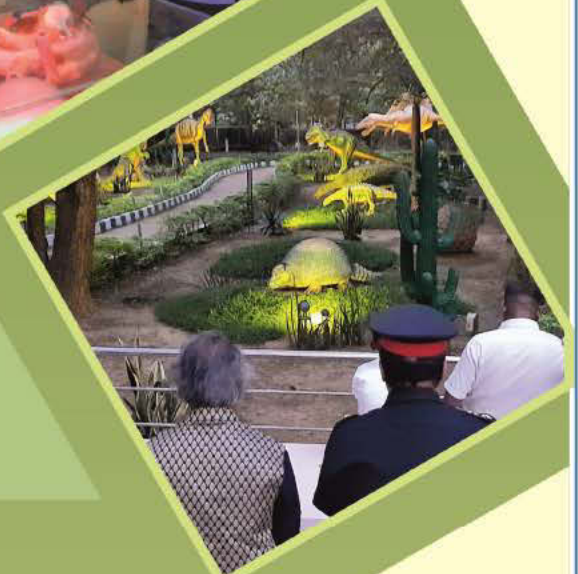
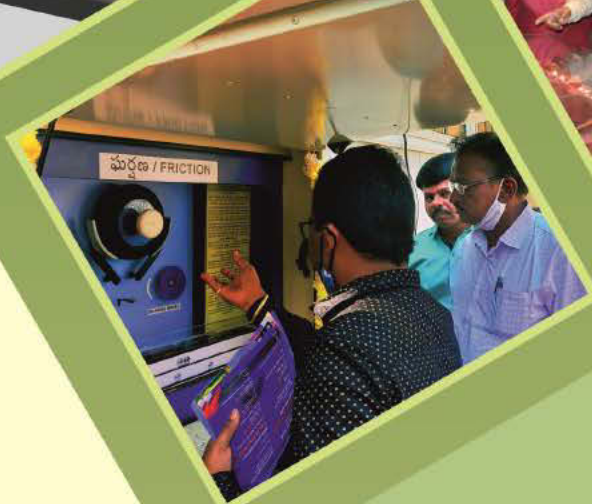


ACTIVITY REPORT

2020-2021



Ministry of Culture
Government of India



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, e-mail: vitmuseum@gmail.com

ACTIVITY REPORT

2020-2021



Ministry of Culture
Government of India



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

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Kolkata - 700 091

ACTIVITY REPORT OF VITM AND SATELLITE UNITS 2020-21

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VISVESVARAYA INDUSTRIAL AND TECHNOLOGICAL MUSEUM, BANGALORE

Biotechnology Gallery at the museum was inaugurated on 15th February 2021 by Prof. G Padmanaban, Former Director, Indian Institute of Science of Science, Bengaluru in the presence of Prof. T G Sitharam, Director, IIT Guwahati & Chairman, Executive Committee, VITM.

The Exhibition “Superbugs- The End of Antibiotics” was inaugurated on 23rd November 2020 at the museum virtually through videoconferencing mode by Dr. VivekJawali, Chairman-Cardiovascular Sciences & Medical Advisory Council, Member-Medical Council of India (Academic Council), Bangalore in the presence of Prof. T G Sitharam, Director, IIT Guwahati & Chairman, Executive Committee, VITM, Ms. Helen Jones, Director, Global Engagement & Strategy, Science Museum Group London and several dignitaries . The exhibition was on display up to 3rd January 2021. During the period as part of the exhibition several Webinars, Online multimedia Visual quiz, Street play on ‘Antibiotics Resistance & Superbugs, Open house quiz, Treasure hunt contests, Drawing contests, Comic contests and hands on activity on ‘Superbugs’ were organised.

A Panel Exhibition on ‘Nobel Prizes – 2020’ developed in house at VITM was opened at the museum on 10th December 2020. **The exhibition on ‘The Father of the Nation’ a Digital Tribute** was inaugurated at the Museum on 8th January 2021 by Shri K. G. Raghavan, Chairman, Bharatiya VidyaBhavan, Bangalore.

Due to Covid – 19 pandemic, the Galleries of Museum and its Satellite Units were closed from 15th March 2020 and was reopened for public on 10th November 2020 by following Standard operating procedures as per Govt. of India and Government of Karnataka Directives. Arrangements were made for contactless hand washing station with liquid soap at the entry of the museum, temperature scanning near the entry, online ticket booking-digital payment for entry tickets purchase, contactless hand sanitising, social distancing, contactless sensor based operation of exhibits and Online awareness programmes about Covid -19 were part of the SoP.

However the museum continued to reach its visitors by organising several programmes online. Programmes like Webinars and interactions, seminars for students and teachers, Quiz Contest, Elocution contest and many more. **Online Creative ability courses ‘Perform and Experience experiments in Chemistry’** and **‘Hand on experience in basic Electronics’** were organised in the month of July and October 2020 respectively. Kits containing Apparatus, Chemicals, components and tools were provided to the participants as part of the programme. In addition, IEEE VITM App development on Android and Python course were also conducted through online mode.

Museum celebrated several commemorative events like National Technology Day, International Museum Day, World Environment Day, International Science Centre & Museum Day, National Mathematics Day, National Science Day, International day of Women and Girls in Science and International Women’s Day by organising webinars and contests for students and general public.

REGIONAL SCIENCE CENTRE, TIRUPATI

New Mobile Science Exhibition on ‘How Science Works’ developed by the Centre was inaugurated at Zilla Parishad Girls High School, Chandragiri on 2nd March, 2021. Shri. Narashima

ACTIVITY REPORT OF VITM AND SATELLITE UNITS 2020-21

Reddy, DEO, Chittoor inaugurated the New MSE bus. Folder on New MSE 'How Things Works' was also released by the dignitaries.

The Exhibition on '**a Digital Tribute to the Father of the Nation**' was inaugurated on 18th December 2020 by Shri. Gopalakrishna Murthy Gandrakota, Executive Director, Academy of Gandhian Studies, Tirupati.

An Online CAC on Electronics & Arduino was organised at the centre for the students from 28th September to 9th October 2020. As part of the programme Kit & Components were provided to the registered participants. The Centre organised **Vacation Creative Ability Course** at the centre from 11th to 17th January 2021 for school students in Physics, Chemistry and Bioscience. Various curriculum based science activities were conducted during the CAC.

Series of Webinars on Nobel Prizes 2020 was held by organising talks by several eminent personalities on the topics of the Nobel prize 2020. Many webinars were conducted by the centre and invited eminent personalities across the country and abroad to deliver talk on various topics related to science. The webinars were live streamed in Facebook and YouTube channel of the centre.

Live Streaming of Partial Solar eclipse was organised on 21st June 2020. Special Sky Observation Programme was held during Jupiter and Saturn Great Conjunction on 21st December 2020. The Centre collaborated with All Indian Radio, Tirupati, National Atmospheric Research Laboratory, B. M labs, Indian Institute of Science Education and Research, Tirupati, Indian Science Congress Association, Tirupati Chapter in organizing Phone in Live Quiz, Moon Landing Week and Teacher Training Programme etc.

The Centre organised community programmes like International Women's Day and many online workshops such as Origami, Fun with toys and Coding for beginners and offline workshops in microscope making and Teacher Training Programme for Government Biology Teachers. The Centre continued to organise many programmes in commemoration of Birth anniversary of scientists and discoveries /inventions made.

REGIONAL SCIENCE CENTRE AND PLANETARIUM, CALICUT

The Centre has taken up fabrication of a new MSE exhibits on Mathematics and is in progress.

The centre maintained connection to its visitors during the pandemic period by organizing programmes through virtual channels online. A You Tube channel RSCP Calicut Virtual was created in 2020. A series of lectures, webinars titled FIRST Hand was conducted throughout the year. Eminent personalities, scientists joined in the online activities.

The centre and The Institute of Chartered Accountants of India, Kozhikode Branch is jointly setting up a man-made urban forest at RSC Calicut premises, inspired by the MIYAWAKI model of afforestation. The project is taken up under the Corporate Social Responsibility scheme of ICAI, Kozhikode Branch.

Zero shadow day was observed on 18th April 2020. Various experiments and demonstrations were performed during the period. The event was live webcast through Facebook and other social media.

ACTIVITY REPORT OF VITM AND SATELLITE UNITS 2020-21

Online summer hobby camps were conducted on 'Introduction to electricity, Colourful Chemistry, Electronic Circuit Design, Introduction to Computer programming, Introduction to Astronomy & Astrophysics and Introduction to Arduino & Sensors in the month of May & June and July 2020.

A five days online workshop on Artificial Intelligence & Robotics was held from 17th to 21st August 2020. Talks, Tutorials and Hands-on Demonstrations were the part of the workshop.

Online workshops on 'home automation using Arduino' & 'Robotics using Arduino' were organised by the Centre on 21st & 23rd February 2021 respectively for students.

In connection with the partial solar eclipse on 21st June 2020 the Centre organized various programmes from 17th June to 21st June 2020. On the eve of 'Great Conjunction of Jupiter and Saturn' on 21st December 2020, the centre set up telescopes at Calicut beach for viewing the event from 6.30pm to 8.00 pm. About 3,600 students and general public gathered for viewing the planets through telescope. The event was live webcast through You tube channel. As part of this event a workshop on making Crosstaff was conducted on 18th December 2020 both offline and online.

The Centre celebrated its **24th ANNIVERSARY** on 30th January 2021 by organising various online programmes on 29th & 30th January 2021. Shri. K. Madan Gopal Director VITM inaugurated the programme on 29th January 2021. He delivered an online talk on "Building RSC & Planetarium, Calicut making a Social impact" followed by a talk by Mr. Martin Kraus Head of Business field Planetariums Carl Zeiss jena on 'Influencing factors for a perfect image'. An online panel discussion creating hybrid planetarium shows was held on 30th January 2021. Experts in the field of Planetarium lead the session.

The Centre continued to organise several Commemorative events like Moon landing Week. World Space Week. National Nutrition Month, Children's Day, National Science Day etc. with various online activities and competitions. The centre published two monographs on the Social Inclusion of the Transgender People and Solar Eclipse.

DISTRICT SCIENCE CENTRE, GULBARGA

The Centre organised a webinar on 'Adventures of Particle Physicist' on 20th June 2020. Dr. Archana Sharma, Principle Scientist European Organization for Nuclear Research (CERN), Swizerland delivered talk.

Arrangement was made to view the event 'Saturn & Jupiter Conjunction' through telescope on 20th December 2020 in the evening. On the day Dr. Ravinder Banyal, Research Scientist, Indian Institute of Astrophysics, Bangalore delivered an online talk on 'Rare celestial event - Saturn & Jupiter Conjunction'.

The Centre celebrated its **37th Anniversary** on 6th January 2021 by hosting a webinar on the topic 'India in Space: Achievements & Challenges'. Dr. B R Guruprasad, Rtd. Scientist 'SG' - Associate Director, Office of Media & Public Relations, ISRO Headquarters, Bengaluru delivered the talk.

An Online SDL on 'Understanding science with low cost Science experiments' was conducted at the Centre on 22nd October 2020.

ACTIVITY REPORT OF VITM AND SATELLITE UNITS 2020-21

An **orientation programme on Low cost Science experiments** was conducted at the Centre on 17th February 2021 for the students of M.S.I Degree College Kalaburagi and Govt. First Grade College, Kalaburagi.

The Centre continued its non-formal education extension activities by organizing webinars and online activities for the students throughout the year by celebrating World Environment Day, World Population Day, Engineers Day, 150th Birth Anniversary of M.K. Gandhi, World Food Day, Birth Anniversary of Sir C.V Raman And Marie Curie Centre, Indian Constitution Day, Birth Anniversary of J.C Bose, Birth Anniversary of Srinivasa Ramaujan, Centre's Anniversary, National Science Day , World Forest Day , World Water Day and World Meteorology Day.

DISTRICT SCIENCE CENTRE, TIRUNELVELI

As part of the 34th Anniversary Day Celebrations of the Centre, **inauguration of HPT 32 Aircraft and Light and Sound Show of Pre-Historic Park** was held on 27th February 2021. Shri V Vishnu, I.A.S., District Collector and District Magistrate inaugurated the facility.

The **Digital Exhibition on 'Gandhi'** was inaugurated at the Centre on 22nd December 2020 by Dr. Valan Arasu, President, Ulaga Thirukural Thagaval Maiyam, Tirunelveli. He delivered a talk on 'Gandhian Thoughts' through Webinar which was live streamed through Youtube. 28 Students and general public participated.

A Webinar on 'Gandhian Thoughts – Special View on Relevance in Contemporary World' was organised at the Centre on 1st October 2020. Smt. Sathiyavalli, Curator, Govt. Museum, Tirunelveli delivered the lecture.

The Centre organised a 5 days **Online workshop on 'IoT Basics – Level 1'** in collaboration with Quantanics Tech Pvt. Ltd., Madurai from 12th to 16th October 2020 for School Students.

The Centre organised an International Workshop on 'Make Your Own Face Mask' & 'Make Your Own Face Shield' at the Centre in November and December 2020 in association with Business Incubation Centre, Manonmaniam Sundaranar University, Tirunelveli, Kyoto University, Japan and Ooyoo Face, Japan.

An **online interactive demonstration lecture on 'Air & Pressure'** and on **'Simple Chemistry Experiments'** was conducted by the Centre 5th December 2020 & 9th January 2021 respectively at Ariviya Palagai (a Tamil wing of Vigyan Prasara), Chennai in coordination with Tamil Nadu Science & Technology Centre, Chennai.

The centre organised **'Sunday School Science – a syllabus oriented online interactive Demonstration'** on topic 'Acid, Base & Salts' for School Students on 17th January 2021.

A Public Awareness Programme on 'Wetland Birds of Thamirabharani River' was organised at the Centre from 29th to 31st January 2021 in collaboration with ATREE Trust, Tirunelveli and Nellai Nature Club. Professionals and Volunteers participated in this Annual Bird Census covering the wetlands spread through the Thamirabharani River in Tenkasi, Tirunelveli and Thoothukudi Districts.

ACTIVITY REPORT OF VITM AND SATELLITE UNITS 2020-21

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	Smt. K.A. Sadhana 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	•www.sciencecentrekalaburagi.org.in •www.Gulbarga.nic.in/dsckalaburagi	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	▪ Rs. 75/- per head for general public ▪ Rs.30/- for students in organised groups	▪ Rs.30/- per head for general public ▪ Rs.20/- for students in groups	▪ Rs.30/- per head for general public ▪ Rs.20/- per head for organised school students	▪ Rs.20/- per head for general public ▪ Rs.15/- for Pvt. Institution students in groups Rs.5/- for BPL- Govt. Institution students in groups	▪ Rs. 20/-per head for general public ▪ Rs.15/- for students in organised groups
Inaugurated on	27 th July 1965	23 rd Sept.1993	30 th January 1997	6 th January 1984	27 th February 1987
Total floor area in Sq. Mts.	11,700	4,843	2,600	2,080	2,660
Staff Strength					
Scientific	6	2	1	0	0
Technical	54	11	11	6	7
Non Technical	29	8	8	4	3

ACTIVITY REPORT OF VITM AND SATELLITE UNITS 2020-21

2. (b) EXPENDITURE:

Expenditure (in Rs.)	VITM, Bangalore	RSC, Tirupati	RSC P Calicut	DSC, Gulbarga	DSC, Tirunelveli	Total
Recurring	111217026.00	18115140.00	8181353.00	8717289.00	18560378.00	164791186.00
Revenue Receipt	9159217.00	1287968.00	533474.00	1181560.00	2485297.00	14647516.00
Non Recurring						
General	58485471.50	6405451.00	5037434.00	4887863.00	8830719.00	83646938.50
CCA	7089992.00	680757.00	512703.00	2469246.00	2032663.00	12785361.00
Total Non-Recurring	65575463.50	7086208.00	5550137.00	7357109.00	10863382.00	96432299.50

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	24	16	52	33	8
No of Students in above	1,222	714	2,752	1,472	443
No. of Visitors to Special Programme	500	1,511	1,489	1,374	144
No of General Visitors	70,704	27,643	33,287	23,600	51,244
No. of Free entry (Activity Club members, defense, handicapped etc)	7,313	518	0	582	425
Total Visitors to Museum/Centre	79,739	30,386	37,528	27,028	52,256
Visitors to MSE including film shows	--	1,610	940	--	--
Visitors to Outreach Programmes	5,305	50	4,700	1,980	346
Total No of visitors to Museum / Centre & outreach Programme	85,044	32,046	43,168	29,008	52,602

Due to Covid – 19 pandemic, the museum and its satellite units remain closed for visitors from 15th March 2020 to 9th November 2020.

ACTIVITY REPORT OF VITM AND SATELLITE UNITS 2020-21

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	79
	Biotechnological Revolution	554	04.01.2003	15.02.2021	41
	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
	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 th November 2018	22
	Electronic Gallery	430	17.04.2009	-	49
	Popular Science	150	28.02.1987	-	30
	Mirror Magic	130	22.12.2012	-	26

ACTIVITY REPORT OF VITM AND SATELLITE UNITS 2020-21

4. NEW GALLERIES / MAJOR RENOVATIONS:

VITM, Bangalore:

Biotechnology Gallery at the museum was inaugurated on 15th February 2021 by Prof. G Padmanaban, Former Director, Indian Institute of Science, Bengaluru in the presence of Prof. T G Sitharam, Director, IIT Guwahati & Chairman, Executive Committee, VITM.

RSC, Tirupati :

New Mobile Science Exhibition on the Topic “How Science Works” was inaugurated on 2nd March 2021

DSC, Tirunelveli:

New facility ‘Light & Sound Show of Pre Historic Pak’ was inaugurated on 27th February 2021 during the 34th Anniversary of the Centre by Shri V Vishnu, I.A.S., District Collector and District Magistrate, Tirunelveli.

Inauguration of Biotechnology Gallery at VITM 15th February 2021



Lighting of Lamp by Prof. G Padmanaban, Former Director, Indian Institute of Science of Science, Bengaluru



Lighting of Lamp by Prof. T G Sitharam, Director, IIT Guwahati & Chairman, Executive Committee, VITM

Dignitaries observing the exhibits after the inauguration



ACTIVITY REPORT OF VITM AND SATELLITE UNITS 2020-21

Inauguration of New Mobile Science Exhibition on the Topic “How Science Works” on 2nd March 2021 at Zilla Parishad Girls High School, Chandragiri by Regional Science Centre, Tirupati.



Inauguration of New MSE

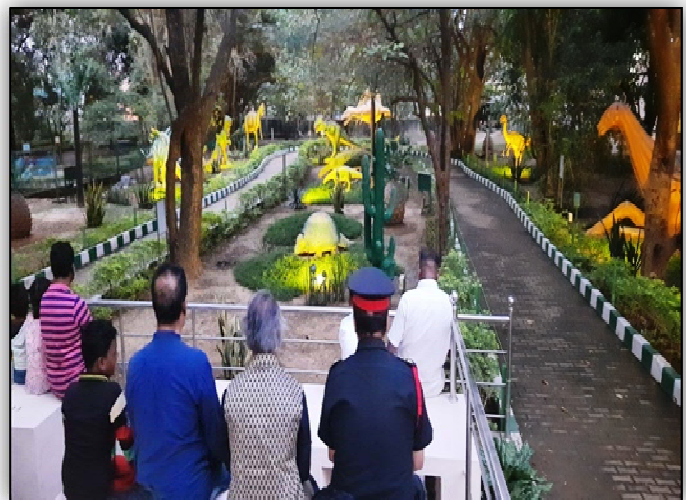


Guided Tour of New MSE during Inauguration

Inauguration of New facility ‘HPT32 Aircraft’ & ‘Light & Sound Show of Pre Historic Pak’ on 27th February 2021 during the 34th Anniversary of the Centre District Science Centre, Tirunelveli.



Inauguration of HPT32 Aircraft



Inauguration of Light & Sound Show of Pre Historic Pak’

ACTIVITY REPORT OF VITM AND SATELLITE UNITS 2020-21

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.	Our Environment (at DSC, Tirunelveli)	RSC, Tirupati	20	2016	-
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	
12	Space Technology for Human Welfare (at RSC Calicut)	VITM, Bangalore	20	2019	
13	How Science Works for RSC Tirupati	RSC, Tirupati	20	2021	

6. NEW TEMPORARY EXHIBITIONS (IN HOUSE DEVELOPMENT):

VITM: Nobel Prizes 2020 Exhibition

ACTIVITY REPORT OF VITM AND SATELLITE UNITS 2020-21

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 &	78	27.02.1987	-
	Pre historic Life Park –Total 5.69 Acre	11	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	45	1	1	-	--
No. of Park Exhibits	8	7	1	-	--
No. of Exhibits for Temporary Exhibition	6	-	--	-	--
No. of Exhibits for Mobile Science Exhibition	--	20	--	-	--
No. of Kits developed (for New Science Shows)	--	28	11	2	--
No. of Duplicate Kits (in-house)	--	122	--	-	--
No. of Duplicate Exhibits (in-house)	--	-	--	-	--
No. of Duplicate exhibits (outside agencies)	--	--	--	-	--
No. of Duplicate Kits (outside agencies)	--	--	--	-	--
No. of Exhibits Renovated- category (gallery/MSE/Temp Exhibition)	--	14	6	2	--
No. of Kits Renovated (mention category - gallery/MSE/Temp. Exhibition)	--		--	-	--
Total	59	192	19	4	--

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

9. COLLECTION OF ARTEFACTS:

VITM :
RSC T:
DSC G
DSC T :

10. PLANNING:

VITM:

1. Modernization of Hall of Electronics Phase-II
2. Modernization of Fun science gallery.
3. Biotechnology Gallery
4. Execution of Innovation Hubs at Trichy, & Pondicherry.

RSC T

1. Gallery on Biomimicry

RSC P Calicut

1. Mobile Science Exhibition on Mathematics

DSC G :

1. Human Biology gallery & Renovation of Fun Science 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:

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	Cauvery	Electricity & Magnetism	---	---	---	---
RSC Tirupati	Sapthagiri	How Science Works?	3	22	1	1,610
RSC P Calicut	Periyar	Popular Science	1	280	1	940
DSC Gulbarga	Bheema	Man and Space	---	---	---	---
DSC Tirunelveli	Thamirabarani	Our Environment	---	---	---	---

ACTIVITY REPORT OF VITM AND SATELLITE UNITS 2020-21

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.	---	---	---	---
RSC Tirupati	Acharya Nagarjuna	Space Technology: For Human Welfare	---	---	---	---
RSC P Calicut	Vianu Bappu	Space Technology for Human Welfare	---	---	---	---
DSC Gulbarga	U.R Rao	Water and Chemistry in our life	---	---	---	---
DSC Tirunelveli	C V Raman	Machines in Everyday Life	---	---	---	---

Due to COVID – 19 Pandemic, the MSE programmes could not be organised.

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.

Due to Covid – 19 pandemic the demonstration were organised online.

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	--	--	--	--
	Chemical Reactions / Colour Chemistry	2	562	--	--
	Force & Pressure	--	--	--	--
	Magnetic effects on electric current	1	148	--	--
	Liquid Nitrogen	--	--	--	--
	Science V/s Miracle	--	--	--	--

ACTIVITY REPORT OF VITM AND SATELLITE UNITS 2020-21

RSC T	Acid, Bases & Salts	1	54	1	263
	Liquid Nitrogen shows	3	271	--	--
	Electricity & Magnetism	--	--	--	--
	Bio Science	--	--	--	--
	Anti Superstition Show	1	96	--	--
RSC P Calicut	Liquid Nitrogen show	10	485	2	50
	Chemical Reactions	--	--	--	--
	Properties of light	--	--	--	--
	Water	--	--	1	25
	Chemistry in daily life	2	70	--	--
DSC G	Electricity & Magnetism	--	--	--	--
	Acids, bases & salts	2	121	2	164
	Science is fun	2	115	4	284
	Anti superstition shows	5	140	0	0
DSC T	Anti Superstition Shows	--	--	--	--
	Electricity & Its Effects	--	--	--	--
	Cryogenics (Liquid Nitrogen)	--	--	--	--
	Science is Fun	09	325	01	212
	Sound	--	--	--	--
	Light	--	--	--	--
	Air	--	--	--	--
	Heat	--	--	--	--

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	Backyard of RSC Tirupati	1 day 14-02-2021	48	8

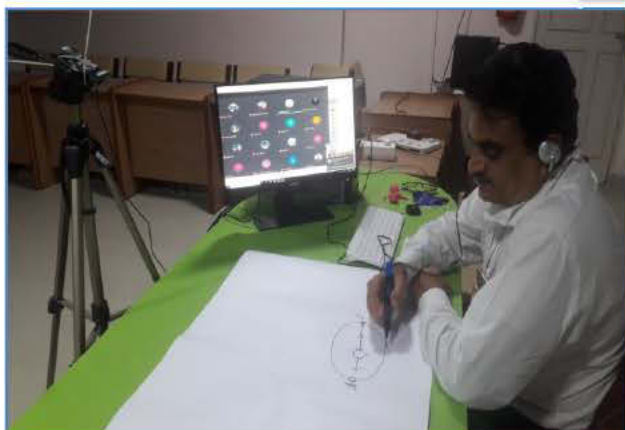
ACTIVITY REPORT OF VITM AND SATELLITE UNITS 2020-21



Online Science Demonstration Lecture on Colour Chemistry at VITM



Online Science Demonstration Lecture on Magnetic effects of Electric Current at VITM



Online Demonstration of Summer & Winter Solcitize at RSC T



Online Science Demonstration Lecture on Acid, Bases and Salts at DSC T

12 (c) ENVIRONMENT AWARENESS PROGRAMME:

Museum / Centre	Venue of the Camp	Duration of Camp (Days & Date)	No of students	No of teachers
RSC T	--	--	--	--
DSC G	--	--	--	--
RSC P C	--	--	--	--

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 an 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.

Due to Covid – 19 pandemic the shows were organised as per SOP

Name of the Centre	No of shows	Total No of visitors
VITM, Bangalore	41	746

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	817

12 (f) FILM SHOWS (VIDEO SHOWS):

Name of the satellite Unit/Centre	No of film shows	Total No of visitors
VITM, Bangalore	2,321	53,696
RSC, Tirupati	--	--
RSC P Calicut	1	45
DSC, Gulbarga	110	1,371
DSC, Tirunelveli	231	10,250

ACTIVITY REPORT OF VITM AND SATELLITE UNITS 2020-21

12 (g) 3D SHOWS:

Name of the satellite Unit/Centre	No of 3Dshows	Total No of visitors
VITM, Bangalore	226	4,935
RSC, Tirupati	1,206	7,133
RSC P Calicut	397	16,123
DSC, Gulbarga	113	1,169
DSC, Tirunelveli	164	2,017

12 (h) POPULAR SCIENCE LECTURES:

Venue	No. of Lectures	No of audience
VITM, Bangalore(Online – Webinars)	19	2,271
RSC, Tirupati	15	2,576
RSC P Calicut(Online – Webinars)	23	5,538
DSC, Gulbarga	18	1,456
DSC, Tirunelveli	18	1,140

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.

Due to Covid – 19 pandemic the Taramandal shows could not be held in VITM

Name of the Museum/Centre	No of shows held	No of audience
VITM, Bangalore	--	--
RSC, Tirupati *	--	--
RSC P Calicut*	314	25,645
DSC, Gulbarga *	200	2,324
DSC, Tirunelveli *	7	52

* Digital Planetarium

12 (j) SCIENCE QUIZ:

Name of the Museum	No of Quiz Contest held	No of participants	No of Audience
VITM, Bangalore	10	445	700
RSC, Tirupati	25	2,169	5,381
RSC P Calicut	11(online)	430	0
DSC, Gulbarga	20	334	--
DSC, Tirunelveli	--	--	--

ACTIVITY REPORT OF VITM AND SATELLITE UNITS 2020-21

12 (k) SKY OBSERVATION PROGRAMMES:

Name of Museum	No of Programmes held	No of participants
VITM, Bangalore	1	30
RSC, Tirupati	17	3,580
RSC P Calicut	32	3,910
DSC, Gulbarga	3	312
DSC, Tirunelveli	--	--

12 (l) VIDEO PROGRAMMES OR COMPUTER SOFTWARE/MULTIMEDIA PROGRAMMES DEVELOPED

VITM	Software Developed for Biotechnology Gallery
	1) Quiz
	2) Opinion Poll
	3) Future of Biotechnology
	4) Human Genome Sequencing
	5) BT in India
	6) Genetic Wheel
	7) Milestones in Biotechnology
	8) Cell Explorer
	9) Robert hook
	10) World Scenario
	11) Journey into the cells
	Seeds of Culture Travelling Exhibition
	12) Spices
	13) Indigo station
14) Herbarium	
Other Development work	
15) New website for VITM	
RSC TIRUPATI YOUTUBE CHANNEL Videos	
1	Digestive System, Software and Video animation for How Science Works new MSE
2	Food Pyramid, Software and Video animation for How Science Works new MSE
3	Cell to organism, Video animation for How Science Works new MSE
4	Carbon Allotrope, Software and Video animation for How Science Works new MSE
5	Number System, Video animation for How Science Works new MSE
6	Probability, Software for How Science Works new MSE
7	Angels in daily Life, Software for How Science Works new MSE
RSC P Calicut	
1	Video on Zero shadow day
2	Making of Cross staff
3	How to make an ellipse
4	Demonstration of tensigrity exhibit

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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.

Due to Covid – 19 pandemic the Science fairs/Camps could not be held.

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.

Due to Covid – 19 pandemic the Science fairs/Camps could not be held.

Museum/ Centre	Venue & Date	District/ Zonal/ State	No of students	No of Participating Schools	No of Audience
DSC T	DSCT (Online)	District	53	23	-

13 (c) CREATIVE ABILITY CENTRE (CAC):

Due to Covid – 19 pandemic, the CAC was held online.

Name of the Museum/Centre	VITM	RSC-T	RSC P-C	DSC-G	DSC-T
No. of Projects completed in Museum's CAC	--	70	14	--	--
No. of Creative Ability Centres	--	2	7	--	--
No. of Students involved in above	--	103	35	--	--
No. of Vacation CAC in museum	2	--	9	--	--
No. of Students involved in above	25	--	296	--	--
No. of Projects completed in above	16	--	45	--	--

List of projects completed is enclosed in Annexure - 4

ACTIVITY REPORT OF VITM AND SATELLITE UNITS 2020-21

13 (d) VACATION HOBBY CENTRE/CAMP:

Name of Museum/ Centre	Venue of programme	Duration	Subjects	No of Participants
VITM	VITM (Online programme)	5 Days 13 th to 20 th July 2020	Chemistry	13
		5 Days 12 th to 16 th October 2020	Electronics	12
RSC T	RSC T	6 Days 12 th to 17 th August 2020	Astronomy	29
		6 Days 24 th to 29 th August 2020	Bioscience	27
		6 Days 1 st to 6 th September 2020	Physics	33
		6 Days 12 th to 17 th September 2020	Electronic & Arduino	8
		8 Days 28 th September to 5 th October 2020	Physic, Bioscience, Chemistry	8
RSC P C	RSC P C	5 Days 18 th to 22 nd May 2020	Introduction to electricity	43
		5 Days 25 th to 29 th May 2020	Colourful Chemistry	30
		6 Days 1 st to 6 th June 2020	Electronic Circuit Design	35
		5 Days 8 th to 12 th June 2020	Introduction to Computer programming	30
		5 Days 15 th to 19 th June 2020	Introduction to Astronomy and Astrophysics	65
		5 Days 22 nd to 26 th June 2020	Introduction to Arduino and Sensors	30
		5 Days 6 th to 10 th July 2020	Basics of Trigonometry	22
		5 Days 13 th to 17 th July 2020	Introduction to Calculus	20
		5 Days 20 th to 24 th July 2020	Introduction to Differential Equations	21

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Participant in Online Creative ability Course on 'Perform & Experience – Experiments in Chemistry' at VITM



Online Creativity Course in 'Hands on experience in Basic Electronics' at VITM



Online Creative ability Course Physics at RSC T



Online Creative ability Course Bioscience at RSC T



Online Creative ability Course Chemistry at RSC T

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13 (e) SIT & DRAW / ESSAY WRITING:

Name of the Museum/ Centre	Venue	Date	Occasion	No. of Participants	Subject
Sit & Draw Contest	VITM	27-08-2020	Superbugs – The end of Antibiotics exhibition	36	Micro organisms'
	RSC T	11-05-2020	National Technology Day	36	Science & technology for Sustainable future
		24-07-2020	Moon landing Week	52	India Mission to Moon
		24-08-2020	27 th Anniversary Week	53	Tribute to Covid Warriors
	RSC P C	19-06-2020	Partial Solar Eclipse	17	Eclipse
		24-07-2020	Moon landing	15	Colonization of Moon
		14-11-2020	Children's Day	22	Science park
	DSC G	02-10- 2020	150 th Birth anniversary of Mahatma Gandhi	98	Tribute to Gandhi- Clean, Green & Plastic free India
		28-02- 2021	National Science day	105	Sir C.V. Raman & his Effect & Devices to harness solar energy
	DSC T	12-11-2020	Deepavali	88	Safe Deepavali
Essay Writing Contest	RSC T	11-04-2020	National Technology Day	85	Significant milestone in the history of India's technology
		05-06-2020	World Environment Day	68	Plant sapling and celebrate biodiversity
		25-06-2020	International day of Yoga	57	Yoga & Immunity
		28-10-2020	Vigilance Awareness Week	15	Role of common Man in eradicating corruption
Essay Writing	RSC P C	23-07-2020	Moon landing Week	23	Moon explorations
		26-11-2020	Constitution day	17	Moral Framework of the Constitution

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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	RSC Tirupati	01-03-2021	50	15
2	RSC P Calicut (Online)	22-12-2020 27-02-2021	20 20	10 10

(b) **COMPUTER TRAINING PROGRAMME:**

Name of the Museum/ Centre	No of Programmes	Duration	No. of participants	Subject
VITM	1	15 th to 20 th June 2020	20 (Girls Students)	Online IEEE-VITM App development on Android
	1	22 nd to 26 th June 2020	22	Online Python course



App Development on Android Course at VITM



Teachers Training Programme at RSC T

ACTIVITY REPORT OF VITM AND SATELLITE UNITS 2020-21

15. COMMUNITY PROGRAMMES:

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

Due to COVID – 19 pandemic, the Science Drama/ Puppetry/Other Forms of Performing Art was not held

(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	Street play on Antibiotics Resistance & Superbugs	VITM	18 th & 19 th /12-2020	500
	2	A Webinar on Women Scientists at the forefront of fight against COVID-19	VITM	11-02-2021	75
RSC T	1	Workshop on Origami & Fun	RSC T	27-08-2020	12
	2	Workshop on Fun with toys	RSC T	28-08-2020	12
	3	Workshop On Making Of Microscope	RSC T	25-02-2021	60
	4	Online Workshop On Coding For Beginners	RSC T	26-02-2021	80
RSC P C	1	Panel Discussion: Combating Covid -19	RSC P C	25-04-2020	2,300
	2	Webinar and conversation on Programmed Cell Death – immunity and infection	RSC P C	8-06-2020	256
	3	Webinar on Comet NEOWISE	RSC P C	17-07-2020	245
	4	Live demonstration on Nutrition value of daily life	RSC P C	24-09-2020	12
	5	Rapid Antigen test	RSC P C	27-09-2020	150
	6	Webinar on Membranes-The trend in water purification	RSC P C	10-10-2020	75
	7	Children's day	RSC P C	14-11-2020	22
	8	Telescopic observation of great conjunction of Jupiter and Saturn	RSC P C	21-12-2020	3600

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	9	Seminar for farmers on New Cultures in Agriculture	RSC P C	24-03-2021	50
DSC G	1	Distribution of homeopathic immunity booster kit and awareness against COVID-19	DSCG	14-05- 2020	38

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	22
RSC, Tirupati	17
RSC P Calicut	10
DSC, Gulbarga	14
DSC, Tirunelveli	23

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	Panel Exhibition on Nobel Prizes – 2020	10-12-2020 to 31-03-2021 (Continuing)	56,240	--	6	--
	Superbugs- The End of Antibiotics	23-11-2020 to 03-01-2021	14,760	NCSM	20	14
	'The Father of the Nation' a Digital Tribute	08-01 to 03-01-2021 (Continuing)	14,700	VP- NCSM	--	10
DSC G	COVID -19	April 2020 to March 2021	3,000	Developed at DSCG	2 panels	-
DSC T	Digital Exhibition on Gandhiji	22-12-2020 to 31-03-2021	12,800	VP / NCSM	-	10

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Superbugs – the end of Antibiotics exhibition at VITM



Street play on 'Antibiotics Resistance & Superbugs



Exhibition - The father of the Nation - a Digital Tribute at VITM

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Panel exhibition on Nobel Prizes - 2020 at VITM



Exhibition - The father of the Nation - a Digital Tribute at RSC T



Exhibition - The father of the Nation - a Digital Tribute at DSC T

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

Name of the Museum/Centre	No. of programmes
VITM, Bangalore	2
RSC, Tirupati	9
RSC P Calicut	7
DSC, Gulbarga	--
DSC, Tirunelveli	18

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19. LIBRARY & INFORMATICS:

Name of the Museum/ Centre	Item	Total holding as on 01-04-2020	No. Acquired during the year 2020-2021	No. Written off during the Year 2020-2021	Net holding as on 31-03-2021
VITM	Books	11,122	16	--	11,138
	Journals **	6	5	--	5
	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	1,902	--	--	1,902
	Journals	24	--	--	24
	Film 16mm	8	--	--	8
	CD/DVD	198	--	--	198
DSC G	Books	822	--	--	822
	Journals **	1	--	--	0
	Film 16mm	0	--	--	0
	Video Tapes	43	--	--	43
	Slides	13 sets	--	--	13 sets
	Audio Cassettes	0	--	--	0
	Educational CDs	9	--	--	9
DSC T	Books	1,196	--	--	1,196
	CD / DVD	33	--	--	33
	16mm films	09	--	--	09

** Renewal only

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20. PUBLICATIONS:

Name of the Museum/ Centre	Name Of The Publication	Process	Number Printed	Expenditure Incurred (in Rs.)
VITM	Folder of new gallery on Biotechnology' – Kannada	Multi colour Digital Printing.	50	1,000-00
	Folder of new gallery on Biotechnology'- English		50	1,000-00
	Folder on Cauvery Gallery of Mysore – Kannada		50	1,000-00
	Folder on Cauvery Gallery of Mysore English		50	1,000-00
	Innovation Hub, Coimbatore.		500	4,000-00
	Innovation Hub, Trichy.		500	4,000-00
	Innovation Hub, Puducherry.		500	4,000-00
RSC P C	1.Aakasham –Annular Eclipse special	Offset printing	100	10,000-00
	2.Medicinal plants and their uses		200	9,000-00

21. CONSTRUCTION:

Name of the Unit	Name of the work	Tender Value of Work * (Rs. In Lakhs)	Date of Commencement	Date of Completion
VITM	Laying of PVC flooring at Biotechnological Gallery of VITM, Bengaluru	4.07	20-06-2020	16-06-2020
RSC P C	Structural auditing of Regional Science Centre and Planetarium, Calicut	1.18	20-01-2021	30-03-2021
	Repairing of ceiling in workshop at RSC, Calicut	1.57	04-11-2020	03-12-2020
DSC T	Providing waterproofing treatment Phase-II at DSC T	7.33	30-09-2020	28-11-2020

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22. PROCUREMENT OF EQUIPMENT:

(Under PL-5 (iv) – Costing Rs.5000/- or more)

Museum / Centre	Name of the Equipment	Date of procurement	Cost (Rs)
VITM	Toshiba e studio 2518A	10.06.2020	1,39,300.00
	Cordless screw driver	11.06.2020	19,340.00
	Hand tools	12.06.2020	18,497.00
	SITC 64 channel	03.08.2020	7,90,600.00
	Conference camera	21.08.2020	24,013.00
	Mix tools	13.10.2020	5,700.00
	1 user license security	13.10.2020	5,400.00
	Android Tablet	25.11.2020	2,21,000.00
	Security deposit of 64 channel	09.12.2020	79,060.00
	55" LED TV	21.12.2020	60,160.00
	Corel draw graphic suits	06.01.2021	14,160.00
	Video Conference camera	29.03.2021	24,013.00
	Infrared digital thermometer	29.03.2021	97,300.00
	Fabrication of workshop tables (EWS)	31.03.2021	24,950.00
	65" LED smart Tv	31.03.2021	99,648.00
	Dome camera	31.03.2021	80,830.00
Bullet camera	31.03.2021	80,830.00	
RSC P C	Fan Wall mounted :5 Nos	19.06.2020	9,900.00
	Fan Exhaust :10 Nos	19.06.2020	21,000.00
	HT Breaker & Termination kit for 11 KVA substation	18.08.2020	1,18,000.00
	Portable Generator	07.09.2020	96,300.00
	LED TV – SONY :3Nos	11.02.2020	37,800.00
	Computer – Think Station Lenovo:2 No	01.02.2021	2,37,000.00

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	Cordless Screw Driver	05.02.2021	6,550.00
	Monitor Lapcare :7Nos	02.03.2021	23,100.00
	Transformer 200 KVA	02.03.2021	5,82,000.00
	Sound system for auditorium & 3D	05.03.2021	3,71,700.00
RSC T	Lenovo Tab	09.03.2021	9,929.00

Museum / Centre	Name of the Equipment	Date of procurement	Cost (Rs)
DSC G	Lenovo TAB 48 Android Tab, Sl. No. HMGOOLLY, IMEI: 865652045543750, Model: TB-8504X STV from VITM No: 2557, dt:23.07.2020	23.07.2020	11,862.00
	Infrared Digital thermometer Fluke Make 59May ESP STV from VITM No:2562/ 20.08.2020 3 Nos @ 6950.00 each	20.08.2020	20,850.00
	Printer Canon LBP-2900B, Laser print	21.09.2020	11,150.00
	Megger, 1000W, 200V, Make: WACO STV from VITM No:2576/ 28.12..2020	28.12.2020	7,434.00
	Mitre Saw BOSCH GCM10MX	11.12.2020	19,700.0
	Planner BOSCH GH026-82	11.12.2020	7,850.00
	Palm Router GMR1	11.12.2020	9,300.00
	LOGITECH CAMERA C920 Pro HD Webcam S.no.2038LZ914XK9	21.12.2020	12,400.00

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23. PERSONNEL:

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

SI No.	Name of the person Shri /Smt/Ms	Cadre & Group Scie/Tech /Adm	Designation	Pay Scale Pay Matrix Level	Date of Joining	Basic Pay in Rs.	Highest Educational Qualification	Date of Birth
1	Shri. S. Thiruselvam	Tech	Tech 'F'	Level - 7	05-10-2020	60400	ITI (Electronics)	25-04-1969

23 (b) PROMOTIONS:

SI. No.	Name of the person Shri./Smt/.Ms.	Designation and Pay Scale before Promotion	Designation and Pay Scale after Promotion	Basic Pay before promotion in Rs.	Basic pay after Promotion in Rs.	Effective date of Promotion
1	Shri. M.M.E. Namboodiri	CoA Level-12	Sr. CoA Level-13	99,800	1,23,100	02.11.2020
2	Shri. Basavaraj. S. Sajjan	Tech Asst 'B' Level-06	Tech Off. 'A' Level-07	68,000	70,000	14.10.2020
3	Shri. Rangaswamy D.	Exbh Asst 'B' Level-06	Exbh Off. 'A' Level-07	46,200	47,600	14.10.2020
4	Shri. AnandS.Pattar	Tech Asst 'B' Level-06	Tech Off. 'A' Level-07	46,200	47,600	14.10.2020
5	Shri.N. Madhu	Tech 'F' Level-07	Tech 'G' Level-09	60400	63,300	14.10.2020
6	Shri. Govind Ram Sharma	Tech 'B' Level-04	Tech 'C' Level-05	30,500	31,900	14.10.2020
7	Shri. Mahesha B.S.	Tech 'B' Level-04	Tech 'C' Level-05	29,600	31,000	14.10.2020
8	Shri. Vrudeepa H.N.	Tech 'B' Level-04	Tech 'C' Level-05	29,600	31,000	14.10.2020
9	Shri. V. Devendran	Tech 'F' Level-07	Tech 'G' Level-09	58,600	59,700	24.02.2021
10	Shri. H. Dinesh Singh	Tech 'F' Level-07	Tech 'G' Level-09	60,400	61,500	28.02.2021
11	Shri. Chandrababu V.	Tech 'E' Level-06	Tech 'F' Level-07	52,000	53,600	11.03.2021
12	Shri. Suryakanth. N. Miskin	TO.'B' Level-09	TO.'C' Level-09	71,300	71,300	02.09.2020
13	Shri. Krishnendu Biswas	Exbh Off. 'B' Level-10	Exbn Off. 'C' Level-11	65,000	67,700	19.03.2021

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14	Shri. Sunil K.M	Edu. Off 'B' Level-09	Edu. Off 'C' Level-11	71,300	Pay Fixation Under process	19.03.2021
15	Shri. M. M. K. Balaji	Curator 'C' Level-11	Curator 'D' Level-12	80,900	Pay Fixation Under process	19.03.2021
16.	Shri. Om Prakash Chakrawarty	Office Asst. Gr. II Level-5	Office Asst. Gr. I Level-06	46,800	49,000	01.12.2020

23 (c) TRANSFERS:

SI No	Full Name of personnel Shri/smt/Ms	Designation	Transferred fromto...	Date of Relief/ joining
1.	Shri. Ajai K.S.	Tech. Asst. 'A'	VITM, Bangalore to SRSC Rajahmundry	30.09.2020

23 (d) RETIREMENT/REPATRIATION/RESIGNATION:

SI No	Full Name of personnel Shri/Smt/Ms	Designation	Name of the museum/ Centre	Resignation /Retirement	Date of retirement or release (w.e.f)
1	Shri. Kumaraswamy Asari C.	Tech. 'G'	VITM, Bangalore	Retirement	31.05.2020
2	Shri. Zacharia. B.V	Tech 'G'	VITM, Bangalore	Retirement	31.05.2020
3	Shri. K. MohanBabu	Tech 'F'	RSC, Tirupati	Retirement	31.07.2020
4	Shri. Ameer Ali Shah	Driver Spl. Gr.	DSC, Gulbarga	Retirement	28.02.2021
5	Shri. K. Madan Gopal	Director	VITM , Bangalore	Retirement	28.02.2021
6	Shri. Panneerselvan P	Driver Spl. Gr.	DSC, Tirunelveli	Retirement	31.03.2021

24. MISCELLANEOUS:

24 (a) DISTINGUISHED VISITORS

VITM, BANGALORE

- Hon'ble Mr. Justice Bachchoo Lal - Allahabad High Court
- Shri. S. Venkatesh Shekar, Senior Environmental Officer, Karnataka State Pollution Control Board, Bengaluru
- K. G. Raghavan, Chairman, Bharatiya Vidya Bhavan, Bangalore

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RSC, TIRUPATI

1. Dr. Y. Aparna, Member Secretary, AP. Council of Science & Technology, Vijayawada
2. Captain. Roshan Agarwal, Founder, repairanymobile.com.Tirupati.

RSC & P, Calicut

1. Shri T. P. Ramakrishnan, Hon'ble Minister for Excise and Labour, Govt. of Kerala.

DSC, TIRUNELVELI

01. Shri Vishnu, I.A.S., District Collector & Magistrate, Tirunelveli.
02. Dr K Pitchumani, Vice-Chancellor, Manonmaniam Sundaranar University, Tirunelveli.
03. Dr. Krishnaveni, Dean, Anna University Regional Campus, Tirunelveli.
04. Shri Jeyaseelan, I.A.S., Commissioner, City Municipal Corporation, Thoothukudi.
05. Shri Sivakumar, Chief Educational Officer, Tirunelveli.
06. Smt. Hemalatha, Assistant Conservator of Forest, KMTR, Dept. of Forest, Govt, of Tamilnadu.
07. Shri Ganesan, Eco Developmental Officer, KMTR, Dept. of Forest, Govt. of Tamilnadu.

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. MMK Balaji Curator, RSCT	All India Radio	Earth Day	22-04-2020
	Shri R. Manigandan PC, RSCT	E TV Telugu	Jupiter and Saturn Great Conjunction'	21-12-2020
	Shri. MMK Balaji Curator, RSCT	ABN TV	Jupiter and Saturn Great Conjunction	21-12-2020
	Shri N. T. Purushothama Edn Asst 'B', RSCT	City Cable	Jupiter and Saturn Great Conjunction	21-12-2020
	Shri. MMK Balaji Curator, RSCT	All India Radio	World Water Day 2021	22-03-2021
	Shri N. T. Purushothama Edn Asst 'B', RSCT	All India Radio	World Water Day 2021	22-03-2021
RSC P C	Shri. Jayant Ganguly Technical Officer	ACV news	Interview on Zero shadow day	18-04-2020

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	Shri K M Sunil Education Officer	All India Radio kozhikode	Talk on World Space Week	04-10-2020
	Shri. Manash Bagchi Curator & Project Co coordinator	Mathrubhumi News	Interview on Great Conjunction	21-12-2020
DSC T	Shri S M Kumar, DSO, DSC-T	All India Radio	Science Centre Activities during COVID-19 Lockdown	08-05-2020
	Shri S M Kumar, DSO, DSC-T	Thanthi TV, PuthiyaThalaim urai News, Jaya TV, News 18, MaaliMurasu TV, Bharani TV	Solar Eclipse – Myths & Facts	21-06-2020
	Shri P Marilenin, EO, DSC-T	PuthiyaThalaim urai News, Jaya TV	Special arrangements made at DSC-T for safely viewing Solar Eclipse	21-06-2020

24 (c) POPULAR LECTURES BY STAFF

Centre	Venue	Date	Topic	Speaker(Shri/Mr)	Audience
VITM	Online Talk	23-06-2020	Covid -19 Influence on Science, Technology and Economy’.	Shri. K. Madan Gopal, Director VITM	176
	Online Talk for KSTEPS Bangalore	14-08-2020	‘Sound & Vibration’	---do---	100
	Online Talk	18-05-2020	Francis Reaction Turbine’	Shri. K. Sajoo Bhaskaran, Curator, VITM	70
RSC T	RSCT	21-12-2020	Astronomical Events Of The Solar System	Shri M M K Balaji, Curator, RSCT	75
RSC P Calicut	ULCC Online	01-11-2020	Nobel Nod for Black Holes	Shri. Manash Bagchi, Curator & Project Coordinator	95
	RSCP Online	20-12-2020	Great Conjunction	---do---	56
	RSCP Online	22-12-2020	Equations that changed our lives	Shri Jayant Ganguly Technical Officer	78
	RSCP Online	23-12-2020	Numbers and shapes	Shri. Binoj. K Education Officer	75

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	DIET Online	05-01-2021	Journey towards Absolute zero	Shri. Sunil. K. M Education Officer	85
DSC G	Reshmi Degree College, Kusnoor	02-03-2021	'Science & Technology in the service of mankind'	Shri C.N Laxminarayana, Dist. Science Officer, DSC G	265
	DSC G	24-08-2020	Biodiversity	Shri C.N Laxminarayana, Dist. Science Officer, DSC G	48
DSC T	DSC-T (Online)	21-06-2020	Solar Eclipse – Viewing Safely & Busting Myths	Shri S M Kumar, DSO, DSC-T	97
	DSC-T (Online)	18-07-2020	Black Holes – Enchanting Mystery	---do---	76
	DSC-T (Online)	15-10-2020	Home Lab to become an Innovator.	---do---	52
	DSC-T (Online)	17-12-2020	The Great Conjunction – a rare astronomical event	---do---	86
	DSC-T (Online)	21-01-2021	Satellites – our window to the Universe	---do---	92
	St. John's of Education, Veeravanallur	19-02-2021	Use of Science & Technology in Classroom teaching	---do---	212
	Sri Sarada College for Women, Ariyakulam, Tirunelveli	01-03-2021	Future of STI : Role of Women	---do---	134
	DSC-T (Online)	03-03-2021	Stimulating Scientific Temper among Prospective Teachers	---do---	82

(d) **FOREIGN DEPUTATIONS:**

ANNEXURE – 1

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 Meter 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

Sl. No.	Name of the Exhibit	Sl. No.	Name of the Exhibit
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

ACTIVITY REPORT OF VITM AND SATELLITE UNITS 2020-21

Pre Historic Life Park

Sl. No.	Name of the Exhibit	Sl. No.	Name of the Exhibit
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. YoYo
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	Turn faster
24. Bird In a Cage	48	Steam Engine - Horizontal

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

ACTIVITY REPORT OF VITM AND SATELLITE UNITS 2020-21

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

11. Early Man faces

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.	ATGC glitch art (Building Blocks)	Biotechnology Gallery	VITM
2.	Migration based DNA studies	--do--	--do--
3.	Understanding Biotechnology	--do--	--do--
4.	Genetic disorder	--do--	--do--
5.	Your Opinion Matters	--do--	--do--
6.	DNA- The blueprint of life	--do--	--do--
7.	Primitive Techniques	--do--	--do--
8.	Early Methods of Plants and Animal breeding	--do--	--do--
9.	Robert Hooke	--do--	--do--
10.	A Journey in to the Micro World	--do--	--do--
11.	Gregor Mendel	--do--	--do--
12.	Exploring a cell	--do--	--do--

ACTIVITY REPORT OF VITM AND SATELLITE UNITS 2020-21

13.	Looking deep in to the cell	--do--	--do--
14.	What makes you	--do--	--do--
15.	Watson & Crick	--do--	--do--
16.	DNA the Double Helix	--do--	--do--
17.	Chromosome	--do--	--do--
18.	Genetic Wheel	--do--	--do--
19.	Genetic Disorder	--do--	--do--
20.	Skin Colour	--do--	--do--
21.	Genetic Scissors	--do--	--do--
22.	Recombinant DNA	--do--	--do--
23.	DNA Finger Printing	--do--	--do--
24.	Human Genome Project	--do--	--do--
25.	Codons	--do--	--do--
26.	Enzymes – Digestion	--do--	--do--
27.	Enzymes – Biological Catalyst	--do--	--do--
28.	Enzymes Lower activation Energy	--do--	--do--
29.	Biotechnology for Agriculture	--do--	--do--
30.	Biotechnology for Health	--do--	--do--
31.	Monoclonal Antibodies	--do--	--do--
32.	Vaccines	--do--	--do--
33.	Biotechnology for Industry	--do--	--do--
34.	Cheese around the world	--do--	--do--
35.	Biotechnology Tools	--do--	--do--
36.	Bioscope – Gene – the story teller	--do--	--do--
37.	Milestones	--do--	--do--
38.	Indian Contribution to the Biotechnology	--do--	--do--
39.	Future of Biotechnology	--do--	--do--

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40.	World Scenario	--do--	--do--
41.	Opinions	--do--	--do--
42.	Quiz Corner	--do--	--do--
43.	Nobel Prizes 2020 6 Panels (43-48)	Panel Exhibition	For VITM
49.	Pythagoras theorem	Gallery Exhibit	KSTA
50.	Space Suit	--do--	--do--
51.	U R Rao and Aryabhata satellite	--do--	--do--
52.	Sun Dial	Park Exhibits	New Science Centre
53.	Planetary Motion	--do--	--do--
54.	Chaos	--do--	--do--
55.	Swing is a pendulum	--do--	--do--
56.	Turn Faster	--do--	--do--
57.	Bird in a cage	--do--	--do--
58.	Lift yourself	--do--	--do--
59.	Musical tubes	--do--	--do--

KITS/AIDS DEVELOPED

RSC, TIRUPATI

Sl. No.	Name of the exhibit	Name of the Gallery for which it is made	Centre for which it is developed
1	Yo-Yo	Science Park	RSCT
2	Swing As A Pendulum	--do--	--do--
3	2D – 3D	--do--	--do--
4	Butterfly Enclave	--do--	--do--
5	Pressure	MSE Exhibit	--do--
6	Newton Cradle	--do--	--do--

ACTIVITY REPORT OF VITM AND SATELLITE UNITS 2020-21

7	Friction	--do--	--do--
8	Force	--do--	--do--
9	Properties of Light	--do--	--do--
10	Animal & Plant Cell	--do--	--do--
11	Digestive System	--do--	--do--
12	Conic Sections	--do--	--do--
13	Work & Energy	--do--	--do--
14	Colour Mixing	--do--	--do--
15	Carbon Allotrope	--do--	--do--
16	Centrifugal Force	--do--	--do--
17	Food Pyramid	--do--	--do--
18	Angles In Daily Life	--do--	--do--
19	Arithmetic Progression & Geometric Progression	--do--	--do--
20	Number System	--do--	--do--
21	Action Reaction	--do--	--do--
22	Probability	--do--	--do--
23	Atmospheric Cycle	--do--	--do--
24	Cell to Organism	--do--	--do--
25	Wave Mechanism	--do--	--do--

KITS/AIDS DEVELOPED

Sl No	Name of the exhibit	Type of exhibit	Gallery / Centre for which made
1	Foot Operated Hand Sanitizer Dispenser *	Kit	RSCT
2	Foot Operated Liquid Soap Dispenser *	--do--	--do--
3	Foot Operated Water Dispenser *	--do--	--do--
4	3D Printed Face Shield	--do--	--do--
5	Reflection of Sound	--do--	--do--
6	See Your Voice through Laser	--do--	--do--
7	3D Printed Tippe Top (CoG)	--do--	--do--

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8	3D Printed Balancing Doll (CoG)	--do--	--do--
9	3D Printed Phi Top (CoG)	--do--	--do--
10	3D Printed Balance on Finger (CoG)	--do--	--do--
11	3D Printed Hygiene Key	--do--	--do--
12	Spiral Snake (Convection)	--do--	--do--
13	Color Disc (Radiation)	--do--	--do--
14	CD Hovercraft	--do--	--do--
15	Mobile Macro-scope (mobile camera)	--do--	--do--
16	Swinging Sticks (Chaos)	--do--	--do--
17	Vibration Driven Circular Motion	--do--	--do--
18	3D Printed Buckminsterfullerene (C60) 3.5"	--do--	--do--
19	Centripetal & Centrifugal	--do--	--do--
20	Tessellation	--do--	--do--
21	Colour Changing Chemistry	--do--	--do--
22	Friction & Motion	--do--	--do--
23	3D Printed Digestive System	--do--	--do--
24	Expansion of Gas (Bottle Thermometer)	--do--	--do--
25	Convection	--do--	--do--
26	Resonance Box	--do--	--do--
27	Leaf Disc Experiment Kit	--do--	--do--
28	Cloud Chamber	--do--	--do--

* Developed as part of Covid – 19 SOP

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.	WAASH	Fun Science	RSCP
2.	Tensigrity stool	Science Park	--do--

ACTIVITY REPORT OF VITM AND SATELLITE UNITS 2020-21

KITS/AIDS DEVELOPED

Sl No	Name of the exhibit	Type of exhibit	Gallery / Centre for which made
1.	Galton board	--do--	RSCP
2.	Cone runs up hill	--do--	--do--
3.	Chaotic pendulum	--do--	--do--
4.	Pythagoras theorem	--do--	--do--
5.	Bizarre bounce	--do--	--do--
6.	Brahmas tower	--do--	--do--
7.	Acrobatic stick	--do--	--do--
8.	Newton's pendulum	--do--	--do--
9.	Transformers	--do--	--do--
10.	Series resistance	--do--	--do--
11.	Logic Gate	--do--	--do--

DSC, GULBARGA

KITS/AIDS DEVELOPED

Sl No	Name of the exhibit	Type of exhibit	Gallery / Centre for which made
1	Tesla coil using solid state device	Gallery	DSCG
2	Camera Obscure (Renovated)	Park	--do--
3	Tesla coil using solid state device	SDL	--do--
4	Mutual induction kit	SDL	--do--

POPULAR SCIENCE LECTURE**VITM, BANGALORE**

Sl. No.	Date	Topic	Name of the speaker	Venue	Audience
1	10-04-2021	Enter the world of Electronics	Ms. Smitha Pisupati, Engineer, Maker, Educator and founder of TINKERAMA, Bangalore	VITM-Online	95
2	23-04-2020	What we can learn from the present pandemic to tackle the climate change	Prof. J. Srinivasan, Chairman, Divecha Centre for Climate Change, Indian Institute of Science, Bangalore	VITM-Online	73
3	30-04-2020	Immunity	Dr. Uday kumar Ranga, Professor, HIV-AIDS Laboratory, Molecular Biology & Genetics Unit, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore and Dr. Prashant Kumar, Faculty Scientist, Institute of Bioinformatics (IOB), Bengaluru	VITM-Online	83
4	11-05-2020	Adopting Technology to Solve Covid-19 Pandemic.	Dr. Dinesh K. Anvekar, Prof. & Director, Electronics & Communication R&D, Sapthagiri College of Engineering, Bengaluru	VITM-Online	185
5	18-05-2020	HF 24 Marut Aircraft	Shri. Ananthakrishna Acharya, Additional General Manager (Design) & Head, Structural Analysis Group, Aircraft Research & Design Centre (ARDC), Hindustan Aeronautics Limited, Bengaluru	VITM-Online	70
6	18-05-2020	Francis Reaction Turbine	Shri. K. Sajoo Bhaskaran, Curator, VITM	VITM-Online	72
7	04-06-2020	Impact of Lockdown on Environment due to COVID 19.	Shri. S. Venkatesh Shekar, Senior Environmental Officer, Karnataka State Pollution Control Board, Bengaluru	VITM-Online	169

ACTIVITY REPORT OF VITM AND SATELLITE UNITS 2020-21

8	19-06-2020	Yoga & Immunity	Dr. S. N. Omkar, Chief Research Scientist, Dept of Aerospace Engineering, Indian Institute of Science, Bengaluru and Yoga Expert	VITM- Online	103
9	25-06-2020	COVID -19: Our experience and Knowledge to fight against the Superbugs	Dr. Pratik Yeshavant Patil, Physician & Consultant, Fortis Hospital	VITM- Online	50
10	12-08-2020	Sarabhai- A Visionary Space Scientist	Prof. Sudhindra Haldodderi, Consultant, L & T Technology Services, Bangalore & Former Joint Director (Aircraft), DRDO Lab CEMILAC	VITM- Online	78
11	18-08-2020	Artificial Intelligence	Ms. Geetha Adinarayan Chief Architect, AI Applications, IBM India, Bangalore	VITM- Online	179
12	15-09-2020	Personality and achievements of Sir. M. Visvesvaraya".	Dr. K S Nanjunda Rao, Chief Research Scientist, Department of Civil Engineering, Indian Institute of Science, Bangalore	VITM- Online	70
13	30-09-2020	Science, morality and Gandhiji	Dr. Narendra Pani, Professor and Dean, School of Social Sciences, Head, Inequality and Human Development Programme, N I A S, Indian Institute of Science Campus, Bengaluru	VITM- Online	60
14	08-10-2020	Evolution of ISRO and its Giant Leap to Moon and Mars.	Shri. Pradeep Kumar P, Project manager (Onboard System), Vikram Sarabhai Space Centre, Trivandrum	VITM- Online	400
15	29-10-2020	Bacteriophages	Dr. Sanjay Bhattacharya, Senior Consultant in Microbiology, Tata Medical Centre, Kolkata,	VITM- Online	156
16	11-12-2020	Antibiotics Misuse – rise of Superbugs	Dr. Varadharajan Sundaramurthy, Host - Pathogen Interaction, National Centre for Biological Sciences (NCBS), TIFR, GKVK, Blore	VITM- Online	139

ACTIVITY REPORT OF VITM AND SATELLITE UNITS 2020-21

17	17-12-2020	Wars vs Ecosystems: Antibiotics, Superbugs and Ayurveda	Dr. Bhaswati Bhattacharya MPH, MD, PhD, Clin Asst Professor of Medicine, Weill Cornell Medical College, New York, NY	VITM-Online	105
18	11-02-2021	Women Scientists at the forefront of fight against COVID-19	Dr. Rashna Bhandari, Staff Scientist and Group Leader, Laboratory of Cell Signalling Centre for DNA Fingerprinting and Diagnostics (CDFD), Hyderabad	VITM-Online	78
19	08-03-2021	'Women in leadership: Achieving an equal future in a COVID-19 world	Padma Shri Smt. SudhaMurty, Chairperson, Infosys Foundation, Bangalore	VITM-Online	106

RSC TIRUPATI

SI. No.	DATE	TOPIC	NAME OF THE SPEAKER	VENUE	AUDIENCE
1	11-05-2020	Education in our schools & colleges post COVID 19	Dr. T. S Natarajan, DEAN, International Alumni Affairs, IIT, Tirupati	Online	279
2	18-05-2020	Science Centre for common man	Dr. P. V. Ranganayakulu Former Chief Museum Officer, SV Museums, TTD, Tirumala, Tirupati	Online	149
3	05-06-2020	Flora & Fauna of Seshachalam	Dr. N V. Sivaram Prasad, Assistant Conservator of Forest & Zonal Manager AP Greening Corporation, Tirupati	Online	554
4	21-06-2020	My Life My Yoga	Dr. R. Lakshmi Narayana, Asst. Prof., Dept. of Yogavignana, National Sanskrit University, Tirupati	Online	132
5	20-07-2020	Neowise- A Comet insight	Prof. S. Vijay Bhaskar Rao, Director, RADAR Application Centre, S V University, Tirupati	Online	185
6	23-08-2020	Artificial Intelligence: Everything for Everyone	Shri. Vidyasagar Machupalli, Technical Product Manager & Developer Advocate, IBM India	Online	100

ACTIVITY REPORT OF VITM AND SATELLITE UNITS 2020-21

7	25-09-2020	Role of Science Centre in Popularizing Science	Prof. D. Srinivasulu, Professor, Dept. of Chemistry, S. V University, Tirupati	Online	47
8	02-10-2020	Life & Works of Mahatma Gandhi	Dr. V. Raja Gopal, President, Society for Hunger Elimination & Former Director, CPCRI, Kasaragod	Online	50
9	02-10-2020	Satellites to Improve Lives	Shri. P. Vijaya Saradhi, Former Group Director, Satish Dhawan Space Centre, SHAR, Sriharikota	Online	80
10	15-10-2020	Application of Nanotechnology in the Aircraft	Dr. James Jabaseelan Samuel E. Senior Professor, Division of Photonics, Nuclear & Medical Physics, Vellore Institute of Technology University, Vellore	Online	85
11	20-10-2020	Nobel Prize in Physiology or Medicine 2020 for the Discovery of Hepatitis C Virus	Dr. Suresh Kumar Swaminathan, Senior Scientist, The Janssen Pharmaceuticals Companies of Johnson & Johnson, Pennsylvania, USA	Online	60
12	04-11-2020	Nobel Prize in Physics 2020	Dr. DebiprasadDuari, Director, Research & Academic of M. P. Birla Institute of Fundamental Research, M. P. Birla Planetarium, Kolkata	Online	395
13	03-12-2020	Genetic Scissors: a tool for rewriting the code of life	Dr. Suresh Kumar Swaminathan, Senior Scientist, The Janssen Pharmaceuticals Companies of Johnson & Johnson, Pennsylvania, USA	Online	296
14.	13-02-2021	Nanotechnology: Recent Advancements	Dr. T N V K V Prasad, Phd. ERF (Aus), Principal Scientist (Soil Science) Principal Investigator-ICAR, NASF Nanotechnology Laboratory Institute of Frontier Technology, Regional Agricultural Research Station, Acharya N G Ranga Agricultural University, Tirupati.	RSCT	44

ACTIVITY REPORT OF VITM AND SATELLITE UNITS 2020-21

15.	26-02-2021	Introduction to Aviation	Captain. Roshan Agarwal, Founder, repairanymobile.com. Tirupati	RSCT	120
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RSC P CALICUT

Sl. No.	DATE	TOPIC	NAME OF THE SPEAKER	VENUE	AUDIENCE
1	02-05-2020	SARS Cov2	Prof. Partha Pratim Majumder Distinguished Scientist & Founder Director, National Institute of Biomedical Genomics & President Indian Academy of Sciences	RSCP Online	1,800
2	14-05-2020	COVID-19, What can India do?	Prof. G. Padmanabhan President NASI, Former Director IISc	RSCP Online	650
3	25-05-2020	Creating Covid Collection –planning a permanent exhibition for future	Dr. Sabyasachi Mukherjee, Director General Chathrapathi Shivaji Maharaj vastu Sangrahalaya, Mumbai	RSCP Online	427
4	27-05-2020.	Disease, Stigma and enemy approach	Dr. Vinay Kumar Srivastava, Director, Anthropological Society of India	RSCP Online	256
5	3-06-2020	Environmental issues in India	Dr. Anil Prakash Joshi, the Padma Shri and Padma Bhushan Awardee Botanist	RSCP Online	670
6	8-06-2020	Programmed Cell Death –immunity and infection	Prof. Chandrima Shaha, President Indian National Science Academy New Delhi	RSCP Online	256
7	23-07-2020	Indian innovation in Space Technology	Dr. S. Somanath, Director Vikram Sarabhai Space Centre Thiruvananthapuram	RSCP Online	140
8	7-08-2020	Artificial Intelligence (AI) for India and beyond	Dr. Manish Gupta, Director at Google Research India	RSCP Online	174

ACTIVITY REPORT OF VITM AND SATELLITE UNITS 2020-21

9	17-08-2020	Introduction to AI & Engineering innovations	Dr. Sheik Muhammed Asst. Professor TKM Engineering College	RSCP Online	31
10	19-08-2020	Trained to Talk-develop a chatbot that learns and talks to you	Shri. Satadal Ghosh Curator, CRTL Kolkatta	RSCP Online	31
11	28-09-2020	Eat Right: Bite by Bite	Prof. Devadasan Malabar Christian College	RSCP Online	35
12	05-10-2020	Introduction to Space Technology	Shri. Sheeju Chandran Scientist VSSC Thiruvananthapuram	RSCP Online	98
13	7-10-2020	Application of Remote Sensing	Dr. M. R. Venugopal, Scientist CWRDM	RSCP Online	53
14	10-10-2020	Membranes-The trend in water purification	Dr. Amit Bhattacharya, Principal Scientist CSIR-Central Salt and Marine Chemicals Research Institute, Bhavnagar Gujarat	RSCP Online	75
15	30-10-2020	Vigilant India, Prosperous India	Shri. Suresh. V. Dy. SP, Vigilance and Anti-Corruption Bureau	RSCP Online	25
16	26-11-2020	Constitutional values Equality, Fraternity, Freedom and Scientific temper	Adv. Anupriya, Munsiff Magistrate court Nadapuram	RSCP Online	45
17	19-12-2020	Integration.	Dr. Mini Tom, Professor SCMS school of Engineering and Technology Karukutty	RSCP Online	310
18	23-12-2020	Mathematics and Beauty	Dr. Jayasree, HOD Mathematics, KMCT College of Arts & Science	RSCP Online	62
19	29-01-2021	Building RSC & Planetarium Calicut making a Social impact	Shri. K. Madan Gopal Director VITM	RSCP Online	125
20	29-01-2021	Influencing factors for a perfect image	Mr. Martin Kraus Head of Business field Planetariums Carl Zeiss jena	RSCP Online	110

ACTIVITY REPORT OF VITM AND SATELLITE UNITS 2020-21

21	27-02-2021	Spectroscopy: Application to Earth Observation and Climate	Dr. M. K .Ravi Varma Professor NIT Calicut	RSCP Online	65
22	24-03-2021	Increase in farm income through adaptation of technology	Dr. Nirmal Babu Former Director of Indian Institute of Spices Research	RSCP	50
23	24-03-2021	Sustainable and Environment –friendly Agriculture	Dr. R. Praveena Senior Scientist IISR	RSCP	50

DSC GULBARGA

Sl.No.	Date	Topic	Name of the Speaker	Venue	Audience
1.	05-06-2020	Time for Nature	Dr. Prakash. K Chairman, Dept. of studies and research in Environmental Science Gulbarga University, Kalaburagi	Webinar at DSC G	109
2.	11-06-2020	Medicinal Kitchen Garden	Dr. Nirmala Kelmani, Professor, Dept. of Dravyaguna Shastra, Shri Hingulambika Ayurvedic Medical College Hospital & Research Centre Kalaburagi	Webinar at DSC G	119
3.	20-06-2020	Adventures of Particle physicist'	Dr. Archana Sharma Principle Scientist European Organization for Nuclear Research (CERN), Swizerland	Webinar at DSC G	131
4.	21-06-2020	Yoga for strengthening your immune system'	Dr. SmitaKanmuse Associate Professor, Dept. of Basic Principles, Shri Hingulambika Ayurvedic College Kalaburagi	Webinar at DSC G	128
5.	20-08-2020	Palaeobotany	Prof. A K Srivatsava Former Sr. Scientist, Birbal Sahni Institute of Palaeobotany, Lucknow	Webinar at DSC G	66
6.	03-09-2020	Our Door Step to the Sky: The Fascinating Galaxies of the Universe'	Prof. Prajval Shastri, Astrophysicist Former faculty member Indian Institute of Astrophysics, Bangalore	Webinar at DSC G	78

ACTIVITY REPORT OF VITM AND SATELLITE UNITS 2020-21

7.	07-09-2020	Pleasure of being a Physics Teacher'	Dr. S .M. Shivaprasad Professor, International Centre for Materials Science, JNCASR, Bengaluru	Webinar at DSC G	78
8.	07-09-2020	Activation Energy	Dr. M. S. Jogad Former Coordinator, Dept. of Physics, KSWU, Vijayapur	Webinar at DSC G	75
9.	08-09-2020	Saga of Digital Era'	Shri. Shivaprasad M. Khened, Director Nehru Science Centre Mumbai	Webinar at DSC G	75
10.	08-09-2020	Story of Evolution of Glass & Glass- Ceramics'	Dr. G. P. Kothiyal Outstanding Scientist (Retired) and Former Head Glass & Advanced Ceramics Division BARC, Mumbai.	Webinar at DSC G	75
11.	15-09-2020	My experience as space Scientist'	Er. Narayana Inamdar Rtd. Scientist, NRSA, ISRO Hyderabad & NASA, Maryland, USA	Webinar at DSC G	48
12.	20-12-2020	Rare celestial event - Saturn & Jupiter Conjunction	Dr. Ravinder Banyal Research Scientist IIA, Bangalore	Webinar at DSC G	98
13.	21-12-2020	life and works of SrinivasaRamanujan'	Dr. Naduvinmai N.B Professor Dept. of Mathematics, Gulbarga University, Gulbarga	Webinar at DSC G	65
14.	06-01-2021	India in Space : Achievements & Challenges'	Dr. B R Guruprasad Rtd. Scientist 'SG' - Associate Director, Office of Media & Public Relations, ISRO Headquarters, Bengaluru	Webinar at DSC G	122
15.	24-02-2021	Raman Effect	Dr. A Dayand Vice Chancellor of Gulbarga University, Kalaburagi	DSC G	118
16.	21-03-2021	Importance of World forest day	Dr. Ramesh Mala, Range Forest Officer, Kalaburagi	Webinar at DSC G	22
17.	22-03-2021	Importance of World Water day	Shri. C. N. Manjappa, Environment Officer, KSPCB, RO, Kalaburagi	Webinar at DSC G	25
18.	23-03-2021	World meteorology day	Shri. Somashekhar S Ruli, Transmission Executive, All India Radio, Kalaburagi	Webinar at DSC G	24

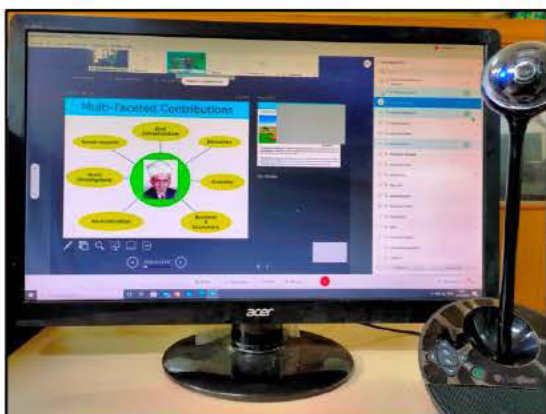
ACTIVITY REPORT OF VITM AND SATELLITE UNITS 2020-21

DSC, TIRUNELVELI

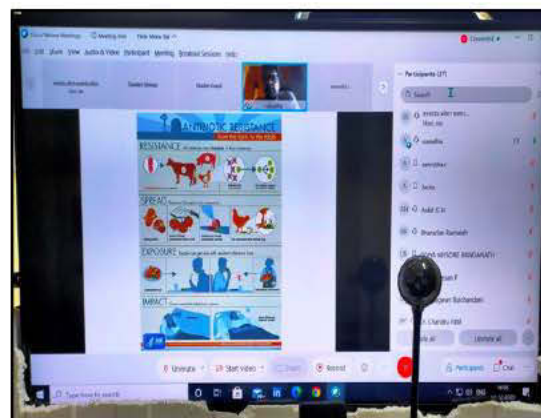
SL NO	DATE	TOPIC	NAME OF THE SPEAKER	VENUE	AUDIENCE
1	18-05-2020	Museums and Fossils for Common People	Dr Niraml Rajah, Education Coordinator, Mleiha Archaeological Centre, Sarjah, UAE.	DSC-T (Online)	34
2	22-05-2020	Biodiversity - the Essence of Life	Dr N Anandakumar, Asst. Professor, Dept. of Education, The Gandhigram Rural Institute, Gandhigram, Dindugal.	DSC-T (Online)	57
3	14-06-2020	Asteroid Mining	Mr. Mitch Hunter Scullion, Founder and CEO of Asteroid Mining Corporation Ltd. United Kingdom.	DSC-T (Online)	46
4	21-06-2020	Benefits of Yoga	Smt E Mahalakshmi, Founder, Agasthiyar Yogasala, Tirunelveli.	DSC-T (Online)	49
5	10-07-2020	Health & Rights of Women and Girls	Dr S V L Michael, Principal, Madonna Arts and Science College, Virahanur, Madurai.	DSC-T (Online)	58
6	09-08-2020	Invasive Agricultural Pests in India	Dr S Gangadharan, Subject Matter Specialist (Agro-Met), Tamilnadu Veterinary & Agriculture Science University, Chennai.	DSC-T (Online)	98
7	26-08-2020	Duties & Rights of a Citizen	Shri V Palanichamy, Director (News), All India Radio.	DSC-T (Online)	39
8	12-09-2020	Eye Care in the Digital Era	Smt . Dr. Meenakshi, Chief Doctor, Aravind Eye Hospital, Tirunelveli.	DSC-T (Online)	89
9	14-09-2020	Hindi Diwas – an overview	Shri Jeyakumar, Asst Director (Language), Hindi Teaching Scheme, Tirunelveli.	DSC-T (Online)	13
10	01-10-2020	Gandhian Thoughts – Special View on Relevance in Contemporary World	Smt. Sathiyavalli, District Curator, Govt. Museum, Tirunelveli.	DSC-T (Online)	106
11	10-10-2020	Robotics Technologies to Enable Space Exploration	Mr. Manuel Retana, NASA JSC Aerospace Engineer.	DSC-T (Online)	46

ACTIVITY REPORT OF VITM AND SATELLITE UNITS 2020-21

12	23-10-2020	Role of Nutrition during Viral Pandemic	Dr. G Subash Chandran, Prof. Govt. Siddha Medical College, Tirunelveli.	DSC-T (Online)	48
13	17-12-2020	The Great Conjunction – a rare astronomical event	Shri S M Kumar, DSO, DSC-T.	DSC-T (Online)	86
14	22-12-2020	Gandhian Thoughts	Dr .Valan Arasu, President, UlagaThirukural Thagaval Maiyam, Tirunelveli.	DSC-T (Online)	28
15	27-02-2021	Science & Society	Dr .S Sethuramalingam, Former Director, RMNH, Bhopal.	DSC-T (Online)	92
16	28-02-2021	Women and Girls in Science	Dr .Rajamalli, Asst. Professor, Indian Institute of Science (IISc), Bengaluru.	DSC-T (Online)	96
17	08-03-2021	Rise, Shine and Re-write future: CRISPR the Nobel prize winning technology, a Golden era for Women in Science	Dr. Kalpana Surendranath, Associate Professor, University of Westminster, London.	DSC-T (Online)	79

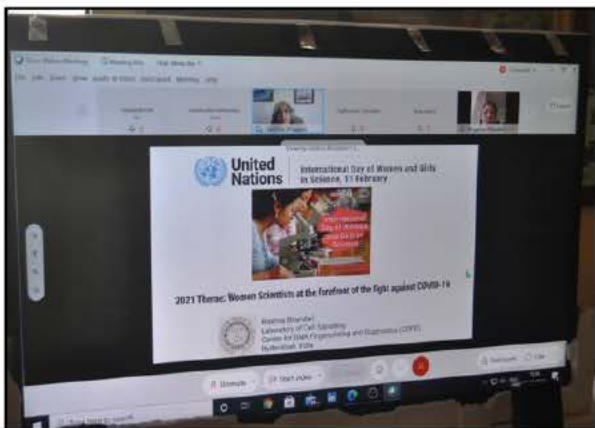


Webinar on 'Personality and Achievements of Sir. M. Visvesvaraya' by Dr. K S Nanjunda Rao, Chief Research Scientist, Department of Civil Engineering, Indian Institute of Science, Bangalore at VITM



Webinar on 'Antibiotics Misuse - rise of Superbugs' by Dr. Varadharajan Sundaramurthy, Host - Pathogen Interaction, National Centre for Biological Sciences (NCBS), TIFR, GVKK Campus, Bangalore at VITM

ACTIVITY REPORT OF VITM AND SATELLITE UNITS 2020-21



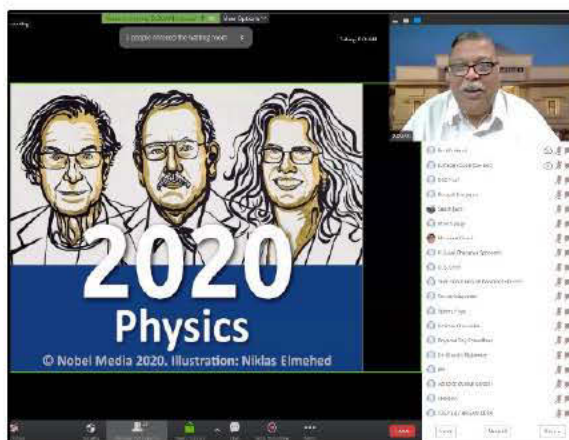
Webinar on “Women Scientists at the forefront of fight against COVID-19 by Dr. Rashna Bhandari, Staff Scientist and Group Leader, Laboratory of Cell Signalling Centre for DNA Fingerprinting and Diagnostics (CDFD), Hyderabad at VITM

Webinar on Women in leadership achieving an equal future in a COVID-19 world by Padma Shri Smt. Sudha Murty, Chairperson, Infosys Foundation, Bangalore at VITM

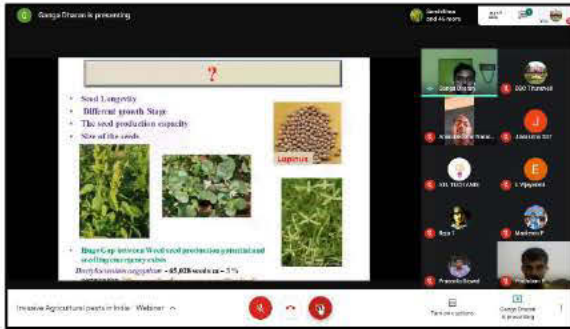


Webinar on ‘Satellites to Improve Lives’ by Shri. P. Vijaya Saradhi, Former Group Director, Satish Dhawan Space Centre, SHAR, Sriharikota at RSC T

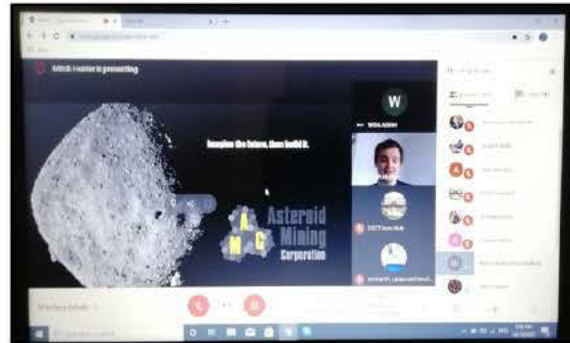
Webinar on Nobel Prize in Physics 2020 by Dr. Debiprasad Duari, Director, Research & Academic of M. P. Birla Institute of Fundamental Research, M. P. Birla Planetarium, Kolkata at RSC T



ACTIVITY REPORT OF VITM AND SATELLITE UNITS 2020-21



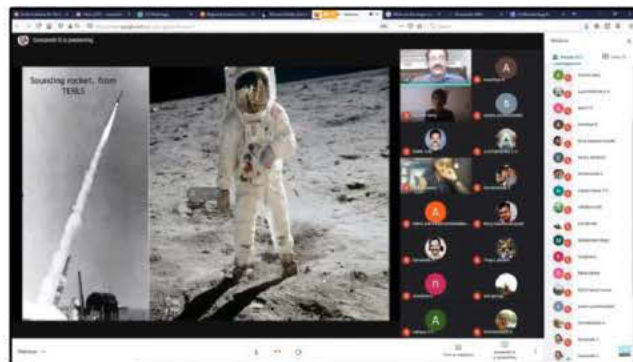
Webinar on 'Invasive Agricultural Pests in India' by Dr S Gangadharan, Subject Matter Specialist (Agro-Met), Tamilnadu Veterinary & Agriculture Science University, Chennai at DSC T



Webinar on 'Asteroid Mining' by Mr. Mitch Hunter Scullion, Founder and CEO of Asteroid Mining Corporation Ltd. United Kingdom. at DSC T



Webinar on 'Raman Effect' by Dr. A Dayanand Vice Chancellor of Gulbarga University, Kalaburagi at DSC G



Webinar on Indian Innovations in space technology by Dr. S .Somanath, Director Vikram Sarabhai Space Centre Thiruvananthapuram at RSC P Calicut

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

SI. No	Name of the Experiments	SI. No.	Name of the Experiments
1	Identification of Acid Base, Salt and Alkali	6	Synthesis reaction
2	Decomposition Reaction	7	Displacement reaction – Single
3	Displacement Reaction - Double	8	Oxidation Reaction
4	Reduction Reaction	9	Endothermic Reaction
5	Exothermic reaction	10	Effect of Electricity on Chemical Reactions

ELECTRONICS :

SI. No	Name of the Projects	SI. No	Name of the Projects
1	Properties of Diode	4	Resistor to glow LED
2	LED blinker using Transistors	5	Optic Switch
3	LED blinker using IC555	6	Multi tone music with IC3561

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

SI. No	Name of the Projects	SI. No	Name of the Projects
Physics			
1.	Laws of Motion	6	Optics
2.	Friction	7	Center of Gravity
3.	Conduction Convection Radiation	8	Transfer of Momentum
4.	Centripetal & Centrifugal Force	9	Simple Pendulum
5.	Resonance	10	Bernoulli's Principal
Biology			
1	T. S of Dicot & Monocot Stem	5	Leaf Disc Experiment
2	T. S of Dicot & Monocot Leaf	6	Stomata & Gas exchange Experiment
3	T. S of Dicot & Monocot Root	7	Extraction of DNA
4	Cell Division in Onion Root Tips	8	Study of Yeast

ACTIVITY REPORT OF VITM AND SATELLITE UNITS 2020-21

5	Fermentation	10	Mobile macro-scope making
Electronics			
1	Introduction to Electronic Components	5	LDR Circuit making
2	Variable Voltage Power Supply	6	Variable Resistance Board
3	Parallel and Series Connections	7	Introduction to Arduino
4	Switch Board Wiring		
Astronomy			
1	Sun Dial	5	Eratosthenes Experiment
2	Sextant	6	Telescope Making
3	Ball & Mirror Projection	7	Sky Chart
4	Scale Down of Solar System		

RSCT – LIST OF PROJECTS COMPLETED IN MUSEUM CAC

RSC P Calicut

Sl. No	Name of the Projects
1	Paper chromatography
2	Polarization
3	Principle of levers
4	Holography
5	Crosstaff
6	Refracting telescope
7	Transformers
8	Soap making
9	Celestial sphere
10	Estimation of NaOH
11	Home automation using Arduino
12	Robotics using Arduino

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 and Video/Film shows, etc both online and offline.

VITM, BANGALORE

SI No	Name of the Programmes	Date
1	World Earth Day	23-04-2020
2	National Technology Day	11-05-2020
3	International Museums Day	18-05-2020
4	World Environment Day	05-06-2020
5	International Day of Yoga	21-06-2020
6	World Population Day	10-07-2020
7	55 th Anniversary of the Museum	27 & 30 – 07-2020
8	Birth Anniversary of Dr. Vikram Ambalal Sarabhai	12-08-2020
9	159 th Birth Anniversary of Sir. M Visvesvaraya	15-09-2020
10	World Ozone Day	16-09-2020
11	150 th Birth Anniversary of Mahatma Gandhi	30-09-2020
12	International Space week celebration	08-10-2020
13	Birth Anniversary of Prof. Subrahmanyam Chandrasekhar	19-10-2020
14	International Science Centre & Science Museums Day	10-11-2020
15	Indian constitution Day	26-11-2020
16	Birth Anniversary of Srinivasa Ramanujan, National Mathematics Day	22-12-2020
17	International day of Women and Girls in Science	11-02-2021
18	National Science Day	24-28/02-2021
19	International Women's Day	08-03-2021
20	Birth Anniversary of Albert Einstein	14-03-2021
21	World Water Day	22-03-2021
22	75 years of independence	30-03-2021

ACTIVITY REPORT OF VITM AND SATELLITE UNITS 2020-21**RSC, TIRUPATI**

SI No	Name of the Programmes	Date
1	NCSM Foundation Day	10-04-2020
2	Earth Day	22-04-2020
3	National Technology Day	11-05-2020
4	International Museum Day	18-05-2020
5	World Environment Day	05-06-2020
6	International Yoga Day	21-06-2020
7	Moon Landing Week	16 to 22 - 07-2020
8	RSC Tirupati Anniversary Week	23 to 28 - 09-2020
10	World Space Week	08 to 10 - 10-2020
11	150 th Birth Anniversary of Mahatma Gandhi	01 & 02 - 10-2020
12	Birth Anniversary of APJ Abdul Kalam	15-10-2020
13	Rashtriya Ekta Diwas	31-10-2020
14	International Science Centre & Science Museum Day	10-11-2020
15	Constitution Day	26-11-2020
16	National Science Week	22 to 28 - 02-2021
17	International Women's Day	08-03-2021

RSC P Calicut

SI No	Name of the Programmes	Date
1	World Earth Day	22-04-2020
2	International Museum Day	18-05-2020
3	World Environment Day	05-06-2020
4	International day of Yoga	21-06-2020
5	Moon landing week	20-07-2020
6	World Space week	04-10-2020
7	Children's Day	14-11-2020
8	National Mathematics Day	22-12-2020
9	Anniversary Day	30-01-2020
10	National Science Day	28-02-2021

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DSC, GULBARGA

Sl. No.	Name of the Programme	Date
1	World Environment	05-06-2020
2	International Day of Yoga	21-06-2020
3	Moon landing day	20-07-2020
4	Engineer's day	15-09-2020
5	World Food Day	16-10-2020
6	Birth anniversary of Sir C.V Raman and Marie Curie	07-11-2020
7	Constitution Day	26-11-2020
8	Birth anniversary of J.C Bose	30-11-2020
9	Birth anniversary of Srinivasa Ramaujan	22-12-2020
10	37 th Anniversary DSCG	06-01-2021
11	National Science day	28-02-2021
12	World forest day	21-03-2021
13	World Water day	22-03-2021
14	World meteorology day	23-03-2021

DSC, TIRUNELVELI

Sl No	Name of the Programmes	Date
1.	International Museum Day	18-05-2020
2.	International Day for Biological Diversity	22-05-2020
3.	World Environment Day	05-06-2020
4.	International Day of Yoga	21-06-2020
5.	World Population Day	10-07-2020
6.	World Elephant Day	12-08-2020
7.	World Photography Day	19-08-2020
8.	Teacher's Day	05-09-2020
9.	Hindi Diwas	14-09-2020
10.	Gandhi Jeyanthi	01-10-2020
11.	World Space Week	10-10-2020
12.	World Sight Day	17-10-2020
13.	World Students Day	15-10-2020
14.	National Unity Day	29-10-2020
15.	Vigilance Awareness Week	02-11-2020
16.	International Science Centre & Science Museum Day	10-11-2020

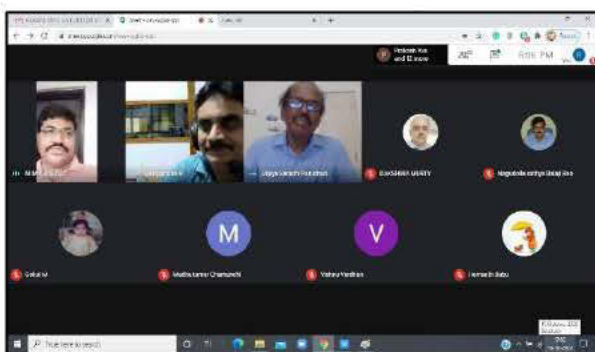
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17.	Indian Constitution	29-11-2020
18.	National Mathematics Day	22-11-2020
19.	DSCT Anniversary Day	27-02-2021
20.	National Science Day	28-02-2021
21.	International Women's Day	08-03-2021
22.	World Glaucoma Awareness Week	14-03-2021
23.	World Water Day	22-03-2021

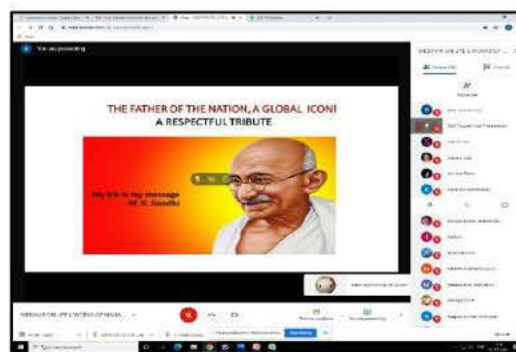
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Celebration of Birth Anniversary of Sir M Visvesvaraya at VITM



World Space week celebration at RSC T



Celebration of 150th Birth Anniversary of Mahatma Gandhi at RSC T



National Science Day celebration at DSC G



Celebration of International Day of Yoga at DSC T



Celebration of International Day of Yoga at RSC P Calicut

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 both online and offline.

VITM, BANGALORE

SI No	Name of the Programmes	Collaborator
1	App Development Course on Android	IEEE, Bangalore Chapter
	The Exhibition "Superbugs- The End of Antibiotics"	Science Museum Group, London & Welcome Trust

RSC, TIRUPATI

SI No	Name of the Programmes	Collaborator
1	Earth Day	All India Radio, Tirupati
2	Moon Landing Week	National Atmospheric Research Laboratory, Gadanki
3	Can Energy Be Created: Demonstration on Perpetual Motion	B M Labs, Chennai
4	Great Backyard Bird Count	A Citizen Science Initiative, IISER, Tirupati
5	Teacher Training Programme	Indian Science Congress Association Tirupati Chapter
6	Workshop on Making of Microscope	C K Das Academy, Kandakuru
7	Online Workshop on Coding for Beginners	SRK Education Society, Tirupati
8	Introduction to Aviation	SRK Education Society, Tirupati
9	World Water Day	All India Radio, Tirupati

RSC P Calicut

SI No	Name of the Programmes	Collaborator
1	World Environment Day –Short film making	Zoological Survey of India
2	Webinar-Indian Innovations in Space Technology	Vikram Sarabhai Space Centre Thiruvananthapuram
3	Online workshop on Artificial Intelligence & Robotics	Institution of Electronics and Telecommunication Engineers Kozhikode

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4	Rapid Antigen test	District Medical Office
5	Webinar: Nobel Nod for Black Holes	UL space club
6	Miyawaki model afforestation	The Institute of Chartered Accountants of India, Kozhikode Branch
7	Workshop on fundamentals of Engineering Mathematics	Institution of Electronics and Telecommunication Engineers Kozhikode

DSC, GULBARGA--NIL--

DSC, TIRUNELVELI

SI No	Name of the Programme	Collaborator
1	World Environment Day - Virtual Panel Discussion	ATREE Trust, Tirunelveli and Nellai Nature Club, Tirunelveli.
2	Webinar on 'Asteroid Mining '	Aero Wings - T.E.M.S Talks, Tirunelveli.
3	International Day of Yoga - Yoga Practice Session	The World Community Service Centre, Tirunelveli.
4	Webinar on 'Solar Eclipse – Viewing Safely & Busting Myths'	National Engineering College, Kovilpatti.
5	Workshop on the topic 'Intellectual & Efficient Nature Club Activities'	Meston College of Education, Chennai.
6	World Elephant Day	Arumbugal Trust, Tirunelveli
7	World Photography Day	V G P G Creations Club, Tirunelveli and Nellai District Video & Photographers Association.
8	Webinar on 'Eye Care Awareness'	Aravind Eye Hospital, Tirunelveli.
9	Webinar on 'Robotics Technologies to Enable Space Exploration'	TEMS Era – Wings of Aero, Tirunelveli.
10	Workshop on 'IoT Basics – Level 1'	Quantanics Tech Pvt. Ltd., Madurai.
11	World Sight Day	Aravind Eye Hospital, Tirunelveli.
12	Webinar on 'Role of Nutrition during Viral Pandemic'	Govt. Siddha Medical College, Tirunelveli.
13	International Workshop on 'Make Your Own Face Mask'	Business Incubation Centre, Manonmaniam Sundaranar University, Tirunelveli, Kyoto University, Japan and Ooyoo Face, Japan.
14	Workshop on 'Food – Water - Energy'	NXPloer Learning Links, Bengaluru.
15	'Wetland Birds Count of Thamirabharani River' - a Public Awareness Programme,	ATREE Trust, Tirunelveli and Nellai Nature Club.

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16	Specific Concept Oriented Programme (SCOPE) projects Evaluation	Office of Chief Educational Officer, Dept of School Education and Rashtriya Madhyamik Shiksha Abhiyan (RMSA), Tirunelveli.
17	Free Glaucoma Screening Eye Camp	Aravind Eye Hospital, Tirunelveli
18	Special Panel Exhibition was inaugurated as a part of India's 75 th Independence Day celebrations	Directorate of Field Publicity, Ministry of Information & Broadcasting, Tirunelveli.

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App Development Course on Android at VITM in collaboration with IEEE Bangalore Chapter



Exhibition "Superbugs- The End of Antibiotics at VITM in collaboration with Science Museum Group, London & Welcome Trust



Bird Watch Great Backyard Bird Count at RSC T in collaboration with A Citizen Science Initiative, IISER, Tirupati Chapter



International Workshop on 'Make Your Own Face Mask' at DSC T in collaboration with Kyoto University, Japan and Ooyoo Face, Japan. Chapter



World Sight Day at DSC T in collaboration with Aravind Eye Hospital, Tirunelveli



Miyawaki model afforestation at RSC P Calicut in collaboration with The Institute of Chartered Accountants of India, Kozhikode Branch



Ministry of Culture
Government of India



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