, Tiruchirapalli. AAA TT 9322J dated: 04.11.1997
9	Affiliation	
	(a) For vocational Education	Bharat Sevak Samaj, National Development Agency Promoted by Govt; of India. AffiliationNo: TN 598/2006 Dated: 28.8.2006
	(b) For Science Popularization	Vigyan Prasara, Dept. of Science & Technology, NewDelhi. Affiliation No: VP-TN0090 Dated: 27.10.2017
10	Banking Details Name of the Bank A/c. No. Type of A/c Branch Code IFSC /RTGS Code	Indian Bank (IB) 850149667 Saving 1372, Rajagopalapuram IDIB000P137
10A	Banking Details Name of the Bank A/c. No. Type of A/c	Allahabad Bank 50200527185 Saving

	Branch Code IFSC /RTGS Code	01815, Pudukkottai ALLA0212291
11	Membership	Member in Tamilnadu Federation of voluntary Agencies, Chennai Regd.No.718/2007 Member in Network for Rural Development, Pudukkottai Dist.
12	NGO Partnership system	Registered with Planning Commission , Govt of India. Unique ID.TN/2010/0031352
13	Chief Functionary/ Director	Dr.S. VIJIKUMAR Director, Tamilnadu Scientific Research Organisation No. 39,Mura Bhavan,Koodal Nagar Rajagopalapuram Post, Pudukkottai-622003. TamilNadu, India

3.Vision and Mission of the Organization

Vision

To improve the resources of our nation and rural prosperity through the application of science & technology and also we dedicate the sustainable development of agriculture, ecology, health, education, employment and food security by the way of transferring valuable informations and action research with the community response and participation.

Mission

To provide expertise and assistance to rural community in building their capacity to reduce poverty, tackle environmental problem and promote sustainable agriculture, rural prosperity assure and responsibility for their health and pursuer education through science and technological application.

4.Objectives

- *To promote popularization of science & technology among the public and students by way of organizing awareness programmes, seminars, lectures, exhibitions, training Programmes and research activities.*
- *To identify areas for the applications of science & technology for the developmental needs, in particular, to the prevailing conditions of backwardness, rural, unemployment and poverty.*
- *To form and maintain farmers field schools, farmer's science clubs, students science club and youth clubs.*

- To formulate and implement any successful environmental programme it is necessary to make it socially relevant
- To institute awards & fellowships for distinct fellow in the field of environmental conservation and science popularization.
- To formulate and implement the community based health promotional programmes.
- To conserve our biodiversity through the effective implementation plan.
- To promote and conduct research and development programmes in the field of health, environment, agriculture, education etc
- To publish research journals, books and local community news paper in the view of promotion of environmental science.
- To encourage the rural community in Sustainable Agriculture through Natural farming.

Current Target Area: - Pudukkottai District and TamilNadu.

Major Target Groups: - Rural Communities, Small Marginal Farmers, Land less Farmers and labourer , Students, Youth groups, SC/ST weaker sections, Rural Teachers, Women groups, Techno entrepreneurs, Innovation groups, BPL groups, Children groups and under privileged groups etc.

5. Board of Managing Committee

S.No.	Name	Address	Qualification	Designation
1	Dr.S.Vijikumar	No. 39,Mura Bhavan, Koodal Nagar, Rajagopalapuram Post,Pudukkottai- 622003, TamilNadu,India.	D.Sc.(A.M.) FNVA.,	Director/ Managing Trustee.
2	V.Muthulakshmi	No. 39,Mura Bhavan,Koodal Nagar Rajagopalapuram Post,Pudukkottai-622003 TamilNadu,India	D.M.L.T. NVA. Fellow	Financial Trustee.
3	A.Gomathy Shankar	Sivapuram,Pudukkottai	B.E.,	Trustee.



6.TNSRO Hierarchy



7.TNSRO working fields

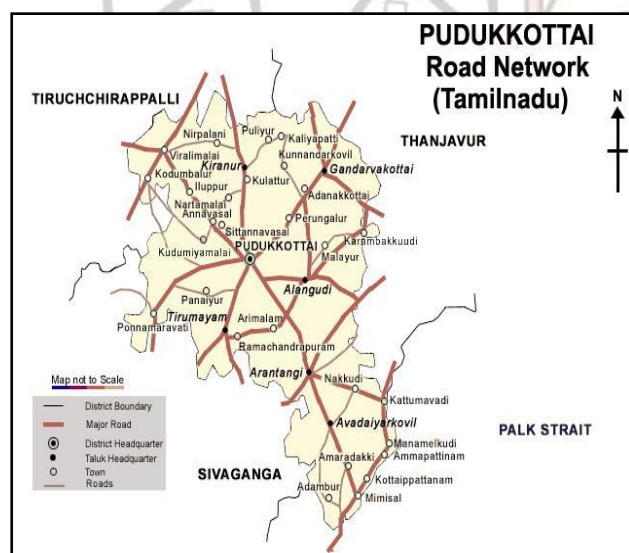
- Bose Science Society – Science popularization
- Bio tech for Villages – Village promotion through Biotechnology
- Climate change –IEC and Research Activities
- Conservation of Biodiversity.
- ICT for Rural Prosperity-Village Information Centre (VIC)
- Environmental Education and Conservation-Village Biodiversity School, Tree plantation, NEAC etc
- Vocational Education and Training - Self Employment Generation.
- Plant Science Research Division – Medicinal Plants Research
- Protection of Indigenous Culture and Knowledge System-Documentation and Research.
- Farmers Training School- Farmers Promotion and Development
- Publication and Library Division- Publish journals & Books, Library develop.
- Village Health Services-Free Medical Camps
- Disaster Risk Management- Training and Research
- Community Radio Programme

8. Staff Particulars

S.No.	Name	Qualification	Designation	Part/ Full Time
1	Dr.S.Vijikumar	D.Sc.(AM)	Director	FT
2	Mrs.V.Muthulakshmi	MLT, FNVA	Project Officer	FT
3	Mr.K.Ramanathan	M.Sc.,M.Phil	Research Associate	PT
4	Mr.C.Karthikeyan	M.Sc.,M.Phil	Administrative Officer	FT
5	Mis.V.Bhuvaneshwari	M.Sc.,	Project Associate I	PT
6	Mis.V.Priyadharshini	B.Sc.,	Project associate II	PT
7	Mr.Govind	-	Field worker	PT
8	Mrs.Lakshmi	-	Aya	PT

9. Project Area Details

District Profile



Pudukkottai District was formed on 14 January 1974 by merging Pudukkottai revenue division of Trichy District and Arantangi and Avudayarkoil taluks of Thanjavur District. The district is bounded by Tiruchirapalli in the North and West, Sivagangai District in the South and Bay of Bengal and Thanjavur District in the East. The district lies between 9' 50' and 10' 40' of the northern latitude and 78' 25' and 79' 25' of the eastern longitude. It comprises 9 taluks, 13 development blocks and 764 revenue villages.

The district is generally a drought prone area an analysis of the rainfall data of the previous 10 years brings to light that expect for the three years of 1998, 2004 and 2005 the district witnessed deficient rainfall; and the deficiency ranged from 0.3 (1996) to 30% (2003).The total population of the district as per the 2001 census was 1459601 comprising 724300 males and 735301 females. There are 3 Major Rivers flowing through the district decides small rivers. However, they do not from the main source of irrigation as they are jungle streams and remain dry for most part of the year. As such, tanks are the major source of irrigation in the district, followed by canals and wells. The net irrigated area in the district is 70 percent of the net cropped area. The major food crop cultivated in the

district is paddy covering around 1.02 lakh hectares representing about 64 percent of the net sown area. Groundnut is the major oilseed crop grown in about 30500 hectares. The other crops include millets, pulses, sugarcane, banana, and cotton. The district is industrially backward. There is no industrially graded raw-material except pockets of granite deposits. Irregular power supply and acute water shortage stand in the way of speedy industrialization. A sugar factory has been set up in the private sector which covers majority of the farmers growing sugar cane in the district.

Historical brief

Pudukkottai was formerly one of the princely states of India. It was under different dynasties during the first half of the 15th century and under Mughals till the 17th century. Thereafter Pudukkottai came under the suzerainty of the Thondaiman Kings who had reigned the state till it was merged with the Government of India after independence. The Thondaiman Kings were noted for the able and clean administration. During their rule they have augmented creation of irrigation sources for agriculture, evolved a sound revenue administration, education systems etc., the palatial administrative buildings for public offices constructed during their period are still remaining as monuments and serving the same purpose till date. The noted British administrator Alexander Loftus Tottenham was the administrative executive under the Thondaiman rulers. He evolved the famous "Tottenham System" of file maintenance and other office procedures, which are still being followed by government departments with a little change then and there.

Revenue Administration

There are two revenue Divisions namely Pudukkottai and Aranthangi. There are nine taluks and thirteen Panchayat unions with 763 revenue villages and 498 village panchayats. There are also two Municipalities and eight town panchayats in this District.

Soil Type

According to Geological reports rocks, granite, stone and limestone occurs in this District. White clay and other building stones are available in plenty.

Industries

Pudukkottai is one of the industrially backward district of Tamil Nadu. The total numbers of small-scale industries are 634.

Historical Architectural Monuments

There is one famous Shiva Temple at Avudaiyarkoil. It is internationally famous for its beautiful stone sculptures. Viralimalai in Madurai - Trichy High way is a pilgrim centre where a beautiful temple is situated over the hilltop for Lord Murugan. Sithannaval is a tourist attraction in this district, where one can see the rock beds and cave temples erected during the Samana period.

Road Communications

This District is sufficiently linked with other parts of the country with Railways and Highways.

General

The nature of the district is purely agrarian with the major crops Paddy, Banana, Sugarcane, Groundnut and cashew nut. There is an All India Pulses Research Station at the village "Vamban" and one State Agricultural farm at Kudumianmalai.

Predominant economic activities of the district

Agriculture is the predominant economic activity being pursued in the district. There are no major industries in the district. Dairy and goat/sheep rearing are the allied activities pursued in villages. Synthetic gem cutting is being done in Viralimalai block of the district. Stone and granite quarrying are the other economic activities worth mentioning.

Major food / commercial and plantation / horticulture crops

Paddy is the major crop cultivated in the district covering around 102750 hectares forming 64 percent of the net sown area followed by groundnut in an area of 30544 ha. The other major crops are sugarcane, millets, gingelly, cotton and pulses. Among the horticulture crops, cashew nut tops the list covering an area of about 15432 ha. Followed by coconut in an area around 4067 ha. Further, the district has around 6418 ha under fruit crops like mango, banana, acid line, etc. Vegetables are also cultivated in an area of 2586 ha. The area under sugarcane has been increasing since the commissioning of a sugar factory under private sector in the district.

Special/additional/other features of the district

Other economic activities include stone quarries, granite quarries, coir rope making, marine fishing, gem cutting, small business, mat weaving, pottery, pith work, etc.

Other factors affecting the district

The district is generally a drought prone area. The industrial progress in the district is sluggish due to low capital formation and absence if any raw material.

10.PROGRAMMES /ACTIVITIES 2018-2019

Indian Journal of Natural Sciences-Research Publication



TNSRO has been publishing **Indian Journal of Natural Sciences -IJONS** from **August 2010**. Also the board of management approved the agenda for journal establishment with ISSN registration (0976-0997). The Journal is peer reviewed **International Bi monthly Journal** for publication of Original Research papers /Reviews/ Short communications/ Book reviews/Reports on conferences/ Seminar, Important events, News of interest etc. IJONS published by our Institution was running successfully. Famous Scientific Information, Research Solution have been published. Above

100 and above Scientists and Professors have joined as a member from India and abroad.

Indian Journal of Natural Sciences established in the year 2010 and it plays a vital role in the publication of Research Papers. Till now, we have published 52 issues. The authors from our country and other countries published many research papers in the Indian Journal of Natural Sciences. There are 446 Research papers published in the volume 8 and 9. Many of the research papers focused in the field of Environmental Science, Plant and Animal Science. These Research papers insisted to save the Environment and protect the rare plant and animal species. We are proud to say that Indian Journal of Natural Sciences indexed by Clarivatic Analytics (Thomson Reuters) and got NAAS Rating 3.56. Our Journal focused in various databases such as Index Copernicus etc. we have applied for Index Copernicus IC value and got the impact factor of ISRA – 4.918, ISI -1.540 and Root Index -5.79. More than 100 Professors and Scientists are Editorial Committee and Review Committee member in IJONS. In near future, IJONS will become an UGC Approved Journal. IJONS ready to publish the events conducted in the Universities and Colleges and new innovations done by the students.

School of Holistic Health Sciences and Research



(SHHSR) has established under the charter of our TamilNadu Scientific Research Organisation for educational objective of providing high quality instruction and therapeutic programs which utilize the mind and bodies own rejuvenative powers through the natural modalities of Acupuncture, Bach Flower Remedies, Herbal Remedies and Nature cure techniques. The School will offer therapeutic educational programs to move

individuals / practitioners to greater understanding and experience of perfect health, rejuvenation, transformation and higher states of awareness and up gradation of skill based training by distance mode and personal contact programme. From the most tangible studies on the physical plane to the most esoteric in exploration of consciousness, the school seeks to provide quality instructors and course material to aid the students/practitioners in achieving the greatest proficiency and reaching the highest attainment of truth and knowledge in their chosen focus of study.

This course is a unique opportunity for individuals of all ages to explore comprehensively the arena of Complementary and Alternative medicine. This course is aimed at providing a comprehensive understanding of a number of popular natural and holistic therapies and achieving sufficient qualifications to engage in professional practice. The PG Diploma Holistic Health Science Certificate issued to 10 students those who done their PG Diploma Programme in the TNSRO SHHSR which was started in the academic year 2018-19. The alternative medicine includes Bach flower Medicine, Aromatheraphy, Herbal Remedies,

Biochemical Remedies, Nature Cure techniques has the ability to control the disease. The English Medicine, Auyurveda, Sidha, Homeopathy are also an effective remedies for the various diseases. The main aim is to create the talented Holistic Health Therapist to solve many problems. The peoples can avail these medicines through NGO or Rural Community Health Center. These studies can available only in the distance education but in the TNSRO we can initiate this PG Diploma Programme with our own syllabus focused on Rural Holistic Medicines and alternative medicines. TNSRO SHHSR creates a pathway to pursue the research in the field of Holistic Health Medicines.

Environmental Awareness and Conservation Programme



TNSRO organized the Environmental Awareness and Conservation Programme on 03.07.2018, 10.10.2018 and 16.12.2018 at Pudukkottai. Dr.E.S.Karthy, Director, AWE CARE, Erode was the chief guest and delivered the special address. In his address, he highlighted the importance of climatic conditions. He also explained about the Global Warming and its problems. Due to deforestation, some of the rare species in the environment are gradually reduced. He insisted to cultivate the Herbal Garden in every home and explained about the solid waste management. He has created the Environmental Awareness to the people and they got good knowledge about the Environmental conservation..

National Science Day Celebration



scientific community.

The Day is observed to mark the novel discovery of Raman Effect by the great Indian Physicist Sir C.V.Raman on 28th February, 1928. Raman Effect is a phenomenon in spectroscopy discovered by the eminent physicist while working in the laboratory of the Indian Association for the Cultivation of science, Kolkata. After two years of this discovery, Sir C. V. Raman brought the first Nobel Award for the country in 1930. Hence the National Science Day is a great day for Indian Science and

The Bose Science Society and Central Rotary Club, Pudukkottai jointly organized the National Science Day with the support of Tamil Nadu Scientific Research Organization on 07.03.2019 at 10 am in the Govt. Middle School, Malaieedu. Rtn. Artist K. Ravi, Head, Central Rotary Club presided over the function. Rtn.P.Mathivanan, Secretary, Central Rotary Club welcomed the gathering. Mr.D.Palanimuthu, Headmaster, Govt. Middle School, Malaieedu and Rtn.V.R.Venkatachalam, Assistant Governor Region-28 felicitated the gathering in the National Science Day Celebrations. Dr.S.Vijikumar, Director, Tamil

Nadu Scientific Research Organization was the chief guest and delivered the keynote address in the occasion. In his address, he highlighted the scientific inventions and explained about the advantages of science. The Government Schemes for the science research and their inventions delivered by him. He also insisted the students to develop their aptitude and attitude towards research in the field of science. He motivated the students to take some body as a role model for their development. He interact the students and explained about the National Science Day. Every month, Bose Science Society plan to conduct Science Exhibition, Quiz Competition, Fundamental Scientific Testing, sampling the plants, awareness programmes and Science Film. Rtn.D.Radhakrishnan, Treasurer, Central Rotary Club proposed vote of thanks. Many students and teachers from the school participated in the National Science Day Celebration. The students got comprehensive knowledge about the Science and its inventions. The arrangement of the function was made by Mr.C.Karthikeyan, Programme Coordinator of Bose Science Society and Rtn.K.Prasana and Rtn.A.Pichai Prabhu, Pudukkottai.

Summer Research programme



Many UG and PG students from various colleges approached TNSRO for their Summer Training Project work. TNSRO Conducted Summer Training and Research Programmes for the students based on their Interest. We are initiating the Summer Research Programmes with proper training in Research Methodology. After completing the Training programme, the students can go for the Research work. We are providing Summer Research Programme in Phytochemistry, Biodiesel, Bioinformatics, Bioproducts, Herbal Medicines etc. The students from Loyala College, Chennai, Bharathidasan University, Trichy, Dr.Umayal Ramanathan College for Women, Karaikudi and SASTRA University, Thanjavur took part in the Summer Research Programme and they got comprehensive ideas about the Research.



Farmers Awareness Programme

TNSRO organized Farmers Awareness Programme on 04.04.2018, 10.05.2018, 20.08.2018, 15.10.2018 and 18.01.2019 at Pudukkottai and Thirumayam block Villages. Mr.Kamaraj was the chief guest and delivered the special address. In his address, he insisted the

farmers to go for organic farming. Farmers are encouraged to promote the agriculture with biofertilizers. In Pudukkottai District, Farmers faced many challenges due to lacking of Rainfall and water. Due to the Gaja Cyclone, climate changes occurred and most of the trees are fall down. This programme give the fundamental ideas to the farmers how to promote their agriculture. TNSRO apply for the grant to conduct many Awareness and Training Programmes to the Farmers.

Children's Science Awareness Training



TNSRO conducted Children's Science Awareness Training Programme for School Students on 10.07.2018 and 04.10.2018 at Municipal Middle School, Malaieedu, Pudukkottai was the chief guest and delivered the keynote address. In his speech, he highlighted the importance of Science and its advantages. He said that Science has many wonders.

Science creates the pathway to the world and it gives Eyes to the Blind and Ears to the Deaf. He insisted the students to involve in the science research and invent new things. He highlighted the scientific inventions and scientists. He motivated the students to participate in Science Exhibitions and Science Quiz Competitions.

Children's Science Film Programme



The Bose Science Society, Pudukkottai Central Rotary Club and Pudukkottai Science Film Society jointly organized the Children's Science Film Programme on 14.03.2019 at Municipal Middle School, Malaieedu. The Programme was inaugurated by Rtn. Artist K. Ravi, Head, Central Rotary Club and the Rtn.P.Mathivanan, Secretary, Central

Rotary Club welcomed the gathering. Mr.D.Palanimuthu, Headmaster, Govt. Middle School, Malaieedu and Rtn.V.R. Venkatachalam, Assistant Governor Region-28 felicitated the gathering. S.Elango, Secretary of Pudukkottai Science Film Society delivered the keynote address. In his speech, he quoted the importance of science and its applications. While he delivered his address, he explained the scientific inventions to the students. He clarified the doubts raised by the students about the Science film. Rtn.S.Vijikumar, President of Bose Science Society delivered the special address and interacted with the students. He highlighted the innovations and inventions in the field of science and inspired the students with his speech. While he addressed the students, he explained about the wonders of the earth and sky. He quoted the life style of few scientists and explained to the students. The Film "Red Ballon" was displayed to the students and they

are keenly observed the wonder of the science. Rtn.D.Radhakrishnan, Treasurer, Central Rotary Club proposed vote of thanks. Many students from the school took part in the Children's Science Film Programme and they are highly encouraged. The arrangement of the function was made by Mr.C.Karthikeyan, Programme Coordinator of Bose Science Society and Tamil Nadu Scientific Research Organization, Pudukkottai.

Climate Change Awareness Training Programme



Tamil Nadu Scientific Research Organization conducted Climate Change Awareness Training Programme on 22.12.2018 at Pudukkottai. Dr.B.Vaseekaran, Professor and Head, Department of Animal Health and Management, Alagappa University, Karaikudi was the chief guest and delivered the special address. In his address, he focused on Climate change in the environment and impact on global warming. He addressed the

problems of the environment and creates awareness about climate literacy among the peoples. He also explained about the alternative sources to protect the environment from various types of pollution. He said that NGO's play a vital role in protecting the environmental problems and commitment towards sustainable development. They got comprehensive knowledge about the Climate Changes. There are more than 75 peoples took part in the awareness training programme.

Biotechnology Training Programme for Students

Tamil Nadu Scientific Research Organization conducted Biotechnology Training Programme on 14.11.2018 at Pudukkottai. Dr.S.Vijikumar, Director, Tamil Nadu Scientific Research Organization presided over the function. Dr.M.Ramesh, Associate Professor, Department of Biotechnology, Alagappa University, Karaikudi was the chief guest and delivered the keynote address. In his speech, he highlighted the



importance of Biotechnology and its applications. He has explained about the principles and applications of advanced techniques in biotechnology. The training program focused on bioinstrumentation, bioinformatics and phytomedicines. In the training program, we gave special training to the students in bioproducts, phytochemistry, bioinformatics and other advanced techniques. The students got inclusive knowledge about advanced techniques, structural elucidation using bioinformatics tools and phytochemical studies. There are 52 students participated in the training program and the arrangement of the function was made by Plant Science Research Division (PSRD), TNSRO.

Observation of National Days.



Tamil Nadu Scientific Research Organization conducted a programme for the school students on observation of National Days. Dr.S.Vijikumar, Director, TNSRO, Pudukkottai was the chief guest and delivered the special address. In his address, he insisted to observe Biodiversity Conservation Day on every year 22nd May. He insisted to protect the Climate change by Water and Forest Conservation, alternative species to be cultivated. Due to the dramatic climate changes, the endangered species were reduced. He explained about the rare plant and animal species to be protected for biodiversity conservation. In his speech, he highlighted the importance of World Environmental Day. Every year, 5th June observed as World Environmental Day. He insisted to protect the Environment by Water, Soil and Forest Conservation. The Herbal Garden is to be expanded in all the Schools and Villages. He insisted the students to cultivate the various plant samplings in their home. Trees can protect the environment from pollution and it stores the ground water. He also focused on the Solid waste Management and Rain water Harvesting.

While he delivered his speech, he spoke about Independence Day. In our Country, every year 15th August we are celebrating Independence Day. He remind about the freedom fighters and his life style. He insisted the students to be patriotist and serve for our the nations. He also quoted the importance of freedom and Education. He explained about Mahatma Gandhi and its protest for getting independence. In his address, he explained about the importance of Republic day. Every year in our country, we have observed 26th January as Republic day. He explained about the Indian Constitution and Democracy. Students are keenly observed his thoughts and they are impressed by his speech.

Bose Science Society –Science Promotion programme

Bose Science Society was established in the year 1999 under Tamil Nadu Scientific Research Organization and later it was affiliated with Vigyan Prasar VIPNET Science Programming a body of Department of Science and Technology, Govt. of India. Bose Science Society was again renovated in the year 2018. There are two types of wings where the members can able to join in the Bose Science Society.



1. Students Wing -The School Students can join in our society with free of cost
2. Professor Wing – The Professors, Scientists, Research Scholars are joined as a member in the Bose Science Society.

Every year, Bose Science Society consented to issue the awards to the Scientists, Professors and Research Scholars based on their qualification and research publications. Bose Science Society conducted Awareness Programmes to the School students every year. The

members from the professors wing may provide their contribution to the programmes in any way. There are 453 members in Bose Science Society joined as a Fellow Members.

10.Partner Organizations



The TNSRO partners with select organizations. These partnerships vary in nature, depending on the identified need –and can be technical, financial or strategic. The Foundation maintains a broad network of contacts in all key areas, is constantly scouting for innovative rural technologies, and for the organizations doing high quality work in the area of rural development.

- Technical Partnerships–AWE Care analytical and Research Laboratories, Erode.
- Community Awareness - Rural Development Society, Gandarvakkottai
- Strategic Partnerships- Rural Development Organisation, Pudukkottai
- Educational support partnership- Bonsecurs College for women, Thanjavur, Holy Cross College, Trichy & Nagercoil
- NGO partner – Roland foundation, RDO, Pudukkottai.

11.MoU signing Institutions

Tamil Nadu Scientific Research Organization signed MoU with following Educational and Research Institutions.

1. Tharshal Training Academy, Chennai. Dt: 21.05.2018
2. V.V.College of Engineering. Dt: 05.07.2018
3. Vivekanandha College of Arts and Sciences for Women, Elayampalayam, Namakkal District Dt: 05.09.2018.
4. St.Peter’s Institute Higher Education & Research (SPIHER Deemed University), Chennai .Dt.28.02.2019

With this, Tamil Nadu Scientific Research Organization signed MoU with 12 Institutions. We have planned to establish Tissue Culture Technology, Medicinal Plants Conservation, Bioenergy Production and Bioproducts laboratory.





12. Awards and Appreciation for Environmental Education and Awareness



In 2013 our organization has received best institution award (**Ariger Anna Award**) from Department of Environment, Govt. Of TamilNadu for best efforts and services in the field of Environmental awareness and education since 1997. Our hon'ble minister of environment and forests Mr. Pachaimal issued to our hon'ble director. **Mr. Mallaseppa**

IAS, Hon'ble director of environment and Principle secretary Mr. **Mohan Verghese Chunkath** IAS also appreciated our organizations best activities in the field of environment. Already our organization has received 2 times (2008 & 2010) from peace trust, regional resource agency, ministry of environment and forests, Dindigul for NEAC programme.

13. Future Plans and Activities

- Biodiversity conservation –flora and fauna species diversity Endangered conservation
- Publish books and magazines related biodiversity and environmental issues and medicinal plants.
- Sustainable Agriculture for Food security
- Popularize biotech application for rural prosperity
- Herbarium centre for research and conservation
- Phytochemical analysis for herbal drug research
- Climate change and water conservation
- Community Radio Programme

14. Available Facilities

- Laboratory
- Research Library with reference texts
- Training Hall
- Computer with Internet facility
- Herbarium
- Bioinformatics and other life science research facility etc.

15.Our Auditor

Mr.S. Jayaraman, B.Sc,F.C.A.,
Chartered Accountant,
Regd No. 200/27903.
7A, Visalakshi Nilayam,
Marthandapuram,
Pudukkottai – 622 001

Report presented by

S.Vijikumar

Director/Managing Trustee

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TNSRO