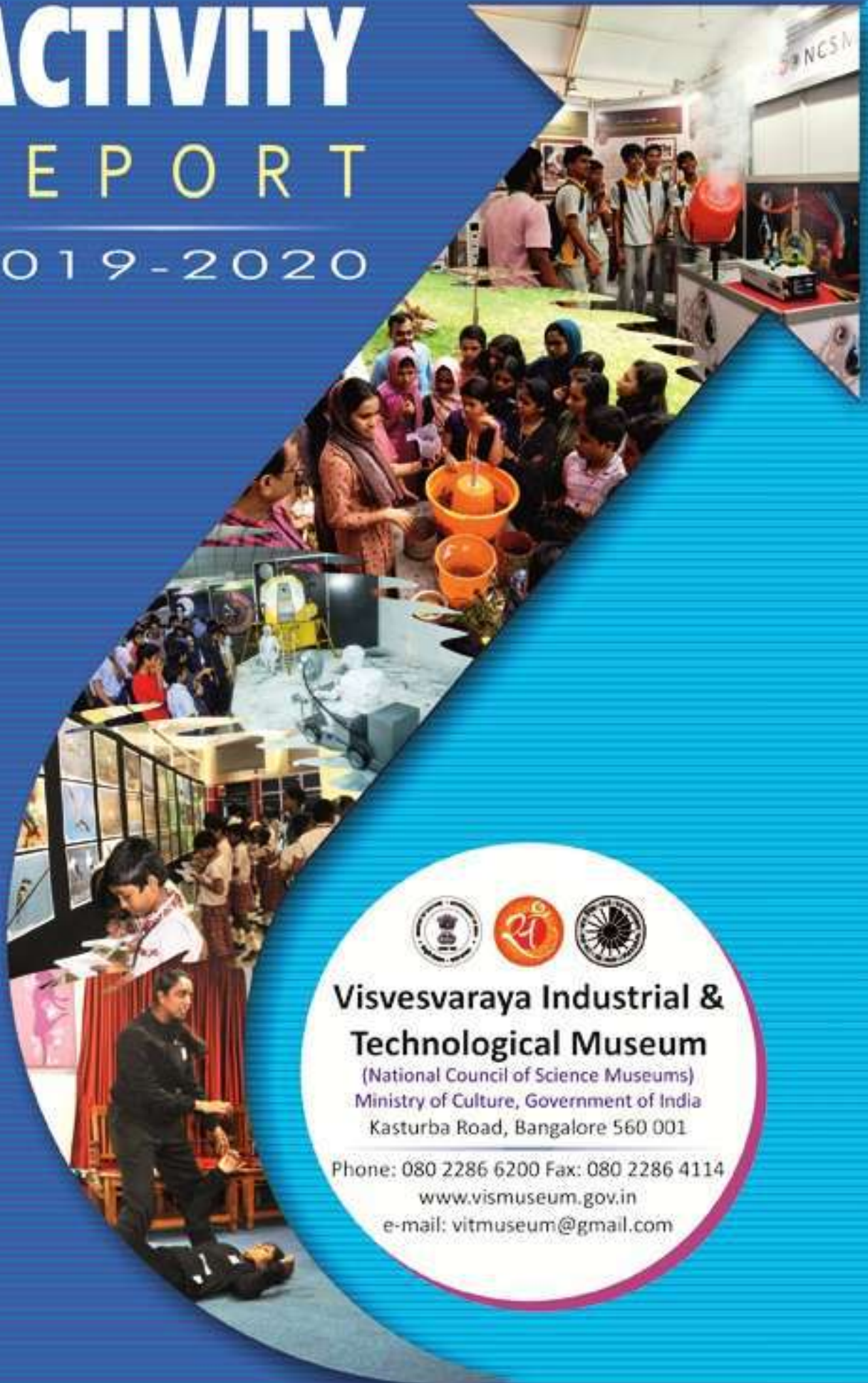


# ACTIVITY REPORT 2019-2020



## Visvesvaraya Industrial & Technological Museum

(National Council of Science Museums)  
Ministry of Culture, Government of India  
Kasturba Road, Bangalore 560 001

Phone: 080 2286 6200 Fax: 080 2286 4114  
[www.vismuseum.gov.in](http://www.vismuseum.gov.in)  
e-mail: [vitmuseum@gmail.com](mailto:vitmuseum@gmail.com)

# ACTIVITY REPORT

2019-2020



## VISVESVARAYA INDUSTRIAL & TECHNOLOGICAL MUSEUM

Kasturba Road, Bengaluru - 560 001

E-mail: vitmuseum@gmail.com website: www.vismuseum.gov.in

### REGIONAL SCIENCE CENTRE

Near Alipiri Gate, Alipiri - Chittoor bye-pass

Tirupati - 517 507

rsctirupati@gmail.com

### REGIONAL SCIENCE CENTRE AND PLANETARIUM

Jafferkhan Colony Road, Near New Bus Stand

Calicut - 673006

planetariumcalicut@gmail.com

rscpcalicut.org

### DISTRICT SCIENCE CENTRE

Municipal Garden

Kalaburagi - 585 103

scienceglb@gmail.com

### DISTRICT SCIENCE CENTRE

N.H. No. 7, Kokkirakulam

Tirunelveli - 627 009

sciencecentrenellai@gmail.com

www.dsctirunelveli.org.in

### K. MADAN GOPAL

Director

Visvesvaraya Industrial &  
Technological Museum

Kasturba Road

Bengaluru - 560 001

### A. D. CHOUDHURY

Director General

National Council of  
Science Museums

Sector- V, Block- GN, Bidhan Nagar

Kolkata - 700 091

## TABLE OF CONTENTS

SI No	Details	Page No.
01	Introduction	3
02	General Information	10
03	Existing Galleries	11
04	New Galleries / Major Renovations	12
05	Mobile Science Exhibition Units	13
06	New Temporary Exhibitions	13
07	Science Park	14
08	Exhibit Development	14
09	Collection of Artefacts	14
10	Planning	15
11	Mobile Science Exhibition Programmes	15
12	Science Education	
	a. Science Demonstration Lectures & Science Shows	16
	b. Nature Study Camp	17
	c. Environmental Awareness Programme	18
	d. Science on a Sphere	18
	e. Wright Brothers Flyer Simulator	18
	f. Film Shows (Video Shows)	18
	g. 3 D shows	19
	h. Popular Science Lectures	19
	i. Taramandal Shows	19
	j. Science Quiz	19
	k. Sky Observation Programme	19
12 (l)	Development of Video Programmes/Computer Software/Multimedia Programme	20
13	Creative Ability	
	a. Science Fair / Camp	21
	b. Science Seminar	21
	c. Creative Ability Centre (CAC)	22
	d. Vacation Hobby Centre	22
	e. Sit & Draw / Essay Writing	24

14	Training	
	a. Teachers Training Programme (TTP)	27
	b. Computer Training Programmes	27
15	Community Programmes	
	a. Science Drama/Puppetry/Other forms of Performing Art	28
	b. Other Community Programmes	28
16.	Commemorative Events	29
17.	Temporary Exhibitions	29
18.	Collaborative Programmes	30
19.	Library & Informatics	31
20.	Publications	31
21.	Construction	32
22.	Procurement of Equipments	34
23.	Personnel	
	a. Appointments	37
	b. Promotions	37
	c. Transfers	39
	d. Retirement	39
24.	Miscellaneous	
	a. Distinguished Visitors	40
	b. Media Programmes	42
	c. Popular Lecture by Staff	43
	d. Foreign Deputations	46
<b>Annexure</b>		
<b>Annexure</b>	<b>Details</b>	<b>Page No.</b>
1.	Science Park Exhibits	47
2.	List of Exhibits Developed	52
3.	List of Popular Science Lectures	58
4.	Creative Ability Centre	70
5.	Commemorative Programmes	77
6.	Collaborative Programmes	80





New Gallery on Science for Kids at VITM



New Gallery on Non Conventional Energy Resources at RSC T



Non Conventional Energy Resources Gallery at RSC T



Art Installation at RSC & P C

## VISVESVARAYA INDUSTRIAL AND TECHNOLOGICAL MUSEUM, BANGALORE

**'Science for kids' Gallery** at VITM was inaugurated on 19<sup>th</sup> April 2019 by Prof. Anurag Kumar, Director, Indian Institute of Science, Bangalore. The gallery is spread out over an area of 263 Sq Mtrs with 27 interactive exhibits and a separate space for kids to play with science toys.

**New Mobile Science Exhibition bus 'Rajaramanna' with exhibits on the theme: 'Space Technology for Human Welfare'** was inaugurated on 5<sup>th</sup> September 2019 at Govt. Pre-University College, Bhimarayanagudi, Shahapur Taluk, Yadgir District (an aspirational district of Karnataka State). In addition a New SDL on 'Space Science' was launched. The exhibition travelled in Raichur districts for 3,348 Kms covering 82 sites in 154 days. 62,860 students and public visited the exhibition. Along with MSE, 353 other programmes such as Science Demonstration lectures, Quiz, Science film shows, Sky Observation Programmes and Virtual Reality programmes were organized. 72,586 students, teachers and general public participated.

**'Vigyan Samagam – Pushing the Frontiers of Science'** was held from 29<sup>th</sup> July to 24<sup>th</sup> September 2019. The event was inaugurated on 29<sup>th</sup> July 2019 by Dr. Anil Kakodkar, Member AEC & Chairman, RGSTC, Mumbai in the presence of Dr. Praveer Asthana, Head, Mega Science Division, DST, New Delhi, Shri. Ranajit Kumar, Head, NCPW, DAE and Prof. V S Rama Murthy, Emeritus Professor, NIAS, Bangalore. Several dignitaries and representatives from facilities namely INO, LIGO, ITER, CERN, FAIR, SKA and TMT were present. This exhibition was a joint collaboration between National Council of Science Museums, Dept. of Atomic Energy, Govt. of India and Dept. of Science & Technology, Govt. of India. During the exhibition, Special Talks, interactive lectures by experts on various topics, quiz and demonstrations were organised.

**A Public Lecture on 'Fundamental Research at CERN & much more'** by Dr. Fabiola Gianotti, Director General, European Organisation for Nuclear Research (CERN) was held on 30<sup>th</sup> August 2019. The lecture was followed by an interactive session on 'Doing Business with CERN' by Mr. Jerome Pierlot, Head of Procurement for Accelerator Technology Section, CERN.

**A Special Popular Talk on 'Moon to Mars exploration'** by Dr. Ann Devereaux, Manager, Spacecraft System Engineering, Jet Propulsion Laboratory, NASA, USA was organised on 4<sup>th</sup> October 2019 at the museum.

**VITM organised Workshop on 'Arduino', 'Raspberry Pi' and App Development Course on Android** operating system in collaboration with IEEE, Bangalore Chapter in April & May 2019.

**VITM organised Travelling Exhibition on 'Statistics at Work'**. The exhibition was inaugurated on 28<sup>th</sup> May 2019 by Dr. V. R. Padmawar, Professor, Stat-Math Unit, Indian Statistical Institute, Bengaluru.

**An exhibition on "YOGA SANDESHA – an exhibition on Yoga, Mind & Body"** (developed in house in collaboration with Integrated Centre for Yoga, NIMHANS Bangalore) was inaugurated on June 21, 2019 by Dr. Shivaram Varambally, Prof. of Psychiatry, NIMHANS Integrated Centre for Yoga, Bangalore.

**A Panel Exhibition on 'Nobel Prizes – 2019'** developed in house at VITM was opened at the museum on 10<sup>th</sup> December 2019.

**A Teachers' Training Programme** was organised by the museum on 9<sup>th</sup> September 2019 for High school teachers in collaboration with Australian Consulate, Chennai. The training was conducted by Dr. Stuart Kohlagen, Professor, Australian National University and Director of Science and Learning at Questacon, Australia. 35 Teachers of Bangalore District participated.

**54<sup>th</sup> Anniversary of the Museum** was celebrated from 23<sup>rd</sup> to 27<sup>th</sup> July 2019 by organising One Minute contest (OMC), Enact a Scientist, Quiz with demonstration, open house quiz on 'Elements of Periodic table' for school students. During the Valediction on 27<sup>th</sup> July 2019 Dr Maneesha Inamdar, Professor & Chairperson, Molecular Biology & Genetics Unit, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore delivered a Popular Science Lecture on 'Stem Cells & Our health'.

**'Experiencing Science through Museum Activities' (ESMA) a new initiative of VITM** for adopting Govt. Schools in Karnataka for enhancing science learning by experiencing was organised in July & August 2019. As part of the programme VITM organised Science Demonstration Lectures on Curriculum based topics like 'Chemical reactions', 'Electricity' & 'Magnetic Effect of electric current', 'Acid-Bases & Salts' and 'Force & Pressure' followed by an interactive session for experimentation by the students. In addition a hands on training on science model making to supplement effective class room science teaching' was also held.

**VITM coordinated the organization of State level Science Seminar** on the topic 'Periodic Table of Chemical Elements – Impact on Human welfare' in the southern states during September & October 2019.

**VITM organised Southern India Science Drama Festival (SISDF-2019)** on 27<sup>th</sup> & 28<sup>th</sup> November 2019. The festival was inaugurated by Dr. K. Ramakrishnaiah, Professor, Dept. of Performing Arts, Bangalore University on 27<sup>th</sup> November 2019. 11 teams from various states in South India consisting of 8 students in a team participated and staged plays on various concepts of Science & Society.

The **33<sup>rd</sup> Southern India Science Fair** hosted by Directorate of School Education, Govt. of Tamil Nadu at Sathyabhama Institute of Science & Technology, Chennai was organised by VITM in collaboration with the Education Departments of Southern Indian States from 28<sup>th</sup> January to 1<sup>st</sup> February 2020. The fair was inaugurated on 28<sup>th</sup> January 2020 by Shri. K A Sengottaiyan, Hon'ble Minister for Education, Youth Welfare & Sports Development, Govt. of Tamil Nadu.

**Science Film Festival** was organised at the museum on 20<sup>th</sup> and 21<sup>st</sup> November 2019 in collaboration with Goethe Institute (Max Mueller Bhavan) for Students and general public on the theme HUMBOLDT and THE WEB OF LIFE. The event was inaugurated on 20<sup>th</sup> November 2019 by Prof. M. Abdul Rehman Pasha, Former Programme Executive, All India Radio, Bangalore followed by Screening of Science films. In addition a Panel Discussion on 'Ecological Balance of the planet earth: Science films – a medium of creating awareness' was also held. Prof. M. Abdul Rehman Pasha, Former Programme Executive, All India Radio, Bangalore and Mrs. Malini Shankar, wildlife photojournalist, radio broadcaster, author, blogger and filmmaker, Bangalore participated in the Panel Discussion. In addition a Workshop on Motion in Animation was held on the next day.

**Spend a Day programme** was held on 21<sup>st</sup> December 2019 exclusively for the Tour Operators of Bangalore. About 40 tour operators of Bangalore participated in the programme with their family members. They were exposed to the facilities in the museum through a guided walk along with SoS and 3 D film show.

**As part of outreach activity VITM participated in the 107<sup>th</sup> Indian Science Congress** at GKVK Campus of University of agricultural Sciences, Bangalore by setting up NCSM pavilion as part of the '**Pride of India**' exhibition from 3<sup>rd</sup> to 7<sup>th</sup> January 2020. In addition Science shows on 'Colour Chemistry', Science V/s Miracles' and 'Liquid Nitrogen' were organised for participating students

and general visitors on 4<sup>th</sup> and 5<sup>th</sup> January 2020. About 2,500 students and general visitors participated. The pavilion attracted about 50,000 visitors.

**Science Shows on 'Science Vs. Miracle'** was organised for students and general public on 20<sup>th</sup> February 2020 at Govt. Model Primary School, Yeshwanthpur, Bangalore on the occasion of Interschool Science Exhibition for Govt. School students.

VITM participated in the '**Science & Technology Fair 2020**' held from 18<sup>th</sup> to 20<sup>th</sup> February 2020 at Sri Kshetra Adichunchangiri, Nagamangala, Mandya Taluk by setting up VITM pavilion with 'Fun Science' exhibits along with MSE exhibits on 'Electricity & Magnetism'. About 12,000 students and general public visited the pavilion.

**'Innovation Festival - 2019'** was organised from 27<sup>th</sup> to 29<sup>th</sup> February 2020 at the museum. Dr. Saragur M Srinidi, President, Advanced Computing and Communications Society, Indian Institute of Science, Bangalore inaugurated the festival on 27<sup>th</sup> February 2020. During the festival an 'Innovation Exhibition' of products designed by various innovators was on display. Workshops on 'Mathematics & Origami', 'Fun with Gliders' and 'Hydroponics', challenger's corner were part of the festival.

**Engineering Fair** was organised for ITI and Polytechnic students from 5<sup>th</sup> to 7<sup>th</sup> March 2020. Several ITI's and Polytechnics participated in the fair. During the fair Seminar on the theme 'Recent trends in Science & Technology' and 'Team Quiz' on 'Science & Technology' was organised.

**International Women's Day** was celebrated at the museum on 9<sup>th</sup> March 2020. Ms. Isha, Pant, Deputy Commissioner of Police, Command Circle, Bangalore was the Chief Guest and delivered a talk on 'Technology for Women's Safety. Dr. Bindya Yohannan, Sr. Counsellor, Parihar, Office of the Commissioner of Police, Bangalore presided and delivered a talk on 'Women Safety'. The talk was followed by live demonstration of defence techniques for women in critical situations.

VITM organised underprivileged children visit from neighboring Districts. A guided tour to the galleries and facilities at the museum was given to the Children.

VITM continued its non-formal education extension activities by organizing public lectures, sky observation programmes, Teachers' Training Programmes etc throughout the year for the benefit of teachers, students and general public. In addition, VITM organised special programmes regularly to mark various occasions like National Technology Day, International Museums Day, International Day of Yoga, International Science Centre & Science Museums Day, National Mathematics Day, National Science Week etc., with various programmes and activities for students, teachers and general public.



## **REGIONAL SCIENCE CENTRE, TIRUPATI.**

**A New Gallery on “Non Conventional Energy Resources”** was inaugurated at RSCT on 18th November, 2019 by Shri Bhumana Karunakar Reddy, Hon'ble MLA, Tirupati and Prof S. Sudarsana Sarma, Vice-Chancellor Vedic University, Tirupati, The gallery has 40 exhibits on non conventional energy resources such as Solar Energy, Wind Energy, Ocean Energy, Biomass etc.

**The Centre launched the new MSE “Nagarjuna’ with exhibits on ‘Space Technology for Human Welfare’.** The exhibition was inaugurated on September 5, 2019 by Hon'ble Deputy Chief Minister of Andhra Pradesh Shri Amzath Basha Shaik Bepari. The bus travelled through a distance of 1,619 Km in Kadapa districts of Andhra Pradesh covering 66 sites in 130 days during September to March 2020. 1,01,961 students and general public visited the exhibition.

**Travelling Exhibition on ‘Statistics at Work’** was inaugurated on 24th July, 2019 by Dr. Amit Kumar Patra, Director, National Atmospheric Research Laboratory, Gadanki

**Science Film Festival** was organised in collaboration with Goethe – Institute / Max Mueller Bhavan Science Films Were screened for 4 categories followed by panel discussion and activity from 27<sup>th</sup> – 30<sup>th</sup> November 2019.

The Centre organized several commemorative programmes like International Yoga Day, Earth Day, Environment Protection Week, Ozone Day and International Science Centres & Museums Day, World Space Week, Moon Landing Week, International Museum Week, National Technology Day, NCSM Foundation Day, National Science Week in collaboration with several other organizations for students, teachers and general public.

Fourth Innovation Science Festival was organised from 28th February – 2nd March, 2020. Several innovators from different states like Telangana, Andhra Pradesh, Tamil Nadu and Karnataka participated in the event.

Sky Observation Programme during Partial Solar Eclipse was organised on 26th December 2019. The Centre collaborated with Office of the DEO and AP SCERT in organizing District Level Science Seminar, District Level Science Drama Contest and State Level Science Drama Contest.

The Centre organised several community programmes like Underprivileged children visit to Regional Science Centre, Pulse Polio Programme and Special Programme for Women and girls during International Women Day.

## **REGIONAL SCIENCE CENTRE AND PLANETARIUM, CALICUT.**

**The Centre Launched a New Mobile Science Exhibition bus ‘Vainu Bappu’ with exhibits on the theme: ‘Space Technology for Human Welfare’.** The exhibition was inaugurated on November 01, 2019 at Jawahar Navodaya Vidyalaya Kalpetta by Shri. C. K. Sasindran Hon'ble MLA Kalpetta . In addition a New SDL on ‘Space Science’ was organised. The exhibition travelled in Wayanad district for 2,075 Kms covering 43 sites in 87 days. About 40,124 students and general public visited the exhibition. Along with MSE, 54 nos of other programmes such as Science Demonstration lectures, Quiz and Science film shows, Sky Observation Programmes and Virtual Reality programmes were organized. About 10,250 students, teachers and general public participated.

**Global astronomy month** was observed at the Centre from 5<sup>th</sup> to 30<sup>th</sup> April 2019 by organising various astronomical events and activities like 'Astro image exhibition', 'Moon observation', 'Telescope making workshop', 'Astronomy model making workshop' and 'Astrophotography workshop'.

**Creativity workshops** were organised in April & May 2019 in **physics** and chemistry through an array of experiments.

**50<sup>th</sup> year of Moon landing** was celebrated at the centre from 22<sup>nd</sup> to 27<sup>th</sup> July 2019. As part of the event an exhibition 'Touchdown Moon' designed and developed by RSC Calicut was inaugurated by Shri. Thottathil Raveendran, Hon'ble Mayor of Calicut. In addition a Symposium on 'Space dynamics', 'Space maths workshop', 'design aspects of space travel', a seminar on 'Lunar travel- we learn last fifty years' 'painting contest on 'Pre-arrangements for rocket launching' were held. 264 students and general public participated.

**A two days conference of 'Contemporary Mathematics Education'** was held at the Centre on 3<sup>rd</sup> & 4<sup>th</sup> October 2019. The conference focused on strategies that can be used and implemented using non-conventional methods, technology and other teaching practices which would make learning mathematics an enjoyable affair.

**Science Film Festival** was organised at the Centre from 14<sup>th</sup> to 16<sup>th</sup> November 2019 in collaboration with Goethe Institute, Delhi. The theme was HUMBOLDT and THE WEB OF LIFE. The festival was inaugurated by Shri. M. T. Vasudevan Nair a Padma Bhushan & Jnanpith Awardee on 14<sup>th</sup> November 2019. 14 films were screened during the festival. 2,750 students and general public were present during the film show. An activity titled **Anti-plastic installation of a 14 ft Blue Whale** made out of 7000 throw away plastic bottles was held on 14<sup>th</sup> November 2019.

As part of **ANNULAR Solar ECLIPSE** two workshops on 'Annular Eclipse' was conducted at Govt. Sanskrit College Pattambi and Kalpetta Civil station on 4<sup>th</sup> & 7<sup>th</sup> December 2019 in association with KSSP, Break through Science Society. Demonstration of various projection methods, pin hole camera was part of the workshop. About 220 students and teachers participated. An **Eclipse Van** was developed by the Centre in connection with the annular solar eclipse 2019. 20 displays related to eclipse mounted on the bus conducted programmes at various schools and in Calicut beach. About 13,000 students and general public visited the exhibition.

**Annular Solar Eclipse** of 26<sup>th</sup> December 2019 was witnessed by visitors of different category with the arrangements made at the Centre like video projection system, Pin hole camera, Projection boxes, mirror reflection method, telescope fitted with solar filter etc. Break the Fast during Eclipse and Kudumbasree's Ruchippura kitchen was the attraction of the event.

**23<sup>rd</sup> Anniversary of the Centre** was celebrated from 25<sup>th</sup> to 31<sup>st</sup> January 2020. As part of the event Clay modelling, Open house quiz, workshop on 'learning how to learn STEM' for students and demonstration of Kitchen Chemistry for women were conducted.

A Panel Discussion "**Curbing Corona virus**" was organised at the Centre on 10<sup>th</sup> February 2020 involving noted doctors and specialists.

**A two days workshop on Innovation in Art & Craft** was organized at the Centre on 8<sup>th</sup> & 9<sup>th</sup> February 2020. Participants were exposed to innovative techniques in Wood craft, Glass painting, Paper craft, etc.

## DISTRICT SCIENCE CENTRE, GULBARGA.

District Science Centre, Gulbarga launched a **New Mobile Science Exhibition U R Rao on 'Water and Chemistry in our life**. The facility was inaugurated on 5<sup>TH</sup> September 2019 by Shri Gurnath Reddy Police Patil, Town Municipal Council, Gurumitkal at Govt. Girls High School, Gurumitkal, Yadgiri District. The bus travelled 2,448 kms covering 84 sites in 146 days. About 64,950 students and public visited the exhibition. Along with MSE 590 programmes like SDL, Films shows, SOP and AR-VR were conducted and 96,123 students and general visitors participated

District Science Centre, Gulbarga opened a Travelling exhibition on 'The Future of Food - Pulses' on 27<sup>TH</sup> September 2019. The exhibition was inaugurated by Dr. J.R.Patil, Associate Director of research, Zonal Agriculture research Station Gulbarga.

DSCG collaborated with DIET Kamalapur in organizing District level Science Seminar on 'Periodic Table of Chemical Elements: Impact on Human Welfare' on 9<sup>th</sup> September 2019. Centre also collaborated with DIET and office of the DDPI in organising Dist. Level Science Drama, District level Science fair and Rural IT quiz.

DSC G organised Science Film festival in collaboration with Goethe Institute, Germany / Max Muller Bhavan New Delhi from 20<sup>th</sup> to 25<sup>th</sup> November 2019. Various science films were screened on the occasion. Shri Mahesh Patil Ex- Director, Rangayana Kalaburagi inaugurated the films festival,

DSC G made elaborate arrangement to observe partial solar eclipse on 26<sup>th</sup> Dec. 2019.

District level Science Fair was organised in the Science Centre in collaboration with DIET, Kamalapur on 19<sup>th</sup> and 20<sup>th</sup> September 2019.

The Innovation Festival was organized at DSC Gulbarga from 21<sup>st</sup> to 23<sup>rd</sup> January 2020. Shri Dil Sukh Jain, Dy Director (Rtd), NRSA-ISRO, Hyderabad inaugurated the festival. Several workshops like Biological model making, Mathematical model making Clay Modeling workshop for school students, 'Challengers Corner', Thod Phod Jod, 'Make & Remake' and Innovators talks on 'Space Technology' & on 'Artificial Intelligence' for general public were part of the festival.

Electronics fair was conducted at the centre for Polytechnic and ITI students of the city on 11<sup>th</sup> & 12<sup>th</sup> March 2020' exhibition of electronics models, Seminar on ICT, Team quiz on Computer, Electronics & ICT were part of the fair.

Underprivileged Children visit to the centre was organised from November 2019 to February 2020. They were given guided tour to the facilities of the centre.

DSC G continued its non-formal education extension activities by organizing popular science lectures, Sky observation programmes, Teachers workshop etc., throughout the year. In addition to this several commemorative events such as World Environment day, World Ozone Day, World population day, International Yoga day, International Science centre & Science museum Day, birth anniversary of Srinivasa Ramanujan, Centre's anniversary week, National Science day were observed with various educational activities for students, teachers and public.

## **DISTRICT SCIENCE CENTRE, TIRUNELVELI.**

**The Centre launched the new Mobile Science Exhibition bus ‘C V Raman’ with the exhibits ‘Machines in Everyday Life’** on 6<sup>th</sup> December 2019 at S S Govt. Hr. Sec. School, Rajapalayam, Virudhunagar District. The facility was inaugurated by Smt. Subashini, Chief Educational Officer, Virudhunagar. The bus travelled for 926 Km in 58 days covering 33 sites in Virudhunagar District of Tamil Nadu. 20,873 students and general public visited the exhibition.

The Centre associated with the Department of School Education, Govt. of Tamil Nadu to organize the Students’ Science Seminar on the topic ‘Periodic Table of Chemical Elements – Impact on Human Welfare’ and District Level Science Drama contest at the Block and District level.

Special arrangements were made for creating awareness, breaking myths & superstitions and safe observation of Partial Lunar Eclipse and Partial Solar Eclipse. In addition to observation through Telescope, images from telescopes, telecast and webcast from other parts of the World were also projected. Coverage from DSC-T was telecast live in TV Channels.

Panel and Photo Exhibitions on ‘Eclipses’, ‘Gandhi 150’, ‘Nobel Prize Winners’, ‘Zero Shadow Day’ and ‘Thamirabharani Wetlands Birds’ were organized

International Museum Day 2019 was celebrated at DSC-T by organising 2-days Exhibition on the topic ‘History of Science & Technology through Antiques’ in which large number of participants displayed their private collections.

‘Experience Science through Science Centre Activities’ ESSCA, a new initiative for reaching out to the Govt. / Corporation / Municipal Schools was launched and extended to 6 Middle Schools in Tirunelveli.

‘Salaam to Kalaam’ Science Fair 2019 was organised at the Centre on 4<sup>th</sup> & 5<sup>th</sup> December 2019 in collaboration with Ion Tech Academy, Tirunelveli. District level Inspire Award Exhibition was organised at DSC-T for School students on 7<sup>th</sup> January 2020 in collaboration with Dept. of School Education, Office of the CEO, Tirunelveli.

Innovation Festival was organised at DSC-T from 23<sup>rd</sup> to 25<sup>th</sup> January 2020. Hands-on Workshop on the topics ‘Banana Fibre Craft’, ‘Leaf Art’ and ‘Coconut Shell Art’, ‘Native Cowdung Art’ were part of the festival.

The Centre continued its non-formal Education Extension Activities by organizing Public Lectures, Sky Observation Programmes, Teachers’ Training Programmes etc., throughout the year for the benefit of teachers, students and general public. In addition, several commemorative events like Earth Day, Technology Day, Environment Day, World Ozone Day, International Science Centre & Science Museums Day etc., were observed with various activities and programs to popularize science and technology among the student community.



## 2. (a) GENERAL INFORMATION

Details of Museum / Centre	Visvesvaraya Industrial & Technological Museum	Regional Science Centre Tirupati	Regional Science Centre & Planetarium, Calicut	District Science Centre Gulbarga	District Science Centre Tirunelveli
Head of the Museum/ Centre & Designation	Shri. K.Madan Gopal Director	Shri. R. Manigandan Project Coordinator	Shri. Manash Bagchi Project Coordinator	Shri. C. N. Laxminarayana District Science Officer	Shri. S Muthu Kumar District Science Officer
Full Address of Museum / Centre	Kasturba Road Bangalore – 560001	Near Alipiri Gate Alipiri - Chittoor By-pass Road Tirupati – 517507	Jafferkhan Colony Calicut 673006	Municipal Garden Kalaburagi - 585103	Kokkirakulam Tirunelveli -627 009
STD Code	080	0877	0495	08472	0462
Phone Nos.	22864114	2286202	2770571	220608	2500256
Tele-fax	080-22864114 080-22864009	0877-2286202	0495 2770571	08472-220608	0462-2500256
E-mail	vitmuseum@gmail.com	rsctirupati@gmail.com	planetariumcalicut@gmail.com	scienceglb@gmail.com	Sciencecentrenellai@gmail.com
Website	www.vismuseum.gov.in	www.rsctirupati.org.in	www.rscpcalicut.edu.in	<ul style="list-style-type: none"> <li>•www.sciencecentrekalaburagi.org.in</li> <li>•www.Gulbarga.nic.in/dsckalaburagi</li> </ul>	www.dsctirunelveli.org.in
Working Hours	9.30 AM - 6.00 PM	9.30 AM- 6.00 PM (10.00 AM - 6.30 PM. on Sundays)	9.30 AM - 6.30 PM	9.30 AM - 6.00 PM	10.00 A.M - 06.30 PM
Closed on	Ganesh Chaturthi & Deepavali	Shiva Rathri & Deepavali	Onam & Deepavali	Ganesh Chaturthi & Deepavali	Pongal & Deepavali
Admission Fee	<ul style="list-style-type: none"> <li>▪ Rs. 50/-per head for general public</li> <li>▪ Rs.25/- for students in organised groups</li> </ul>	<ul style="list-style-type: none"> <li>▪ Rs.25/- per head for general public</li> <li>▪ Rs.15/- for students in groups</li> </ul>	Rs.15/- per head for general public Rs.10/- per head for organised school students	<ul style="list-style-type: none"> <li>▪ Rs.15/- per head for general public</li> <li>▪ Rs.10/- for students in organised groups</li> </ul>	<ul style="list-style-type: none"> <li>▪ Rs. 50/-per head for general public</li> <li>▪ Rs.25/- for students in organised groups</li> </ul>
Inaugurated on	27 <sup>th</sup> July 1965	23 <sup>rd</sup> September 1993	30 <sup>th</sup> January 1997	6 <sup>th</sup> January 1984	27 <sup>th</sup> February 1987
Total floor area in Sq. Mts.	11,700	4,843	2600	2,080	2,660
<b>Staff Strength</b>					
Scientific	6	2	2	0	0
Technical	56	11	11	6	7
Non Technical	30	8	8	4	4

## 2. (b) EXPENDITURE:

Expenditure (in Rs.)	VITM, Bangalore	RSC, Tirupati	RSC P Calicut	DSC, Gulbarga	DSC, Tirunelveli	Total
<b>Recurring</b>	9,35,83,013/-	2,16,08,243/-	174,35,618/-	76,41,966/-	81,79,915/-	1,484,48,755/-
Revenue Receipt	5,81,96,243/-	49,48,135/-	138,72,988/-	27,19,766/-	59,07,170/-	856,44,302/-
<b>Non Recurring</b>						
General	7,37,53,657/-	1,28,65,733/-	151,56,452/-	87,94,740/-	79,38,580/-	1185,09,166/-
CCA	1,10,63,569/-	18,81,530/-	7,98,045/-	20,61,964/-	35,52,139/-	193,57,247
<b>Total Non- Recurring</b>	8,48,17,226/-	1,47,47,263/-	159,54,497/-	108,56,704/-	114,90,719/-	1378,66,413/-

## 2(C) VISITORS TO MUSEUM/CENTRE:

Name of Museum/Centre	VITM, Bangalore	RSC, Tirupati	RSC P Calicut	DSC, Gulbarga	DSC, Tirunelveli
No. of School groups	2,765	432	1,699	860	728
No of Students in above	1,82,667	32,455	1,28,669	67,243	41,844
No. of Visitors to Special Programme	28,948	29,541	48,158	31,764	19,094
No of General Visitors	5,57,627	89,981	1,74,246	62,372	1,88,743
No. of Free entry (Activity Club members, defence, handicapped etc)	37,791	6,371	0	25,666	2,8631
<b>Total Visitors to Museum/Centre</b>	<b>8,07,033</b>	<b>1,58,348</b>	<b>3,51,073</b>	<b>1,87,045</b>	<b>2,78,312</b>
Visitors to MSE including film shows	1,82,436	2,99,812	1,77,471	2,07,910	91,741
Visitors to Outreach Programmes	1,97,924	27,624	1,79,540	7273	5,607
<b>Total No of visitors to Museum / Centre &amp; outreach Programme</b>	<b>11,87,393</b>	<b>4,85,784</b>	<b>7,08,084</b>	<b>4,02,228</b>	<b>3,75,660</b>

## 3. EXISTING GALLERIES:

Name of the Museum/ Centre	Name of the gallery	Floor area in Sq. Mts.	Date of Inauguration	Date of major Renovation	Number of Exhibits
VITM, Bangalore	Electrotechnic	723	08.04.2010	27.07.2015	74
	Biotechnological Revolution ( <i>Under renovation</i> )	554	04.01.2003	-	73
	Science for Kids	263	30.04.2007	19-04-2019	27
	How Things Work	350	28.07.2014	28.07.2014	37
	Engine Hall	620	02.06.1994	27.07.2015	57
	Fun Science	700	23.05.2008	-	53

Name of the Museum/ Centre	Name of the gallery	Floor area in Sq. Mts.	Date of Inauguration	Date of major Renovation	Number of Exhibits
	Space Technology	700	19.06.1999	28.11.2017	58
	BEL Hall of Electronics	554	29.06.2004	-	51
RSC, Tirupati	Non Conventional Sources of Energy	370	18.11.2019	-	40
	Our Senses	370	15.10.2005	-	42
	Illusion	370	17.12.2006	-	45
	Emerging Technology	370	18.08.-2007	-	59
	Popular Science	370	07.09.2009	-	44
	Our Universe	370	04.02.2012	-	53
	Space Exposition Hall	381	21.05.2017	-	14
RSC P Calicut	Fun Science	80	05.05.2011		23
	Life Science	78.14	17.04.2010		12
	Mirror Magic	165	18.02.2008		29
	Hall of Astronomy	410	07.03.2010		35
	Hall of Ocean	549	05.05.2018		56
	Planetarium	499.44	30.01.1997	30.12.2015	-
DSC Gulbarga	Fun Science	102	06.01.2004	-	34
	Electronics	806	10.10.2005	-	44
	Popular Science	102	09.04.2012	-	24
	Mathematics	102	17.01.2015	-	33
	Mirror Maze	85	09.04.2012	-	01
DSC, Tirunelveli	Fun Science	120	16.01.2008	14 <sup>th</sup> November 2018	22
	Electronic Gallery	430	17.04.2009	-	49
	Popular Science	150	28.02.1987	-	30
	Mirror Magic	130	22.12.2012	-	26

#### 4. NEW GALLERIES / MAJOR RENOVATIONS:

**VITM, Bangalore :** Science for kids' Gallery at VITM was inaugurated on 19<sup>th</sup> April 2019.

**RSC, Tirupati :** Non Conventional Energy Sources Gallery was opened on 18<sup>th</sup> November 2019.

**DSC, Gulbarga:** 8 Persons capacity Lift installed.

**5. MOBILE SCIENCE EXHIBITION UNITS IN THE MUSEUM/CENTRE:**

SI No	Title of the unit	Name of the Museum/Centre that developed the unit	No of Exhibits	Year in which developed	Date of major Renovation
1.	Popular Science -II (at DSC, Tirunelveli)	VITM, Bangalore	20	1993	-
2.	Machines in Everyday Life (at DSC, Tirunelveli)	DSC, Tirunelveli	20	2019	
3.	Man and Space (at DSC Gulbarga)	VITM, Bangalore	24	1994	-
4.	Water and Chemistry in our life (at DSC Gulbarga)	(at DSC Gulbarga)	20	2019	
5.	Environment (at RSC, Tirupati )	RSC, Tirupati	24	2002	-
6	Biodiversity (at VITM Bangalore)	VITM, Bangalore	24	2007	-
7	Space Technology for Human Welfare'(at VITM Bangalore)	VITM, Bangalore	20	2019	
8	Electricity & Magnetism (at VITM Bangalore)	VITM, Bangalore	20	2017	-
9	Our Senses (at RSC T)	RSC, Tirupati	22	2014	-
10	Space Technology for Human Welfare'(RSC Tirupati at VITM Bangalore)	VITM, Bangalore	20	2019	
11	Popular Science (at RSC P Calicut)	RSC P Calicut	20	2011	
	Space Technology for Human Welfare'(at RSC Calicut)	VITM, Bangalore	20	2019	

**6. NEW TEMPORARY EXHIBITIONS (IN HOUSE DEVELOPMENT):**

**VITM:** 1) Nobel Prize 2019  
2) Yoga Sandesha - an exhibition on Yoga Body & Mind.

**RSC P1)** Touch Down Moon  
2) Annular Eclipse



7. **SCIENCE PARK:** List of exhibits at Annexure – 1

Name of the Museum/Centre	Area of the Science Park in Hectares or Acres	No of Exhibits	Date of Inauguration of Park	No of exhibits added during the year, if any
VITM, Bangalore	Science Park - 800 Sq. Mtrs.	8	--	--
RSC P Calicut	Science Park -3 acres	48	30.01.1997	2
RSC, Tirupati	Science Park – I 4.5 Acres	58	23.9.1993	-
	Traditional Herb Garden	-	23.9.1995	-
	Pre historic Life Park - 2.5 acres	34	28.5.2003	-
	Science Park Phase – II – 2.5 acres	16	04.2.2012	-
DSC, Gulbarga	Science Park - 2.34 Acres	48	2.03.1995	-
	Prehistoric Animal Park - 0.03 acre	7	9.04.2012	-
DSC, Tirunelveli	Science Park & Pre historic Life Park – Total 5.69 Acres	84	27.02.1987	-
		10	27.02.2012	-

8. **EXHIBIT DEVELOPMENT:**

Name of the Museum/Centre	VITM Bangalore	RSC Tirupati	RSC P Calicut	DSC Gulbarga	DSC Tirunelveli
No. of Gallery Exhibits	19	17	1	--	-
No. of Park Exhibits	10	2	2	--	-
No. of Exhibits for Temporary Exhibition	13	--	20	--	-
No. of Exhibits for Mobile Science Exhibition	60	--	0	--	-
No. of Kits developed (for New Science Shows)	5	12	24	01	17
No. of Duplicate Kits (in-house)	35	-	0	2	545
No. of Duplicate Exhibits (in-house)	--	--	5	-	-
No. of Duplicate exhibits (outside agencies)	--	--	0	-	-
No. of Duplicate Kits (outside agencies)	--	--	0	-	-
No. of Exhibits Renovated- category (gallery/MSE/Temp Exhibition)	--	--	--	1	-
No. of Kits Renovated (mention category - gallery/MSE/Temp. Exhibition)	--	--	-	-	-
Total	142	31	52	04	562

Note: List of exhibits and kits developed during the year is enclosed in the Annexure – 2

9. **COLLECTION OF ARTEFACTS:**

**VITM** : 1. Letter Press printing machine

**RSC T, DSC G and DSC T** : TTL Kiran Aircrafts

## **10. PLANNING:**

### **VITM:**

1. Construction of SRSC, Rajahmundry
2. Modernization of HALL OF ELECTRONICS.
3. Execution of Innovation Hubs at Trichi and Puduchery.
4. Modernisation of Fun Science gallery

### **RSC T**

1. Fabrication of exhibits on Biomimicry.
2. Planning & Fabrication of New Science park Exhibits

### **RSC P Calicut**

1. MSE on Mathematics

### **DSC G**

1. Modernization of Fun Science gallery.

### **DSC - T**

1. Planning and Fabrication of exhibits on Space Technology
2. Planning of exhibits for Electronics Gallery

## **11. MOBILE SCIENCE EXHIBITION PROGRAMME :**

The Mobile Science Exhibition buses of VITM, Bangalore RSC Tirupati, DSC Gulbarga and DSC Tirunelveli toured rural districts of Karnataka, Andhra Pradesh, Telangana and Tamil Nadu during the year.

The statistics of the MSE programmes held by various centres are furnished below:

<b>Name of the Museum/ Centre</b>	<b>Name of the Vehicle/Unit</b>	<b>Theme of Exhibits</b>	<b>No. of Exhibition Days</b>	<b>Kms. travelled</b>	<b>No. of Exhibition Sites</b>	<b>No. of Visitors</b>
VITM Bangalore	Cauvery	Electricity & Magnetism	145	3,050	95	1,00,894
RSC Tirupati	Sapthagiri	Our Senses	133	1,742	67	1,63,941
RSC P Calicut	Periyar	Popular Science	105	1,028	51	1,11,806
DSC Gulbarga	Bheema	Man and Space	154	963	73	75,280
DSC Tirunelveli	Thamirabarani	Our Environment	110	3,464	63	69,568



VITM MSE on  
Space Technology in Yadgir  
(Aspirational District of Karnataka)



MSE in schools



V R demonstration



Science Show



Sky Observation



# Mobile Science Exhibition (MSE)



RSC T  
New MSE Bus in Aspirational Districts of  
Andhra Pradesh



RSC T  
Mobile Science Exhibition



RSC & P C  
MSE programme in  
Aspirational Districts of Kerala



DSC G  
Science Demonstration during MSE



DSC G  
MSE programme in  
Aspirational Districts of Karnataka



DSC T  
MSE programme in  
Aspirational Districts of Tamilnadu



DSC T  
Model making workshop during MSE



## MSE Data for Aspirational District.

Name of the Museum/ Centre	Name of the Vehicle/Unit	Theme of Exhibits	No. of Exhibition Days	Kms. travelled	No. of Exhibition Sites	No. of Visitors
VITM Bangalore	Rajaramanna	Space Technology for Human Welfare'	154	3,348	82	81,542
RSC Tirupati	Acharya Nagarjuna	Space Technology: For Human Welfare	130	1,619	66	1,35,871
RSC P Calicut	Vianu Bappu	Space Technology for Human Welfare	87	2,075	43	40,124
DSC Gulbarga	U.R Rao	Water and Chemistry in our life	146	2,448	84	1,51,073
DSC Tirunelveli	C V Raman	Machines in Everyday Life	58	926	33	1,73,966

## 12. SCIENCE EDUCATION:

### (a) SDL AND SCIENCE SHOWS:

Science Demonstration Lectures and Science Shows were conducted on different topics in VITM & its Satellite Centres as listed below.

VITM launched a new Science Demonstration lecture on 'Magnetic effects of electric current during 53<sup>rd</sup> Anniversary week celebrations in July 2018.

Name of the Museum/ Centre	Name of the SDL Units	No of lectures held in Museum/ Centre	No of students attended the lecture	No of lectures held outside museum	No of students attended the lecture
VITM	Science is Fun	471	18788	14	2150
	Chemical Reactions	3	390	2	500
	Force & Pressure	2	200	2	150
	Magnetic effects on electric current	4	300	0	0
	Liquid Nitrogen	4	300	2	1000
	Science V/s Miracle	0	0	5	600
RSC T	Acid, Bases & Salts	30	1750	2	560
	Liquid Nitrogen shows	49	5570	6	1880
	Electricity & Magnetism	20	1630	2	490

Name of the Museum/ Centre	Name of the SDL Units	No of lectures held in Museum/ Centre	No of students attended the lecture	No of lectures held outside museum	No of students attended the lecture
	Bio Science	20	1650	2	580
	Anti Superstition Show	15	2200	4	1520
<b>RSC P Calicut</b>	Liquid Nitrogen show	95	8750	14	710
	Chemical Reactions	22	1300	4	190
	Properties of light	40	2400	8	320
	Water	33	2120	5	200
	Chemistry in daily life	55	3850	3	145
<b>DSC G</b>	Electricity & Magnetism	13	637	6	918
	Acids, bases & salts	10	481	4	622
	Science is fun	30	1518	9	1367
	Anti superstition shows	55	2335	7	293
<b>DSC T</b>	Anti Superstition Shows	93	8663	06	124
	Electricity & Its Effects	17	1125	-	-
	Cryogenics (Liquid Nitrogen)	38	2684	-	-
	Science is Fun	55	3655	-	-
	Sound	-	-	06	132
	Light	01	56	-	-
	Air	-	-	09	182
	Heat	-	-	06	129

### 12(b) NATURE STUDY CAMPS:

Name of the Museum/Centre	Venue of the Camp	Duration of Camp (Date)	No of students	No of teachers
RSC T	RSC T	1 Day : 01-03-2019	23	2
	SV Zoological Park	1 Day : 18-01-2020	42	3
DSC G	DSCG	1 day : 11.11.2019	149	6



SDL Mag eff of electric current  
at VITM



SDL on Chemical Reactions  
at VITM



Science show at RSC & P C



Science Show at DSC G



Science Show at DSC G





Science on a Sphere  
at VITM



Sky Observation  
at VITM

Wright brothers Flyer  
Simulator at VITM





**12(c) ENVIRONMENT AWARENESS PROGRAMME:**

Museum / Centre	Venue of the Camp	Duration of Camp (Days & Date)	No of students	No of teachers
RSC T	RSC T	5 Days, 01-06-2019 to 05-06-2019	635	15
DSC G	DSC G	15 days, 5 to 19-06-2019	915	35
	DSC G	1 day, 19-06-2019	436	4
RSC P C	RSC P Calicut	1 day, 17-04-2019	110	5

**12 (d) SCIENCE ON A SPHERE:**

A large visualisation system that uses multimedia projections to display animated data on to the exterior of a sphere converting it into a immersive animated globe that shows dynamic, animated images of the atmosphere, oceans and land area of a planet. Combined with narrations and supporting material, it is an innovative and powerful teaching tool to enhance informal education on earth, climate change etc. and transform the public perception to effectively implement conservation measures of the earth.

Name of the Centre	No of shows	Total No of visitors
VITM, Bangalore	800	28,662

**12 (e) WRIGHT BROTHERS' FLYER SIMULATOR :**

As value addition to the existing 1903 Wright Brothers' Flyer, the museum added a simulator which is first of its kind in the country. The simulator allows visitors to fly the aero plane simulating the ambience of Kitty Hawk, North Carolina where Wright Brothers' flew their Air plane in 1903. The controls in the flyer are positioned similar to that of the original Wright Brothers' flyer.

*Also on display is the original wood of 'Red Spruce' which was used to built Wright Brothers' Flyer in 1913.*

Name of the Centre	Total No of visitors
VITM, Bangalore	12,892

**12(f) FILM SHOWS (VIDEO SHOWS):**

Name of the satellite Unit/Centre	No of film shows	Total No of visitors
VITM, Bangalore	6,504	2,80,686
RSC, Tirupati	18	8,200
RSC P Calicut	41	4,750
DSC, Gulbarga	801	14,404
DSC, Tirunelveli	2,905	1,46,750

### **12 (g) 3-D Shows**

<b>Name of the satellite Unit/Centre</b>	<b>No of 3Dshows</b>	<b>Total No of visitors</b>
VITM, Bangalore	3,326	1,06,704
RSC, Tirupati	1,206	29,340
RSC P Calicut	2,668	2,56,485
DSC, Gulbarga	1,485	41,745
DSC, Tirunelveli	1,609	40,966

### **12(h) POPULAR SCIENCE LECTURES:**

<b>Venue</b>	<b>No. of Lectures</b>	<b>No of audience</b>
VITM, Bangalore	93	9,352
RSC, Tirupati	14	3,450
RSC P Calicut	31	3,240
DSC, Gulbarga	15	3,528
DSC, Tirunelveli	12	1,611

For details please refer Annexure – 3

### **12(i) TARAMANDAL SHOWS:**

Taramandal, an exciting portable mini planetarium has an inflatable dome with simple projection equipment.

Number of Taramandal programmes conducted in VITM & its satellite units is listed below.

<b>Name of the Museum/Centre</b>	<b>No of shows held</b>	<b>No of audience</b>
VITM, Bangalore	677	17,131
RSC, Tirupati *	1,131	44,943
RSC P Calicut*	1,658	2,21,510
DSC, Gulbarga *	1,419	39,966
DSC, Tirunelveli *	1,208	34,303

\* Digital Planetarium

### **12(j) SCIENCE QUIZ:**

<b>Name of the Museum</b>	<b>No of Quiz Contest held</b>	<b>No of participants</b>	<b>No of Audience</b>
VITM, Bangalore	27	2,240	2,840
RSC, Tirupati	25	2,169	5,381
RSC P Calicut	24	530	1,800
DSC, Gulbarga	45	383	4,408
DSC, Tirunelveli	27	1,538	1,824

### **12(k) SKY OBSERVATION PROGRAMMES:**

<b>Name of Museum</b>	<b>No of Programmes held</b>	<b>No of participants</b>
VITM, Bangalore	22	2,905
RSC, Tirupati	54	5,136
RSC P Calicut	133	14,650
DSC, Gulbarga	61	741
DSC, Tirunelveli	59	6,014

**12(I) VIDEO PROGRAMMES OR COMPUTER SOFTWARE/MULTIMEDIA PROGRAMMES DEVELOPED**

VITM	<ol style="list-style-type: none"> <li>1. Why satellite</li> <li>2. Eye in the sky</li> <li>3. New Avenues</li> <li>4. Launch Vehicles</li> <li>5. Internet</li> <li>6. Providing healthcare to deprived</li> <li>7. Remote surgery</li> <li>8. Observing earth from space</li> <li>9. Active &amp; passive remote sensing</li> <li>10. Natural resource monitoring</li> <li>11. Helping farmers</li> <li>12. Monitoring Air quality</li> <li>13. Helping fishermen</li> <li>14. Predicting weather</li> <li>15. Urban planning</li> <li>16. Navigation</li> <li>17. Exploring the space</li> <li>18. Space spin offs</li> <li>19. Online registration for various programmes during Vigyan Samagam</li> <li>20. Journey into the cell for BTG</li> <li>21. Mobile App for NCSM Mobile Science Exhibition (MSE) Bus</li> </ol>
<b>RSC TIRUPATI YOUTUBE CHANNEL Videos</b>	
01	Non Conventional Energy Resources Ultrasonic Sensor based Software for Non Conventional Energy Resources Gallery
02	Solar World Scenario Touch Sensor based Software for Non Conventional Energy Resources Gallery
03	Wind Farms Across India RFID based Software for Non Conventional Energy Resources Gallery
04	Wind Energy Potential In India LDR based Software for Non Conventional Energy Resources Gallery
05	Green Energy Quiz Software for Non Conventional Energy Resources Gallery
06	Video Corner- Gas Hydrates for Non Conventional Energy Resources Gallery
07	Video Corner- Types of Pollutions for Non Conventional Energy Resources Gallery
08	Biomass – Sequential based software for Non Conventional Energy Resources Gallery
09	Sun Source of All energy software for Non Conventional Energy Resources Gallery
RSC P Calicut	Mobile app on Annular Eclipse
	Video on 50 year of Moon landing

### 13. CREATIVE ABILITY:

#### (a) SCIENCE FAIR/CAMP:

Science fairs provide an opportunity for students & teachers to think creatively and develop working models on various scientific topics. Students present individual exhibits as well as group exhibits. Teachers are encouraged to present teaching aids/models developed by them in the fair. District level and State level Science fairs are coordinated by the State Education departments.

Museum / Centre	Venue of the fair/ Camp & Date	District / Zonal / State	No of Schools participated	No of Students/ Participants	No of science clubs participated	No of projects	No of visitors
VITM	Sathyabhama Institute of Science & Technology, Chennai 28-01 to 01-02 2020	Zonal	263	265	--	263	27,950
	'Innovation Festival - 2019' 27 to 29-02 2020	Zonal	--	68	--	40	5,000
	Engineering Fair 5 to 7 -03-2020	Zonal	28	311	--	91	4,750
RSC T	RSC T 28-02-2020 – 01-03-2020	Zonal	--	41	--	26	11,654
DSC G	DSC G 19 to 20-09-2019	District	41	96	0	48	4,198
DSC T	DSCT 04 & 05.12.2019	District	82	381	-	203	4,100

#### 13(b) SCIENCE SEMINAR:

Science Seminar provides an opportunity to the young students to debate on the topic of current issues, to inculcate in them a spirit of scientific inquiry and analytical thinking. It forms a common platform to the budding scientists from all over the country for exchanging their ideas and to nurture a feeling of national integration. The Science Seminars are organised at Block level, District level and State level in the country by the Education Department of the respective states. National level events are held at the National level units of NCSM. This year the theme of the Seminar on the topic 'Periodic Table of Chemical Elements – Impact on Human welfare'.

Museum/ Centre	Venue & Date	District/ Zonal/ State	No of students	No of Participating Schools	No of Audience
VITM Bangalore	G. G Hr. Sec. School, Kadirkamam, Puducherry 04-09- 2019	Pondicherry State level	12	12	100
	SCERT, Hyderabad 24-09-2019	Andhra Pradesh State level	27	27	100







Sub District Science fair at RSC & P C



District Level Science Fair at DSC G



Innovation Festival at RSC T



Innovation Festival at DSC T



Workshop during Innovation Festival at DSC T



Electronics fair  
at DSC G





State Level Science Seminar at RSC T



District Level Science Seminar at RSC T



District Level Science Seminar at DSC G



District Level Science Seminar at DSC T



Puducherry State Science Seminar



Southern India Science Drama Festival at VITM



State Level Science Drama Contest at RSC T



District Science Drama Contest at DSC G



District Science Drama Contest at DSC T





Vacation Hobby Centre - Chemistry at VITM



Vacation Hobby Course in Art & Science at VITM



Vacation Hobby Courses in Robotics at VITM



Summer Camp Gardening at RSC T



Summer Camp Bioscience at RSC T



Vacation Hobby Course in Physics at VITM



CAC Electronics at DSC G



CAC Chemistry at DSC G



CAC Electronics at DSC G



VHC Electronics at DSC T



VHC Art Crafts at DSC T

	Godavari Auditorium, SCERT, Hyderabad 24-09-2019	Telengana State level	32	32	90
	Govt. Secondary School Kavaratii 30-09- 2019	Lakshadweep UT level	10	10	77
	Govt. Girls Higher Secondary School Ernakulum, Kerala 04-10-2019	Kerala State level	28	28	75
	Govt. Girls Higher Secondary School, Ashok Nagar, Chennai 04-10- 2019	Tamil Nadu State level	31	31	95
	DIET, Haveri 21-10-2019	Karnataka State level	29	29	90
RSC T	Regional Science Centre, Tirupati 19-09-2019	District	21	21	144
RSC P C	Govt. Model HSS, Calicut, 26-09-2019	District	28	28	300
DSC G	DSC G 09-09- 2019	District	16	16	185
DSC T	DSCT 09-09-2019	District	10	10	116

### 13 (c) CREATIVE ABILITY CENTRE (CAC):

Name of the Museum/Centre	VITM	RSC-T	RSC P-C	DSC-G	DSC-T
No. of Projects completed in Museum's CAC	--		37	105	--
No. of Creative Ability Centres	--		8	1	--
No. of Students involved in above	--		80	58	--
No. of Vacation CAC in museum	12	10	4	4	--
No. of Students involved in above	225	300	40	129	121
No. of Projects completed in above	854	68	10	351	629

List of projects completed is enclosed in Annexure - 4

### 13(d) VACATION HOBBY CENTRE/CAMP:

Name of Museum/ Centre	Venue of programme	Duration	Subjects	No of Participants
VITM	VITM	10 Days 15 to 26-04-2019	Art & Science	20
			Chemistry	20
			Electronics	24
			Mathematics	18
			Physics	25
			Robotics	23

VITM	VITM	10 Days 06 to 17-05-2019	Art & Science	21
			Chemistry	16
			Electronics	15
			Mathematics	12
			Physics	11
			Robotics	21
RSC T	RSC T	7 Days 29-04 to 05-05-2019	Physics	30
			Bioscience	30
		7 Days 06 to 12-05-2019	Electrical & Electronics	30
			Robotics	30
		7 Days 13-05-2019 – 19-05-2019	Gardening	30
			Astronomy	30
		7 Days 20 to 26-05-2019	Science & Art	30
			Computer Science	30
		7 Days 27-05 to 02-06-2019	Mathematics	30
			Chemistry	30
RSC P C	RSC P C	08 to 13-04-2019	Fascinating world of Chemistry	30
		29-04 to 04-05-2019	Robotics Heat and Thermodynamics	20
		29-04 to 04-05-2019	Horizons of Science	30
		06 to 11-05-2019	Heat and Thermodynamics	40
		06 to 11-05-2019	Mazhavillu	40
		13 to 18-05-2019	VijnanaKouthukam	45
DSC G	DSC G	03 to 24-04-2019	Physics, Electronics, Chemistry, Biology	351
DSC T	DSC T	15 to 26-04-2019	Astronomy, Electronics, Art & Crafts	65
		06 to 17-05-2019	Astronomy, Electronics, Art & Crafts	56

**13(e) SIT & DRAW / ESSAY WRITING:**

Name of the Museum/ Centre	Venue	Date	Occasion	No. of Participants	Subject
<b>Sit &amp; Draw Contest</b>	VITM	21-04-2019	Centenary of the Jallianwala Bagh Massacre	15	Revisit Jallianwala Bagh 100 years ago'
		21-06-2019	International Day of Yoga	27	Yoga Postures
		24-10-2019	150 <sup>th</sup> Birth Anniversary of Mahatma Gandhi	60	Gandhi & freedom movement'
		26-12- 2019	'Annular Solar Eclipse'	80	Eclipses
		23-02-2019	National Science Week	30	Indian Scientists & their experiments'
<b>Sit &amp; Draw Contest</b>	RSC T	02-06-2019	World Environment Week	180	Combat Air Pollution
		21-07-2019	Moon Landing Week	220	Lunar Mission Chandrayaan 2
		14-08-2019	World First Aid Day	250	First Aid & Road Safety
		06-10-2019	World Space Week	210	Gaganyaan
		10-11-2019	Kalautsav	50	Science In India
		23-02-2020	National Science Week	220	Science & Technology
<b>Sit &amp; Draw Contest</b>	RSC P C	08-06-2019	Environment Awareness week	26	Our Environment
		27-07-2019	Moon landing Week	72	Pre-arrangements for rocket launching
		20-12-2019	Annular Eclipse	24	Eclipse observation
		05-06-2019	World Environment Day	23	Air pollution
<b>Sit &amp; Draw Contest</b>	DSC G	14-04-2019	Centenary of Jallianwala Bagh Massacre	31	Jallianwala Bagh Massacre
		18-5-2019	International Museum Day	28	Exhibition hall of a science museum
		09-06-2019	World environment day	155	Nature, Green House effect , Environment pollution
		21-6-2019	World Yoga day	52	Yogasanas – postures & their names'
		05-10-2019	Swachhta hi Seva programme	136	Tribute to Gandhi by 'clean and plastic free India'

		09-11-2019	4 <sup>th</sup> International Science Centre and Science Museum Day	89	Chandrayaan -2, Museums – Cultural Hubs
		07-01-2020	36 <sup>th</sup> Anniversary of DSCG	174	Nature & Environment, Landing on Moon, Energy Resources
		24-02-2020	National Science Day	115	Sir C V Raman & his effect , devices to harness energy
<b>Sit &amp; Draw Contest</b>	DSC T	05-05-2019	Jallianwala Bagh Massacre Centenary	68	Freedom Fighters of India
		05-06- 2019	World Environment Day 2019	115	Air Pollution
		14-06- 2019	World Blood Donors' Day 2019	218	Blood Connects All
		14-07- 2019	Gandhi 150	196	Gandhian Thoughts
		18-08- 2019	World Photography Day 2019	126	Photography Instruments
		28-08- 2019	100 <sup>th</sup> Birth anniversary of Dr. Vikram Sarabhai	147	Indian Space Programme
		08-11- 2019	World Diabetes Day 2019	158	Health is Wealth
		23-02- 2020	DSCT Anniversary Week 2020	347	Healthy Planet
<b>Essay Writing Contest</b>	RSC T	03-06-2019	World Environment Week-2019	130	Air Pollution
		16-08-2019	Ozone Day 2019	50	Ozone & Environment
		02-10-2019	150 <sup>th</sup> Birth Anniversary of Mahatma Gandhi & Plastic Free Cleanliness Drive	120	Gandhi & His Dream of Clean India
		31-10-2019	Rashtriya Ekta Diwas	100	Life & Works of Sardar Vallabhai Patel
		01-11-2019	Vigilance Awareness Week	120	Eradicate Corruption – Build a New India
		09-03-2020	International Women's Day	160	Each For Equal
<b>Essay Writing</b>	DSC G	05-05-2019	Centenary Jallianwala Bagh Massacre	16	Indian Freedom movement
		09-06-2019	World environment day	28	Air pollution – Causes & prevention



		07-08-2019	Hiroshima and Nagasaki Day	21	Renewable energy resources
		15-09-2019	Engineers' Day	24	life & works of Sir M V
		01-11-2019	Vigilance Awareness week	18	My vision : Corruption free India
<b>Essay Writing</b>	DSC T	14-06-2019	World Blood Donors' Day 2019	139	Give Blood – Gift Life
		14-09-2019	Gandhi 150 celebrations	58	Gandhi's Life

#### 14. TRAINING:

##### (a) **TEACHER'S TRAINING PROGRAMME (TTP) :**

Teachers Training programme provides an opportunity and an exposure to school teachers to effectively use easily available tools & materials for developing low cost teaching aids for supplementing class room teaching.

Sl. No.	Venue of the Programme	Period of the Programme Date From & to	No. of Teachers trained	No. of teaching aids Developed
1	VITM	09-09-2020	35	5
2	RSC Tirupati	25 to 26-02-2020	270	120
3	RSC P Calicut	22 -04-2019 & 28-02-2020	450	30
4	DSC Gulbarga	1-05- 2019	52	16
		11-12-2019	50	60
		09-01-2020	62	40
5	DSC- Tirunelveli	26 to 27-08-2019	33	297
		06-07-11- 2019	31	248

##### (b) **COMPUTER TRAINING PROGRAMME:**

Name of the Museum/ Centre	No of Programmes	Duration	No. of participants	Subject
VITM	1	08 to 12-04-2019	21	Workshop on Arduino'
	1	10 to 12-05-2019	19	App Development Course on Android - Five different apps on Fitz
	1	13 to 17-05-2019	10	A workshop on 'Raspberry Pi'
RSC Tirupati	2	30-08-2019	40	Computer Fundamentals and Skill to Operate Personal Computer
		31-12-2019	40	
RSC P Calicut	8	18 to 23-11-2019	80	Basics in computer, creation of gmail account, Social media, online services etc
DSC Gulbarga	1	3 to 24-04-2019	15	MS word, excel, PowerPoint, and learnt basic of internet and email
DSC Tirunelveli	01	17-08- 2019	23	How to do online Trading of Household Products



Workshop on Raspberry Pi at VITM



App Development on Android at VITM



Workshop on Arduino at VITM



Teachers Training Programme at VITM



Teacher Training programme at RSC T



Teacher Training programme at RSC & P C



Computer Training programme at RSC T



Teachers workshop at DSC G



Teacher Training programme at DSC T





Under Privileged  
Children Visit to VITM



Annular Solar Eclipse  
at VITM



Under Privileged  
Children Visit to RSC T



Nature Camp  
at RSC T



A day with snake  
programme  
at RSC P & C



Environment  
awareness week  
Tree planting at RSC & P C



Wetland  
Birds Exhibition  
at DSC T

Family Quiz during  
World Wildlife week  
at DSC T



## 15. COMMUNITY PROGRAMMES:

### (a) SCIENCE DRAMA / PUPPETRY / OTHER FORMS OF PERFORMING ART:

Name of Museum	Venue of the programme	Description of media	No. of staff involved	No. of programmes	No. of participants	No. of audience
VITM	VITM	Southern India Science Drama Festival	65	1	88	1,020
RSC T	RSC T	District Level Drama Contest	8	18	140	315
	RSC T	State Level Drama Contest	8	13	75	680
RSC P C	RSC P C	Puppetry (health and hygiene)	3	5	250	40
		Telescope making workshop	5	4	100	20
DSC G	DSC G	District Level Science Drama	8	1	64	230
DSC T	DSC T	District Science Drama	06	01	78	124

### (b) OTHER COMMUNITY PROGRAMMES (Training programmes organised in VITM/ RSC / DSC for different categories of people):

Name of the Centre	Sl. No	Nature of Programme	Venue	Duration	No. of Participants/ audience
VITM	1	International Women's Day	VITM	09-03-2020	100
RSC T	1	Workshop on Bird Nest Making	RSCT	15-08-2019	45
	2	Computer Training Programme	RSCT	30-08-2019 & 31-12-2019	80
	3	Workshop on Detergent Making for Home Makers	RSCT	10-11-2019	35
	4	Workshop on Robotics	RSCT	10-03-2020	100
	5	Workshop on Hydroponics	RSCT	05-01-2020	63
RSC P C	1	Nature awareness programme –Prakrithi padam	RSC P	17-04-2019	55
	2	Star Party	RSCP	23-04- 2019	75



	3	Beach side astronomy	Calicut beach	25-04- 2019	250
	4	Bio diversity Day	RSC P	22-05-2019	85
	5	International Day of Yoga	RSC P	21 -06- 2019	40
	6	World Sickle cell Day	RSC P	23-06-2019	105
	7	Transform	RSC P	01-07-2019	110
	8	Day with Snake	RSC P	5-07- 2019	95
	9	Hiroshima Day	RSC P	6 -08- 2019	60
	10	Swachhtha Hi Sewa Campaign	Sarovaram	25-09-2019	115
	11	National Thalassemia Day	RSC P	17 -11-2019	55
DSC G	1	Preparation of Origami boxes, Rakhi making out of silk & woolen thread & silk thread Jewellery	DSCG	24 & 25-07-2019	45
	2	Art & Craft from waste	DSCG	18-06-2019	24

#### 16. COMMEMORATIVE EVENTS:

Events like World Earth Day, World Environment Day, National Science Day and World Science Day and National Technology Day were held with science related activities

Name of the Museum/Centre	No. of programmes
VITM, Bangalore	13
RSC, Tirupati	19
RSC P Calicut	11
DSC, Gulbarga	21
DSC, Tirunelveli	24

For details please refer Annexure – 5

#### 17. TEMPORARY EXHIBITIONS:

Museum/Centre	Title of Exhibition	Duration	No. of visitors	Borrowed from	No. of visuals	No. of working/ Animated Exhibits
VITM	“YOGA SANDESHA – an exhibition on Yoga, Mind & Body”	21-06-2019 to 10-07-2019	28,500	Developed in house at VITM	22	--
	Nobel Prizes 2019	10-12-2019 to 31-03-2020	1,25,000	Developed in house at VITM	6	--



Statistics at Work Exhibition at VITM



Vigyan Samagam - Inauguration Programme at VITM



Vigyan Samagam ITER Week at VITM live plasma demonstration & models of plasma applications



Statistics at Work Exhibition at RSC T



Exhibition on Touch down Moon at RSC & P C



Traveling Exhibiton on pulses at DSC G



Exhibition on Nobel Prize 2019 at DSC T

	Statistics at Work	29-05-2019 to 10-07-2019	60,000	NCSM	28	4
	Vigyan Samagam – The frontiers of Science	29-07-2019 to 28-09-2019	1,28,349	Department of Atomic Energy, Dept. of Science & Technology, Govt. of India and CERN	118	41
RSC T	Statistics at Work	24-07-2019 to 26-11-2019	52,000	VITM	28	4
RSC P C	Touchdown Moon	22-07-2019 to 31-08-2019	6,500	Developed at RSC P	30	10
	Eclipses	15-12-2019 to 25-08-2019	13,000	Developed at RSC P	15	5
DSC G	The Future of Food - Pulses'	27-09-2019 to 25-10-2019	6,748	DSC Purulia	42	5

#### 18. **COLLABORATIVE PROGRAMMES (WITH OUTSIDE ORGANISATIONS):**

Networking with likeminded institutions is an ongoing activity of NCSM. The details of such Collaborative Programmes held are listed below.

Details are given in Annexure – 6

<b>Name of the Museum/Centre</b>	<b>No. of programmes</b>
VITM, Bangalore	17
RSC, Tirupati	16
RSC P Calicut	14
DSC, Gulbarga	10
DSC, Tirunelveli	35

## 19. LIBRARY & INFORMATICS:

Name of the Museum/ Centre	Item	Total holding as on 01-04-19	No. Acquired during the year 2019-2020	No. Written off during the Year 2019-2020	Net holding as on 31-03-2020
VITM	Books	11,071	51	-	11,122
	Journals **	6	6	-	6
	Film 16mm	242	-	-	242
	Video Tapes/	500	-	-	500
	CD/DVD ROMS	405	-	-	405
	Slides	1,765	-	-	1,765
	Maps & Charts	151	-	-	151
RSC T	Books	396		-	396
	Journals**	3		-	3
	News Letters	-		-	-
	Maps	2		-	2
	Charts	2		-	2
RSC P C	Books	1,862	40	-	1,902
	Journals	12	12		24
	Film 16mm	8	-	-	8
	CD/DVD	196	2		198
DSC G	Books	787	35	-	822
	Journals **	1	-	-	1
	Film 16mm	0	-	-	0
	Video Tapes	43	-	-	43
	Slides	13 sets	-	-	13 sets
	Audio Cassettes	0	-	-	0
	Educational CDs	9	-	-	9
DSC T	Books	1,188	08	-	1,196
	CD / DVD	33	-	-	33
	16mm films	09	-	-	09

\*\* Renewal only

## 20. PUBLICATIONS:

Name of the Museum/ Centre	Name Of The Publication	Process	Number Printed	Expenditure Incurred (in Rs.)
VITM	Anutarang (Vigyan Samagam Booklet)	Multi colour Offset	2,500	1,90,000-00

	MSE Broacher (Multilingual)	Multi colour Offset	6,000	14,000-00
	MSE Broacher (Machines)	Multi colour Offset	1,000	12,495-00
RSC T	Posters for International Day of Yoga	Digital Laser Printing	12	360-00
RSC P C	RSC News letter	Offset printing	500	10,000-00
DSC G	Poster for innovation festival	Multicolour Digital Print	10	200-00

## 21. CONSTRUCTION:

Name of the Unit	Name of the work	Tender Value of Work * (Rs. In lakhs)	Date of Commencement	Date of Completion
VITM	Civil works for modernization of Goods elevator	8.167	16-10-19	21-12-2019
	Providing Painting Room in workshop	5.01	15-10-19	14-12-2019
	Modernization of 3rd Floor visitors toilet at VITM, Bengaluru	9.49	3-10-19	1-11-2019
	Providing safety mesh for windows at back side of VITM and External painting rear block and internal painting at selected places of VITM	19.14	27-12-19	10-03-2020
	Rectification of sewer line at backyard of VITM, Bengaluru	1.96	11-12-19	20-12-2019
	Providing white topping in front of Visitors entrance at VITM, Bengaluru	4.19	2-02-20	5-03-2020
	Providing waterproofing treatment on terrace of C and E Block of VIMSA	4.64	29-10-19	12-12-2019
	Modernisation of Goods Elevator of OTIS make (Spillover of 2018-19)	20.04	16-12-2018	10-07-2019

RSC T	Providing Cubicles in Office	5.0	15-08-2019	10-09-2019
	Providing street lights in Science Park	4.74	19-12-2019	07-01-2020
	Replacing UG HT cable for supply of electricity	1.99	27-11-2019	19.12.2019



RSC P C	Construction of existing ticket counter, security cabin & entrance main gate	6.23	3-02-2020	Work in progress
DSC G	Providing Umbrellas and Seating arrangements for canteen (Outdoor)	1.49	15-09-2019	10-08-2019
	Installation of TTLE Kiran TAIL No. U-809 at DSCG	1.33	27-11-2019	27-11-2019
	Miscellaneous civil works in C/W MRL lift at DSC, Gulbarga	1.42	17-02-2020	2-03-2020
	Spillover of Providing Lift	16.02	21-01-2019	18-07-2019
DSC T	Extension of Stores at DSC, Tirunelveli	7.68	25-10-2019	24-11-2019
	SITC of Fire fighting system	8.36	27-05-2019	25-07-2019
	Construction of Parapet wall & Water proofing of Terrace of Main Building	10.53	17-10-2019	15-12-2019
	Installation of TTLE HPT-32 Aircraft at DSC T	1.27	25-10-2019	24-11-2019
	Miscellaneous works in connection with fire fighting works at DSC T	1.69	17-02-2020	12-03-2020

**22. PROCUREMENT OF EQUIPMENT:****(Under PL-5 (iv) – Costing Rs.5000/- or more)**

<b>Museum / Centre</b>	<b>Name of the Equipment</b>	<b>Date of procurement</b>	<b>Cost (Rs)</b>
VITM	Adobe creative cloud	16-07-2019	35,164-00
	Liquid Nitrogen Container (Cryocan- 7.08 ltr)	29-08-2019	22302-00
	Split AC with accessories 2.0- 2 Nos & 1.5- 1 No.	19-06-2019	1,38,444-00
	Adobe creative cloud – all apps individual device license 2 nos	19-07-2019	76662-00
	Visual studio professional 2019 academic version	04-09-2019	6,195-00
	Electronic article surveillance system	04-09-2019	68,057-00
	Auto desk media entertainment collection – 1 user for 1 yr	17-09-2019	104044-00
	Split A/c 2.0- 2 Nos 1.0- 1 No	16-09-2019	1,77,760-00
	Visual studio professional 2019 academic version	04-09-2019	6,195-00
	ARES std 2019 with 3 yrs maintenance perpetual license	30-09-2019	49,560-00
	JIG Saw machine Bosch make	11-12-2019	1,21,80-00
	Cordless Screw Driver	11-12-2019	19,340-00
	12 mm collet	11-12-2019	11,329-00
	Cordless screw driver – Heavy duty	24-01-2020	38,680-00
	Split A/c – inverter	03-02-2020	49,500-00
	Mitre Saw 2 Nos.	03-02-2020	1,12,277-00
Welding Machine MIG - GeM	14-11-2019	94,799-00	
RSC P C	DLP projector	31-07-2019	77,440-00
	Desktop Computer	17-01-2020	1,00,084-00
	Napkin destroyer	17-01-2020	22,313
	Saw machine	11-02-2020	5,61,381-00
	Conference room chairs	09-03-2020	18,600-00
RSC T	Liquid Nitrogen Container (Cryo can)- 7.08 ltr	29-08-2019	22,302-00

<b>Museum / Centre</b>	<b>Name of the Equipment</b>	<b>Date of procurement</b>	<b>Cost (Rs)</b>
DSC G	Mobile science exhibit bus, Make & Model :TATA LP712 EX/42, BS-IV, diesel engine with standard accessories - 1 No.	22-07-2019	24,93,903-00

DLP Projector having hybrid LED & Laser light with carry bag, make CASIO, Model:XJ-V10X - 1 No.	22-07-2019	77,440-00
Tripod projector screen 8'x6' Libert make	22-07-2019	6844-00
Portable PA System Ahuja make model: WA 635 DPR - 1 No.	22-07-2019	15,576-00
Portable Computerized telescope Make & model: Celestron, Nexstar 102SLT with all accessories - 1 No.	22-07-2019	1,10,070-00
MRL Passenger elevator 8 person capacity - 1 No.	30-06-2019	16,02,000-00
250 LPH, RO Plant- 1 No.	15-11-2019	80,000-00
30 LPH, RO Plant- 1 No.	15-11-2019	55,000-00
Camera – 2MP, IR Network Dome camera with power supply ; Samsung - 2 Nos.	18-10-2019	49,000-00 +18% GST
Camera – 2MP Network IR bullet camera with power supply ; Samsung - 3 Nos	18-10-2019	74,550-00 + 18% GST
Door frame metal detector , model checkmate – IIS ; - 1 No.	24-12-2019	56,640-00
Portable generator Honda make model:EU30is ; - 1 No.	29-08-2019	96,256-00
3D printer - 1 No.	25-10-2019	49,699-00
Cordless drilling machine - 1 No.	29-01-2020	16,390-00 + GST18%
Liquid Nitrogen Container (Cryocan)- 25.5 ltr metal	06-06-2019	35,951-00
Liquid Nitrogen Container (Cryocan)- 7.08 ltr	29-08-2019	22,302-00
Metal Detector- CCA	18-02-2020	65,490-00

Museum/ Centre	Name of the equipment	Date of procurement	Total Cost(Rs.)
DSC T	2 MP Network IR Dome Camera Samsung – outdoor – 04 Nos	18-10-2019	1,17,292-00
	2 MP Network IR Dome Camera Samsung – Indoor – 04 Nos	18-10-2019	1,15,640-00
	Almirah Steel – 01 No	11-11-2019	15,900-00
	Almirah Shelf – 01 No	11-11-2019	10,190-00
	Almirah Steel – 02 Nos	11-11-2019	19,830-00
	Air Conditioner – 04 Nos	02-12-2019	1,67,000-00
	Computer Dell – 03 Nos	16-12-2019	1,53,813-00
	File Cabinet Drawer type – 01 No	11-11-2019	10,990-00
	File Cabinet – 01 No	11-11-2019	12,890-00
	Metal Detector Door Frame – 01 No	24-12-2019	8,640-00

	2.8 KVA Generator Portable – 01 No	29-08-2019	6,256-00
	Inverter Microtec – 01 No	29-08-2019	7,649-00
	12V Battery – 02 Nos	29-08-2019	13,135-00
	TVS MSP 450 Star Printer – 01 No	22-01-2020	11,300-00
	Sofa Set Wooden (3+1+1) – 01 No	29-03-2019	46,800-00
	LCD TV 55” - 02 Nos	11-02-2020	1,04,960-00
	LCD TV 88” - 02 Nos	11-02-2020	7,42,400-00
	LCD TV 55” - 04 Nos	22-02-2020	2,61,120-00
	Teapoy – 01 No	11-11-2019	10,572-00
	Liquid Nitrogen Container (Cryo can)- 7.08 ltr	29-08-2019	22,302-00



### **23. PERSONNEL:**

(a) **APPOINTMENT** – New appointments and persons joining on transfer from other museums / centres

**VITM, Bangalore**

<b>Sl No.</b>	<b>Name of the person Shri /Smt/Ms</b>	<b>Cadre &amp; Group Scie/Tech /Adm</b>	<b>Designation</b>	<b>Pay Scale Pay Matrix Level</b>	<b>Date of Joining</b>	<b>Basic Pay in Rs.</b>	<b>Highest Educational Qualification</b>	<b>Date of Birth</b>
1	Shri. Siddi Sreenivas	Adm	OA.Gr.(III)	Level-2	10.04.2019	19,900/-	M.Sc	05.06.1995
2	Shri. Ajai K.S.	T.A	T.A (Civil)	Level-5	12.04.2019	29,200/-	Dip. Civil Engg.	04.06.1981
3	Shri. P. Dhiravidamani	Tech	Tech 'A'	Level-2	14.06.2019	19,900/-	ITI (Carpentry)	17.12.1986
4	Shri. Athul Raj C.	Tech	Tech 'A'	Level-2	27.12.2019	19,900/-	ITI.(Fitter)	25.10.1995

### **23(b) PROMOTIONS:**

<b>Sl. No.</b>	<b>Name of the person Shri/Smt/Ms</b>	<b>Designation and Pay Scale before Promotion</b>	<b>Designation and Pay Scale after Promotion</b>	<b>Basic Pay before promotion in Rs.</b>	<b>Basic pay after Promotion in Rs.</b>	<b>Effective date of Promotion</b>
1	Smt. K. A. Sadhana	Curator 'F' Level-13A	Curator 'G' Level-14	1,81,500/-	1,93,800/-	11.04.2019
2	Shri. K Sajoo Bhaskaran	Curator 'E' Level-13	Curator 'F' Level-13A	1,34,500/-	1,43,300/-	11.04.2019
3	Shri R. Shanthini Devi	Lib. Off. 'A' Level-07	Lib. Off. 'B' Level-9	60,400/-	65,200/-	30.05.2019
4	Shri Mahesh Kumar Naik	Tech. Asst. 'B' Rs.9,300- 34,800/- GP 4,200/-	Tech. Off. 'A' Level-7	17,940/- (as per 6 <sup>th</sup> CPC)	49,000/-	30.05.2019
5	Shri G. Muthukumar	Technician 'B' Rs.5,400- 20,200/-,GP- 2,400/-	Tech 'C' Level-05	11,380/- (as per 6 <sup>th</sup> CPC)	31,900/-	30.05.2019
6	Shri Arumugam R.	Tech 'B' Rs.5,200- 20,200/-, GP 2,400/-	Tech 'C' Level-05	11,380/- (as per 6 <sup>th</sup> CPC)	31,900/-	30.05.2019
7	Shri Hariprasad K.	Tech 'B' Rs.5,200- 20,200/-, GP 2,400/-	Tech 'C' Level-05	11,380/- (as per 6 <sup>th</sup> CPC)	31,900/-	30.05.2019
8	Shri Savarigire	Tech 'B'	Tech 'C'	11,040/-	31,000/-	30.05.2019

	Selvan S.	Rs.5,200-20,200/-, GP 2,400/-	Level-05	(as per 6 <sup>th</sup> CPC)		
9	Shri M. Sudalaimani	Tech 'B' Rs.5,200-20,200/-, GP 2,400/-	Tech 'C' Level-05	11,040/- (as per 6 <sup>th</sup> CPC)	31,000/-	30.05.2019
10	Shri Mohammad Abdul Khaleeq	Tech 'B' Rs.5,200-20,200/-, GP 2400/-	Tech 'C' Level-05	11,040/- (as per 6 <sup>th</sup> CPC)	31,000/-	30.05.2019
11	Shri Siddaling	Tech 'B' Rs.5,200-20,200/-, GP 2,400/-	Tech 'C' Level-05	11,040/- (as per 6 <sup>th</sup> CPC)	31,000/-	30.05.2019
12	Shri Revanasiddappa	Tech 'A' Level-02	Tech 'B' Level-04	22,400/-	26,300/-	30.05.2019
13	Shri Ajjappa S.Devashetti	Tech 'A' Level-02	Tech 'B' Level-04	22,400/-	26,300/-	30.05.2019
14	Shri B. Harshavardhana	Tech 'A' Level-02	Tech 'B' Level-04	21,700/-	26,300/-	30.05.2019
15	Shri Purushothama N.T.	Edu. Asst 'A' Level-05	Edu.Asst 'B' Level-06	33,900/-	36,500/-	30.05.2019
16	Shri Ambaraya	Driver (OG) Level-02	Driver Gr(II) Level-04	25,200/-	27,100/-	23.06.2019
17	Shri Bharadan R.	Edu. Off. 'C' Level-11	Edu.Off. 'D' Level-12	85,800/-	91,400/-	14.08.2019
18	Shri Premkumar L.	Tech. Off. 'C' Level-11	Tech. Off. 'D' Level-12	85,800/-	91,400/-	14.08.2019
19	Shri Anup Kumar Paul	Artist 'A' Level-02	Artist 'B' Level-04	21,700/-	25,500/-	30.08.2019
20	Shri V. C. Sasikumar	Artist 'B' Level-4	Artist 'C' Level-05	28,700/-	31,000/-	30.08.2019
21	Shri Ramesh D.Baskaware	Tech 'B' Level-04	Tech 'C' Level-05	28,700/-	31,000/-	30.08.2019
22	Shri Mareppa H.	Tech 'B' Level-04	Tech 'C' Level-05	28,700/-	31,000/-	30.08.2019
23	Shri S. Venkatesha	Tech 'B' Level-04	Tech 'C' Level-05	28,700/-	31,000/-	30.08.2019
24	Shri Galatage Kumar Maruthi	Lib. Off. 'B' Level-09	Lib. Off. 'C' Level-11	75,600/-	80,900/-	06.12.2019
25	Shri K.Srinivas	Tech 'B' Level-04	Tech 'C' Level-05	28,700/-	30,100/-	10.01.2020
26	Shri Mahadevaswamy M	Tech 'B' Level-04	Tech 'C' Level-05	28,700/-	30,100/-	10.01.2020
27	Shri Jestin Joseph	Tech 'E' Level-06	Tech 'F' Level-07	50,500/-	52,000/-	10.01.2020
28	Shri R. Vijayan	Tech 'F' Level-07	Tech 'G' Level-09	60,400/-	63,300/-	10.01.2020

29	Shri S.Gopinath	Tech 'F' Level-07	Tech 'G' Level-09	58,600/-	61,500/-	10.01.2020
30	Shri E. Subramanian	Tech 'F' Level-07	Tech 'G' Level-09	56,900/-	59,700/-	10.01.2020
31	Shri N. Narayana	Tech 'F' Level-07	Tech 'G' Level-09	56,900/-	59,700/-	10.01.2020
32	Shri Bore Gowda	Tech 'F' Level-07	Tech 'G' Level-09	56,900/-	59,700/-	10.01.2020
33	Shri Chandra Sekhar Prasad	Edu.Asst.'B' GP-4,200/-	Edu.Off. 'A' Level-07	16,900/- (as per 6 <sup>th</sup> CPC)	46,200/-	13.01.2020
34	Shri Prasanta Kumar Biswal	Edu.Asst.'B' GP-4,200/-	Edu.Off. 'A' Level-07	16,900/- (as per 6 <sup>th</sup> CPC)	46,200/-	13.01.2020
35	Shri Bhute Mahendranath	Exbh.Asst. 'B' GP-4,200/-	Exbh.Off. 'A', Level-07	16,900/- (as per 6 <sup>th</sup> CPC)	46,200/-	13.01.2020
36	Shri Senthil Kumar C	Tech.Asst.'B' Level-06	Tech.Off. 'A' Level-07	43,600/-	46,200/-	25.01.2020
37	Shri Narayana Swamy C.	Tech 'E' Level-06	Tech 'F' Level-07	50,500/-	53,600/-	09.02.2020
38	Shri Binoj K.	Edu.Asst. 'B' Level-06	Edu.Off. 'A' Level-07	43,600/-	46,200/-	23.02.2020
39	Shri Saidalavi Ekkaden	Tech 'A' Level-02	Tech 'B' Level-04	21,700/-	25,500/-	19.03.2020
40	Shri Manash Bagchi	Curator 'D' Level-12	Curator 'E' Level-13	91,400/-	1,23,100/-	13.03.2020
41	Shri RajendranM	Driver Gr.I Level-05	Driver Spl.Gr.	35,900/-	36,500/-	18.03.2020

### 23(c) TRANSFERS:

SI No	Full Name of personnel Shri/smt/Ms	Designation	Transferred from ....to...	Date of Relief/ joining
1	Shri Srinivas Murthy C.	Tech. Off. 'A'	RSC Tirupati to NSC Mumbai	09.10.2019

### 23(d) RETIREMENT/REPATRIATION/RESIGNATION:

SI No	Full name of person (Shri/Smt/Ms)	Designation	Name of the museum /centre	Resignation/ Retirement	Date of retirement or release (w.e.f)
1	Shri B. Vishnumoorthi Bayari	DCFA	VITM	Retirement	31.05.2019
2	Shri Durgaiah Y.	Edu.Off. 'C'	RSC, T	Retirement	30.06.2019
3	Shri Anandan S.	Tech. 'G'	VITM	Retirement	30.11.2019

## **24. MISCELLANEOUS:**

### **24 (a) DISTINGUISHED VISITORS**

#### ***VITM, BANGALORE***

1. Prof. Anurag Kumar, Director, Indian Institute of Science, Bangalore
2. Dr. Anil Kakodkar, Member AEC & Chairman, RGSTC, Mumbai
3. Dr. Praveer Asthana, Head, Mega Science Division, DST, New Delhi,
4. Shri. Ranajit Kumar, Head, NCPW, DAE
5. Prof. V S Rama Murthy, Emeritus Professor, NIAS, Bangalore
6. Dr. V. R. Padmawar, Professor, Stat-Math Unit, Indian Statistical Institute, Bengaluru.
7. Dr. Fabiola Gianotti, Director General, European Organisation for Nuclear Research (CERN)
8. Dr. K. Kasturirangan. Former Chairman ISRO & Former Secretary, Dept. of Space, Govt. of India.
9. Shri K N Vyas, Chairman, Atomic Energy Commission & Secretary, Dept of Atomic Energy, Govt. of India.
10. Shri Arun Srivastava, Secretary, AEC & Head, ICPD, NCPW- DAE, Govt. of India.
11. Dr. Stuart Kohlagen, Professor, Australian National University and Director of Science and Learning at Questacon, Australia.
12. Dr. Ann Devereaux, Manager, Spacecraft System Engineering, Jet Propulsion Laboratory, NASA, USA.
13. Dr. Saragur M Srinidi, President, Advanced Computing and Communications Society, Indian Institute of Science, Bangalore
14. Dr. Taslimarif Saiyed, CEO & Director, Centre for Cellular & Molecular Platforms (an initiative of Dept. of Biotechnology, Govt. of India), Bangalore.
15. Shri. A. Vijay Simha, Member, Advisory Committee, Lemelson Foundation, USA
16. Ms. Isha, Pant, Deputy Commissioner of Police, Command Circle, Bangalore
17. Dr. Bindya Yohannan, Sr. Counsellor, Parihar, Office of the Commissioner, Bangalore

#### ***RSC, TIRUPATI***

1. Shri Bhumana Karunakar Reddy, Hon'ble MLA, Tirupati
2. Prof. K. N. Ganesh, Director, Indian Institute of Science Education and Research, Tirupati
3. Dr. Arun Kumar Bhaduri, Director, Indira Gandhi Centre for Atomic Research, Kalpakam
4. Shri. P. Gopikrishna, Group Director, MSA, Satish Dhawan Space Centre, Sriharikota,

#### ***RSC & P, Calicut***

1. Shri. A. K. Saseendran : Minister for Transport, Govt. of Kerala
2. Shri. Sreeram Sambasiva Rao, District Collector, Kozhikode
3. Shri. A. Pradeepkumar, MLA Kozhikode
4. Shri. Thottathil Raveendran, Hon. Moyal, Kozhikode
7. Shri. K. K. Ragesh, MP (Rajysabha)



### ***DSC, GULBARGA***

1. Shri. S. K. Jena, r. Manager (HR), Corporate Communication Group, Nuclear Power Corporation of India Limited, Mumbai
2. Dr. Banuprakash K, Chief Scientist, Indian Institute of Chemical technology, Hyderabad
3. Shri Dil Sukh Jain, Dy Director (Rtd), NRSA-ISRO, Hyderabad
4. Shri R. Satyanarayana, Outstanding Scientist, Nuclear Power Corporation of India Ltd, Kaiga, Karnataka

### ***DSC, TIRUNELVELI***

01. Shri K Thirumal, I.F.S., District Forest Officer
02. Smt Shilpha P Satish, I.A.S., District Collector, Tirunelveli
03. Shri M Sivaguru Prabhakaran, I.A.S., Sub Collector, Tirunelveli
04. Smt K Suganthi, Deputy Commissioner, Vigilance, S.GST, Tirunelveli
05. Smt Hemalatha, Additional Chief Conservator of Forest, Tirunelveli
06. Dr Ponraj, Scientific Advisor to Former President Dr A P J Abdul Kalam
07. Shri Deepak M Damor, Commissioner of Police, Tirunelveli City
08. Shri Saravanan, Deputy Commissioner, Tirunelveli City
09. Shri Gnana Thiraviyam, Member of Parliament, Tirunelveli

**24(b) MEDIA PROGRAMMES IN WHICH STAFF PARTICIPATED:**

Centre	Name of the Staff	Name of the media	Type of the programme	Broadcast on
RSC T	Shri R. Manigandan PC, RSCT	Krishna Teja Channel	Partial Solar Eclipse	26-12-2019
	Shri R. Manigandan PC, RSCT	SCV Cable	Innovation Festival	28-02-2020
	Shri. MMK Balaji Curator, RSCT	ABN TV	Partial Solar Eclipse	26-12-2019
	Shri. MMK Balaji Curator, RSCT	E TV Telugu	Tirupati Bird Festival	07-12-2019
	Shri N. T. Purushothama Edn Asst 'B', RSCT	Sakshi TV	Partial Solar Eclipse	26-12-2019
RSC P C	Shri. Manash Bagchi P C	Asianet News 18 Mathrubhumi	Interview on Annular Eclipse	26-12-2019
	Shri. Jayanth Ganguly TO "C"	Media One ACV	Talk on Annular Eclipse	25-12-2019
	Shri. K. M. SUNIL EO "B"	All India Radio	National Science day Quiz	28-02-2020
DSC G	Shri C. N. Laxminarayana DSO, DSCG	AIR Kalaburagi	Talk on Importance of National Science day	01.03.2020
DSC T	Shri S M Kumar, DSO, DSCT	Puthiya Thalaimurai	Vacation Hobby at DSCT	08.05.2019
	Shri S M Kumar, DSO, DSCT	Mayuri TV	Science Kits for Effective Classroom	06.11.2019
	Shri S M Kumar, DSO, DSCT	Hello FM	Sustainable Development is our Goal	08.11.2019
	Shri S M Kumar, DSO, DSCT	Suriyan FM	Solar Eclipse	23.12.2019
	Shri S M Kumar, DSO, DSCT	Bharani TV	Solar Eclipse & Myths	24.12.2019
	Shri P Marilenin, EO, DSCT	Suriyan FM	Special arrangement for Solar Eclipse	26.12.2019
	Shri P Marilenin, EO, DSCT	Puthiya Thalaimurai	Special arrangement for Solar Eclipse	26.12.2019
	Shri S M Kumar, DSO, DSCT	Jeya TV, News 18, Thanthi TV	When, Where & How to Observe Solar Eclipse	26.12.2019
	Shri P Marilenin, EO, DSCT	Mayuri TV , Bharani TV	Special arrangement for Pongal Holidays	16.01.2020

**24(c) POPULAR LECTURES BY STAFF**

Centre	Venue	Date	Topic	Speaker (Shri/Mr)	Audience
VITM	GKVK Campus, University of Agricultural Sciences, Bangalore	04-01-2020	Challenging Concepts in Science to sustain interest	Shri. K. Madan Gopal, Director, VITM	250
	Infosys Campus, Bangalore	04-03- 2020	Women in Engineering	Smt. K. A. Sadhana, Curator 'G' VITM	300
	Christ University Campus, Bangalore	05-03- 2020	Women in Technology	-do-	200
RSC T	Sri Govindaraja Swamy High School, Tirupati (Science Fair Cum Exhibition)	04-07-2019	Hands On – Mind On	Shri. R. Manigandan PC, RSCT	1,500
	GITAM High School	15-08-2019	Role of Science Centres' in enhancing Understanding Science	-do-	1,200
	Ananda vedika: framing happy curriculum at Viswam school, Tirupati	12-09-2019	Teaching science with fun and misconceptions in science	-do-	280
	Arya Vysya Yuvajana Sangam, Tirupati	15-09-2019	Water Conservation Responsibility of Everyone	-do-	850
	Youth Hostel Gandhi Peace Foundation	02-10-2019	Gandhi & Science	-do-	50
	SKEIT Engineering College, Puttur	10-10-2019	Space Infinite Oppurtunity	-do-	4,400
	Pre Departure Camp Nort East Zone	11-10-2019 – 17-10-2019	Solving Problems in Astronomy	Shri. M.M.K. Balaji Curator, RSCT	30
	27 <sup>th</sup> AP State National Children Science Congress Sri Padmavathi Mahila Visvavidyalayam	25-11-2019	Science and Innovation	Shri. R. Manigandan PC, RSCT	1,200
	Curriculum Development For Implementation Of Outcome Basde Teaching – Learning”: Annamacharya Institute Of Technology & Science, Tirupati	28-11-2019	Science in Engineering- Bridging the Gap	-do-	200

	Innovation Space RSCT	15-12-2019	Innovative Ideas 2020	-do-	45
	JNNSMEE 2019 Chittoor District Science Fair: Sri Padmavathi Mahila Visvavidyalayam	15-12-2019	Science Through Hands On	-do-	2,500
	INNOVATIONS & PATENTS: S V U College of Engineering, Tirupati	27-12-2019	'Innovation-Bridging the Gap'	-do-	650
	Sri Chaithanya School, Tirupati	26-01-2020	Role of Science Centre in enhancing & Understanding Science	-do-	800
	Mahatma Gandhi Municipal Corporation School:	28-02-2020	Science Exhibitions for Better Understanding	-do-	1,500
	Ravindra Bharathi School, Tirupati	20-02-2020	Life & Works of CV Raman	-do-	860
RSC P Calicut	Providence Girls HSS	18-05-2019	Role of Museum in Science communication	Shri. Manash Bagchi PC	260
	MJ HSS ElettillThamarassery	19-07-2019	Moon Explorations	-do-	350
	RSC P Calicut	24-12-2019	The Cosmic Shadow palay	-do-	110
	RSC P Calicut	24-12-2019	On the origin of Saros	Shri. Jayanth Ganguly Technical officer C	110
	Kalpetta Civil station Hall	07-12-2019	How to observe Annular Eclipse	Shri. K. M. Sunil EO	135
DSC G	Innovative international School, Kalaburagi	18-08-2019	Renewable energy resources	C. N Laxminarayana DSO	135
	Vedha Public School, Kalaburagi	14-11-2019	Science and Technology	-do-	533
	Viswadhama High School, Sedam	23-11-2019	Health and Nutrition	-do-	925
	Govt. Higher primary School, Kalanoor, Kalaburagi	28-11-2019	Scientific temper	-do-	478
	Satyapriya School of Excellence, Kalaburgai	28-12-2019	Scientific temper	-do-	406
	innovative International School, Kalaburgai	29-12-2019	Scientific attitude	-do-	755
	Sir Sai School, Kalaburgai	24-01-2020	Scientific attitude	-do-	292

	Faraan PU College, Kalaburagi	22-02-2020	Role District science Centre in developing scientific awareness	-do-	583
	Sambuddha Degree College Aland, Kalaburagi	27-02-2020	National Science day	-do-	369
	Atal tinkering lab at Govt. High School , KSRP colony, Tajsultanpur	05-03-2020	Esay Experiments and activities to learn science	-do-	335
DSC T	Sadakadulla Appa College, Tirunelveli	11-07-2019	Global Impactof Population Explosion	Shri S MKumar, DSO, DSCT	340
	St.Xavier's College, Tirunelveli	12-07-2019	Air Pollution & Mitigation	-do-	165
	Anna University Regional Campus, Tirunelveli	07-08-2019	Science, Engineering & Society	-do-	295
	National Engineering College, Kovilpatti	29-08-2019	Zero Shadow Day	-do-	565
	Kanchi Sri Sankara Academy, Tiruchendur	31-08-2019	Zero Shadow Day	-do-	460
	Pop's College, Sayarpuram	05-09-2019	Science for Society	-do-	125
	VOC College, Thoothukudi	10-12-2019	Safely Observing Solar Eclipse	-do-	228
	Sadakadulla Appa College, Tirunelveli	19-12-2019	Animal Preserving Techniques	-do-	256
	Science Camp, Kayalpattinam	01-01-2020	Carrier Opportunities in Pure Science	-do-	86
	Success Matric Hr. Sec.School,Tenkasi	21-01-2020	STEAM Education	-do-	624
	BMC Matric Hr.Sec.School, Thoothukudi	06-02-2020	Inventions that Shaped the World	-do-	482
	Chathram Bharathi Hr.Sec.School, Kadayam	07-02-020	Mistakes that leads to Great Inventions	-do-	412
	DSC T	11-02-2020	Joy of Star Watching	-do-	54
	Sri Jayendra S Golden Jubilee Matric Hr.Sec.School, Tirunelveli	15-02-2020	Inventions in Daily Life	-do-	412



	Johnson's Primary School, Thoothukudi	01-03-2020	Inspirations from Scientists	-do-	356
	Govt. Hr.Sec.School, Sivalaperi	11-03-2020	Global Issues and Local Solutions	-do-	139
	VOC College, Thoothukudi	10-12-2019	Safely Observing Solar Eclipse	-do-	228

(d) **FOREIGN DEPUTATIONS:**

**RSC T** : Shri. M M K Balaji, Curator RSC T represented NCSM with the Indian Delegation in International Astronomy Olympiad held at Piatra Neamt, Romania from 18<sup>th</sup> to 27<sup>th</sup> October 2019

**SCIENCE PARK EXHIBITS :****V.I.T.M BANGALORE**

1	Stationary Steam Engine – 1926	6	Hydro-Electric Generator Reaction Turbine
2	Swings of different lengths	7	Railway Engine – SMR Metre Gauge 1888
3	Portable Steam Engine	8	H F 24 Aircraft
4	Archimedes Screw	9	Solar Street Light
5	Sun Dial	10	Solar Water Pump

**RSC TIRUPATI**

<b>Sl. No.</b>	<b>Name of the Exhibit</b>	<b>Sl. No.</b>	<b>Name of the Exhibit</b>
1	A Swing is A Pendulum	30	Action and Reaction
2	Sympathetic Swing-I	31	Cone Runs Uphill
3	Trace a Pattern	32	Win the Race
4	Compound Pendulum	33	Centrifugal Force
5	Straight Line or Circle?	34	Echo tube
6	Swing a Quintal	35	ISIS
7	Variable Pendulum	36	Whispering garden
8	Inclined Planes	37	Musical Bars
9	Pulleys Lift Loads	38	Elliptical Speaking Tube
10	Lever Reduces Effort- 3No.s	39	Optic Tree
11	A Sea-Saw is a Lever	40	Bird In a Cage
12	Pulley Drive	41	World Minus Colours
13	Gear Train	42	Perception of Depth
14	Worm Wheel -2 Nos.	43	A simple Camera
15	Check your weight	44	Nipkov's Disc
16	Lift Yourself	45	Oscillating or Rotating
17	Roller Coaster - 2 Nos.	46	Archimedes Screw
18	The Acrobatic Ball	47	Moment of Inertia
19	Minimum Time path	48	Balancing (Moment)Wheel
20	Rolling and Sliding	49	Sun-dial
21	Segregation of Balls	50	Geodesic Dome - Rabbits Cage – 1
22	Guess the Length	51	Geodesic Dome - Rabbits Cage – 2
23	Size and Distance	52	Geodesic Dome - Rabbits Cage – 3
24	Ellipse Tracing	53	Geodesic Dome – Pigeon Cage
25	Möbius Band	54	Geodesic Dome - Ducks Cage
26	Impossible Triangle	55	Sympathetic Swing – II
27	Weightlessness	56	Animal in a Cage
28	Turn Faster	57	Spider Web
29	Moment Wheels(3 Discs)	58	HPT-32 Deepak

### **Pre Historic Life Park**

<b>Sl. No.</b>	<b>Name of the Exhibit</b>	<b>Sl. No.</b>	<b>Name of the Exhibit</b>
1	Evolution of Man	18	Smilodon
2	Lemur	19	Cynognathus
3	Proconsul ape	20	Ankylosaurus
4	Neanderthal Man	21	Tyrranosaurus
5	Megatherium	22	Dimetrodon
6	Brachiosaurus	23	Anatosaurus
7	Moeritherium	24	Woolly Rhinoceros
8	Dienotherium	25	Spinosaurus
9	Woolly Mammoth	26	Psittocosaurus
10	Uintatherium	27	Velociraptor
11	Glyptodon	28	Pterenodon
12	Beluchitherium	29	Corythosaurus
13	Musk Ox	30	Dragon fly
14	Diatryma	31	Land scorpion
15	Archaeopteryx	32	Giant Squid
16	Magaloceros	33	Giant Water scorpion
17	Stegosaurus	34	Trilobite

### **SCIENCE PARK –Phase II**

1	Lift yourself	10	Relative Motion
2	Probability	11	Earth-Moon System
3	Rolling Discs	12	Racing Balls
4	DNA	13	Bouncing Balls
5	Sea-saw as a Pump	14	2D to 3D
6	Pin Screen	15	Scientists - 8 Nos
7	Transverse Wave Propagation	16	Mathematical Totems -13 Nos
8	Laminar or Turbulent		
9	Variable Swing		

## **RSC P Calicut**

1. Echo tube
2. Who speaks
3. Weightlessness
4. Rolling & sliding
5. The acrobatic ball
6. Minimum time path
7. Roller coaster
8. Mobius band
9. Musical bars
10. Whispering garden
11. A swing is a pendulum
12. World minus colours
13. Perceiving depth
14. Bird in cage
15. Variable pendulum
16. Compound pendulum
17. Lever-I
18. Lever-II
19. Lever reduces effort
20. See-saw is a lever
21. Inclined plane
22. Pulley lifts loads
23. Simple camera
24. Action & reaction
25. Pulley & Gears
26. Gear Train
27. Revolving Faster
28. Worm Wheel
29. Straight line or circle
30. Evolution of Man
31. Oscillation or Rotation
32. Sympathetic pendulum
33. Lift yourself
34. Giant lever
35. Pulley Reduces Effort
36. Giant Archimedese screw
37. Magical swing
38. Yo Yo
39. Delayed Hearing
40. Energy Drum
41. Standing See Saw
42. Dome climber
43. Balancing Block
44. Orbital Climber
45. Sun to phone
46. Magical swing
47. Bouncing ball
48. Tensigrity structure



## **DSC, GULBARGA**

1. Archimedes' Screw	25	Minimum Time Path
2. Musical Bars	26	Geodesic dome – 5m dia-4 Nos.
3. Musical Pipes	27	Geodesic Dome-15m dia - 1 No.
4. Lever Reduces Effort	28	Parabolic sound Reflectors
5. II and III Order Lever	29	Sun dial
6. Projective Geometry	30	Action and Reaction
7. Inclined Plane	31	Periscope
8. Pulley Lift Loads	32	Torsional Oscillation / Wave motion
9. Variable - Pendulum-I	33	Geodesic Dome - 3m Dia - 1 No.
10. Variable Pendulum-II	34	Amusing Seesaw
11. Sympathetic Swing	35	Mobius Band - I
12. Echo Tube	36	Mobius Band - II
13. Swing is a Pendulum	37	Sea Saw is a lever
14. Gear Train	38	Size and Distance
15. Worm Wheel	39	Kinetic wheel /Yo-Yo wheel
16. Pulley Drive	40	DNA Model – Double Helix
17. Roller and Coaster	41	RNA Model
18. Acrobatic Ball	42	Centrifugal force
19. Rocking Chair	43	Water Wheel
20. Cone Runs Uphill	44	Check your weight
21. Camera Obscura	45	Lift your self
22. Straight Line Or Circle	46	Perspective drawing
23. Nipkov's Disc	47	Steam Engine - Horizontal
24. Bird In a Cage	48	Turn faster

## **PREHISTORIC ANIMAL PARK**

### **EXHIBITS**

1 Dimetrodon	2 Scelidosaurus
3 Gallimimus	4 Psittacosaurus
5 Corythosaurus	6 Tyrannosaurus rex
7 Spinosaurus	

## DSC, TIRUNELVELI

1. Sun dial
2. Early Man faces
3. Musical Bars
4. Centrifugal force
5. Amusing See saw
6. Aero engine Radial type
7. Size And Distance
8. Win a race
9. Weightlessness 'A'
10. Echo Tube
11. Pulley System
12. Check Your Weight
13. Roller Coaster
14. Acrobatic Ball  
(Centripetal Force - A)
15. Gravity Well
16. Pulley Drive
17. Gear train
18. Worm Wheel
19. How friction helps?
20. Swing is a Pendulum
21. Rocking Chair
22. Tug of War
23. Rolling Drum –Circular
24. Rolling Drum –Hexagonal
25. Deceiving Eyes
26. Inertia of Wheels
27. Gravity Paradox - A
28. Gravity paradox - B
29. Sound Reflectors
30. Harmonograph
31. World Clock
32. Self Balancing Sticks
33. Spider Web
34. Variable Pendulum
35. Bird in a Cage
36. Parabola
37. Weightlessness 'B'
38. Size & Weight
39. Compound pendulum
40. Lever reduces effort –I
41. Lever reduces effort –II
42. Lever reduces effort –III
43. Lissajous Figures - A
44. Inclined Plane
45. Isis Speak - 1 set (2 Nos.)
46. Straight Line or Circle  
(Pulfritch Pendulum)
47. Seesaw is a Lever 'A'
48. Seesaw is a Lever 'B'
49. Sympathetic Swing
50. Angular Momentum
51. Swing is a Pendulum
52. One plus one is less than one
53. Projectiles
54. Action & Reaction
55. Archimedes Screw
56. Geodesic Dome
57. Moebius Band
58. Express Slide
59. Wave Motion
60. Cycloid Path
61. Lift Yourself Up
62. Elliptical Band
63. Swings of different lengths
64. Scientists Busts (08 Nos)
65. Mathematical Totem (13 Nos)
66. Camera Obscura
67. Rabbit cage
68. Pet Aviary
69. Yo - yo
70. Geodesic Dome (5.4Mtrs)
71. Geodesic Dome (3.6 Mtrs)
72. Guess the length
73. Persistence of Vision
74. Involute in a Circle
75. Total Internal Reflection
76. Sun dial or Telling Time
77. Rotation per Minute
78. Spring Saves Energy
79. Inner Earth
80. Moment of Inertia
81. Rain Rain Come Again
82. Electromagnetic Waves
83. Ellipse
84. Tension

## PREHISTORIC ANIMAL PARK EXHIBITS

Sl. No.	Name of the Exhibit	Sl. No.	Name of the Exhibit
1	Dimetrodon	6	Baluchitherium
2	Stegosaurus	7	Glyptodon
3	Corinthosaurus	8	Spinosaurus
4	Tyrannosaurus Rex	9	Psittacosaurus
5	Gallimimus	10	Scelidosaurus

## ANNEXURE – 2

### GALLERY EXHIBITS DEVELOPED:

#### VITM, BANGALORE

SI No	Name of the Exhibit Completed	Name of the Gallery for which it is made	Centre for which it is developed
1.	Why satellite	Mobile Science Exhibition (Aspirational District)	VITM, RSC Tirupati & RSC P Calicut
2.	Eye in the sky.	-do-	-do-
3.	Orbits.	-do-	-do-
4.	Launch vehicles	-do-	-do-
5.	Internet	-do-	-do-
6.	Resources Sources Monitoring	-do-	-do-
7.	Active and Passive Element	-do-	-do-
8.	Remote Surgery	-do-	-do-
9.	Telemedicine	-do-	-do-
10.	Helping Formers.	-do-	-do-
11.	Monitoring Air Quality	-do-	-do-
12.	Weather report	-do-	-do-
13.	Urban planning	-do-	-do-
14.	Disaster Management	-do-	-do-
15.	Helping fisherman	-do-	-do-
16.	Navigation	-do-	-do-
17.	Exploring the space	-do-	-do-
18.	Space Spin-offs.	-do-	-do-

19.	Observing Earth from the space.	-do-	-do-
20.	New Avenues	-do-	-do-
21.	Blue Eye Vs Brow Eye	Biotechnology Gallery	VITM
22.	DNA Replication	-do-	-do-
23.	Sickle cell Anemia	-do-	-do-
24.	How similar are we!	-do-	-do-
25.	Louis Pasteur	-do-	-do-
26.	Diversity	-do-	-do-
27.	Electrophoresis	-do-	-do-
28.	Enzymes	-do-	-do-
29.	Boy or Girl	Human Biology Gallery	DSC, Gulbarga
30.	How Lungs work	-do-	-do-
31.	Peristalsis motion	-do-	-do-
32.	Iris	-do-	-do-
33.	How muscles work	-do-	-do-
34.	Human body joints	-do-	-do-
35.	how we swallow	-do-	-do-
36.	Reaction time	-do-	-do-
37.	View your blood vessel (See your veins)	-do-	-do-
38.	Know your teeth	-do-	-do-
39.	Constellations	Science Park	KSTA
40.	Swing is a pendulum - 2 sets	-do-	-do-
41.	Levers	-do-	-do-
42.	Turn Faster	-do-	-do-
43.	Planetary motion	-do-	-do-
44.	Lift your self	-do-	-do-
45.	Identify the Magnets -	Fun Science Gallery	New Science Centres
46.	Pebble Chimes	Science Park	New Science Centres
47.	Archimedes Screw	-do-	-do-
48.	Sea saw Pump	-do-	-do-
49.	Nobel Prizes 2019 (Panels – 6 Nos)	Temporary Exhibition	VITM

50.	Corona Virus	-do-	-do-
51.	Concentration, Memory & Emotion in Children (Panel exhibit)	Yoga Sandesh – an exhibition of Yoga, Mind and Body	VITM
52.	Autism & Attention Defect Hyperactive Disorder (Panel exhibit)	-do-	-do-
53.	Technology Addiction (Panel exhibit)	-do-	-do-
54.	Substances yielding Disorders (Panel exhibit)	-do-	-do-
55.	Adolescents (Panel exhibit)	-do-	-do-
56.	Girls (Panel exhibit)	-do-	-do-
57.	Physical Stamina, Motor Coordination health of Children (Panel exhibit)	-do-	-do-

*MSE Exhibits each exhibit is 3 set (3 set x 20 Nos) One each for VITM, RSC T and RSC P, C*

#### **KITS/AIDS DEVELOPED**

##### **During TTP**

<b>SI No</b>	<b>Name of the exhibit</b>	<b>Type of exhibit</b>	<b>Gallery / Centre for which made</b>
1.	Centrifugal Force	Kit	
2.	Air Rocket	Kit	
3.	Bernoulli's cone	Kit	
4.	Balancing Balloons	Kit	
5.	Potential & Kinetic Energy	Kit	

#### **RSC, TIRUPATI**

<b>Sl. No.</b>	<b>Name of the exhibit</b>	<b>Name of the Gallery for which it is made</b>	<b>Centre for which it is developed</b>
1	Wind Power	Non Conventional Energy Resources	RSC T
2	Geothermal Energy	---do---	---do---
3	Energy Storage Devices	---do---	---do---
4	Sterling Engines	---do---	---do---
5	Green Energy	---do---	---do---
6	Harvesting Solar Energy	---do---	---do---



7	Wind Energy Potential	---do---	---do---
8	Bloom Energy	---do---	---do---
9	Gas Hydrates	---do---	---do---
10	Tidal Energy	---do---	---do---
11	Environmental Issues	---do---	---do---
12	Flying Wind Turbine	---do---	---do---
13	Bio-fuel	---do---	---do---
14	Human Power	---do---	---do---
15	Muscle Energy	---do---	---do---
16	Wind Farm Across India	---do---	---do---
17	Wave Energy	---do---	---do---

#### KITS/AIDS DEVELOPED

SI No	Name of the exhibit	Type of exhibit	Gallery / Centre for which made
1	DNA Model With Beads	Kit	RSCT
2	Osmosis	---do---	---do---
3	Bluetooth Operated Car	---do---	---do---
4	Temperature V/s Resistance	Kit (Cold Show)	RSCT
5	Temperature V/s Chemical Reaction	---do---	---do---
6	Bernoulli's Principle	Kit	RSCT
7	Colour Shadow	---do---	---do---
8	Photosynthesis in action	---do---	---do---
9	Singing Tube	---do---	---do---
10	Centripetal Force	---do---	---do---
11	Hydroponics	Innovation	RSCT
12	Bernoulli's Maze	Kit	RSCT
13	Triangular Pyramid Puzzle	---do---	---do---
14	Total Internal Reflection	---do---	---do---

## RSC P Calicut

SI No	Name of the Exhibit Completed	Name of the Gallery for which it is made	Centre for which it is developed
1.	Tensigrity stool	Fun Science	RSCP Calicut
2.	Structure	Science Park	-do-
3.	Bouncing ball	-do-	-do-
4.	Day and Night	Temporary exhibition Touchdown Moon	-do-
5.	Why we see always only one side of Moon from Earth	-do-	-do-
6.	GSL V Mark 111	-do-	-do-
7.	Chandrayaan 2	-do-	-do-
8.	Lunar Lander	-do-	-do-
9.	Lunar Rover	-do-	-do-
10.	Moon Buggy	-do-	-do-
11.	Inner core of Moon	-do-	-do-
12.	Be an Astronaut	-do-	-do-
13.	Tides	-do-	-do-
14.	Apollo missions	-do-	-do-
15.	Saturn V rocket	-do-	-do-
16.	Facts about Moon	-do-	-do-
17.	Indian Moon Missions	-do-	-do-
18.	Vikram lander	-do-	-do-
19.	Pragyan Rover	-do-	-do-
20.	Facts about eclipse	-do-	-do-
21.	How eclipse occurs	-do-	-do-
22.	Pin Hole Camera	-do-	-do-
23.	Projection box with telescope	-do-	-do-

### KITS/AIDS DEVELOPED

SI No	Name of the exhibit	Type of exhibit	Gallery / Centre for which made
1.	Snake Pendulum	Kit for SDL	RSC P
2.	Cone Runs up hill	-do-	-do-
3.	Ohms law	-do-	-do-

4.	Transverse wave	-do-	-do-
5.	Periscope	-do-	-do-
6.	Mirror magic	-do-	-do-
7.	Induction apparatus,	-do-	-do-
8.	Compound pendulum	-do-	-do-
9.	Magnetic lines of force	-do-	-do-
10.	Jumping disc	-do-	-do-
11.	Magnetic doll	-do-	-do-
12.	DC Motor	-do-	-do-
13.	Planetary Motion	-do-	-do-
14.	Reflecting mirror	-do-	-do-
15.	Eclipse projection box	-do-	-do-
16.	Turia	-do-	-do-
17.	Mobious band	-do-	-do-
18.	Chaotic pendulum	-do-	-do-
19.	Gear Train	-do-	-do-
20.	Transformer	-do-	-do-
21.	Lazy tube	-do-	-do-
22.	Wind mill	-do-	-do-
23.	Series and parallel resistance	-do-	-do-
24.	First order lever	-do-	-do-

## DSC, GULBARGA

### KITS/AIDS DEVELOPED

SI No	Name of the exhibit	Type of exhibit	Gallery / Centre for which made
1	Tesla coil – using solid state devices	Exhibit for Demonstration	Fun Science Gallery
2	Tesla coil – using solid state devices	Kit	SDL
3	Tesla coil – using solid state devices	Duplicate kit	Outdoor SDL

## POPULAR SCIENCE LECTURE

## VITM, BANGALORE

Sl. No.	DATE	TOPIC	NAME OF THE SPEAKER	VENUE	AUDIENCE
1	17-04-2019	'Treasure from the Trash'	Ms Padma of 'Stone soup'	VITM	100
2	29-05-2019	'Statistics at Work'	Dr. V. R. Padmawar, Professor, Stat-Math Unit, Indian Statistical Institute, Bengaluru	VITM	100
3	21-06-2019	Yoga for wellness of humans'	Dr. Shivaram Varambally, Prof. of Psychiatry, NIMHANS Integrated Centre for Yoga,	VITM	100
4	27-07-2019	'Stem Cells & Our health'.	Dr Maneesha Inamdar, Professor & Chairperson, Molecular Biology & Genetics Unit, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore	VITM	240
9	06-08- 2019	'Probing neutrinos with cool detectors'.	Prof Vandana Nanal, TIFR, MUMBAI Mumbai	VITM	80
10	06-08- 2019	Cosmic rays'.	P R Vishwanath, TIFR, MUMBAI	VITM	85
11	06-08- 2019	Why particle physics needs big experiments'	Prof Rohini Godbole from IISc , Bangalore	VITM	79
12	07-08- 2019	Probing neutrinos with cool detectors'.	Prof Vandana Nanal from TIFR, Mumbai'	VITM	65
13	07-08- 2019	Neutrino Astronomy'.	Prof P R Vishvanath, TIFR, Mumbai	VITM	70
14	07-08- 2019	Physics through low cost experiments'	Prof D Indumati IMSc, Chennai	VITM	240
15	08-08- 2019	Physics through low cost experiments'	Prof D Indumati IMSc, Chennai	VITM	130
16	08-08- 2019	'What is the matter with Dark matter'	Prof B Dasgupta from TIFR, MUMBAI Mumbai	VITM	150
17.	08-08- 2019	Neutrinos and INO'.	Prof. G Rajasekaran from IMSc, Chennai	VITM	160
18	09-08- 2019	Neutrinos and INO'.	Prof. G Rajasekaran from IMSc, Chennai	VITM	40
19	09-08- 2019	'Particle Hunter's guide'	Prof N K Mondal SINP, Kolkata	VITM	50
20	09-08- 2019	Why Particle physics needs big experiments'	Prof. Rohini Godbole IISc , Bangalore	VITM	30
21	10-08-2019	Story of Neutrinos'	Prof N K Mondal SINP, Kolkata '	VITM	145
22	10-08-2019	'Societal spin –offs of	Dr. B. Sathyanarayana, TIFR, Mumbai	VITM	45

		Neutrinos Research’.			
29	13-08-2019	‘Gravitational Waves as a new tool for Cosmology’	Shri Aditya Vijaykumar, ICTS, Bangalore	VITM	121
24	13-08-2019	Black hole Master - LIGO in your hand & toy interferometer	Shri Aditya Vijaykumar, ICTS, Bangalore	VITM	149
25	14- 08- 2019	Black Holes & Gravitational Waves	Dr. Shasvath Kapadia, Research Associate & Postdoctoral Fellow, ICTS, Bangalore	VITM	180
26	15-08- 2019	‘General Relativity and Beyond’	Shri Arpitm Ganguly, ICTS, Bangalore	VITM	150
27	16-08-2019	Gravity makes Waves	Shri. H R Madhusudan, Jawaharlal Nehru Planetarium, Bangalore	VITM	170
28	17-08- 2019	‘Doubly Einstein! Gravitational Lensing of Gravitational Waves’	Prof. P Ajith, ICTS, Bangalore	VITM	180
29	17-08- 2019	Some interesting facts on Gravitational Waves’	Shri. Vishak Prasad, IUCAA, Jawaharlal Nehru Planetarium, Bangalore	VITM	160
30	20-08- 2019	‘What is Plasma’?	Dr. A. V. Ravi Kumar, Scientific Officer & Head, Outreach Division, Institute for Plasma Research, Gandhi Nagar, Gujarat	VITM	230
31	21-08- 2019	‘An insight in to Plasma’.	Dr. A. V. Ravi Kumar, Scientific Officer & Head, Outreach Division, Institute for Plasma Research, Gandhi Nagar, Gujarat	VITM	146
32	21-08- 2019	Applications of Plasma.	Ms. Chayya Chavda, Scientific Officer, Outreach Division, Institute for Plasma Research, Gandhi Nagar, Gujarat	VITM	130
33	22-08-2019	Applications of Plasma’.	Dr. P. N. Maya, Post Doctoral Fellow, Institute for Plasma Research, Gandhi Nagar, Gujarat	VITM	130
34	23-08- 2019	‘ITER Projects, Overview & Challenges’.	Dr. Shishir Deshpande, Institute for Plasma Research, Gandhi Nagar, Gujarat	VITM	221
35	23-08- 2019	‘Ensuing India’s Deliverables to ITER – an Overview.	Dr. Mahendrajit Singh Institute for Plasma Research, Gandhi Nagar, Gujarat	VITM	104
36	27-08- 2019	RRCAT Large Hadron	Ms. S. Tiwari,	VITM	77



		Collider and India's Role in Its Making.			
37	27-08- 2019	Exploration of micro-second old universe in the laboratory	Dr. Zubayer Ahmed, VECC	VITM	60
38	27-08- 2019	Searching for fundamental building blocks of the universe with the CMS experiment	Dr. Jyothsna Komaragiri, IISc , Bangalore	VITM	60
39	28-08- 2019	LHC and Beyond – India's Role in High Energy Accelerator development	Ms. S. Tiwari, RRCAT	VITM	170
40	28-08- 2019	Computing Paradigms for Mega Science	Dr. B. S. Jagadeesh, BARC , Mumbai	VITM	164
41	29-08- 2019	Large Hadron Collider at CERN – Indian Contributions Towards Discovery of Higgs Boson	Sh. S. N. Singh, RRCAT delivered	VITM	75
42	29-08- 2019	Unraveling the Higgs Boson at the Large Hadron Collider	Dr. Somnath Choudhury, IISc, Bangalore	VITM	50
43	29-08- 2019	Searching for Beauty: Finding one in a Billion with the CMS Experiment	Prof. James Libby, IIT Madras	VITM	50
44	30-08- 2019	Indian Participation in LHC for Discovery of Higgs Boson	Sh. Avinash Puntambekar, RRCAT	VITM	75
45	30-08- 2019	Superconducting Magnets for the LHC project at CERN - Indian Contribution	Sh. Avinash Puntambekar, RRCAT	VITM	50
46	30-08- 2019	Fundamental Research at CERN & much more'	Dr. Fabiola Gianotti, Director General, European Organisation for Nuclear Research (CERN)	VITM	225
47	31-08- 2019	Understanding Large Hadron Collider and High Energy Accelerators	Dr. Vikas Jain, RRCAT	VITM	50
48	31-08- 2019	An Odyssey through Our Universe - From the "Little Bang" to the "Big Bang"	Dr. Prabhat Pujari, IIT Madras delivered	VITM	50
49	03-09- 2019	'Physics of Neutron Star'.	Prof. Sanjay K. Ghosh, Bose Institute, Kolkata	VITM	108
50	03-09-2019	Evolution of Gaseous detectors for High Energy Physics Experiments.	Mr. Sayak Chatterjee, Bose Institute, Kolkata	VITM	120
51	05-09-2019	Exploring the Universe at FAIR	Prof. Rudrajyoti Palit TIFR, MUMBAI	VITM	30

52	05-09-2019	Detectors for Physics and Imaging: an Introduction	Dr. Saikat Biswas, Bose Institute,	VITM	30
53	06-09-2019	Physics with NUSTAR facilities at FAIR	Prof. Samit K. Mondal, Delhi University	VITM	72
54	07-09-2019	Synergy between Science and Technology	Dr. Supriya Das Bose Institute High Energy Physics, Kolkata	VITM	83
55	07-09-2019	Synergy between Science and Technology	Prof. Dinesh Kumar Srivastava, NIAS, Bengaluru	VITM	80
56	10-09-2019	Introduction to Radio Astronomy	Prof. Rajaram Nityananda, APU -	VITM	45
57	10-09-2019	Galaxies	Dr Mousumi Das, Indian Institute of Astrophysics, Bangalore	VITM	35
58	10-09-2019	Sensitive Antennas and RF	Dr A Raghunathan, Raman Research Institute, Bangalore	VITM	45
59	10-09-2019	Electronics For Radio Astronomy	Mr. R Somashekar Raman Research Institute, Bangalore	VITM	50
60	11-09-2019	Transients	Prof A. Deshpande, Raman Research Institute, Bangalore	VITM	40
61	11-09-2019	Big Ear: How to Listen with Many Antennas	Mr. V Mugundhan, Raman Research Institute, Bangalore	VITM	70
62	12-09-2019	Epoch of Reionization	Prof N Udayashankar, Raman Research Institute, Bangalore	VITM	32
63	12-09-2019	Introduction to Radio Astronomy	Prof N Udayashankar, Raman Research Institute, Bangalore	VITM	60
64	12-09-2019	Architectures For Radio Astronomy Digital Signal Processing	Mr. B S Girish, Raman Research Institute, Bangalore	VITM	40
65	13-09-2019	Magnetic Fields	Dr Sharanya Sur , Associate Professor, Indian Institute of Astrophysics (IIA), Bangalore	VITM	27
66	13-09-2019	Introduction to Radio Astronomy	Dr Nirupam Roy , Assistant Professor of the Department of Physics, Indian Institute of Science, Bangalore.	VITM	20
67	13-09-2019	State of the Art Digital Technology Transforming the Radio Astronomy Signal Processing	Ms. K S Srivani , Raman Research Institute, Bangalore	VITM	20
68	14-09-2019	The Sun	Prof R Ramesh, Indian Institute of Astrophysics	VITM	90
69	14-09-2019	Antenna Networks that Observe The Sun	Prof R Ramesh, Indian Institute of Astrophysics	VITM	80

70	17-09-2019	TMT Adaptive Optics system: How and Why?	Dr. Ravinder Banyal, Associate Professor, Indian Institute of Astrophysics (IIA), Bangalore,	VITM	20
71	17-09-2019	Stars as Time Machines : Creation of Chemical Elements in the Universe	Prof. Sivarani Thirupathi Indian Institute of Astrophysics	VITM	30
72	17-09-2019	"Galileo in Modern Times" - a Fun Optics Demo	Mr. Samir Dhurde IUCAA. Poone	VITM	20
73	18-09-2019	Evolution of Telescopes : From Galilean to TMT	Dr. Vineeth Valsan Post doctoral Fellow, Indian Institute of Astrophysics, Bangalore	VITM	50
74	18-09-2019	Exoplanets : Exploring New Worlds	Mr. Aritra Chakrabarty, Professor, Indian Institute of Astrophysics (IIA), Bangalore,	VITM	125
75	19-09-2019	Looking into the Universe with Giant Eyes	Mr. S. Sriram Junior Research Fellow, Indian Institute of Astrophysics, Bangalore	VITM	42
76	19-09-2019	Quasars as Probes of the Distant Universe	Prof. C. S. Stalin Professor, Indian Institute of Astrophysics, Bangalore	VITM	50
77	20-09-2019	Telescopes and High Resolution Spectrographs to Dissect the Stars	Prof. Gajendra Pandey Professor, Indian Institute of Astrophysics, Bangalore,	VITM	61
78	20-09-2019	Galaxies on Your Desktop - Data Science in the TMT Era	Dr. Sudhanshu Barway Scientist 'D' Indian Institute of Astrophysics, Bangalore	VITM	70
79	21-09-2019	Telescopes in India : Past, Present and Future	Prof. T. P. Prabhu, Professor, Indian Institute of Astrophysics (IIA), Bangalore,	VITM	74
80	21-09-2019	Black hole science and aspects where TMT can be a driver	Prof. Arun Mangalam Professor, Indian Institute of Astrophysics (IIA), Bangalore,	VITM	70
81	04-10-2019	'Moon to Mars exploration'	Dr. Ann Devereaux, Manager, Spacecraft System Engineering, Jet Propulsion Laboratory, NASA, USA	VITM	250
82	21-12-2019	Patterns in Music	Shri. Nilesh Trivedi, Engineer & Founder of "Learn Awesome"	VITM	110

83	22-12-2019	Let's make Math Human again	Ms. Rakhi Chawla Founder of ED3D, STEM Edupreneur, Global Math Project Ambassador, TEDx Speaker, Lead Partner of India for various Olympiads.	VITM	160
84	23-12-2019	Math's and Origami	Shri. VSS Sastry Serving bank officer with passion for Mathematics	VITM	140
85	24-12-2019	The thinking Mind – What's Math got to do with it	Ms. Meera Raghavan Maths Tutor & Coacher, HAL 2 <sup>nd</sup> Stage, Bangalore	VITM	135
86	25-12-2019	Algebra with cardboards	Prof. S. Sundar Raj Retd Professor, National College, Basavanagudi, Bangalore	VITM	107
87	26-12-2019	Math magic	Shri. Anmol Pathak Actuarial Scientist, Data Analyst, Bangalore	VITM	121
88	27-12-2019	Mobius Strip	Ms. Yamuna Natraj Global Math Project Ambassador, Math Educationalist, Runs the Math Workshop "Math Maya" in Bangalore.	VITM	105
89	28-12-2019	Magic and joy of exploding dots	Mr.Kiran Bacche Global Math Project Ambassador, Author of "The Magic and Joy of Exploding Dots" & "Mathematical Approach to Puzzle Solving", "Bangalore Math Circle"	VITM	60
90	29-12-2019	Ramanujan and large scale computing	Prof. Veni Madhavan Dept. of Computer Science and Automation Indian Institute of Science, Bangalore	VITM	60
91	28-02-2020	The Unreal world of Molecules and Materials'	Dr. Balasubramanian Sundaram, Professor, Centre for Physics & Chemistry of Materials, Jawaharlal Nehru Centre for Advanced Scientific Research, Bengaluru	VITM	200
92	9-03-2020	Technology for Women's Safety	Ms. Isha, Pant, Deputy Commissioner of Police, Command Circle, Bangalore	VITM	110
93	9-03-2020	Women Safety'	Dr. Bindya Yohannan, Sr. Counsellor, Parihar, Office of the Commissioner of Police, Bangalore	VITM	110

## RSC TIRUPATI

SI. No.	DATE	TOPIC	NAME OF THE SPEAKER	VENUE	AUDIENCE
1	11-05-2019	Fractals In Nature	Prof. P. Ambika, Dept. Of Physics, Indian Institute of Science Education & Research, Tirupati	RSC T	280
2	21-06-2019	Effect Of Yoga On Human Health	Swami Anupamananda, Secretary, Ramakrishna Mission Ashrama -Tirupati	RSC T 180 & NCC Camp 400	580
3	24-07-2019	Statistics In Day To Day Life	Prof. P. Raja Sekhara Reddy, Hon. President of Indian Society for Probability & Statistic(ISPS)	RSC T	235
4	24-07-2019	Brushing Teeth and How to Keep Oral Hygiene	Dr. Vaishnavi, Dentist Haripriya Dental Hospital, Tirupati	RSC T	230
5	22-07-2019	Life in Microgravity	Prof. B. J. Rao, Professor and Dean (faculty) Indian Institute for Science Education & Research (IISER) Tirupati	RSC T	290
6	07-12-2019	eBird Application in Monitoring Birds	Ms. Mittal Gala, Bird Count India	RSC T	210
7	07-12-2019	Taking Birds to the Children through Art	Ms. Niharika Rajput, Wildlife Artist	RSC T	210
8	26-12-2019	'Solar Eclipse: A Scientific Approach	Prof. C. Deshmukh, Dept. of Physics, IIT, Tirupati	RSC T	250
9	26-12-2019	Awareness and Safe Viewing of Solar Eclipse	Dr. Karthikeyan, Ophthalmologist (Retinal Specialist) of S. V. Aravind Eye Hospital, Tirupati	RSC T	150
10	26-01-2020	'Big Bang & LHC'	Dr. Abijith Gandrakota, Rutgers University, New Jersey, USA	RSC T	280
11	05-01-2020	Science Behind Hydroponics	Prof. G. Sudarsanam, HOD, Dept. of Botany, Sri Venkateswara University, Tirupati	RSC T	65
12	28-02-2020	Artificial Intelligence: Is / The Future	Shri. M Vidya Sagar IBM, Bangalore	RSCT	245
13	01-03-2020	Yoga & Innovation	Prof. Lakshmi Narayana, Asst. Professor, Dept. of Yoga, Rastriya Sanskrit Vidya peeta, Tirupati.	RSCT	275
14.	02-03-2020	Women In Innovation	Dr. P V Ranganayakulu, Former, Chief Museum Officer, SV Museums, TTD Tirupati	RSCT	150



## RSC P CALICUT

SI. No.	DATE	TOPIC	NAME OF THE SPEAKER	VENUE	AUDIENCE
1	17-04-2019	Biodiversity around us	Dr.Jaffer Palot Scientist Zoological Survey of India	RSC P C	90
2	17-04-2019	Climate Change &birds	Shri. Sathyan Meppayur Noted Environmentalist Malabar Natural History	RSC P C	90
3	18-04-2019	Floral diversity of Kerala	Dr. Kishore, Associate Professor Farook College Kozhikode	RSC P C	110
4	04-05-2019	Evolution of Massive Stars'	Dr. Madhu K, Professor of Physics at UC college, Aluva , Kerala.	RSC P C	105
5	04-05-2019	Astrophysics of Black Holes'	Dr. Ananthakrishnan, International School of Photonics, CUSAT	RSC P C	95
6	22-05-2019	Collection, Preservation and Identification of common insects	Dr. P. M. Sureshan, Scientist, Zoological Survey of India	RSC P C	50
7	21-06-2019	Yoga &Stress Managementat	Shri Unni Raman Director, Patanjali Yoga Research Centre, Calicut	RSC P C	85
8	23-06-2019	Innovative treatment of blood disorder patients"	Dr.V.T.Ajithkumar Prof& Head, Department of Paediatrics, Govt Medical College,Kozhikkode	RSC P C	105
9	23-06-2019	Growing problems of adults blood disorder patients"	Dr.B.Hitha.Asst. Prof& Chief consultant in Hematology Department, Govt.MedicalCollege, Calicut	RSC P C	120
10	01-07-2019	Why transgender persons need visibility	SheethalShyam Transwoman Sahodari Cultural Society	RSC P C	125
11	05-07-2019	Snakes around us.	Shri.Gireesh, Kerala Forest department.	RSC P C	90
12	22-08-2019	Climate Change and flood	Dr.MadhavanKomath Scientist, Centre for Water Resources Development & Management, Kozhikode	RSC P C	85
13	06-09-2019	Chandrayaan 2	Dr.K.Jayaraman, Scientist ISRO Bangalore	RSC P C	150
14	03-10-2019	Conservation and Protection of animal life.	Dr.Gireeshkumar Scientist, ZSI Kozhikode	RSC P C	100

15	03-10-2020	Invisible Mathematics	Prof Ambattvijayakumar CUSAT	RSC P C	100
16	04-10-2020	Making virtual class rooms using Desmos	Prof.Pravas.K KKTU Govt.College Pullut	RSC P C	90
17	12-10-2019	'Nuclear radiation for health care and clinical practices'	Dr.P.M.Maharajan,Nuclear Medicine Physician,Baby memorial Hospital Kozhikode	RSC P C	90
18	17-10-2019	Molecular and Genetic evidences authenticating human migration	Dr.K.P.Aravindan, Retd Professor, Dept. of Pathology, Govt.Medical College Kozhikode	RSC P C	150
19	17-11-2019	Prenatal diagnosis of Thalassemia and its Challenges.	Dr.NaliniMenon Govt.Medical College Kozhikode	RSC P C	75
20	18-11-2019	Gandhian concept of rural Development	Dr.Sebastian.N Dept.of Political Science University of Calicut	RSC P C	85
21	16-12-2019	Chemical is not at all bad word, We are all made of chemicals	Prof C.SureshPillai , Centre for Precision Engineering, Institute of Technology ,Sigo Ireland	RSC P C	140
22	16-12-2019	Reflections from a chemistry voyage	Dr.G.Unnikrishnan, Professor NIT Calicut	RSC P C	140
23	21-12-2019	Life &Works of SrinivasaRamanujan	Prof.P.T.Ramachandran Calicut University	RSC P C	50
24	24-12-2019	Harbinger of Life-Our star	Shri.K. Madan Gopal Director VITM Bangalore	RSC P C	105
25	24-12-2019	Astrophysics of Sun	Dr. Ram Ajor Mairya Asst. Professor NIT Calicut	RSC P C	100
26	24-12-2019	Solar Spectrum	Dr.MiniBalakrishnan Professor,Dept of Physics Gokulam College Balussery	RSC P C	95
27	24-12-2019	AdithyaLil-Producing artificial solar eclipse 24x7and more	Dr.SreejithPadinhatteri SUIT Project Scientist IUCAA Pune	RSC P C	95
28	25-01-2020	Insights in Cosmology: The 2019 Nobel Prize in Physics	Dr. Jagadheep. D, Associate Professor, Department of Earth and Space Sciences, Indian Institute of Space Science and Technology Thiruvananthapuram (IIST)	RSC P C	170
29	10-02-2020	Curbing Corona Virus	Dr.A.S. Anoop Kumar, Consultant, Department of critical medicine, Baby	RSC P C	125

			Memorial Hospital, Kozhikode		
30	10-02-2020	Preventive measures against Covid 19	Dr.Asma, Professor, Department of Community Medicine, Government Medical College Hospital, Manjeri,	RSC P C	120
31	08-03-2020	The Unknown Universe: Fast Radio bursts	Dr. Resmi. L, Associate Professor, Indian Institute of Space Science and Technology Trivandrum	RSC P C	110

### DSC GULBARGA

Sl.No.	Date	Topic	Name of the Speaker	Venue	Audience
1.	24-04-2019	scenario of Nuclear power plant in India	Shri. S. K. Jena Manager (HR), Corporate Communication Group, Nuclear Power Corporation of India Limited, Mumbai	DSC G	118
2.	29-05-2019	how can crystals be liquids	Dr. C.V.Yelamaggad Scientist E, centre for nano and soft matter sciences Bangalore	DSC G	121
3.	19-06-2019	Beat Air Pollution	Dr. S R Mise Professor, Dept. of Civil Engineering, PDA Engg. College, Kalaburagi	DSC G	450
4.	11-07-2019	population explosion & issues'	Dr. Channaveer R.M Head & Associate Professor, Dept. of Social Work, CUK, Kalaburagi	DSC G	265
5.	28-08-2019	Applications of AI & ways it can Transform Industries'	Er. Narayana Inamdar Rtd. scientist , NRSA Hyderabad and NASA, USA	DSC G	156
6.	27-09-2019	Importance of Pulses in our daily food	Dr. J.R.Patil Assote. Director of research Zonal ARS, Kalaburagi	DSC G	760
7.	11-10-2019	Gandhian Principle to save earth	Dr. G.S.Gulshetty Professor, Gulbarga & Board member of World leisure organisation	DSC G	590
8.	07-11-2019	Life & Works of Sir C.V Raman	Dr. M.S. Jogad Rtd Professor, Dept. of Physics, Kalaburagi	DSC G	135
9.	10-11-2019	medicinal Plants at your backyard	Dr. Nirmala Kelmani, Professor & HOD, Dept. of Dravyaguna, S.H Ayurvedic Medical college, Kalaburagi	DSC G	155

10.	20-12-2019	Life & work of Srinivasa Ramanujan	Dr. G. Janardhan Reddy Assistant Professor & Coordinator, Dept. of Mathematics, School of Physical Sciences, CUK, Kalaburagi	DSC G	140
11.	21-01-2020	Space Technology	Shri Dil Sukh Jain Dy Director (Rtd), NRSA- ISRO, Hyderabad	DSC G	145
12.	23-02-2020	Artificial Intelligence for Engineering	Er. Narayana Inamdar Rtd Scientist, NRSA, ISRO Hyderabad & NASA, Maryland, USA	DSC G	68
13.	23-02-2020	Nuclear Energy scenario in India	Shri R. Satyanarayana, Outstanding Scientist Nuclear Power Corporation of India Ltd, Kaiga, Karwar Karnataka	DSC G	180
14.	25-02-2020	Careers in Basic Science	Dr. Ravindra S Hegadi Associate Professor, Dept. of Computer Science CUK, Kalaburagi	DSC G	138
15.	26-02-2019	Corona Virus	Dr. Ravi S. Kurlle Asst. Professor, Dept. of Community Medicine, M.R. Medical College, Kalaburagi	DSCG	107

#### DSC, TIRUNELVELI

SL NO	DATE	TOPIC	NAME OF THE SPEAKER	VENUE	AUDIENCE
1	07-05-2019	Recent Advances in Zika Virus Disease	Dr Vaithi Arumugaswami, Ph.D., Asst. Professor of Molecular Biology, University of California, Los Angeles	DSC T	92
2	10-05-2019	Freedom Movements in India	Dr Ramasubramnian, Prof. & Head, Dept. of History, Manonmaniam Sundaranar University, Tirunelveli,	DSC T	68
3	05-06-2019	Air Pollution around Us & Mitigation	Shri Mathivanan, Co- ordinator, Ashoka Trust for Research in Ecology and Environment (ATREE)	DSC T	178
4	21-06-2019	Yoga for Peace and Health	Shri A Nagarajan, Yoga Professor, Nellai City Manavalakali Maiyam	DSC T	148
5	16-07-2019	Snake Conservation & Snake Bite Mitigation	Dr Vinoth, Research Guide, Manimuthar Aghasthiyamalai Community Centre, Tirunelveli	DSC T	172
6	22-07-2019	Recent Trends in Genome Techniques	Dr Beschi Antony Rayan, Professor & Head, Dept. of Botany, St. Xavier's College, Palayamkottai	DSC T	59

7	02-10-2019	Gandhiji's Vision	Dr P Valan Arasu, Head, Ulaga Thirukural Thagaval Maiyam, Tirunelveli	DSC T	118
8	12-11-2019	Preventive Methods of Diabetes	Dr Sayed, Retinopathy, Aravind Eye Hospital, Tirunelveli	DSC T	118
9	20-12-2019	Science and Technology for the Human Welfare'	Dr Sundara Avudaiappan, Programme Director, All India Radio, Tirunelveli	DSC T	157
10	07-02-2020	CoronaVirus	Dr S Sudhakar, Professor, Dept. of Biotechnology, Manonmaniam Sundaranar University, Tirunelveli	DSC T	138
11	27-02-2020	Solar Energy	Dr Kalidasa Murugavel, Principal, National Engineering College, Kovilpatti	DSC T	169
12	28-02-2020	Plant Health	Dr S Sethuramalingam, Former Director, RMNH, Bhopal	DSC T	194



Talk by Dr. Fabiola Gianotti, D.G., CERN on Fundamental Research at CERN organised at VITM



Talk by Dr. Ann Devereaux, Manager Spacecraft System Engineering, J.P.L., NASA on Moon to Mars exploration at VITM



Ms. Isha Pant DCP, Bangalore Speaking on Technology for Women's Safety at VITM



Talk by Shri M. Vidya Sagar, IBM, Bangalore on 'AI - the Future' at RSC T



Talk by Dr. D. Jagadheep, Associate Prof., Dept. of Earth and Space Sciences, IISER Thiruvananthapuram at RSC & P Calicut



Popular lecture on 'Life & Works of Sir C.V Raman' by Dr. M.S. Jogad, Rtd Professor, Dept. of Physics, Gulbarga at DSC G



Talk by Dr Vinoth, Research Guide, M A Community Centre, Tirunelveli on 'Snake Conservation & Snake Bite Mitigation' at DSC T



**CREATIVE ABILITY CENTRE:****VITM, BANGALORE****LIST OF PROJECTS COMPLETED IN VACATION CAC:****CHEMISTRY:**

<b>Sl. No</b>	<b>Name of the Experiments</b>	<b>Sl. No.</b>	<b>Name of the Experiments</b>
1	Decantation	2	Evaporation
3	Filtration	4	Sublimation
5	Growing of Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> Crystals	6	Growing of MgSo <sub>4</sub> salt Crystals
7	Endothermic Reaction – KnO <sub>3</sub>	8	Endothermic Reaction – Freezing of water w/o ice
9	Exothermic reaction – Alkali in water	10	Preparation of Detergent Powder
11	Exothermic reaction – fire w/o match sticks	12	Preparation & study of Oxygen gas
13	Preparation & study of Hydrogen Gas	14	Preparation & study of Chlorine Gas
15	Test for Presence of alkali	16	Synthesis of synthetic turmeric
17	Test for Presence of gases – Ammonia	18	Magic letters on paper
19	Test for Presence of Copper in Brass	20	Developing Silver mirror in a test tube
21	Filter Paper reaction	22	Chemical Sun rise & Sun set
23	Burn Paper w/o ash	24	Elephant Toothpaste
25	Test for presence of Acid	26	Physical Separation of Mixtures
27	Test for Presence of starch	28	Chemical Separation of Mixtures
29	Test for Presence of Glucose	30	Mercury Heart Beat
31	Test for Presence of gas – Co <sub>2</sub>	32	Silver Tree
33	Ferrous to ferric salt (Oxidation)	34	Lemon Battery
35	Change the colour by shaking (Oxidation)	36	Potato Battery
37	Magic Smoke	38	Sodium Chloride Cell
39	Effect of electric current in chemical Reactions	40	Magic tadpole

**ELECTRONICS ;**

<b>Sl. No</b>	<b>Name of the Projects</b>	<b>Sl.No</b>	<b>Name of the Projects</b>
1.	Multitone Music	2.	Disco Light
3.	Resistance in Parallel	4.	Resistance in Series
5.	Property of capacitor	6.	Inductor Experiment
7.	Half Wave Rectifier	8.	Full wave Rectifier

**MATHEMATICS:**

Sl. No	Name of the Projects	Sl. No	Name of the Projects
1.	Platonic Solids	2.	Golden Ratio
3.	Fibonacci Gauge	4.	Algebraic Identities
5.	Pascal Triangle	6.	Mobius Band
7.	Area of a Circle	8.	Ramanujan Magic Square
9.	Mathematic Puzzeler	10.	Golden Rectangle
11.	Golden Triangle	12.	Prime Number
13.	Topology	14.	

**PHYSICS:**

Sl. No	Name of the Projects	Sl. No	Name of the Projects
1.	Static Electricity	2.	Bi metal Strip
3.	DC Motor	4.	Infinity Images
5.	Wind Mill	6.	Cartesian Diver
7.	Bird in Cage	8.	Electric Bell
9.	Sound Formation	10.	Oresteds Experiment

**Robotics**

Sl. No	Name of the Projects	Sl. No	Name of the Projects
1	Gyro Boy	2	Wall follower
3	Line Follower	4	Snake & Robo Arm
5	Proportional Line Follower	6	Colour Sorter

**Art & Science**

Sl. No	Name of the Projects	Sl. No	Name of the Projects
1	Bird	2	Kathakali Face
3	Dog	4	Pen stand (from News paper)
5	Flying Bird	6	Paper Craft - Dog
7	Thread Design	8	Paper Craft - Dinosaur

**RSC, TIRUPATI****LIST OF PROJECTS COMPLETED IN VACATION CAC:**

Sl. No	Name of the Projects	Sl. No	Name of the Projects
<b>Physics</b>			
1.	Simple Pendulum	5	Action & Reaction
2.	Center of Gravity	6	Transfer of Momentum
3.	Resonance	7	Bernoulli's Principal
4.	Centrifugal Force	8.	Simple Mechanics

<b>Chemistry</b>			
1	Exothermic Reaction	5	Acid Base Titrations
2	Endothermic Reaction	6	Oxidation & Reduction Reaction
3	Sublimation Process	7	Diffusion
4	Crystallization	8	Catalytic Reactions
<b>Biology</b>			
1	T. S of Dicot & Monocot Stem	5	Study if part of Flower
2	T. S of Dicot & Monocot Leaf	6	Extraction of DNA
3	T. S of Dicot & Monocot Root	7	DNA Model Making
4	Cell Division in Onion Root Tips	8	Extraction of Chloroplast
<b>Gardening</b>			
1	Introduction to gardening & its Tools	4	Soils layering in pot and Transfer of saplings
2	Composting of soil	5	Making of Moss Stick
3	Germination of Seeds Techniques	6	Introduction to Ornamental plants
<b>Electronics</b>			
1	Introduction to Electronic Components	4	Switch Board Wiring
2	Variable Voltage Power Supply	5	LDR Circuit making
3	Parallel and Series Connections	6	Variable Resistance Board
<b>Mathematics</b>			
1	Vedic Mathematics	5	Probability
2	Platonic Solids	6	Pizza Fraction
3	Measurements	7	Geometric Board
4	Odd and Even Error Check	8	Projections
<b>Art &amp; Science</b>			
1	3D Drawings Illusion Drawings	4	Spirography
2	Draped Cement Pot Making	5	Origami
3	String Art	6	Mixing of Colours
<b>Astronomy</b>			
1	Sun Dial	5	Eratosthenes Experiment
2	Sextant	6	Telescope Making
3	Ball & Mirror Projection	7	100 years Calendar
4	Scale Down of Solar System		
<b>Robotics</b>			
1	Assembling of Robot with Components	5	Construction of Puppy Bots
2	Introduction to Sensors	6	Construction of Spirography Bots
3	Introduction to Software	7	Construction of Bowling Bots
4	Construction of Line Following Robot		

**RSCT – LIST OF PROJECTS COMPLETED IN MUSEUM CAC**

<b>Sl. No.</b>	<b>Name of the Project</b>	<b>Sl. No.</b>	<b>Name of the Project</b>
1	Hydroponics	2	

**RSC P Calicut**

<b>Sl. No</b>	<b>Name of the Projects</b>	<b>Sl. No</b>	<b>Name of the Projects</b>
1	Thermal expansion	25	Exothermic reaction
2	Osmosis	26	Preparation of cl gas
3	Oxidation reduction reaction	27	Gravity
4	Newton's pendulum	28	Nail chair
5	Day and Night	29	Electromagnetic induction
6	Logic gate	30	AC Dynamo
7	Mutual induction	31	Electric bell
8	Fire alarm	32	Transformer
9	Gear train	33	Magic square
10	Surface tension	34	Soap making
11	Foam fire extinguisher	35	Magic lamp
12	Solubility	36	Colour memory
13	Reflex action	37	Isomerism
14	Water analysis	38	Chromotography
15	How do we hear	39	Solar system
16	Star chart	40	Satellite communication
17	Acid base indicators	41	Estimation of NaOH
18	Celestial sphere	42	Radio telescopes
19	Preparation of sanitiser	43	Tyndal effect
20	Rectifier	44	Sun dial
21	Magnetic lines of force	45	Eddy current
22	Holography	46	Persistence of vision
23	Rain water harvesting	47	Vermi composting
24	Temperature of stars	48	

**DSC, GULBARGA CHEMISTRY:**

Sl. No.	Name of the Project	Sl. No.	Name of the Project
1	Identification of Acids & Bases by Litmus	16	Combustion of Phosphorous
2	Identification of Acids & Bases by PH paper	17	Sublimation
3	Identification of Acids & Bases by Methyl red	18	Hydrogen preparation
4	Identification of Acids & Bases by Phenolphthalein	19	Preparation & study of carbon dioxide
5	Naturalization Reaction	20	Changing colours by shaking
6	Formation of Ammonium Chloride	21	Cut without blood
7	Chemical combination	22	Chemical Volcano
8	Chemical decomposition	23	Sun rise & sun set experiment
9	Chemical displacement	24	Acid-base titration
10	Double displacement	25	Electrolytic decomposition
11	Exothermic Reaction	26	Magic candle experiment
12	Endothermic Reaction	27	Traffic light experiment
13	Burning a paper without ash	28	Oxidation reaction
14	Action of HCl on metals	29	Reduction reaction
15	Action of HNO <sub>3</sub> on metals	30	Electric writing

**PHYSICS :**

Sl. No	Name of the Project	Sl. No	Name of the Project
1	Simple Electric Bell	9	Sympathetic swing
2	Simple Motor	10	Laws of Reflection
3	Ampere & Oersted Experiment	11	Thermal Expansion
4	Coulombs law	12	Simple Camera
5	Electrolysis	13	Magic box
6	Electromagnet	14	Wave motion
7	Bird in a cage	15	Coulombs' law of static electricity
8	Fleming's right hand rule	16	Image formation between two plane mirrors kept at different angles

**ELECTRONICS:**

Sl. No	Name of the Project	Sl. No.	Name of the Project
1	Resistors in Series on bread board	7	Transistor as amplifier on bread board
2	Resistors in Parallel on bread board	8	Transistor as oscillator on bread board
3	Capacitors in Series on bread board	9	LED blinker on bread board
4	Capacitors in Parallel on bread board	10	Musical doorbell Using UM66
5	Diode as forward bias on bread board	11	Mini Tesla coil
6	Diode as reverse bias on bread board	12	Transistor as amplifier on bread board

**LIST OF PROJECTS COMPLETED IN MUSEUM CAC:****CHEMISTRY:**

Sl No	Name of Project
1	Electrolytic decomposition
2	Magic candle experiment
3	Traffic light experiment
4	Oxidation reaction
5	Reduction reaction
6	Electric writing
7	Chemical decomposition

8	Chemical displacement
9	Double displacement
10	Exothermic Reaction
11	Electrolytic decomposition
12	Magic candle experiment
13	Traffic light experiment
14	Oxidation reaction
15	Reduction reaction

**Physics:**

Sl. No.	Name of the Project	Sl. No.	Name of the Project
1	Simple Electric Bell	3	Electromagnet
2	Electromagnet	4	Bird in a cage

**DSC, TIRUNELVELI****ASTRONOMY:**

Sl.No	Name of the Projects	Sl.No	Name of the Projects
1.	Star Chart	2.	Sun Dial
3.	Ball Mirror	5	Theodolite
4.	Satellite Model		

**ELECTRONICS:**

Sl. No	Name of the Projects	Sl. No	Name of the Projects
1.	Music Organ	2.	LDR Street Light
3.	IR-based Circuit	4.	Sound-based Circuit

**SCIENCE TOY MAKING:**

Sl. No	Name of the Projects	Sl. No	Name of the Projects
1.	Floating Magnet	2.	Origami
3.	Paper Bag	4.	Optical Illusion
5.	Coconut Shell Art	6.	Cube Flexagon
7.	Colour Shadow	8.	Mathematical Shapes with Toothpicks



**COMMEMORATIVE PROGRAMMES:**

The following commemorative events were organised by arranging Open house Quiz, Sit and draw competitions, Model Presentation contest, Treasure Hunt contest, Elocution contest, Seminar, Science Shows, Video/Film shows, Model presentation competition etc.

**VITM, BANGALORE**

SI No	Name of the Programmes	Date
1	NCSM Foundation Day	10-04-2019
2	Centenary of the Jallianwala Bagh Massacre	3-04 to 12-05 2019
3	National Technology Day	11-05-2019
4	International Museum Day	18-05-2019
5	World Environment Day	05-06-2019
6	International Yoga Day	21-06-2019
7	54 <sup>th</sup> Anniversary of the Museum	23 to 27-07-2019
8	158 <sup>th</sup> Birth Anniversary of Sir M Visvesvaraya	15-10-2019
9	International Science Centre & Science Museum Day	10-11-2019
10	National Mathematics Day (Birth Anniversary of Srinivasa Ramanujan)	21 to 29-12-2019
11	Constitution Day	13-02- 2020
12	National Science Week	22 to 28 -02-2020
13	International Women's Day	09-03-2020

**RSC, TIRUPATI**

SI No	Name of the Programmes	Date
1	NCSM Foundation Day	10-04-2019
2	Earth Day	22-04-2019
3	National Technology Day	11-05-2019
4	International Museum Day	18-05-2019
5	World Environment Day	01to 05-06-2019
6	International Yoga Day	21-06-2019
7	Moon Landing Week	16 to 22-07-2019
8	Independence Day	15-08-2019
9	World Ozone Day	16-08-2019
10	150 <sup>th</sup> Birth Anniversary of Mahatma Gandhi	02 to 16-10-2019
11	World First Aid Day	14-09-2019

12	Birth Anniversary of APJ Abdul Kalam	15-10-2019
13	Rashtriya Ekta Diwas	31-10-2019
14	International Science Centre & Science Museum Day	10-11-2019
15	National Mathematics Day	22-12-2019
16	Republic Day	26-01-2020
17	Constitution Day	26-01-2020
18	National Science Week	22 to 28-02-2020
19	International Women's Day	09-03-2020

### RSC P Calicut

SI No	Name of the Programmes	Date
1	International Museum Day	18-05-2019
2	World Environment Day	05-06-2019
3	Moon landing week	21-07-2019
4	Hiroshima Day	06-08-2019
5	Wild life week	03-10-2019
6	World Space Week	04 -10-2019
7	National Thalassemia Day	17-11-2019
8	National mathematics Day	22-12-2019
9	Anniversary Day	30-01-2020
10	National Science Day	28-02-2020
11	International Women's Day	08-03-2020

### DSC, GULBARGA

SI. No.	Name of the Programme	Date
1	Swachhta action	16 to 30-04-2019
2	Centenary Jallianwala Bagh Massacre	21-04 to 12-05- 2019
3	National Technology Day	11-05-2019
4	International Museum Day	18-05-2019
5	World Environment Day	05-06-2019
6	International Yoga Day	21-06-2019
7	World Population day	11-07-2019
8	Moon landing day	22-07-2019
9	Hiroshima Day	05-08-2019
10	Engineers' Day	15-09-2019
11	Swachhta Pakhwada	16 to 30-09-2019

12	Hindi Pakhwada	16 to 30-09-2019
13	150 <sup>th</sup> Birth anniversary of Mahatma Gandhi Swachhta hi Seva	1 to 11-10-2019
14	Vigilance Awareness Week	28-10 to 2-11-2019
15	Rashtriya Ekta Diwas	31-10-2019
16	Birth anniversary of Sir C V Raman & Madam Curie	07-11-2019
17	International Science Centre & Science Museum day	10-11-2019
18	Birth anniversary of J C Bose	30-11-2019
19	Ramanujan's Birth anniversary	22-12-2019
20	36 <sup>th</sup> Anniversary of DSC Kalaburagi	06-01-2020
21	National Science Day	28-02-2020

### DSC, TIRUNELVELI

SI No	Name of the Programmes	Date
1.	NCSM Foundation Day	04-04-2019
2.	World Earth Day	22-04-2019
3.	Swachhta Pakhwada	16 to 30-04-2019
4.	Jallianwala Bagh Massacre Centenary	06 to 17-05-2019
5.	National Technology Day	11-05-2019
6.	International Museum Day	18-05-2019
7.	World Environment Day	05-06-2019
8.	World Blood Donor's Day	14-06-2019
9.	International Day of Yoga	21-06-2019
10.	World Population Day	03-07-2019
11.	World Snake Day	16-07-2019
12.	Birth Anniversary of Gregor J Mendal	22-07-2019
13.	World Photography Day	16-08-2019
14.	Teachers Day	07-09-2019
15.	Gandhi 150	02-10-2019
16.	World Space Week	05-10-2019
17.	Vigilance Awareness Week	28-10 to 02-11-2019
18.	National Unity Day	31-10-2019
19.	International Science Centre & Science Museum Day	10-11-2019
20.	Nobel Prize Winners	20-12-019
21.	3 <sup>rd</sup> National Siddha Day	12 to 16-01-2020
22.	DSCT Anniversary Week	23 to 27-02-2020
23.	National Science Day	28-02-2020
24.	International Women's Day	08-03-2020

# Commemorative Programmes

Drawing Contest  
at VITM during  
150th Birth  
Anniversary of  
Mahatma Gandhi



Science Show at VITM



International Womens Day  
at VITM



Live demonstration  
of defence  
techniques  
for women during  
International  
Womens Day  
at VITM

Yoga Sandesha  
exhibition  
at VITM



International Day of Yoga at VITM



Science Quiz during 54th Anniversary  
of VITM



Enact a Scientist contest  
at VITM



# Commemorative Programmes

National Science Week  
Science Model Making  
Contest at RSC T



Moon Landing Week  
Water Rocket launching  
Contest at RSC T



International Bio Diversity Day  
Vermicompost Demonstration at RSC & P C



36th Anniversary  
Science Toy making at DSC G



International  
Science Centre  
& Science Museum day  
at DSC G



World Environment Day  
Drawing Contest at DSC T



World Earth Day  
Leaf Zoo Contest at DSC T



World Environment Day  
Cycle Rally at DSC T



**COLLABORATIVE PROGRAMMES**

The following events were held by organising Open house Quiz, Sit and draw competitions, Treasure Hunt contest, Elocution contest, Seminar, Science Shows, Video/Film shows, Science fairs, interactive sessions with scientists, Drama competitions and temporary exhibitions etc.

**VITM, BANGALORE**

<b>SI No</b>	<b>Name of the Programmes</b>	<b>Collaborator</b>
1	App Development Course on Android	IEEE, Bangalore Chapter
2	International Day of Yoga YOGA SANDESHA – an exhibition on Yoga, Mind & Body'	Developed in collaboration with Integrated Centre for Yoga, NIMHANS Bangalore)
3	'Vigyan Samagam – Pushing The Frontiers of Science'	Dept. of Atomic Energy, Govt. of India and Dept. of Science & Technology, Govt. of India.
4	Teachers' Training Programme	Australian Consulate, Chennai
5	Pondicherry State level Science Seminar	Directorate of School Education, Puducherry
6	Andhra Pradesh State level Science Seminar	SCERT, Amaravathi, Govt. of Andhra Pradesh.
7	Telangana State level Science Seminar	SCERT, Govt. of Telangana
8	Kerala State level Science Seminar	Directorate of General Education Govt. of Kerala
9	Lakshadweep UT level Science Seminar	Directorate of Education Lakshadweep Administration
10	Tamil Nadu State level Science Seminar	Directorate of School Education Govt. of Tamil Nadu.
11	Karnataka State level Science Seminar	Urdu & Minority Language Schools, Office of the Commissioner of Public Instruction, Govt. of Karnataka
14	Southern India Science Drama Festival (SISDF-2019)	Education Departments of Southern Indian States
15	Science Film Festival	Goethe Institute (Max Mueller Bhavan)
16	33 <sup>rd</sup> Southern India Science Fair	Education Departments of Southern India States
17	International Women's Day	IEEE Women in Engineering Bangalore Section

**RSC, TIRUPATI**

<b>SI No</b>	<b>Name of the Programmes</b>	<b>Collaborator</b>
1	Polio Vaccination programmes	SVIMS Hospital, and SVRRR Hospital Tirupati
2	World Earth Day	A.P. Pollution Control Board, Tirupati
3	World Environment Day	A.P. Pollution Control Board, Tirupati
4	Moon Landing Week	National Atmospheric Research Laboratory, Gadanki
5	District Level Science Seminars	District Educational Officer, Chittoor, Andhra Pradesh.
6	District Level Science Drama	District Educational Officer, Chittoor, Andhra Pradesh.
7	State Level Science Drama	AP SCERT, Andhra Pradesh
8	Hydroponics Workshop	SV University, Dept. of Botany
9	World Ozone Day	A.P. Pollution Control Board, Regional Office, Tirupati
10	Tirupati Bird Festival	Indian Institute of Science Education and Research, Tirupati
11	Kalautsav	Dept. of School Education and Samagra Siksha, Govt. of Andhra Pradesh
12	World First Aid Day	St. John Ambulance Association & Indian Red Cross Society, Chittoor
13	Science Film Festival	Goethe – Institute / Max Mueller Bhavan
14	Nature Study Camp	Indian Institute of Science Education and Research, Tirupati
15	Robotics Workshop and Contest	AP Council of Science & Technology
16	Free Dental Camp	Haripriya Dental Hospital, Tirupati

**RSC P Calicut**

<b>SI No</b>	<b>Name of the Programmes</b>	<b>Collaborator</b>
1	Defence Quiz	Ex-Airmen Group for Social Excellence (EAGLE)
2	Nature workshop	Malabar Natural History Society
3	Symposium on 'first imaging of Black hole'	Indian Association of Physics Teachers (IAPT) Kerala
4	International Biodiversity day	Zoological Survey of India
5	World Sickle Cell Day	Blood Patient Protection Council Kerala
6	A Day with Snake workshop	Zoological Survey of India
7	Swachhtha Hi Sewa Campaign	Directorate of Arecanut & Spices Development,
8	Science Film festival	GEOTHE INSTITUT Delhi
9	Celebration of International year of Periodic table	Chemistry teachers forum



10	Conference on Sun and Eclipse	VigyanPrasar New Delhi
11	Workshop on Annular Eclipse	Breakthrough Science Society
12	Earth Day	Oisca International Kozhikode
13	Children's Day	Childline
14	National Technology Day	IEEE Calicut Chapter

### DSC, GULBARGA

SI. No.	Name of the Programme	Collaborator
1	World Environment Day	Karnataka Pollution State Control Board, Regional Office, Kalaburagi
2	Community training Programme	Shri Shakti Mahila Abhuvruddhi Samsthe
3	India march for Science	Break though Science society
4	District level Science Seminar	DIET Kamalapur
5	District level Science Drama	DIET Kamalapur
6	District level Rural IT Quiz	Office of the DDPI, Kalaburagi
7	District level Science Fair	DIET Kamalapur
8	Workshop on AI	Karnataka State Science & Technology , Regional Centre, Kalaburagi
9	A workshop on Information and communication technology – Gate way to Artificial intelligence	Silicon technologies, Kalaburagi
10	Science Film festival	Goethe Institute, Germany / Max Muller Bhavan New Delhi

### DSC, TIRUNELVELI

SI No	Name of the Programme	Collaborator
1	World Earth Day	Dept. of forest, Govt. Of Tamil Nadu & ATREE trust
2	Reframing Your Daily Habits	Max Jones Charitable Trust, Tirunelveli
3	Art & 3D Painting Exhibition	Nellai Drawing Teachers' Association
4	World Environment Day	ATREE Trust & National Green Corps, Tirunelveli
5	Bi-Cycle Rally	Dept. of Forest, Govt. of Tamil Nadu & ATREE Trust
6	World Blood Donors Day	Nellai Maavatta Maanagara Rajini Makkal Mandram
7	Swachh Bharath Awareness Programme	National Green Corps, Tirunelveli
8	World Population Day	Dept. of Family Welfare & Dept. of School Education, Tirunelveli
9	World Snake Day	ATREE Trust & Madras Crocodile

		Bank Trust, Chennai
10	Wetland Rovers of Thamirabarani	ATREE Trust
11	World Photography Day	VGPG Creations & Nellore Video and Photographers Association
12	Computer Training Programme	Microlux Pvt. Ltd., Chennai
13	Soft Skill and Motivation Training Programme	Microlux Pvt. Ltd., Chennai
14	100 Birth Anniversary of Dr Vikram Sarabhai	IPRC, ISRO, Mahendragiri
15	National Children Science Congress	Tamil Nadu Science Forum, Tirunelveli
16	Teachers Day	Tamil Nadu Science Forum, Tirunelveli
17	District Science Seminar	Dept. of School Education, Tirunelveli
18	Art Exhibition – Gandhi 150	Sivaram Kalaikoodam, Tirunelveli
19	World Space Week	IPRC, ISRO, Mahendragiri
20	4 <sup>th</sup> Eco Conservator Award	ATREE Trust & Bell Pins Pvt. Ltd.,
21	District Science Drama	Dept. of School Education, Tirunelveli
22	Nilgiri Tahr - Workshop	WWF Southern Region & Arumbugal Trust, Tirunelveli
23	World Diabetes Day	Aravind Eye Hospital, Tirunelveli
24	Wild Life Family Quiz	ATREE Trust
25	Science Film Festival	Goethe Institute
26	Thulir Science Quiz	Tamil Nadu Science Forum, Tirunelveli
27	Specific Concept Oriented programme (SCOPE)	Sarva Shiksha Abhiyan (SSA), Tirunelveli
28	Salam to Kalam – Science Fair	Ion Tach Academy, Tirunelveli
29	Heritage Monuments in Nellore – Seminar	History & Cultural Field Research, Tirunelveli
30	3 <sup>rd</sup> Siddha Day	Office of the District Siddha Medical Officer, Tirunelveli
31	Thaedal – Seminar	WIZIFI Robotics, Tirunelveli
32	Thamirabarani Wetland Birds – Exhibition	Dept. of Forest, Govt. of Tamil Nadu & ATREE Trust
33	Kavalan App – Short Movie Release	Nallathai Pakirvathu Nam Kadamai Team, Tirunelveli
34	Youth Convention Programme	Nehru Yuva Kendra, Tirunelveli
35	Swachh Bharath Programme	Sankar Polytechnic, Tirunelveli



Southern India Science Fair organized by VITM



Inauguration of Science Film Festival at VITM



NCSM Pavilion during  
107th Indian Science Congress  
at GVKK campus Bengaluru



Science Film Festival activity at RSC T



'A day with snake' programme at RSC & P C



District level Science Drama Contest at DSC G



Science Film Festival workshop at DSC T

## EXECUTIVE COMMITTEE (EC)

### VITM, BANGALORE

1. Prof. Sitharam T.G  
Chairman  
Department of Civil Engineering  
Indian Institute of Science  
C.V Raman Road,  
Bangalore – 560 012  
Chairman
2. Dr. M. K. Panduranga Setty  
Founding Member  
Visvesvaraya Industrial Museum Society  
No. 14, Bull Temple Road  
Bangalore – 560 004  
Member
3. Executive Secretary,  
Karnataka State Council for Science & Technology  
Indian Institute of Science  
C.V Raman Road,  
Bangalore – 560 012  
Member
4. Shri Pramod G Galgali  
Director  
Jawaharlal Nehru Planetarium  
Sri T Chowdiah Road, High Grounds  
Bangalore – 560 001  
Member
5. Prof. Siva Umapathy  
Director  
Indian Institute of Science Education and Research  
Bhopal By-pass Road, Bhauri,  
Bhopal - 462066  
Member
6. Dr. Chandan Ghosh  
Professor  
Head of the Geo – Hazard Risk Management Division  
National Institute of Disaster Management (NIDM)  
Ministry of Home Affairs,  
Govt of India, New Delhi  
Member
7. Dr. Nagambika Devi  
The Principal Secretary  
Higher Education  
Govt. of Karnataka  
Room No. 645, 6<sup>th</sup> Floor, MS Building,  
Bangalore – 560 001  
Member
8. Director (Museums),, MoC  
Member Ministry of Culture, Govt. of India  
Shastri Bhavan, New Delhi – 110 115  
Member

- |     |   |                         |
|-----|---|-------------------------|
| 9.  | Shri A.D. Choudhury<br>Director General,<br>National Council of Science Museums,<br>Sector –V, Bidhan Nagar,<br>Kolkata – 700 091                 | Member                  |
| 10. | Shri K Madan Gopal<br>Director,<br>Visvesvaraya Industrial & Technological Museum<br>Kasturba Road,<br>Bangalore – 560 001                        | Member                  |
| 11. | Smt. K.A. Sadhana<br>Curator 'F',<br>Visvesvaraya Industrial & Technological Museum<br>Kasturba Road,<br>Bangalore – 560 001                      | Member                  |
| 12. | Shri K Sajoo Bhaskaran<br>Curator 'E',<br>Visvesvaraya Industrial & Technological Museum<br>Kasturba Road,<br>Bangalore – 560 001                 | Member                  |
| 13. | Shri M.M.E. Namboodiri<br>Controller of Administration<br>Visvesvaraya Industrial & Technological Museum<br>Kasturba Road,<br>Bangalore – 560 001 | Non Member<br>Secretary |

**PLANNING AND PROGRAMME COMMITTEE (PPC) MEMBERS  
VITM, BANGALORE**

- |    |  |          |
|----|--|----------|
| 1. | Shri Pramod G Galgali<br>Director<br>Jawaharlal Nehru Planetarium<br>Sri.T Chowdiah Road, High Grounds<br>Bangalore- 560001  | Chairman |
| 2. | Prof. Sumantra Chattarji<br>Department of Neurobiology<br>National Centre for Biological Sciences<br>Tata Institute of Fundamental Research<br>Bellary Road, GKVK Campus<br>Bangalore-560065         | Member   |
| 3. | Prof. Amaresh Chakrabarti<br>Chairman<br>Centre for Product Design & Manufacturing,<br>Indian Institute of Science,<br>Bangalore- 560012   | Member   |
| 4. | Prof.Shobhana Narasimhan<br>Professor of Theoretical Sciences and<br>Dean of Academic Affairs<br>Jawaharlal Nehru Centre for Advanced Scientific Research<br>(JNCASR)<br>Jakkur, Bangalore - 560 064 | Member   |
| 5. | Shri Mahesh V<br>Director (R& D)<br>Bharat Electronics Limited<br>Outer Ring Road, Nagavara,<br>Bangalore - 560 045  | Member   |
| 6. | Shri Rajendrasingh P Byali<br>Associate Director,<br>Office of Media & Public Relations,<br>ISRO Headquarters,<br>Antariksh Bhavan, New BEL Road<br>Bangalore – 560094                               | Member   |
| 7. | Dr S Soundararajaperumal<br>Executive Director<br>Tamilnadu Science and Technology Centre<br>Gandhi Mandapam Road, Chennai—600025  | Member   |

- |     |  |                     |
|-----|--|---------------------|
| 8.  | Mrs.Veena Sahani<br>Principal<br>Army Public School<br>Kamraj Road<br>Bangalore – 560042   | Member              |
| 9.  | Director General or his Nominee<br>National Council of Science Museums<br>Sector V, Block – GN,<br>Bidhan Nagar<br>Kolkata- 700091 | Member              |
| 10. | Shri K. Madan Gopal<br>Director<br>Visvesvaraya Industrial & Technological Museum<br>Kasturba Road, Bangalore – 560 001            | Member              |
| 11. | Shri K. Sajoo Bhaskaran<br>Curator 'F'<br>Visvesvaraya Industrial & Technological Museum<br>Kasturba Road,<br>Bangalore – 560 001  | Member              |
| 12. | Smt. K. A. Sadhana<br>Curator 'G'<br>Visvesvaraya Industrial & Technological Museum<br>Kasturba Road,<br>Bangalore – 560 001       | Member<br>Secretary |



**LOCAL ADVISORY COMMITTEE  
REGIONAL SCIENCE CENTRE, TIRUPATI**

1	The Vice Chancellor, S.V. University Tirupati – 517 502	---	Chairman
2	Prof. P.V. Ranganayakalu Chief Museum Officer (FAC) SV Museum, TTD, Tirumala, Tirupati	---	Member
3	The Director National Atmospheric Research Laboratory Department of Space Government of India Gadanki – 517 112	---	Member
4	The Member Secretary, APCOST 12 <sup>th</sup> Floor, Gagan Vihar M J Road, Hyderabad – 500 001	---	Member
5	Prof K.N. Ganesh Director & Professor Indian Institute of Science Education and Research (IISER), Tirupati- 517 507	---	Member
6	Dr. Rama Lakshmi Gynecologist & Secretary Indian Red Cross Society #20-119, Red Cross Building PH Road, Chittoor – 517 001	---	Member
7	Shri Lakshmi pathi Secretary, Lions Club D. No. 20-50-S1-100, Plot No. 103, Anandanilayam Appartment Chintalachenu Opp Hero Showroom Renigunta Road, Tirupati – 517 501	---	Member
8	Dr. Viswanatha Reddy Correspondent Viswam Schools Varadaraja Nagar Tirupati – 517 501	---	Member

9	The District Educational Officer Office of the DEO Palamaner Road Chittoor – 517 001	---	Member
10	The Municipal Commissioner, Tirupati Municipal Corporation, Tilak Road, Tirupati – 517 501	---	Member
11	Shri K. Madan Gopal Director, Visvesvaraya Industrial & Technological Museum Kasturba Road, Bangalore – 560 001	---	Member
12	Shri R. Manigandan, Project Coordinator Regional Science Centre, Near Alipiri Gate Tirupati – 517 501	---	Member Secretary

\*\*\*\*

**LOCAL ADVISORY COMMITTEE**  
**REGIONAL SCIENCE CENTRE & PLANETARIUM, CALICUT,**

1	Dr. M. P. Pillai Director, National Institute of Electronics and Information Technology (A Centre of NIELIT, New Delhi) P.B.No:5, NIT Campus Post, Calicut – 673 601	---	Chairman
2	Dr. V.R. Rajendran Principal Govt. Medical College Medical College P.O Calicut -673 008	---	Member
3	Dr. Keyoorpurani Professor Marketing Indian Institute of Management Kozhikode, Kunnamangalam IIMK Campus Post Kozhikode – 673 570	---	Chairman
4	Shri. Arul Gerald Prakash Director Kerala State Science & Technology Museum Vikas Bhavan P.O Trivandrum – 695 033	---	Member
5	Dr. P.S. Harikumar Registrar & Senior Principal Scientist Centre for Water Resource Development & Management Kunnamangalam Kozhikode – 673 571	---	Member
6	Dr. P.K. Rajendrakumar HOD Mechanical National Institute of Technology Calicut NIT Campus P.O, Calicut	---	Member
7	Dr. Homi Cheriyan Director Directorate of Arecanut & Spices Development, Govt. of India.	---	Member

	Ministry of Agriculture, Dept. of Agriculture and Co-operation West Hill, Calicut – 673 005		
8	Shri.A.Shyam Sunder President Malabar Chamber of Commerce, Chamber House, Cherooty Road, Kozhikode – 673 032	---	Member
9	Smt. Mini P Deputy Director of Education O/of the Directorate of Education Mananchira, Calicut – 673 001	---	Member
10	Shri.P.K.Ahamed Chairman & Managing Director P.K.Group of Companies Nallalam, Calicut	---	Member
11	Shri. K Madan Gopal Director Visvesvaraya Industrial and Technological Museum Kasturba Road, Bengaluru - 560001	---	Member
12	Shri. Manash Bagchi Curator & Project Co-ordinator RSC, Calicut	---	Member Secretary

**LOCAL ADVISORY COMMITTEE**  
**DISTRICT SCIENCE CENTRE, GULBARGA**

1.	The Deputy Commissioner Mini Vidhana Soudha Station Road, Kalaburagi	---	Chairman
2.	Professor H.M. Maheswaraiah Vice Chancellor Central University of Karnataka Kadaganchi, Aland Road, Kalaburagi – 585 367	---	Member
3.	Regional officer KSCST Regional Centre VTU campus, Kalaburagi	---	Member
4.	Shri Shivasharanappa Mulegaon Dy. Director of Pre-University Office of the Dy. Director Pre University Board Behind Mini Vidhana Soudha, Kalaburagi	---	Member
5.	Dr. Malhar Rao Malle Secretary, St. John's Ambulance Malle Clinic, Darga Road, Kalaburagi	---	Member
6.	Dr. Chandrakant Kelamani Chairman, Department of Biotechnology Kalaburagi University, Kalaburagi	---	Member
7.	Shri Siddeshwarappa District Information Officer Department of Information & Publicity Mini Vidhana Soudha Station Road, Kalaburagi	---	Member
8.	Dr. Shashikant R Mise Professor & Head Department of Environmental Engineering PDA Engineering College, Kalaburagi	---	Member
9.	Dr. Swarup Ranjan Principal Chandrakanth Patil English Medium School Sedam Road, Kalaburagi	---	Member
10.	Shri Subhash Kamalpure Managing Partner Suvanra Financier Groups Suvarna Tower, Humnabad Road Kalaburagi	---	Member
11.	Shri K. Madan Gopal	---	Member

Director,  
Visvesvaraya Industrial & Technological Museum  
Kasturba Road, Bangalore

12. Shri C.N. Laxminarayana --- Member  
District Science Officer Secretary  
District Science Centre  
Municipal Garden, Kalaburagi

\*\*\*\*

**LOCAL ADVISORY COMMITTEE  
DISTRICT SCIENCE CENTRE, TIRUNELVELI**

- |    |  |     |             |
|----|--|-----|-------------|
| 1. | The District Collector & District Magistrate<br>O/o The District Collector<br>Kokkirakulam<br>Tirunelveli – 627 009  | --- | Chairperson |
| 2. | Dr. P Suresh Kumar<br>Dean<br>Anna University Tirunelveli Regional Campus<br>Kanniyakumari Road<br>Reddiyarpatti<br>Tirunelveli – 627 007                                | --- | Member      |
| 3. | Dr K Alaguvelu<br>Director<br>ISRO Propulsion Complex<br>Mahendragiri<br>Tirunelveli Dist – 627 133  | --- | Member      |
| 4. | Dr. Anil Kumar<br>Director<br>Equatorial Geophysical Research Laboratory<br>#6/249, SH 40, Vittalapuram Vilakku<br>Tirunelveli – 627 007                                 | --- | Member      |
| 5. | Shri Sankarssubramanian<br>Sankar Polytechnic College<br>Sankarnagar<br>Tirunelveli – 627 357  | --- | Member      |
| 6. | Dr. M Malarvizhi<br>Principal<br>Sri Sarada College for Women<br>Saradanagar, Ariakulam<br>Maharajanagar – 627 011   | --- | Member      |
| 7. | Shri R Boopathi<br>Chief Educational Officer<br>O/o the Chief Educational Officer<br>Adj. Collector Office Campus<br>Kokkirakulam<br>Tirunelveli – 627 009               | --- | Member      |
| 8. | Smt Usha Raman<br>Principal<br>Sri Jayendra Saraswathi Swamigal Golden Jubilee<br>Matric Higher Secondary School<br>Thenkalam Road, Sankarnagar<br>Tirunelveli – 627 357 | --- | Member      |



- |     |  |     |                     |
|-----|--|-----|---------------------|
| 9.  | Shri K Kannan<br>Commissioner<br>Tirunelveli City Municipal Corporation<br>Near Schaffter Higher Secondary School<br>Tirunelveli – 627 004 | --- | Member              |
| 10. | Shri S Shanmugam<br>Jt. President<br>The India Cements Limited<br>Sankarnagar<br>Tirunelveli – 627 357                                     | --- | Member              |
| 11. | Shri K. Madan Gopal<br>Director,<br>Visvesvaraya Industrial & Technological Museum<br>Kasturba Road,<br>Bangalore – 560 001                | --- | Member              |
| 12. | Shri S. Muthukumar<br>District Science Officer<br>District Science Centre,<br>Kokkirakulam,<br>Tirunelveli - 627009                        | --- | Member<br>Secretary |

\*\*\*\*



**Visvesvaraya Industrial & Technological Museum**  
(National Council of Science Museums)  
Ministry of Culture, Government of India  
Kasturba Road, Bangalore - 560 001

RSC, Tirupati  
RSC & P, Calicut  
DSC, Kalaburagi  
DSC, Tirunelveli

