ACTIVITY REPORT 2020 - 2021

Birla Industrial & Technological Museum &

Shrikrishna Science Centre, Patna
North Bengal Science Centre, Siliguri
Digha Science Centre & National Science Camp
District Science Centre, Purulia
Bardhaman Science Centre

With best compliments from

Shri A. D. Choudhury

Director General
National Council of Science Museums

Shri V S Ramachandran

Director
Birla Industrial & Technological Museum

Birla Industrial & Technological Museum (National Council of Science Museums, Ministry of Culture, Govt. of India) 19A, Gurusaday Road, Kolkata - 700 019 Phone - 2287 7241, 9477345291

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Twitter: @BITMKolkata

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Message

In the all-encompassing pandemic environment, BITM and its satellite units fought hard to keep the student community engaged with a variety of online events throughout the period 2020-21. Although the Museum and Science Centres in West Bengal were given the green signal to let the visitors in from 10 November 2020, the student community, which constitutes a hefty part of the visitors, were sourly missed.

In spite of the heavy odds, few new exhibits were installed. NBSC Siliguri unveiled HPT 32 "Deepak" Aircraft along with an "Energy Drum" exhibit. SSC Patna added "Day-Night Sundial" Exhibit. Giant Magic Taps were fabricated and thrown open to public in BITM, Bardhaman Science Centre, SSC, Patna, Digha Science Centre and in NBSC, Siliguri.

New Science Demonstration Lectures on 'Optical Illusion' and 'Light & Color' were launched by NBSC Siliguri, 'Mele Ke Khiloune' by SSC Patna. BITM came up with 'Joy of Toy' show. Videos on 'Why we celebrate Makar Sankranti' and 'Why we need Machines' were made and screened by SSC Patna. Digha Science Centre released a video on "Butterfly: The Secret journey of life". BITM Kolkata developed two films - 'Characterizing Color: Sir C V Raman at Work' and another one on environment entitled 'Dear Trellis'.

Although regular annual programmes such as Science Fair, Science Seminar, Exhibition, Mobile Science Exhibition could not be arranged, all effort were made to maintain connectivity with the students and general visitors through our social media platforms, such as, Website, Twitter, Facebook and YouTube. Online Exhibition, lecture, quiz, webinar, painting competition, science workshop, hobby camps were organized. Celestial events were webcast by BITM and its units with huge response. Partial Solar Eclipse, Conjunction of Jupiter & Saturn, Super Moon observation were some of them.

Innovation Hub activities carried on with right earnest. Members attended online class, workshop and Lecture by eminent speakers and thereby enriched themselves. Projects were guided by the mentors online. Quite a few projects were successfully completed. Biotech Lab also played its role in engaging the students online fruitfully with lectures and experiments.

Last but not the least, programmes under Govt. initiative, such as, Yoga Day, Rashtriya Samrasta Diwas, Rajbhasa Diwas / Hindi Pakwara, Sankalp Parva, Vigilance Awareness Week, Constitution Day Celebration with Yearlong Activity, Rashtriya Ekta Diwas, Concluding Ceremony of the 150th Birth Anniversary of Mahatma Gandhi and National Youth Day were arranged in all the units of BITM.

I sincerely hope for a safe pandemic free environment for one and all in the coming 2021-22.

V. S. Ramachandran Director, BITM

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General Information

1. Birla Industrial & Technological Museum

i. Name of Head of Museum : Shri V. S. Ramachandran, Directorii. Full Address : 19A, Gurusaday Road, Kolkata - 700019

iii. Phone No and : 033 2287 7241, 9477345290/1/2,

iv. Fax : 22870233

v. Email: director@bitm.gov.in vi. Website:www.bitm.gov.in

vii. Hours of opening: 9:30 am to 6:00 pm on all days (including Saturdays and Sundays)

viii.Closed to visitors on : Doljatra and Kalipuja ix. Entry Fee : a) Museum Entry

i. General Visitors - Rs.50.00 per head

ii. 25 or more Visitors in a group - Rs.40.00 per head

iii. Students in Groups - Rs.20.00 per head

iv. Govt. School Students in Group - Rs.10.00 per head

b) Taramandal Show

i. General Visitors & Students - Rs. 10.00 per head,

ii. Govt. School Students in Group - Rs.5.00 per head

c) Coal Mine Show

i. General Visitor - Rs. 15.00 per head,

ii. 25 or more Visitors in a group : - Rs.10.00 per head

iii. School Group - Rs. 5.00 per head

d) 3D show

i. General Visitors- Rs. 30.00 per head

ii. 25 or more Visitors in a group - Rs.25.00 per head

iii. School Group - Rs. 20.00 per head,

iv. Govt. School Students in Group - Rs.15.00 per head e) Science Show

i. General Visitors & Students - Rs. 10.00 per head ii. Govt. School Students in Group - Rs.5.00 per head x. Inaugurated on : 2nd May 1959 xii. Floor Area in Sq. mtrs.: 10351.95

f) Package Rate Tickets

(includes one science show + 3D show + coal mine show + visit to all galleries + Chromakey shows in TV + Show in Spark Theatre + Math demo in Mathematics Gallery

i. General Visitors- Rs. 75.00 per head

ii. 25 or more Visitors in a group : - Rs. 65.00 per head

iii. School Group - Rs. 45.00 per head,

iv. Govt. School Students in Group - Rs. 30.00 per head

2. Srikrishna Science Centre, Patna

i. Name of Head of Centre : Shri Amitabh, Project Coordinator ii. Full Address : West Gandhi Maidan, Patna - 800001

iii. STD Code with Phone No: 0612 2206992

iv. Email: sscncsm@gmail.com

v. Website: http://www.sksciencecentre.org

vi. Hours of opening: 9:30 am to 6.30 pm
vii. Closed to visitors on: Holi & Diwali
viii. Entry Fee: a) Centre Entry

i. General Visitors - Rs.30.00 per head

ii. 20 or more Visitors in a group - Rs. 15.00 per head

iii. Students in Groups - Rs. 10.00 per head

iv. Govt. School Students in Group - Rs. 5.00 per head

b) Taramandal Show

i. General Visitors & Students in group - Rs. 10.00 per head ii. Govt. School Students in Group - Rs. 5.00 per head

c) Science Show

i. General Visitors & Students in group - Rs. 10.00 per head ii. Govt. School Students in Group - Rs. 5.00 per head

SSC, Patna Contd.

d) 3D Show

i. General Visitor - Rs. 30.00 per head

ii. 25 or more Visitors in a group - Rs. 15.00 per head

iii. School Group - Rs. 15.00 per head

iv. Govt. School Students in Group - Rs. 5.00 per head

e) <u>Digital Planetarium Show</u>
i. General visitor - 30.00 per head
ii. Student in group - 15.00 per head
iii. Govt. Student in group - 5.00 per head

f) <u>Science on a Sphere Show</u>
i. General visitor - 25.00 per head
ii. Student in group - 15.00 per head
iii. Govt. Student in group - 10.00 per head

ix. Inaugurated on: 14th April 1978 x. Floor Area in Sq. mtrs: 5000.69

3. District Science Centre, Purulia

i. Name of Head of Centre: Shri Dhrubajyoti Chattopadhaya, District Project Officer

ii. Full Address : North Lake Road, Purulia - 723101

iii. Phone No: 9593383386

iv. Email: dscpurulia@gmail.com, districtsciencecentrepurulia@gmail.com

v. Hours of opening : 10:30 am to 7:00 pm vi. Closed to visitors on : Doljatra and Kalipuja

vii. Entry Fee:

a) <u>Centre Entry</u>

i. General Visitors - Rs. 15.00 per head ii. Students in Groups - Rs. 10.00 per head

iii. Govt. School Students in Group - Rs. 5.00 per head

b) <u>Taramandal Show</u>

I) General Visitors & Students - Rs. 10.00 per head

II) Students in groups - Re. 5.00 per head

c) Science Show

I) General Visitors & Students - Rs. 10.00 per head

II) Students in groups - Re. 5.00 per head

d) 3D Show

i) General Visitors - Rs. 15.00 per headii) Students in groups - Re. 10.00 per head

e) Royal Museum Tour Package for General (Entry & including all

shows) - Rs. 35.00

f) Gold Museum Tour Package for General (Entry & including 3D) -

Rs.25.00

viii. Inaugurated on : 15th Dec, 1982

ix. Floor Area in Sq. mtrs : 1637

4. Bardhaman Science Centre

i. Name of Head of Centre : Shri Nikhilesh Biswas, District Science Officer ii. Full Address : Ramna Maidan, Baburbag P.O. Rajbati Dist.

Purba Bardhaman - 713104

iii. STD Code with Phone No: 0342 2950565

iv. Email: sciencecentrebwn@gmail.com

v. Hours of opening : 10 am to 6:00 pm vi. Closed to visitors on : Doljatra and Kalipuja

vii. Entry Fee : <u>Centre Entry</u>

i. General Visitors - Rs. 20.00 per head ii. 25 or more in a Group : Rs. 15.00 per head iii. Organised School Group : Rs. 10 per head

iv. Govt. Schools students in Group: Rs. 5.00 per head

Bardhaman Science Centre (Contd.)

Taramandal Show

i. General Visitors— Rs. 10.00 per head ii. Students in Group: Rs. 5.00 per head

Science Show

i. General Visitors— Rs. 10.00 per head ii. Students in Group: Rs. 5.00 per head

3D Show

i. General Visitors - Rs. 25.00 per head II) 25 or more in a group - Rs. 20 per head ii. Students in Group: Rs. 10.00 per head

viii. Inaugurated on: 9th January 1994 ix. Floor Area in Sq. mtrs: 2117 Sq. Mtrs

5. North Bengal Science Centre

i. Name of Head of Centre : Shri Ritabrata Biswas, Project Coordinator ii. Full Address : Post Matigara Siliguri - 734010 Dist. Darjeeling

iii. STD Code with Phone No: 0353 2571229

iv. Email, nbscsiliguri1997@gmail.comv. Website http://www.nbscsiliguri.org

vi. Facebook: https://www.facebook.com/nbscsiliguri
vii. Twitter: https://twitter.com/nbscsiliguri1

viii. Youtube: https://www.youtube.com/channel/UCjwgmxzRCFAFBVrwHVueF1Q

ix. Hours of opening:x. Closed to visitors on:xi. Entry Fee:10:30 am to 7 pmHoli & Diwalia) Centre Entry

i. General Visitors - Rs. 25.00 per head

ii. 25 or more Visitors in a group - Rs. 20.00 per head

iii. Students in Groups - Rs. 10.00 per head

iv. Govt. School Students in Group - Rs. 5.00 per head

b) Digital Planetarium

i. General Visitors - Rs. 25.00 per headii. 25 or more in a group - Rs. 20.00 per headiii. Students in Groups - Rs. 15.00 per head

iv. Govt. School Students in Group - Rs. 10.00 per head

c) Taramandal Show

i. General Visitors & Students in a group: Rs. 10.00 per head

ii. Govt. School Students in Group - Rs. 5.00 per head

d) Science Show

i. General Visitors & Students in a group - Rs 10.00 per head

ii. Govt. School Students in Group - Rs. 5.00 per head

e) 3D Show

i. General Visitor - Rs 20.00 per head

ii. 25 or more Visitors in a group - Rs. 15.00 per head

iii. School Group - Rs. 10.00 per head

iv. Govt. School Students in Group - Rs. 10.00 per head

viii. Inaugurated on: 17th Aug 1997

ix. Floor Area in Sq. mtrs: 2598

6. Digha Science Centre & National Science Camp

i. Name of Head of Centre : Shri Niranjan Gupta, Project Coordinator

ii. Full Address: Fore shore Road, New Digha - 721 463 West Bengal

iii. STD Code with Phone No: 03220 266360

iv. Email: dscdigha@gmail.com

v. Hours of opening: 9 am to 7 pm

vi. Closed to visitors on : Doljatra and Kalipuja

Digha Science Centre (Contd.)

vii. Entry Fee: a) Centre Entry

i. General Visitors - Rs.25.00 per head

ii. 25 or more Visitors in a group - Rs.20.00 per head iii. Students in Groups - Rs. 15.00 per head

iv. Govt. School Students in Group - Rs. 10.00 per head

b) Taramandal Show

i. General Visitors & Students in a group - Rs. 10.00 per head ii. Govt. School Students in Group - Rs.5.00 per head

c) Science Show

i. General Visitors & Students in a group - Rs 10.00 per head ii. Govt. School Students in Group - Rs. 5.00 per head

d) 3D Show

i. General Visitors-Rs 20.00 per head

ii. 25 or more Visitors in a group - Rs. 15.00 per head

iii. School Group - Rs. 10.00 per head

iv. Govt. School Students in Group - Rs. 10.00 per head

e) Sky Observation Programme

Rs. 5.00 perhead.

f) <u>Space & Astronomy Centre</u> i. General Visitors- Rs.25.00 per head

ii. 25 or more Visitors in a group – Rs. 20.00 per head

iii. Students in groups – Rs.15.00 per head

iv. Govt. School Students in Group – Rs. 10.00 per head

viii. Inaugurated on: 31st Aug 1997 ix. Floor Area in Sq. mtrs: 2589.25

Inauguration of Innovation Hub

Innovation Hub					
Name of the Museum	Date of Inauguration				
BITM, Kolkata	23 August 2013				
Bardhaman Science Centre	10 July 2015				
SSC, Patna	7 October 2016				
NBSC, Siliguri	16 February 2018				
Digha Science Centre	26February 2019				
DSC, Purulia	17 December 2019				
Biotechnology Lab					

Inauguration of Biotech lab

Inauguration of	
Space & Astronomy Centre	

Space and Astronomy Centre					
Name of the Museum	Date of Inauguration				
NBSC, Siliguri	3 April 2010				
SSC, Patna	7 October 2016				
Digha Science Centre	9 February 2018				

Science on a Sphere

Inauguration of Science on a Sphere

Name of the Museum SSC, Patna

Date of Inauguration
9 April 2018

2 May 2017

BITM, Kolkata



Visitors to Museum/Centre

	BITM Kolkata	SSC, Patna	DSC, Purulia	Sc. Cent. Bardh	N.B.S.C. Siliguri	Digha Sc. Centre
School Groups	15	31	3	1	16	10
Students	749	1494	113	55	1138	298
Visitors in Spl. prog	547	9156	9175	5412	5670	10295
General visitors	25412	72119	49535	55195	84551	181584
In-house Visitors	26708	82769	58823	60658	91359	192807
Outreach Visitors including visitors in MSE	5210	0	0	0	70	0
Total Visitors	31918	82769	58823	60685	91429	192807



Mobile Science Exhibition

Museum/ Centre	Title of the Unit Museum the		No. of Exhibits	Year in which developed		
BITM, Kolkata	Heat & Temperature Mathematics Machine in Everyday Llfe	RSC, Bhubaneswar NBSC, Siliguri BITM, Kolkata	20 20 20	2010 2007 2019		
SSC, Patna	Popular Science BITM Kolkata Food & Health CRTL, Kolkata Machine in Everyday Llfe SSC, Patna		C, Patna Food & Health CRTL, Kolkata 20		20	2018 2019 2019
DSC, Purulia	Popular Science Measurement Food & Health	BITM, Kolkata CRTL Kolkata CRTL Kolkata	24 20 20	2012 2019 2019		
SC, Bardhaman	Fun Science Measurement	BITM, Kolkata CRTL Kolkata	24 20	2013 2019		
N.B.S.C., Siliguri	Hands on Science Machine in Everyday Llfe	BITM, Kolkata BITM, Kolkata	24 20	2014 2019		
Digha Sc. Centre	Water - Daily Life Chemistry	Sc. City	20	2019		





Museum/Centre	Name of the Gallery	Floor Area (Sq. mtr.)	Year of Inauguration	No. of Exhibits
Birla Industrial & Technological Museum, Kolkata	Transport Mock-up Coal Mine Motive Power Hall 1 Motive Power Hall 2 Metals Fascinating Physics Television Popular Science Mathematics Children's gallery Electricity World in Darkness Digital Adventure	350 540 181 189 200 265 200 475 260 475 170 95 230	1973 & 2008 1983 & 2008 1962 & 2003 2006 2005 2006 2007 1964 & 2009 2010 1988 & 2012 1984 & 2015 2009 2019	94 65 46 47 50 65 28 45 44 42 53 19
Shrikrishna Science Centre, Patna	Fun Science Mirror Image & 3D Evolution Ocean Gallery, Hall of Activity & Mirror Section S. K Singh Gallery Children's Gallery	400 462 400 260 50 100	2008 & 2016 2010 & 2013 1996 1978 1978 2018	63 53 67 - - 71 20 12
District Science Centre, Purulia	Wealth of Purulia Popular Science Children's Gallery Life Science	186 186 95 186	2005 2010 2011 2016	31 40 21 35
Bardhaman Science Centre	Human Perfomance Life Science & Fun Science	450 450	2002 2011	29 14 27
North Bengal Science Centre, Siliguri	Fun Science Popular Science Life Science & Children's Corner Nature Interpretation Light, Mirrors & Images	380 380 120 400 250	2010 1997 1997 2001 2017	37 19 12 17 32
Digha Science Centre	Life Science Reflection Fun Science	247 247 247	2006 2010 2014	28 30 32

NEW FACILITIES

New Science Demonstration Lecture

- *A new Science Demonstration Lecture (SDL) on 'Optical Illusion' was launched on August 19 2020 through facebook page of NBSC. NBSC launched another new SDL Lecture (SDL) on 'Light & Color' on February 28, 2021.
- * A new SDL was developed and launched by SSC Patna titled 'Mele Ke Khiloune' on February 28, 2021. In this SDL various types of Simple and interactive toys were used to demonstrate and explain different laws and principles of science.

New Science Show

BITM launched a new Science Show 'Joy of Toy' on January 12, 2021. Experiments on Physics were demonstrated with commonly available toys.

Installation of Aircraft and 'Energy Drum' exhibit

HPT 32 "Deepak" Aircraft, donated by the Indian Air Force and another exhibit "Energy Drum" were inaugurated by Shri Anil Kumar, Deputy Inspector General of Police, CRPF, Siliguri and Dr. Bikash Chandra Paul, Prof., Dept. of Physics, University of North Bengal at NBSC Siliguri on February 28, 2021.

Making Films / Videos

- * SSC Patna produced an interactive video on 'Why we celebrate Makar Sankranti' with the use of science on a sphere show on January 14, 2021. Also, a Video series on 'Why we need Machines' and the same was uploaded in SSC Facebook page.
- * A documentary video by Digha Science Centre on "Butterfly: The Secret journey of life" was uploaded on YouTube on September 5, 2020.
- * BITM Kolkata developed and released an expert advice compilation 'Containing COVID'19: Clarity amidst Confussion' on 7 April 2020; an awareness initiative on International Year of Plant Heath 'Dear Trellis' on 10 June 2020; and a documentary entitled 'Characterizing Color: Sir C V Raman at Work' on February 28, 2021.

Inauguration of Giant Magic Tap

- * BITM reopened on November 10, 2020 after almost eight months due to COVID 19 pandemic. On this auspicious occasion a 20-feet Giant Magic Tap was installed in BITM lawn.
- * A 'Giant Magic Tap' was inaugurated by the Shri Arun Kumar, President of Science for Society, Bihar in the Science park of SSC Patna on February 28, 2021.
- * The Magic Tap Exhibit was inaugurated on February 28, 2021 at Bardhaman Science Centre. It was inaugurated by Smt. Nidhi Malik, ADM (Development), Purba Bardhaman.
- * Digha Science Centre inaugurated a "Giant Magic Tap" exhibit on March 22, 2021.
- * NBSC, Siliguri inaugurated a new exhibit, 'Magic Water Tap' in the presence of Dr. Pradosh Kumar Adhvaryyu, Director, Siliguri Institute of Technology, Siliguri on March 22, 2021.

Installation of "Day-Night Sundial" Exhibit

A new exhibit titled: "Day-Night Sundial" was inaugurated by Prof. Dr. Rash Bihari Prasad, Ex. VC., Patna University on March 25, 2021 at SSC, Patna. This exhibit will show time along with the illumination pattern of Earth.

INAUGURATION OF EXHIBITIONS

- * A panel Exhibition on "Seaweeds: An Emerging Future Indeed" was inaugurated on the occasion of "International Day of Forestry" at Digha Science Centre on March 22, 2021.
- * A Digital Exhibition on Mahatma Gandhi was inaugurated by Sri Bishnupada Roy, BDO Ramnagar, Purba Medinipur at Digha Science Centre on December 14, 2020.
- * Exhibition "The Father of the Nation: A Digital Tribute" was inaugurated by Dr. Sujit Ghosh, Principal, Siliguri College at NBSC, Siliguri on November 26, 2020. The exhibition was an initiative of Ministry of Culture, Govt. of India and developed by Vigyan Prasar.



Special Events

Conjunction of Jupiter and Saturn

- * BITM arranged live as well as virtual viewing on a screen with live commentary of the 'Conjunction of Jupiter and Saturn' from 19 to 22 December 2020. More than 750 visitors enjoyed.
- * Special Sky Observation Programme on Great Conjunction of Jupiter & Saturn was organized at NBSC from on 21 December 2020.
- * SSC, Patna organized a sky observation program to witness the "Great Conjunction" from 19 to 23 December 2020. The centre also made a 3D model to demonstrate to 630 visitors.
- * Observation of the Great Conjunction of Jupiter and Saturn was organized through telescope at District Science Centre, Purulia from December 20 to 22, 2020. Visitors 460.

Online Observation of Super Moon

Moon was projected on a giant screen through telescope and queries over phone were answered live on April 7, 2020. There were 83 engagements in BITM Facebook and 1000 online viewers.

Observation of Partial Solar Eclipse

- * BITM, Kolkata arranged direct webcast of this partial eclipse through telescope fitted with filters on June 21, 2020. Also organized were, online Quiz Contest and Online Painting Contest on "Eclipses and Superstition" for students. More than 14,000 viewed.
- * NBSC, Siliguri organized an online Presentation The Obscured Sun, an online Discussion on Solar Eclipse by Shri Debashis Sarkar, Secretary, Sky Watcher's Association from June 19 to 21, 2020. Online live show of Partial Solar Eclipse was also organised.
- * Digha Science Centre arranged live telecast of Partial Solar Eclipse June 21, 2020.
- * District Science Centre, Purulia organized a Facebook live programme to cover the Partial Solar Eclipse. Online Painting Competition and Quiz were held.
- * Bardhaman Science Centre arranged live telecast of Partial Solar Eclipse through Facebook.
- * SSC, Patna arranged an online live streaming of partial solar eclipse using Facebook page on June 21, 2020. The programme was viewed by 1557 persons.

Special Events (Contd.)

Observation of Blue Moon

Online viewing and live-chatting with experts was organized by BITM during observation of Blue Moon on October 31, 2020. 1200 participants were engaged in the event.

INNOVATION HUB ACTIVITY

BITM Kolkata

Projects done at their home during 2020-21. Some of them were Robotic arm to pick up lightweight objects, Solar powered Bluetooth Headphone, Low cost intensity controlled table lamp model, A voice controlled Al project using python, PUFROM-The lifesaver app for medical emergency, Chess game using python, Water dispenser using waste materials, Toddle Search Engine, Al Chess Engine, Low Cost Pulse Oximeter, Cares U: Your Companion App on Google Play, Design of LED matrix for moving display project, Quadcopter Drone, Home based satellite dish antenna system for signal measurement, CARO-Simulation of Self Driving Car, Real-time Classroom Mobile App on Google Play, Seismograph using low cost material.

SSC, Patna

The following experiments were conducted by Innovation Hub members at the Centre :-

Law of conservation of mass, Comparative Study of Xerophytic plant stem and terrestrial plant stem (Workshop), How to make droplet microscope (Workshop), Battery Free light source, Integrated Flower irrigation system cont., Advancement in Hydroponic system cont., Next level of "Agrobot "cont., Home cleaner mini robot, Physiochemical Study of ground water of Patna, Microscopic View of Plant Vascular Bundle cell (Workshop), Preparing for Imagine Junior Cup 2021. Pyrolysis of plastic, Preparing for SLSMEE (State Level Science Mathematics And Environment Exhibition) & JNNSMEE (Jawaharlal Nehru National Science Mathematical And Environment Exhibition). 36 Online science activities in the form of videos were developed for the members of Innovation Hub.

NBSC, Siliguri

- * Online STEM Workshop on Virtual Robotics was organized from 26 to 29 August 2020. 22 students participated.
- * Online STEM Workshop on Basic Electronics was organized ifrom 9 to 11 September 2020. 15 students participated.
- * Online STEM workshop on "Introduction to Arduino" was conducted. 22 students participated.
- * Online Workshop on Elemental 3D Designing was organized from 20 to 22 October, 2020. 15 students participated.

Digha Science Centre

- * Workshop on "Arduino" was conducted on 3 & 4 September, 2020 through digital platform. 10 students took part.
- * Online Wworkshop on "Robotics for Future" was conducted by Digha Science Centre on 15 & 16 October, 2020. 3 Projects wer completed.

Innovation Hub (Contd.)

Bardhaman Science Centre

- * Online workshop on 'Drinking Water Purification' on 30 March 2021 in which 88 Members participated from 8 Institutions.
- * Online Hobby Camp programme for students on Physics, Mathematics from 23 to 25 June 2020.
- * A Webinar on "A.I. The Revolution" on 10 August 2020 in which 96 members participated.
- * Online workshop on "Preparation of Hand Sanitizer for Self Defence" on 16 September 2020.
- * Online workshop on "Introduction to Basic Electronics" on 19 November 2020.

DSC, Purulia

- * Online Astronomy work shop on Astronomy on 20 July, 2020.
- * Online Webinar on 18 November, 2020 on 'Gamemaking'.
- * Online workshop on "Fruits and Vegetables" to celebrate NSD on 28 February, 2021.

BIOTECH LAB, BITM

Projects done by members from their home, under the online guidance of the mentors, during 2020-21:-

Self-watering planters, Project on water holding capacity of soil, Identification of moulds, Arrangement of tissue in leaf and their functions, Bacterial enumeration, Aseptic techniques, Plasmolysis, Bacterial staining, Sub culturing, To obtain the pure culture of bacteria, Sub culturing of fungi, DNA gel electrophoresis, Budding of yeast, Counting of bacterial colony, Study of colony morphology, chlorophyll extraction and comparison, Extraction of protein etc.

CATALYTIC SUPPORT

- * BITM, Kolkata designed and fabricated an exhibition on 'Zero: The Nothing That Is' for Ramakrishna Mission Residential College, Narendrapur. It was inaugurated on March 6, 2021.
- * BITM Kolkata and NBSC, Siliguri made necessary arrangements for formal inauguration of facilities like Digital Planetarium, 3D Theatre, Biodiversity Gallery & Innovation Hub for Sikkim Science Centre, Marchak. These facilities were dedicated to the people of Sikkim by Shri Prem Singh Tamang, Chief Minister of Sikkim on November, 20, 2020.
- * Three Interactive videos explaining science experiments based on curriculum of class IX and X (CBSE) were developed by SSC, Patna and given to Bihar Shiksha Pariyojana for their programme "Mera Door Darshan Mera Vidyalaya".

ONLINE PROGRAMMES DURING CONCLUDING CEREMONY OF THE 150TH BIRTH ANNIVERSARY OF MAHATMA GANDHI

* BITM organized online interactive events from September 29 to October 2, 2020. They were Lecture on 'Gandhi and Science' by Shri Jawhar Sircar, Former Secretary, Ministry of Culture, Govt. of India, Quiz on 'Mahatma Gandhi – The Father of the Nation' and a Virtual Exhibition on "Gandhi and Science". 288 viewers attended through YouTube. In the Quiz on 'Mahatma Gandhi – The Father of the Nation' on October 1, 2020, 339 students participated through Google Sheet. A Virtual Exhibition on "Gandhi and Science" was launched on October 2, 2020 and was available at BITM website www.bitm.gov.in till October 31, 2020.

Concluding Ceremony during the 150th Birth Anniversary of Mahatma Gandhi (Contd.)

- * SSC Patna organized an online Popular Lecture on 'Gandhiji's Life & Work' by Mr. Asif Wasi, Joint Secretary, Gandhi Sangrahalya, Patna on September 28, 2020 and an online Quiz on 2 October 2020 on "Gandhiji's Life and Work". 134 students participated.
- * NBSC Siliguri organized an Online Lectures on 'Nature in the Light of Mahatma Gandhi' by Dr. Pratik Ghosh, Director-Secretary, Gandhi Smarak Sangrahalaya, Barrackpore, 'The Concepts of Truth and Nonviolence according to Mahatma Gandhi' by Dr. Raghunath Ghosh, Former Professor, University of North Bengal, Online Quiz on 'Life & Works of Mahatma Gandhi', Online Workshop on Waste to Wealth, Plastic Free Cleanliness Drive and Tree Plantation from September 28 to October 2, 2020.
- * A webinar on "Innovative Thoughts of Mahatma Gandhi" was organized by Digha Science Centre on Face book and Stream yard on October 2, 2020. The lectures were given by Dr P K Mishra, Dept. of Chemical Engineering IIT (BHU), and Dr S N Mondal, Hoogly Mohsin College. The programme had a reach of 2,667. A special Quiz was organized for the students. A Digital Exhibition on 'Mahatma Gandhi' was inaugurated by Digha Science Centre on December 14, 2020.
- * District Science Centre, Purulia celebrated October 2, 2020 by conducting online programmes, such as, Painting Competition on 'Gandhi & Science'; Popular Lecture by Prof. Samirranjan Adhikari, Sidhu-Kanho-Birsha University, Purulia on 'Relevance of Ghandhism in the Unity of India' and Quiz competition.
- * Bardhaman Science Centre organized online Painting Competition, Quiz competition on October 2, 2020.



Collaborative Programmes

- * North Bengal Science Centre, Siliguri in association with Sky Watchers' Association of North Bengal observed the day of Southern Solstice by organizing special activities related to astronomy on December 21, 2020.
- * Science Film Festival 2020 was organized by BITM, in collaboration with Goethe-Institut / Max Mueller Bhavan Kolkata, from 6 October to 20 December 2020. The festival has received 554 registrations, among which 152 are schools.
- * SSC, Patna participated in the SOS Users Collaborative Network Workshop 2020 hosted by National Oceanic and Atmospheric Administration (NOAA), Depart of Commerce, US virtually from December 1 to 3, 2020.

Collaborative Programme Contd.

- * Shrikrishna Science Centre Patna arranged a webinar series in collaboration with Agastya foundation on "Towards the mindset of Innovation" on August 21, 2020.
- * Shrikrishna Science Centre Patna arranged a webinar in collaboration with Prem youth foundation on Sustainable Development Goal on Climate Action on August 26, 2020.

"CLOSE ASSOCIATION WITH SCHOOLS BY SCIENCE MUSEUMS" – AN NCSM PROJECT

* BITM conducted online Workshops for 10 teachers from Pranta Palli Balika Vidyalaya on 'Digital Presentation Making' during August 18, September 2, 9, 16, 23 and 30, 2020 through Google Meet. This effort of BITM was part of the NCSM project "Close Association with Schools by Science Museums".

PARTICIPATION IN MEGA FAIR

BITM took part in Acharya Satyendranath Basu Smarak Science & Technology Fair-2021 organized by Paschim Banga Bhigyan Mancha at Hedua Park, North Kolkata from January 28 to 31, 2021. BITM participated with a MSE bus on "Machines in Every Day Life" along with a show on 'Fun Science'.

COVID 19 AWARENESS ACTIVITIES

- * NBSC, Siliguri organized an online lecture on COVID'19 on 17 June, 2020 by Dr. Tulika Saha, University of North Bengal and an "Online Awareness Quiz" for school students.
- * As part of Citizens' Duties Awareness Programme (CDAP) NBSC, Siliguri arranged an Online Presentation 'COVID'19: What We Should Do' on 30 September, 2020.
- * NBSC, in collaboration with North Bengal Medical College & Hospital (NBMC&H), organized a Webinar on 'COVID-19 & Vaccine Preparedness' on January 14, 2021. The panelist were Prof. Dipanjan Bandyopadhyay, Head, Dept. of General Medicine, NBMC&H, Dr. Ranadhir Chakraborty, Professor, Dept. of Biotechnology, University of North Bengal and Dr. Nilanjana Ghosh, Asstt. Prof, Dept. of Community Medicine, NBMC&H. A Q&A session followed.

RESEARCH AND HUMAN RESOURCE DEVELOPMENT

The idea 'Sanitizer in bracelet' of Shri Amarjit Sahani from Siliguri, a member of Innovation Hub of NBSC, was shortlisted for Challenge COVID-19 Competition (C3) organized by National Innovation Foundation-India and was considered for further support.

HONOURS AND AWARDS

Master Aritra Neogi, a member of Innovation Hub, BITM has grabbed 1st Position in App Innovation Challenge under E-Summit, IIT Roorkee.

PARTICIPATING IN GOVERNMENT PROGRAMMES / INITIATIVES

Celebrations of Independence Day

- * BITM celebrated Independence Day on August 15, 2020 with hoisting the National Flag accompanied by National Anthem, Sapling Plantation, Online Quiz Competition on "History of Indian Independence", Essay Competition on "Role of Patriotism in your life", Patriotic Poetry Competition. 820 students responded.
- * North Bengal Science Centre organized an online Slogan Writing Competition on 'Our India Our Duties' on August 15, 2020.
- * SSC Patna uploaded a video on Independence Day on August 15, 2020.

Rashtriya Samrasta Diwas

North Bengal Science Centre, on the occasion of Birth Anniversary of Dr. B R Ambedkar, celebrated Rashtriya Samrasta Diwas on April 14, 2020. Preamble of Constitution of India was upload in three languages, Bengali, Hindi and English in the Facebook page of NBSC, an Online Quiz on 'Our India – Our Constitution' was also arranged through Facebook. There was 4000 posts reach.

Rajbhasa Diwas / Hindi Pakhwara

- * Hindi Week was celebrated at North Bengal Science Centre from September 14 to 19, 2020. Competitions on News Paper Reading, Hindi Dictation, Hindi Quiz and Hindi Workshop by Shri Vikram Kumar, Secretary, TOLIC, Siliguri were organized for the staff members.
- * District Science Centre, Purulia organized Hindi Pakhwara from September 14 to 30, 2020. Staff members of DSC, Purulia took part in Dictation, Essay Writing, Newspaper and Poem Reading.
- * A Hindi Workshop was organized for the staff members of Bardhaman Science Centre on February 26, 2021 at Bardhaman Science Centre. Shri Nirmal Dube, Asst. Director, Hindi Implementation Committee, participated as an expert.

Sankalp Parva

- * BITM Kolkata observed Sankalpa Parva fortnight from June 28 to July 10, 2020 by planting 50 saplings inside BITM and 7 saplings at Karmi Abas, the residential complex NCSM staffs.
- * North Bengal Science Centre organized Sankalpa Parva from June 28 to July 12, 2020 by planting 15 saplings in the campus of NBSC.
- * Plant saplings were planted in the campus of SSC, Patna and an video on the scientific nature and health benefits of each tree was developed and uploaded on the social media.
- * District Science Centre, Purulia organized "Sankalp Parva" from June 28 to July 12, 2020 by planting 15 saplings of different varieties in the Science Park.

5th International Day of Yoga

- * BITM, Kolkata organized an Online Yoga Session on June 21, 2020 on the occasion of International Yoga Day. The session will be guided by Shri Utpal Dey, Yoga Teacher, Patanjali Yogpith. There were 369 participants online.
- * International Day on Yoga was observed at Digha Science Centre on June 21, 2020. Yoga

postures were performed by the staff members. Activities like online Essay Writing Competition, online Sit & Draw Competition were organized for students. 37 students took part.

- * NBSC, Siliguri observed International Day of Yoga on June 21, 2020 by organizing an Online Yoga Practice Session: 'Yoga for Health Yoga at Home' by Shri Surajit Lahiri, Yoga Expert, Siliguri.
- * SSC Patna organized a Yoga Session on June 21, 2020 on the occasion of International Yoga Day along with a Quiz on 'Yoga and You' for the officials of the Centre.
- * Bardhaman Science Centre observed International Day of Yoga on June 21, 2020 with Live Telecast on Yoga Demonstration on YouTube Channel and an Online Quiz Competition on Yoga.
- * District Science Centre, Purulia observed International Yoga Day on June 21, 2020 through online Essay Writing competition on "Yoga for Health with Family", online Yoga Performance Competition. Staff members of DSC, Purulia took part in a Yoga Practice season.

Vigilance Awareness Week

- * Birla Industrial & Technological Museum observed Vigilance Awareness Week from October 27 to November 2, 2020 with a Pledge by the staff members and an online Quiz competition for school students on 'Vigilant India, Prosperous India' and was participated by 276 students
- * Bardhaman Science Centre observed Vigilance Awareness Week from October 27 to November 2, 2020 with an Integrity Pledge and an Online Quiz Competition among students.
- * District Science Centre, Purulia observed the Vigilance Awareness Week from October 27 to November 2, 2020. Integrity Pledge, Essay Writing Competition, Poster Painting Competition, Workshop/Sensitization Programme and Online Quiz were held.
- * North Bengal Science Centre arranged for Integrity Pledge, Online Essay and Slogan Writing on "Vigilant India, Prosperous India" was arranged for school students as part of observance of Vigilance Awareness Week from October 27 to November 2, 2020.

Constitution Day Celebration with Year long Activity

- * BITM arranged for reading of the Preamble of the Constitution and an Online Quiz following the live telecast of President of India on Constitution Day on November 26, 2020.
- * On the Constitution Day on 26 November 2020 Shrikrishna Science Centre, Patna organized Reading of preamble, an online Quiz on 'Constitution of India' for 47 students and also a digital Exhibition on 'Sardar Patel'. Facebook page recorded 681 reach and 85 engagements.
- * North Bengal Science Centre, Siliguri organized an online Lecture "The Salient Features of Constitution" delivered by Dr. Amitava Kanjilal, Siliguri College on June 30, 2020. An online Essay Writing Competition on "Our India Our Constitution Our Duty" on July 28, 2020 and an online presentation "India: Our Constitution Our Duty" on August 31, 2020.
- * On November 26, 2020, Constitution Day was celebrated by North Bengal Science Centre, Siliguri by live screening of Hon'ble President of India's Reading of the "Preamble to the Constitution", 'Creation of a Preamble Wall' where all Staff-members & visitors signed, and lastly, Discussion on the Fundamental Principles & Values of the Indian Constitution. Dr. Sujit Ghosh, Principal, Siliguri College inaugurated.
- * Bardhaman Science Centre organized an online Quiz Competition on Indian Constitution on June 20, 2020 and also on 26 November 2020 with Screening of Hon'ble President reading of the Preamble and an online Quiz on Constitution of India for school students.

* District Science Centre, Purulia organized an online Quiz Competition on Indian Constitution on July 6, 2020, a Painting competition on August 31, 2020 to observe Yearlong Celebration of Activities on Indian Constitution. On 26 November, 2020 Screening of President's reading of the Preamble, Taking Oath, Online Quiz and Slogan Writing for school students were held.

Citizens' Duties Awareness Programme (CDAP)

* As part of year-long activities relating to Citizens' Duties Awareness Programme (CDAP) North Bengal Science Centre arranged an Online Presentation: Our Duty Towards Environmental Protection: An Overview on October 27, 2020 through Facebook page.

Rashtriya Ekta Diwas

- * Celebrating the birthday of Sardar Vallabhbhai Patel on October 31, 2020, BITM observed National Unity Day / Rashtrya Ekta Diwas, jointly with Regional Outreach Bureau, Kolkata, by organizing an online Painting Competition on 'Integrated India' and an online Essay Writing Competition on 'My Idea of Integrated India'. 444 students participated.
- * Rashtriya Ekta Diwas was observed at North Bengal Science Centre on October 31, 2020 by organizing online Visual Quiz on 'Our India – Our Prides' through Facebook page of NBSC.

National Youth Day

- * BITM celebrated National Youth Day on January 12, 2021 by inaugurating a New Science Show titled 'Joy of Toy'. The show explains some principal of physics through the working of commonly used toys. The show is of 30 minutes and 25 toys are used to do experiments on Physics.
- * National Youth Day was celebrated at North Bengal Science Centre, Siliguri on January 12, 2021. Online Scientific & Innovative Idea Competition for School Students was organized. Online Lecture on 'Ideas of Swami Vivekananda: Unison of Science & Philosophy', was delivered by Dr. Raghunath Ghosh, Professor (Retd.), University of North Bengal.



Science Demonstration Lecture

Museum/Centre	No. of Lectures held in Museum	No. of Students in Museum	No. of Lectures held outside	No. of Student outside			
BITM, Kolkata	0	0	0	0			
SSC, Patna	41*	46636**	0	0			
DSC, Purulia	0	0	0	0			
Sc.Cent.Bardhaman	1	72	1	75			
N.B.S.C. Siliguri	5	334	1	70			
Digha Science Centre	1	120	3	74			
*Online SDL done by SSC Patna ** Online Viewers							



Science Park

Museum/Centre	Area	No. of Exhibits	Date of Inauguration
SSC, Patna	1 acre 46		1979
DSC, Purulia	1 Acre	41	1977
Science Centre Bardhaman	3 Acre	46	1992
Digha Science Centre	1.7 Acre	31	1997
N.B.S.C. Siliguri	4.6 acres	32	1997



Mobile Science Exhibition

Museum- / Centre	Theme of the Exhibit	No. of Exhibition Sites	No. of Exhibiti- on days	No. of Film Shows	No. of visitors in film shows	No. of visitors in exhibitions	Km. Travelled
BITM, Kolkata	Heat & Temperature, 'Mathematics and Machines in Everyday life	1	4	0	0	5000	12
SSC, Patna	Popular Science Food & Health Machines in Everyday Llfe	1	1	-	-	-	-
DSC, Purulia	Popular Science, Measurement, Food & Health	-	-	-	-	-	-
Digha Science Centre	Water, Daily Life Chemistry	-	-	-	-	-	-
Bardh. Sc. Cent.	Fun Science Measurement	-	-	-	-	-	-
NBSC, Siliguri	Hands on Science Machines in Everyday Llfe	-	-	-	-	-	-



	BITM, Cal	SSC, Patna	SC, Bardh	DSC, Puru	NBS- C, Sili	DSC, Digha
Gallery Exhibits	11	1	-	1	1	-
Duplicate Exhibits	-	1	-	-	-	-
Park Exhibits	4	2	1	-	-	-
MSE Exhibits	-	-	-	-	-	-
Kits/Aids	-	12	-	-	9	-
Duplicate Kits/Aids	-	52	-	-	-	-
Temporary Exhibition Exhibits	21	-	-	- 1		14
Total	36	67	1	-	9	8

Exhibit Developed during 2020-21

BITM, Kolkata

Gallery exhibit: Motive Power Gallery

- 1. Muscle Power I, II & III
- 2. Wind Power 3. Animal Power

SRSC Bodhgaya, Fun Science

- Rising Arc
 Visualizing Sound
 SRSC Kokrajhar, Fun science
- Changing Colour
 Spark wheel
 Coded Music
 Wave Motion

Zero the Nothing That Is exhibition.

- 1. Egypt panel 1 & 2 2. Babylon panel 1 & 2
- 3. 5. Maya panel 1 & 2 4. Inca panel 1 5. Greece panel 1 & 2 6. Rome panel 1
- 11. China panel 1
- 12. India Panel 1, 2, 3, 4, 5 & 6
- 18. Arab panel 1
- 19. Modern Europe panel 1 & 2
- 21. Acknowledgment

Park exhibit: SRSC Bodhgaya

- 1. Echo Tube 2. Projective Geometry *SRSC Kokrajhar*
- 1. Projective Geometry 2. Value of Pi

SSC, Patna - Park exhibit:

- 1. Giant Magic Water Tap
- 2. Day night sundial

Duplicate exhibit: 1. Tug of War Kits/ Aids SDL- "Mele ke Khiloune"

- 1. Newton's Car
- 3. Pikachu Wheel4. Humpty Dumpty Spinner
- 5. Musical Toys7. Bubble Bar8. Hovercraft

2. Balancing belt

- 9. Steady Toy
- 10. Balloon helicopter
- 11. Rotating Fan 12. Whistle blower

Duplicate kits/Aids
1. Curie point: 09

- 2. Bernoulli's Principle: 09
- 3. Wave motion: 084. Image Multiplier: 07
- 5. Volume Flow rate: 07
- 6. Automatic street light controller: 06
- 7. Two way ladder switch: 06

 DSC, Bardhaman Park exhibit

 1. Giant Magic Water Tap)

Digha Science Centre

Temporary Exhibition "Seaweeds: An Emerging Future Indeed" - 14 Panel Exhibition

NBSC, Siliguri - Kits

- 1. Mixing of Colours
- 2. Polarisation of Light
- 3. Simple Motor with Safety-pin
- 4. Graphite as Conductor 5. Illusion Box
- 6. Refraction Illusion
- 7. 3D Illusion
- 8. Lilac Chaser
- 9. Stroop Effect



	BITM, Calcut- ta	SSC, Patna	DSC, Purulia	Sc. Cent. Bardh	NBSC, Siliguri	Digha Sc. Cent		
Digital Planetorium Shows								
Shows held	-	-	-	-	-	9		
Visitors	-	-	-	-	-	138		
Popular Lec	ture							
No. of Lectures	8	8	13	6	18	9		
Audience	3050	1952	1440	441	7315	6148		
Taramandal	Show							
No. of Shows	-	-	-	-	-	-		
Audience	-	-	-	-	-	-		
Science Qu	iz							
Contests	9	10	26	24	15	11		
Participa- nts	1661	529	910	96	1698	535		
Visitors	1320	145	1	ı	250	-		
Sky Observ	Sky Observation							
No. of Prog. held	36	42	20	6	42	-		
Visitors	17858	8960	460	118	2126	-		

ONLINE POPULAR LECTURE

BITM, Kolkata

- * The Future of Work Astronauts, Microgravity, Commercial Opportunities and YOU by Dr. Bidushi Bhattacharya, CEO and Founder of AstroHUB, Singapore & US on June 19, 2020. 317 online viewers.
- * 'Common Errors in Mathematics' by Dr. Partha Karmakar, Deputy Secretary Academic, West Bengal Board of Secondary Education on August 19, 2020. 7200 viewers.
- * 3D printing entitled "From Art to Part: A peep into Digital Fabrication" on September 10, 2020. The speaker was Dr. Guruprasad Rao, Director, Imaginarium India Pvt Ltd. 466 viewers.

Popular Lecture (Contd.)

- * 'Gandhi & Science' by Shri Jawahar Sarkar, Ex CEO, Prasar Bharati on 29 September, 2020
- * 'Search for Alien Life' on September 30, 2020 delivered by Professor Rajesh Kumble Nayak, Dept. of Physical Sciences, Center of Excellence in Space Sciences, IISER, Kolkata. 395 viewers.
- * Anti-Microbial Resistance and Super-bugs by Dr. Sanjay Bhattacharya, Senior Consultant, Tata Medical Centre, Kolkata
- * 'Discovery and Landmark studies on Hepatitis-C Virus' by Professor Saumitra Das, Director, National Institute of Biomedical Genomics, Kalyani on November 4, 2020.
- * 'Rewriting the Code of Life' on December 10, 2020 by Dr. Debojyoti Chakraborty, Senior Scientist, CSIR-Institute of Genomics and Integrative Biology.

SSC, Patna

- * 'Time for Nature' by Prof (Dr.) Atul Aditya Pandey, Patna University on June 5, 2020
- * 'Prime Numbers' and 'Quantum computers introduction' by Dr. Lalruatfela Renthlei, Curator, SSC Patna on September 14, 2020.
- * 'Healthy Heart for Children' by Dr. Nishant Tripathy, HOD, Cardiology, Paras HMRI Hospital on September 29. 2020
- * 'Gandhiji's Life & Works' by Mr. Asif Wasi, Joint Secretary, Gandhi Sangrahalaya, Patna on September 28, 2020.
- * 'The Human Eye: A Natural Optical System' by Dr. Lalruatfela Renthlei, Curator, SSC Patna on 20 October 2020.
- * 'Evolution of Television' by Dr. Lalruatfela Renthlei, SSC, Patna on November 21, 2020
- * 'Nature and Science: At Nanoscale' by Dr. Professor Rakesh Kumar Singh, Centre of Nanolab, Aryabhatta Knowledge University on February 28, 2021.
- * 'Implementation of Science & Technology in daily life' by Shri Amitabh, PC & Curator, SSC, Patna on March 9, 2021

Digha Science Centre

- * 'All about 'SARS COVID-19 Pandemic' by Dr Sanjeev Pandey, Banwarilal Bhalotia Collage Asansol on May 2, 2020.
- * 'Viral Emergence Nature's fury or Human error' by Dr Sanjeev Pandey, Banwarilal Bhalotia Collage Asansol on September 24, 2020. Viewers 2,338.
- * 'Innovative Thoughts of Mahatma Gandhi' by Dr. P. K. Mishra, IIT (BHU), and Dr. S. N. Mondal, Associate Professor, Hoogly Mohsin College, Burdwan University on October 02, 2020.
- * "Classification, Identification & Naming of plants" by Dr. Nirupama Goswami, Burdwan Raj Collage, West Bengal on on October 12, 2020
- * "Diversity of seaweed in India and its economic importance" by Dr. Sudhir Kumar Yadav, Botanist, Botanical Survey of India, Kolkata on October 13, 2020
- * "The Role of Fungi in Human Life" by Dr. Pradip Bandhopadhay HOD & Associate Professor, Dept. of Botany, Burdwan Raj College, West Bengal on October 14, 2020

Popular Lecture (Contd.)

- * "A glimpse of Indian FIGS (FICUS Species) and its economic importance" by Dr. J. V. Sudhakar, Assistant Professor, Dept. of Botany, SRK Collage, Puducherry on October 15, 2020
- * 'Energy And Law' by Dr. S. N. Mondal Associate Professor, Hoogly Mohsin College, Burdwan University on December 18, 2020
- * "Diversity of Seaweeds throughout Coastal India" by Dr. Suparna Roy, Indian Association for Cultivation of Science, Kolkata on February 28, 2021.

District Science Centre, Purulia

- * "World at Nano Scale" by Dr. Sandipta Roy, Western Digital, Bangaluru on 16 September 2020.
- * 'How to Beat Cardiovascular Disease' by Dr. Suvendu Mishra, Police Hospital, Purulia on September 29, 2020.
- * 'Relevance of Gandhism in the Unity of India' by Prof. Samirranjan Adhikari, Sidhu-Kanho-Birsha University, Purulia on October 2, 2020.
- * 'Identification of Common Adulterants in Foodstuff' by Shri Dhrubajyoti Chattopadhyay, DSO, DSC, Purulia on 16 October 2020
- * 'The Constitution of India and its Importance' by Dr. Krishna Saha, Sidhu-Kanho-Birsha University, Purulia on 26 November 2020.
- * 'Mt. Kilimanjaro Mountain of Moon' by Shri Nilavishek Mukherjee, the youngest Indian to climb five out of the seven highest volcanoes in the world on November 27, 2020
- * 'Energy Crisis and Future of Mankind' by Prof. Syamal Chakrabarti, Calcutta University on December 14, 2020
- * 'Pythagoras Theorem: Why it is Still Interesting?' by Dr. Bhupati Chakrabarti, Former Secretary, IAPT and Former HOD, Determent of Physics, City College, Kolkata on December 22, 2020
- * 'Vital Role of Fruits and Vegetable in Human Nutrition' by Shri Suprakash Pradhan, Department of Nutrition, P.K. College, Contai on December 22, 2020.
- * 'Role of Renewable Energy and Our Future Demand' by Shri Bamapada Ghatak, Head of the Engineering, APAC, Singapore on January 31, 2021
- * 'I am and I will-together we to create a cancer free world' by Dr. Subhra Kanti Kundu, MGM Medical College and Hospital, Jamshedpur on February 4, 2021
- * 'Living well with kidney disease' by Dr. Nayan Mukherjee, Renowned Surgeon, Deban Mahato Sadar Hospital, Purulia on March 11, 2021.

Bardhaman Science Centre

- * "Students success thru' Innovative Thinking" by Shri Amiya Kumar Kalidaha, Senior Scientific Officer. DST and Biotechnology, Govt. of West Bengal on May 27, 2020.
- * 'Chemistry of Human Hair' by Dr. Naba Kumar Mondal, Burdwan University on June 5, 2020.
- * 'Nano Fabricated Mask' by Dr. Naba Kumar Mondal, Burdwan University on July 30, 2020
- * 'Preparation of Hand Sanitizer' by Dr. Naba Kumar Mondal on September 16, 2020.

Popular Lecture (Contd.)

* 'Social Vaccine' by Dr Subhas Chandra Datta, Kanchannagar D. N. Das High School, Burdwan on October 16, 2020.

NBSC, Siliguri

- * 'Climate Action' by Dr. Ananda Mukhopadhyay, Prof. (Retd.), Dept. of Zoology, University of North Bengal on April 22, 2020.
- * 'Novel Corona Virus and How to Prevent COVID 19' by Dr. Tapas Kumar Choudhury, Brainware University, Kolkata & Dr. Nilanjana Ghosh, North Bengal Medical College on April 29, 2020.
- * 'Biodiversity' by Shri Biplab Ray, Rtd. Teacher, N.P.H.S. School, Naxalbari on May 5, 2020
- * 'Topology and Mobius Strip' by Dr. Manas Pratim Das, Fellow, WB Academy of S&T , May 6 2020.
- * 'Mathematics Beyond Books' by Shri Swapanendu Nandi, HM, Buddha Bharati High School, Haiderpara, Siliguri on May 13 2020.
- * 'Introduction to Light' by Dr. Abhijit Roy, Prof. (Retd.), Dept. of Chemistry, University of North Bengal delivered a lecture on May 20, 2020,
- * 'Diagnosis of COVID'19' by Dr. Hadida Yasmin, Cooch Behar Panchanan Barma University on May 27, 2020.
- * 'Immunological Aspects of COVID 19' by Dr. Tilak Saha, NBU, on June 17, 2020.
- * 'Usefulness of Yoga' by Shri Surajit Lahiri, Yoga Expert, Siliguri on June 21, 2020
- * 'The Salient Features of Constitution' by Dr. Amitabha Kanjilal, Siliguri College, on June 30, 2020.
- * 'S&T in the Coming 100 Years' by Prof. Ranadhir Chakraborty, NBU on August 17, 2020.
- * 'Nature and Mahatma Gandhi' by Shri Pratik Ghosh, Secretary, Gandhi Smarak Sangrahalaya, Barrackpore on September 28, 2020.
- * 'The Concepts of Truth and Non-violence according to Mahatma Gandhi' by Dr. Raghunath Ghosh, Professor (Retd.), University of North Bengal on October 2, 2020.
- * 'Fun With Mathematics' by Dr. S.S. Agrawal, Bharati Hindi Vidyalaya on December 22, 2020.
- * 'Ideas of Swami Vivekananda: Unison of Science & Philosophy' by Dr. Raghunath Ghosh, Professor (Retd.), University of North Bengal on January 12, 2021.
- * 'Sky: The Grand Calendar' by Shri Debashis Sarkar, SWAN, Siliguri on January 29, 2021.
- * "Mahatma Gandhi & Indian Freedom Movement : An Overview" by Dr. Pratik Ghosh, Director Secretary, Gandhi Smarak Sangrahalaya, Barrackpore on March 12, 2021
- * 'Water Conservation & Sanitation' by Shri Biswajit Kundu, Education Officer, North Bengal Science Centre on March 22, 2021.





Name of the Museum	Dates	Level	No. of Schools/ Colleges	No. of Students and teachers	No. of Science Clubs	No. of Projects	Visitors
SSC Patna	-	-	-	-	-	-	-
SC., Bardhaman	-	-	-	-	-	-	-
DSC Purulia	-	-	-	-	-	-	-
NBSC, Siliguri	28.01.21 & 29.01.21	Centre Level (Online)	20	20	-	20	-
	-	Kolkata District	-	-	-	-	-
BITM, Kolkata	-	Eastern India Science Fair	-	-	-	-	-
		Science and Engineering Fair	-	-	-	-	

S&T Fairs and Festivals

^{*} North Bengal Science Centre organized an online Science & Innovation Festival "Innvo - Fest -2021" on January 28 & 29, 2021. Events held were Quiz on 'Science & Innovation', Scientific & Innovative Idea Competition, Lecture on 'Sky: The Grand Calendar' by Shri Debashis Sarkar, Sky Watchers' Association of North Bengal (SWAN) and a STEM Workshop.



Name of the Museum	BIT M Calcutta	SSC Patna	DSC Purulia	SC. Cen Bardha	NBSC Siliguri	Digha Science Centre
Projects completed in Museum CAC	64	1	33	1	1	27
Students Participated	96	5	32	-	-	47
Vacation Hobby Camps	10	-	5	-	4	-
Projects completed in above	83	-	43	-	144	-
Students Participated	149	-	32	-	36	-

ONLINE WORKSHOPS FOR STUDENTS

BITM, Kolkata

- * Virtual Workshop was arranged on "Mobile App Development" on August 12, 2002. 168 members of Innovation Hub BITM and its satellite centres attended through Google meet.
- * Virtual Workshop on Circuit Making Using Tinker CAD Software was organized by Innovation Hub, BITM, Kolkata.
- * 'Incredible Edibles' a Food flavoured online Science Workshop commemmorating World Food Day on 16 October 2020. Prticipants 50
- * Workshop on "Mathworks-Computations that Govern Life" on December 22, 2020 via Google Meet. Participants 100.
- * Online Quiz arranged on 'Radio Technology' at World Radio Day on February 13, 2021.
- * Online Workshop on 'Chemistry' via Google Meet on March 3, 2021. Hands on experiments were performed with household / easily available materials. 43 students participated through Google Meet. There were 438 viewers in Facebook.

NBSC, Siliguri

- * An online workshop on "Robotics for Future" was conducted by Digha Science Centre on October 15 & 16, 2020. 3 projects were fabricated. 4 students took part.
- * A Virtual STEM Workshop on Robotics was organized in the Innovation Hub of NBSC, Siliguri involving students of class VI to class XII from August 26 to 29, 2020. 22 students participated.
- * An Online STEM Workshop on Basic Electronics was organized in the Innovation Hub of NBSC, Siliguri from September 9 to 11, 2020. 15 students participated.

- * Online STEM workshop on "Introduction to Arduino" was conducted in the Innovation Hub, NBSC on September 15, 2020. 22 students participated.
- * An Online Workshop on Elemental 3D Designing was organized by the Innovation Hub of NBSC, Siliguri for students from October 20 to 22, 2020. 15 students actively participated.

Digha Science Centre

- * Workshop on "Electronics for the Beginners" was conducted by Digha Science Centre from July 13 to 15, 2020. 6 Projects were completed. 8 students took part.
- * Workshop on "Physics" was conducted by Digha Science Centre from August 12 to 14, 2020 on digital platform. 5 Projects have been fabricated by 5 students.
- * Digha Science Centre conducted an online workshop on "Chemistry at Home" on September 23 and 24, 2020 on digital platform. 7 experiment were performed. 23 students including Innovation Hub members took part.

SSC, Patna

- * Shrikrishna Science Centre Patna arranged an online workshop on 'Arduino' from August 19 to 21, 2020. 6 students participated.
- * SSC Patna organized an online workshop on "Kitchen ki Chemistry" on September 15 and 16, 2020. 7 participants took part.

DSC, Purulia

- * An online Science Toys making Camp was conducted by DSC, Purulia on October 6 and 7, 2020. 9 students prepared 12 projects.
- * Commemmorating 2021 as the International Year of Fruits and Vegetables, District Science Centre, Purulia organized an online lecture by Shri Suprakash Pradhan, P.K. College, Contai on 'Vital role of fruits and vegetables in human nutrition and food security' on 22 January, 2021.
- * DSC, Purulia organized an online workshop on role of 'Renewable Energy and Our Future Demand' on 31 January, 2021 by Shri Bamapada Ghatak, Head, Engineering, APAC, Singapore.

Bardhaman Science Centre

- * An online workshop on "Introduction to Basic Electronics" on November 19, 2020. Students and Innovation hub members participated.
- * Online workshop on "Preparation of Hand Sanitizer" on September 16, 2020.

ONLINE SUMMER VACATION SCIENCE CAMP

- * BITM organized online Science Camps on Mathematricks, Physics, Geography & Basic Astronomy and Make Your First Android App from July 7 to 9, and again from July 13 to 15, 2020. 78 students was accommodated. They took part in 47 projects.
- * Bardhaman Science Centre organized an online Hobby Camp for students on Physics and Mathematics from June 23 to 25. 2020
- * North Bengal Science Centre organized Online Science Camp from June 15 to 20, 2020 on Elemental 3D Designing and Basic Electronics. 36 students participated.
- * DSC Purulia organized an Online Science Camp from August 25 to 28, 2020 on Physics & Mathematics. 14 students participated in 25 projects. Another online camp was from September 6 to 8, 2020. 6 Project were made by 9 students on Electronics and Life Science.



Science Seminar

Name of the Museum	Date	Level	No. of Schools	No. of Students Participat- ed	Audience
BITM, Kolkata	-	District	-	-	1
,	-	State	-	-	-
SSC, Patna	12 December 2020 & 28 December 2020	District*	80	86	-
DSC, Purulia	-	-	-	-	-
NBSC, Siliguri	-	-	-	-	-
Digha Science Centre	-	-	-	-	-
Bardhaman Science Centre	-	-	-	-	-

^{*} Science Seminar on 'Sustainable Living' organized by SSC Patna during Children's Sciene Congress

Online Science Webinars

- * Bardhaman Science Centre organized a Webinar on "A.I. The Revolution" on August 10, 2020 in which 96 students participated through Google Meet.
- * A webinar series on "From seeds to shades- All about Plants" was organized by Digha Science Centre on Face book and Stream Yard from October 12 to 15, 2020. Lectures were given by Dr Nirupama Goswami, Burdwan Raj College, Dr Sudhir Kumar Yadav, BSI, Dr Pradip Bandhopadhay, Burdwan Raj College and Dr J V Sudhakar, SRK College. The Facebook reach was 3,324.
- * District Science Centre, Purulia organized an online Webinar on November 18, 2020 to create expertise in students how to build their own 'Game'.
- * Shrikrishna Science Centre, Patna in collaboration with 'Science for Society' and 'National Council for Science & Technology communication' organized two district level online webinars in December 2020. 86 students presented their innovative ideas on the topic- "Science for sustainable living".



■ Training ■

	B IT M C a l	S S C P a tn a	DSC Purulia	S C .C en B ard ha	NBSC Siliguri	Digha Sc. Cen	
Teachers' Training Programme							
No. of Programmes	2	3	-	1	2	-	
No. of Teachers	19	114	-	49	55	-	
No. of Teaching Aids Developed	-	52	-	1	212	-	
Computer Train	Computer Training Programme						
No. of programmes	-	-	-	-	-	-	
No. of Trainees	-	-	-	-	-	-	

Online Training and Workshop for Teachers

- * Bardhaman Science Centre organized an online Teacher's Training Programme on "Nano Fabricated Mask Preparation" on July 30, 2020. 49 teachers participated.
- * North Bengal Science Centre Siliguri organized online Teachers' Training Workshop on 'Interactive Pedagogical Techniques' in STEM Education on September 23, 2020. Dr. Suprakash Roy, Chairman, Siliguri Primary School Council, Siliguri inaugurated. 28 teachers participated.
- * An Online Teachers' Training Workshop was organized for the students of Siliguri B.Ed. College on February 24 and 25, 2021. 27 trainee-teachers participated.
- * SSC, Patna organized Teacher's Training Program (T.T.P) for the trained Science Teachers of B.D. Public School in two batches, one from March 18 to 20, 2021 and the other from March 23 to 25, 2021. 52 low cost kits were developed by 44 teachers.

REGULAR PUBLIC DEMONSTRATION LECTURE

Science Shows on: Science Magic & Miracle, Super Cold, Surprising Chemical Reactions, Fun Science, Egg-cellent / Fire-y-Tale and Balls, Balloons & Bubbles.

Name of the Centre	No. of Programmes	No. of Audience
BITM, Kolkata	194	10849
SSC, Patna	6	115
NBSC, Siliguri	53	1053
DSC, Purulia	31	289
Bardhaman Science Centre	77	642
Digha Science Centre	117	3924

ⁿ3D SHOW

Name of the Centre	No. of Programmes	No. of Audience
BITM, Kolkata	400	8575
SSCPatna	587	13553
NBSC Siliguri	499	7557
Digha Science Centre	1086	27326
DSC, Purulia	214	2181
Bardhaman Science Centre	452	1890

ⁿ SCIENCE ON A SPHERE

SSC, Patna	113	1620
JJC, Fallia	113	1020

"SHOWS IN PREHISTORIC LIFE PARK

Name of the Centre	No. of Shows	No. of Visitors
District Science Centre, Purulia	142	Free Show

ⁿ CHROMAKEY SHOW

Name of the Centre	No. of Shows	No. of Visitors
BITM, Kolkata	98	594

ⁿ MATH DEMO

Name of the Centre	No. of Shows	No. of Visitors
BITM, Kolkata	-	-

ⁿ UNDERGROUND COAL MINE DEMONSTRATION

Name of the Centre	No. of Shows	No. of Visitors
BITM, Kolkata	-	-

ⁿSHOWS IN SPARK THEATRE

Name of the Centre	No. of Shows	No. of Visitors

BIT M, Kolkata 18 623

OBSERVANCE OF IMPORTANT DAYS

Birla Industrial & Technological Museum, Kolkata

- * Earth Day on April 22 and 23, 2020
- * 61st Anniversary of BITM May 2, 2020
- * National Technology Day on May 11, 2020
- * World Environment Day June 5, 2020
- * World Food Day 2020 October 16, 2020
- * World Science Day and International Science Center & Science Museum Day November 10, 2020
- * Children's Day November 20, 2020
- * World Aids Day December 1, 2020
- * National Mathematics Day December 22, 2020
- * National Science Day on February 28, 2021
- * World Engineering Day March 4 2021
- * International Women's Day March 8, 2021

Digha Science Centre

- * Observation of Earth Day 22 April, 2020
- * Celebration of International Museum Day 18 May, 2020
- * World Environment Day 5 June, 2020
- * International Day of Yoga 21 June, 2020
- * 22nd Anniversary Day 31 August, 2020
- * Moon Landing Day 20 July, 2020
- * Teacher's Day 5 September, 2020
- * World Heart Day 29 September, 2019
- * International Science Centre Day 10 November, 2020
- * National Energy Conservation Week 14 to 20 December, 2020
- * National Science Day 28 February, 2021
- * World Water Day 22nd March, 2021

Bardhaman Science Centre

- * Earth Day April 22, 2020
- * World Environment Day June 5, 2020
- * World Nature Conservation Day July 28, 2020
- * Celebration of 75 years commemoration of independence 30 March 2021
- * 27th Anniversary Day 9 January, 2021
- * International Museum Day 18 May, 2020.
- * National Pollution Control Day 2 December. 2020
- * National Science Day 28 February 2021

Shrikrishna Science Centre, Patna

- * World Environment Day, 5 June, 2020
- * World Ocean Day, 8 June, 2020
- * International Yoga Day, 21 June, 2020
- * World Population Day, 11 July, 2020
- * Sankalp Parv, 3-15 July, 2020
- * Moon Landing Day, 20 July, 2020
- * National Sports Day, 29 August, 2020
- * World Heart Day, 29 September, 2020
- * 150th Birth Anniversary of Mahatma Gandhi Jayanti week, 28 September - 2 October, 2020
- *World Food Day, 5-16 October, 2020
- *Unity Day, 31 October, 2020
- *World Science Day, 10 November, 2020
- *World Television Day, 21 November, 2020
- *National Energy Conservation Day, 14 December, 2020
- *National Science Day, 28 February, 2021
- *World Water Day, 22 March, 2021

North Bengal Science Centre, Siliguri

- * Rashtriya Samrasta Diwas 14 April, 2020
- * Earth Day 22 April, 2020
- * International Museum Day 18 May, 2020
- * International Day for Biological Diversity
- 22 May, 2020
- * World Environment Day 5 June, 2020
- * International Day of Yoga 21 June, 2020
- * Moon Landing Day 20 July, 2020
- * Independence Day 15 August, 2020
- * Anniversary Day 17 August 2020
- * Hindi Day 14 September, 2020
- * World Ozone Day 16 September, 2020
- * Rashtriya Ekta Diwas 31 October, 2020
- * International Science Centre and

Science Museum Day - 10 November, 2020

- * Children's Day 14 November, 2020
- * Samvidan Divas (Constitution Day) 26 November, 2020
- * National Mathematics Day 22 December, 2020
- * National Youth Day 12 January, 2021
- * National Science Day 28 February, 2021
- * World Water Day 22 March, 2021

Observance of Important Days (Contd.)

District Science Centre, Purulia

- * Earth Day 22nd April, 2020,
- * Astronomy Day 2 May, 2020,
- * International Museum Day 18 May, 2020
- * Biodiversity Day 22 May, 2020
- * World Environment Day 5 June 2020
- * International Day of Yoga 21 June 2020
- * World Population Day 11 July, 2020,
- * Moon Landing Day 20 July, 2020
- * World Nature Conservation Day 28 July, 2020,
- * Hindi Day 14 September, 2020
- * World Ozone Day 16 September, 2020
- * World Heart Day 29 September, 2020
- * World Sight Day 8 October, 2020

- * World Food Day 16 October, 2020
- *Vigilance Awareness Week 27 October to 2 November, 2020
- * International Science Centre & Science Museums Day – 10 November, 2020
- * Children Day 14 November, 2020
- * Constitution Day 26 November, 2020
- * Energy Conservation Day 14 December, 2020
- * 38th Anniversary Day 15 December, 2020
- * National Mathematics Day 22 December, 2020
- * World Cancer Day 4 February, 2021
- * National Science Day 28 February, 2021
- * World Kidney Day 11 March, 2021.

Library Holding

Name of the Museum	Items	Total holding as on 01.04.2020	Acquired during the year	Written-o- ff during the year	Total holding as on 31/3/2021
ВIТМ, Kolkata	Books Brochure Journals Films/Cassettes CDs	16513 3001 8727 919 679	68 23 97 - 46		16581 3024 8824 919 725
SSC, Patna	Books Journals	2282 1356	73 114	-	2355 1470
DSC, Purulia	Books Films Cassette CDs	1143 43 17 58	11 - - -		1154 43 17 58
NBSC, Siliguri	Books Films CDs	379 5 15	- - -	- - -	379 5 15
Digha Science Centre	Books CDs	283 27	112 -	-	395 27
Science Centre Bardhaman	Books Journals CDs Films Video Cassettes	224 291 27 21 02	17 24 - -		241 315 27 21 02

STAFF STRENGTH

Name of the Museum/Centre	Scientific	Technical	Administrative	Total
BITM, Calcutta	6	54	40	100
SSC, Patna	2	11	7	20
DSC, Purulia	-	6	4	10
Sc.Cent. Bardhaman	-	8	5	13
Digha Sc. Centre	1	9	4	14
Siliguri Sc. Centre	1	8	5	14
Total	10	96	65	171

PERSONNEL

Retirement / Resignation/ Death								
Museum / Centre	Name Shri/Smt. Designation at the time of Retirement /Death/Completion		Date of Retirement or Release / Death/Completion	Remarks				
DSC, Purulia	Gurupada Das	Driver	31.05.2020	Retirement				
ВІТМ	K. L. Biswas	O. A. Gr. I	31.08.2020	Retirement				
SSC, Patna	B. K. Sivanunni Jr. Stenographer		28.02.2021	Retirement				
SC, Burdwan	R. N. Das Edu. Officer		15.08.2020	Expired				
	Appointment							
Nil								
MACP								
Museum / Centre	·			Date of Appointment				
BITM	Arghya C	nakraborty	22.09.2020					
вітм	Sujoy E	Banerjee	12.08.2020					
Siliguri	Arun Kr.	Adhikari	25.09.2020					
ВІТМ	Pintu	Biswas	31.10.2020					

		Promotion			
Museum / Centre	Name Shri / Smt	Designation before promotion	Designation after Promotion / upgradation	Date of promotion / upgradation	
вітм	P. B. Saren	Tech 'F'	Tech 'G'	26.08.2020	
DSC, Digha	P. K. Tripathi	Tech 'F'	Tech 'G'	26.08.2020	
вітм	Aditi Ghose	Edu. Asstt. 'B'	Edu. Officer 'A'	26.08.2020	
BITM	Arijit Modak	Tech. Asstt. 'B'	Tech. Officer 'A'	26.08.2020	
BITM	Subhashis Ghosh	Tech. Asstt. 'B'	Tech. Officer 'A'	26.08.2020	
BITM	Ajoy Kr. Singha	Tech. 'F'	Tech 'G'	29.08.2020	
BITM	Narendra Paul	Exh. Officer 'C'	Exh. Officer 'D'	03.09.2020	
BITM	Rajib Nath	Curator 'D'	Curator 'F'	10.11.2020	
SC, Bardhaman	Sountu Kr. Shall	O. A. Gr. II	O. A. Gr. I	01.12.2020	
BITM	D.P. Samanta	Tech. 'E'	Tech. 'F'	09.12.2020	
BITM	K. K. Panja	K. K. Panja Tech. 'E'		18.12.2020	
BITM	Ajoy Ray	O. A. Gr. III	r. III O. A. Gr. II		
DSC, Digha	Biswarup Das	Edu. Asstt. 'B'	Edu. Officer 'A'	01.01.2021	
DSC, Digha	Sachin Kr. Balmiki	Tech 'A'	Tech. 'B'	24.01.2021	
BITM	Arghya Chakraborty	O.A. Gr. III	O. A. Gr.II	03.03.2021	
Siliguri	Praksh Ghosh	O.A. Gr. III	O.A. Gr. II	03.03.2021	
BITM	K. K. Biswas	Tech. 'F'	Tech 'G'	11.03.2021	
DSC, Digha	Debashis Dhar	Edu. Asstt. 'B'	Edu. Officer 'A'	25.03.2021	
NBSC, Siliguri	Ritabrata Biswas	Curator 'C'	ator 'C' Curator 'D'		
BITM	D. Mukherjee	Edu. Officer 'C'	Edu. Officer 'D'	19.03.2021	
BITM	Kanishka Chakraborty	Edu. Officer 'C'	Edu. Officer 'D'	19.03.2021	
BITM	Swapan Kr. Roy	Exh. Officer 'B'	Exh. Officer 'C'	19.03.2021	

Transfer							
Museum / Centre	Name S/Shri/Smt.	Transfer from	Transfer to	Date of Transfer			
ВІТМ	T. K. Bhattacharya	BITM	Sc, City	31.05.2020			
DSC, Digha	Shivendra Pratap Singh	DSC, Digha	RSC, Lucknow	31.05.2020			
ВІТМ	Chandan Das	BITM	NCSM Hqrs.	30.06.2020 ~AN			
ВІТМ	Chandana Ghosh	BITM	NCSM Hqrs.	30.06.2020 ~AN			
DSC, Purulia	Patralika Bhattachrya	DSC, Purulia	DSC, Digha	01.10.2020 _AN			
SC, Burdwan	Sountu Kr. Shall	SC, Bardhaman	BITM	27.11.2020 ~AN			
ВІТМ	-M Nani Gopal BITM		NCSM Hqrs.	31.01.2021 ~AN			
NCSM Hqrs.	s. Khela Murmu NCSM Hqrs.		BITM	31.01.2021 ~AN			
NCSM Hqrs.	Arabinda Kundu	NCSM Hqrs.	BITM	01.06.2020			
NCSM Hqrs.	Debashree Nandi	NCSM Hqrs.	ВІТМ	01.09.2020			

EXPENDITURE

Expenditure (2020-21) under GIA / Salaries &General (Rs. in Lakhs)							
Particul- ars	BITM, Kolkata	SSC., Patna	D.S.C., Purulia	S.C., Bardh	Digha S.C.	N.BS.C, Siliguri	Total
GIA Salaries	1124.28	142.55	60.12	98.73	89.09	110.90	1625.67
GIA General	1028.39	82.72	37.88	44.77	53.46	49.89	1297.11
Gross Exp.	2152.67	225.27	98.00	143.50	142.55	160.79	2922.78
Receipt	43.86	27.82	8.58	12.09	51.94	26.29	170.58
Net Exp (A - B)	2108.81	197.45	89.42	131.41	90.61	134.50	2752.20
GIA-CCA Gross Expendi- tre	40.58	18.49	3.27	7.93	5.42	10.30	85.99
Total Expenditure (Gross) GIA Salaries + General + CCA (Rs. in Lakhs)							
Particul- ars	BITM, Kolkata	SSC., Patna	D.S.C., Purulia	S.C., Bardh	Digha S.C.	N.BS.C, Siliguri	Total
Gross Exp.	2193.25	243.76	101.27	151.43	147.97	171.09	3008.77

Expenditure (2020-21) nnovation Hub (Rs. in Lakhs)							
Particul- ars	BITM, Kolkata	S.S.C., Patna	DSC Purulia	S.C., Bardh	DSC Digha	NBSC Siliguri	Total
Gross Exp	21.51	-1.18	14.47	5.90	5.75	6.43	52.79

COMMITTEE MEMBERS OF BITM AND SATELLITE UNITS

Executive Committee of BITM

1. Prof. Sibaji Raha Chairman

Former DirectorDepartment of PhysicsBose InstituteUnified Academic CampusEN 80, Sector V, Bidhan NagarKolkata – 700 091

2. Prof. Rajib Bandyopadhyay Member

Dept. of Instrumentation and Electronics Engineering Jadavpur UniversityB-73-80, Plot No.8, Salt Lake Bypass, LB Block, Sector III, Salt Lake CityKolkata -700 098

3. Dr. Bhupati Chakraborty Member

Former Professor, Dept. of Physics, City CollegeGeneral Secretary, Indian Association of Physics Teachers (IAPT)23, Imbrahimpur Road, JadavpurKolkata – 700 032

4. Dr. Jayanta Sengupta Member

Secretary & CuratorVictoria Memorial Hall1, Queens Way, Kolkata – 700 071

5. Mrs. Rupkatha Sarkar Member

PrincipalLa Martiniere for Girls14, Rowdon StreetKolkata – 700 017

6. Shri Vinay K. Goenka Member

Executive Chairman, Warren Tea Ltd.Suvira House4B, Hungerford StreetKolkata – 700 017

7. The Secretary or his nominee Member

Dept. of School EducationGovt. of West BengalBikash Bhavan, 5th & 6th floorDF Block, Sector 1, Salt Lake CityKolkata – 700 091

8. The Director (Museums) Ex-officioMember

Ministry of Culture, Govt. of India(Not below the rank of Deputy Secretary)323-C Wing, Shastri BhawanDr. Rajendra Prasad RoadNew Delhi: 110 015

9. Shri A. D. Choudhury Ex-officioMember

Director General
National Council of Science Museums33,
Block – GN, Sector – V Bidhan Nagar
Kolkata – 700 091

10. **Director Ex-officio Member**Birla Industrial & Technological Museum, 19A, Gurusaday Road Kolkata – 700 019

11. Shri Rajib Nath Member

Curator, Birla Industrial & Technological Museum19A, Gurusaday RoadKolkata – 700 019

12. Shri Amitabh, Member

Project Coordinator, Shrikrishna Science Centre, Chaju Bagh, West Gandhi Maidan, Patna - 800 001

13. Shri Subhashis Paul Non-member Secretary

Dy. Controller of Administration Birla Industrial & Technological Museum 19A, Gurusaday Road Kolkata – 700 019.

Planning & Programme Committee of BITM

- 1. **Dr. Bhupati Chakraborty,** Chairman Former Professor, Dept. of Physics, City College, 23, Imbrahimpur Road, Jadavpur Kolkata 700 032
- 2. **Principal,** Member Asoke Hall Girls' H. Secondary School 5A, Sarat Bose RoadKolkata – 700 020
- 3. **Dr. Gautam Majumdar,** Member Professor, Mechanical Engineering Dept. Jadavpur University, Kolkata 700 032
- 4. **Director General or his nominee,** Member National Council of Science Museums 33, Block GN, Sector V, Bidhan Nagar, Kolkata 700091
- 5. **Commissioner,** Member Directorate of School Education, Govt. of West Bengal, 7th floor, DF Block, Sector-1, Bikash Bhawan, Salt Lake Kolkata – 700091
- 6. **Director,** Member Directorate of Madrasah Education Govt. of West Bengal, Bikash Bhawan, Salt Lake, Kolkata – 700 091
- 7. **Dr. Maitree Bhattacharyya,** Member Director, JBNSTS, 1300, Rajdanga Main Road, Kasba, Kolkata 700 107
- 8. **Dr. Suman Lata,** Member Principal, KV, Ballygunge, Kolkata – 700 019
- 9. **Director,** Ex-officio Member BITM, 19A, Gurusaday Road, Kolkata – 700 019
- 10. **Shri Amitabh**, Member Project Coordinator, Shrikrishna Science Centre, Chaju Bagh, West Gandhi Maidan, Patna -800 001
- 11. **Shri Rajib Nath,** Member Secretary Curator, BITM, 19A, Gurusaday Road, Kol – 700019

Building Committee of BITM

- Shri S. Roy Chaudhury, Chairman
 Former Chief Architect CPWD
 K P Ray Lane, Kolkatta 700033
- 2. **Shri Anup Kumar Ghosh,** Member Director General of Operation, KMDA (Retd.), Flat No. A-2, 2nd Floor, Tulip Apartmen t282, Parnasree Pally, Kolkata 700 060
- 3. **Dr. Bhaskar Sengupta,** Member Chief University Engineer, Rabindra Bharati University, Emerald Bower Campus, 56A, B. T. Road Kolkata – 700 050
- 4. **Director,** Ex-Officio Member BITM, 19A, Gurusaday Road, Kolkata 700019
- 5. **Shri G. K. Mahapatra,** Ex-Officio Member Chief Engineer, National Council of Science Museums 33, Block – GN, Sector – V, Bidhan Nagar, Salt Lake City, Kolkata – 700091
- 6. **Shri Subhashis Paul,** Ex-Officio Member Dy. Controller of Administration, BITM, 19A, Gurusaday Road, Kolkata – 700 019
- 7. **Shri Arup Chakraborty,** Ex-Officio Member, Dy. Controller of Finance & Accounts, BITM, 19A, Gurusaday Road, Kolkata 19
- 8. **Shri Arabinda Kundu,** Member Secretary Technical Officer, 19A, Gurusaday Road, Kolkata 700 019
- 9. Invitee Members

To be invited based on requirement for discussing specific Buildings projects of NCSM

Local Advisory Committee of Shrikrishna Science Centre, Patna

- **1. Prof. Rasbihari Pd Singh**, Chairman Former Vice Chancellor, Patna University 101, Rewati Apartment, Road No. 2, Kazipur, Patna-800 004
- **2. Ms. Jyoti Parihar**, Member Director, Kilkari Bal Bhawan Patna Collectorate, Patna 801 503
- **3. Shri Krishna Kanahaiya Pd Singh**, ADM Law and Order, Patna Collectorate, Patna - 800 001 Member
- **4. Ms. Moumita Ghosh**, Member Curator, Bihar Museum, Baily Road, Patna 800 001
- **5. Prof. Naveen,** Member Dept. of Physics, IIT, Patna, Bihar 801 103
- **6. Sister Josephine CJ**, Member Principal, St. Joseph Convent High School, Bankipore, Patna-800 004
- **7. Dr. Vivekanand Pandey**, Member Pro Vice Chancellor, Amity University, DPS More, Danapur, Patna-801 503
- **8. Shri Ashok Kumar**, Member Deputy Secretary, Bihar State University Service Commission, Dept. of Education Secretariat, Patna 800 001
- **9. Dr. Upasana Singh**, Member Head & Dean , Dept. of Education, Patna Women's College, Baily Road, Patna 800 001
- **10. Shri B Vinod**, Member Principal, Delhi Public School Vill. Chandmari, P.S. Sahapur, Danapur, Patna 801 503
- **11. Shri V. S. Ramchandran**, Director, BITM, Ex-officio Member 19A, Gurusaday Road, Kolkata - 700 019
- **12. Shri Amitabh**, Member Secretary Project Coordinator, Shrikrishna Science Centre, Chaju Bagh, West Gandhi Maidan, Patna 800 001

Local Advisory Committee of North Bengal Science Centre, Siliguri

- 1. **Dr. Subires Bhattacharyya,** Chairman VC, University of North Bengal, Rajarmmohunpur Darjeeling, Pin. 734 013
- 2. **Shri Amar Biswas, WBCS,** Member DPOSSM & RMSA, Siliguri Educational District, Bhutia Market, Hakim Para Siliguri, Pin. 734 001
- **3. Dr. Bikash Ch. Paul,** Member Council for P.G.Studies in Science NBU, Rajarammohunpur, Darjeeling 734 013
- **4. Dr. Mayukh Sarker,** Member Principal, Acharya Prafulla Chandra Roy Govt. College, Matigara, Siliguri 734 010
- **5. CEO,** Member SJDA, Tanzing Norgey Road Pradhannagar, Ward 1, PatiramJote, Siliguri, Pin. 734 001
- **6. Smt. Debyani Saha,** Member Principal, BSF Senior Secondary Residential School, Siliguri 734 012
- **7. AEO & ADM,** Member Siliguri Mahakuma ParishadBhutia Market, Hakim Para, Siliguri – 734 001
- **8. Shri Chandranath Das** Curator, Himalayan Mountaineering Institute, Darjeeling
- **9. Prof. Indrajit Saha,** Member Principal, North Bengal Medical College Sushrutanagar, Darjeeling, Pin. 734 012
- **10. Shri Jyoti Ghosh,** WBCS, Member (Exe) Deputy Director, Dept. of Tourism, North Bengal, Govt. of West
- **11. Shri V. S. Ramachandran,**Director, BITM, Ex-officio Member
 Kolkata 700019
- **12. Shri Ritabrata Biswas,** Member Secretary Project Coordinator, North Bengal Science Centre, P.O. Matigara, Siliguri – 734 010

Local Advisory Committee of Bardhaman Science Centre

- 1. Smt. Priyanka Singla, IAS, Chairman District Magistrate, Court Compound P.O. & Dist. Purba Burdwan, Pin. 713 101
- 2. **Dr. Asit Kr. Manna**, Member Principal, M.B.C. Institute of Engineering & Technology, Sadhanpur, Pin. 713 101
- 3. **Dr. Naba Kumar Mondal,** Member University of Burdwan, Golapbag, Pin. 713 104
- 4. **Shri Pramad Kumar Swain**, Member Senior GM, The Supreme Industries Ltd., E.P.I.P. P.O. Bankskopa, Dist. Paschim Burdwan, Durgapur 12
- 5. **Smt. Mouli Sanyal,** Member DPO, SSM, New Administrative Building, P.O. & Dist. Burdwan Pin. 713 101
- 6. **Shri Buddha Deb Das**, Member DYO, Purba Bardhaman, Postal Cooperative Building, 1st Floor, P.O. & Dist. Burdwan Pin. 713 101
- **7. Smt. Rama Bandyopadhyay,** Member HM, Rathtala Monohar Das Balika Vidyalaya, P.O. Kanchanagar, Pin. 713 102
- 8. **Shri Soumen Konar**, Member Head Master, Krishnapur High School P.O. Rajbati, Purba Bardhaman, Pin. 713 104
- 9. **Dr. Anindya Bose**, Member Senior Scientific Officer, Dept. of Physics, The University of Burdwan, Rajbati, Pin. 713 104
- 10. **Shri V. S. Ramachandran**, Ex-officio Member Director, BITM, 19A, Gurusaday Road, Kol 700019
- 11. Shri Nikhilesh Biswas

 District Science Officer, Member Secretary
 Science Centre, Bardhaman, Ramna Maidan,
 Baburbag, P.O. Rajbati, Burdwan Pin. 713 104

Local Advisory Committee of District Science Centre, Purulia

- 1. **Dr. Dipak Kumar Kar**, Chairman Vice Chancellor, Sidho Kanho Birsha University, Purulia
- Swami Shivaprasadanandaji Maharaj
 Secretary, Ramakrishna Mission Vidyapith,
 Purulia Pin. 723 147 Member
- 3. **Smt. Krishna Saha**, Member Govt. Girls' High School Ranchi Road, Purulia, Pin. 723 101
- 4. **Shri Bikash Mazumdar**, Member DPO, SSM, Zilla Parishad Bhavan 5th Floor, Purulia, Pin. 723 101
- 5. **Dr. Santanu Chattopadhay**, Member Principal, J. K. College, Purulia 723 101
- 6. **Dr. Bibek Chakraborty**, Member Principal, Rama Krishna Mahato Govt. Engineering College, Pin. 723 103
- 7. **Dr. Subrata Raha**, Member Head of Dept. of Botany, Sidho Kanho Birsha University, Purulia
- 8. **Dr. (Mrs.) Indrani Deb**, Member Principal, Nistarini College Desh Bandhu Road, Purulia – 723 101
- 9. **Shri Pijush Maiti,** WBES, Member DI of School (H.S.), Zilla Siksha Bhavan (Hill View Ground), Dulmi Nadiha, Purulia, Pin. 723 101
- 10. **Shri Surya Kumar Jana,** Member District Youth Officer, District Youth Office Ranchi Road, Purulia - 723 101
- 11. **Shri V. S. Ramachandran**, Ex-officio Member, Director, BITM, Kol 19
- 12. **Dhrubajyoti Chattopadhyay**District Science Officer, Member Secretary,
 District Science Centre
 North Lake Road, Purulia 723 101

Local Advisory Committee of Digha Science Centre

1. District Magistrate & Chairman District Collector,

Tamluk, Purba Medinipur, Pin. 721 636

- 2. **District Inspector of School (Secondary)**Tamluk, Purba Medinipur, Member
- 3. **Dr. Amit Kr. Dey**, Member Principal, Prabhat Kumar College Contai, Purba Medinipur, Pin. 721 401
- 4. **Shri S Balakrishnan**, Member Scientist-in-Charge, ZSI, Digha Purba Medinipr, Pin. 721 428
- 5. Additional District Inspector of School, (Secondary), Member Contai, Pin. 721 401
- 6. **Shri Samarendra Nath Das**, Member Principal, Contai Public School Contai, Purba Medinipur, Pin. 721 401
- 7. **Shri Hrisikesh Das**, Member Head Master, Battala Anandamoyee High School, Purba Medinipur

- 8. **Sub Divisional Officer**, Member Contai, Pin. 721 401
- Block Development Officer Member
 Ramnagar 1,
 Purba Medinipur
- 10. Administrator & Executive Officer, DSDA, Digha, Purba Medinipur, Pin. 721 428 Member
- **11. Shri V. S. Ramachandran**, Ex-officio Director, BITM Member, 19A, Gurusaday Road, Kolkata 700 019
- 12. Shri Niranjan Gupta,
 Project Coordinator, Member Secretary
 Digha Science Centre
 Foreshore Road, New Digha
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