

Raman Science Centre & Planetarium, Nagpur**Annual Activity Report- 2019-20**

6. Developmental Activities	
New Exhibits, Exhibitions and Galleries	7 Nos of exhibits for Temporary Exhibition- Chandrayan-2, 3 Nos. for Science park, 1 for SOS show, 6 Nos. for Digikids gallery, 2 for other centres, 5 for Temporary Exhibition- Solar Eclipse, 1 for Planetarium and 11 kits for SDL
Innovation Hub	Innovation Centre has been set up at Amravati, Maharashtra and inaugurated on 27 th December 2020.
Science Park	3 Nos. of New Exhibits fabricated and installed in Science Park.

7. Mobile Science Exhibition in Aspirational Districts	<p>New Mobile Science Exhibition on theme "Health & Hygiene" mounted on new bus was Inaugurated on 5th September 2019 at Shivaji High School Washim in Aspirational District Washim. The exhibition was inaugurated by Dr. Avinash Aher, District Health officer, Jilha Parishad Washim. 1100 students, teachers, and general public were present to witness the event. After inauguration, the exhibition was opened for the students, teachers and public.</p> <p>The exhibition was organized at 19 sites covering three talukas of Aspirational Washim District from September to October 2019. The exhibition programme was supported by Science Demonstration Lectures and AR/VR shows. 42083 students and teachers from 78 schools and 6405 general public visited the exhibition.</p> <p>In the winter session the Mobile Science Exhibition on theme "Health & Hygiene" was organized at 40 sites covering Six talukas of Aspirational Gadchiroli District from November 2019 to February 2020. The exhibition programme was supported by Science Demonstration Lectures, Science Film Show, Sky observation programme using telescope and AR/VR shows. 60160 students and teachers from about 100 schools and 10680 general public visited the exhibition.</p> <p>Total km travelled is 1881.</p>
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8. Programs and Events	18 Nos. of Commemorative events were organised during the year. List of all the programmes is attached separately.
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9. Exhibitions	Separate Sheet is attached
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10. Travelling Exhibitions	
Travelling Exhibitions	NIL
Mobile Science Exhibition	Mobile Science Exhibition was organised in Buldhana & Akola Districts. 64 sites were covered. Nos. of Exhibition days 128. 2,07,118 nos. of students, teachers and general public visited the exhibition. Nos. of Film Shows 68 in which 12375 students participated. Nos. of SDLs held 57 for 11145 students. Total Km Travelled 2406.

11. Education Extension Programs		
Lectures/Shows/Competitions	Popular Science Lectures	27 lectures held for 3707 students and teachers
	Science on a Sphere	1392 shows for 73400
	Planetarium Show	1668 shows for 129597
	3-D show	2768 shows for 118353
	Prehistoric animal park	96235
Science Seminar	District & Divisional level Science Seminar was organised at Raman Science Centre, Nagpur in collaboration with Dept. of Education, Jilha Parishad, Nagpur and Office of Dy Director of Education, Nagpur on 8 th August 2019 and 24 th August 2019 resp. The topic of the seminar was "Periodic Table of Chemical Element: Impact on Human Welfare" 34 students from 34 different schools participated. 365 students, teachers and parents witness the seminar.	
Science Drama Festival	District Level Science Drama Festival was organised by Raman Science Centre in collaboration with Education Dept. ZilaParishad, Nagpur on the topic "Science and Society" on 17 & 18 th August 2019. 14 selected schools presented their drama. The event was witnessed by 1175 students, teachers and visitors.	
Science & Technology Fairs		
Orange City Science Fair	<p>Raman Science Centre in collaboration with Aeronautical Society of India has organized an ORANGE CITY SCIENCE FAIR from 19th to 21st December 2019 for the students & teachers. 157 Students from 65 schools participated in the fair with their 117 Innovative Working science models/kits. 18 Teachers also participated with their teaching aids in Teaching Aid Demonstration Contest.</p> <p>The Orange city Science fair was inaugurated by Air Vice Marshal V.C. Wankhade, Chairman, Aeronautical Society of India, Nagpur Branch and AOES, HQ, Maintenance Command, Indian Air Force, Vayusena Nagar</p> <p>Meet the Scientist Programme, Rangoli Contest, posters making contest, Written Science quiz, Kids Lab Demonstration, Science Demonstration Lecture on Principles of Flight. This Orange City Science Fair was open for the students & general public for visit from till 21st December,2019. Nearly 31235 Students, Teachers and people of Nagpur visited the exhibition.</p>	

Science Expo	<p>Raman Science Centre and other scientific institutions in Maharashtra are jointly organised 'Science Expo' from 16 to 20 January 2020, to create awareness among the school/college students; bring students and general masses face to face with practicing scientists; and also to motivate students about the benefits of choosing science as their career. The Students of Schools and Colleges had the firsthand information on the latest developments in science especially in the fields the collaborating institutions are engaged in. The 'Science Expo 2020' show-cased the scientific Research and Development taking place in 14 participating institutions.</p> <p>A series of Popular Science Lectures (PSL) were also organised during the five-day event. 6 825 The lectures were delivered by eminent scientists of all the participating institutions. 6 lectures were held and 825 students witnessed the lectures.</p> <p>The 'Science Expo 2020' was inaugurated on 16th Jan. 2020 at 11.00 am. by Dr. Ranjit Rath, Chairman cum Managing Director, Mineral Exploration Corporation Limited, Nagpur in presence of Dr. Rakesh Kumar, Director NEERI, Nagpur. The 'Science Expo' remained open for the public every day during 16 – 20 January 2020. In all 59938 students, Teachers and general public witnessed the expo and the lecture series.</p>	
Innovation Festival	<p>Raman Festival of Innovation, the annual festival to celebrate the spirit of innovation, was organized at Raman Science Centre from February 13 – 15, 2020. 200 innovators from 56 schools, science and engineering colleges participated with their 80 working innovative projects in this festival. Specially designed projects, which can potentially be taken up under Start-up scheme and live demonstrations by artisans were an added attraction in the festival. A workshop on folding microscope, Intellectual Property Right were also be organised for students.</p> <p>Raman Festival of Innovation was inaugurated today by Dr. Vivek Nanoti, Principal, Priyadarshani College of Engineering in presence of Dr. Prashant Agrawal, GreenVention Biotech, Pune. The festival was open for public from 13 to 15 Feb. 2020. In all 32450 students teachers and general public visited the Festival.</p>	
Workshops		
Date	Topic of Workshop	Nos of participants
21.06.2019	simple yogic asanas and Pranayama in daily life	35
12.10.2019	Workshop on Intellectual Property Rights	135
11.11.2019	Clean Water Campaign: Water Testing Workshop	65
29.11. 2019	Workshop on Intellectual Property Rights	105
20.12. 2019	Kids Lab Workshop	240
20 to 26 12.2019	Solar Eclipse	125

Annexure - I

14.02.2020	Folding Microscope	58
15.02.2020	Intellectual Property Rights	102
25.02.2020	Women Empowerment workshop	50
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28.01.2020	Hands on Activity - Maths	135
Total 11 workshops		1100

Summer Camps

2 batches of Vacation CAC were conducted in 7 disciplines at Raman Science Centre. The first batch in summer vacation in Astronomy, Creative Science, Model Rocketry, Aeromodeling and 3-D Printing and Second batch of Astronomy, Creative Science, Model Rocketry, Aeromodeling and 3-D Printing, Robotics and Electronic-arduino board In all 244 students participated in it The students completed 1358 projects.

Training and Workshops for Teachers.

Teachers Training Programme was organised on January 29, 2020. 34 teachers from 21 schools participated in it. The sessions like World of Numbers, Geometrical interpretation of Some basic concepts in Maths, Innovative Teaching Methods and activities were held. Another Teachers Training programme was held in which teachers were guided how to make models/projects for Science Fairs.25 teachers participated.

Total 2 TTPs were organised in which 46 teachers participated 63 kits were made.

12. Community Programs

45 community programmes such Science Drama, Rally, Street Plays, Clean Water Campaign: Water Testing Workshop, Workshops for women empowerment, IPR, Films screened on various Global environmental issues, Various activities on Cleanliness, Health & Hygiene, Popular Lectures, Mobile Science Exhibition on Health & Hygiene etc. Nearly 26,833 students, Teachers and general public were benefitted. Details of the programmes is attached separately.

Programs for the Underprivileged

All the facilities of the science centre were made available for the underprivileged children. 26,428 children took benefit of this, out of which 2045 children were provided free transportation, Snacks and Science Toys.

Programs for Divyangs (Specially Abled)

Special visit of Divyangs was arranged in which nearly 65 students were provided all the facilities of the centre free of cost. Special Science Demonstration Lecture was organised for them.

Program for Girls and Women

Women Empowerment workshop was organised on 25th February for the girl students of

Jawahar Navodaya Vidyalaya, Nagpur, Chandrapur and Gadchiroli, Kendriya Vidyalaya, Vayusena and Ajni, Nagpur. 50 girls participated in the hand on activity related to Astronomy and Science Demonstration lecture on Atmospheric pressure, Vacuum and Matter at Low Temperature.	
Programs for Senior Citizens	NIL
Environmental Awareness Programs	
Activities like Swachhata Pledge, PSLs on Save Species, Cleanliness Health & Hygiene, Air Pollution, Combating Wildlife Trafficking, Cleaner Energy and Environmental Challenges; Sit & Draw Contests on topics such as Tree plantation, Save Mother Earth, Energy Resources, Green City, Pollution Hazards, Cleanliness Health & Hygiene, Affordable and clean energy, My Favourite Animal, My Green School, Swachcha Bharat Abhiyan, I am in Science Park, Green City, Women In Science, Planet Under Pressure; Open House Quiz, Science Rally, Street Plays, Slogan Writing Contest Essay Writing, Power Point presentation Contests etc. were organised.	
29 such activities were organised in which 9974 students, teachers participated.	
Other Programs	NIL

13. Research and Human Resource Development

R & D	NIL
Patent & Copyright	One patent has been filed. Title of the project is - A device for mobile phone battery charging, working on wind power generated by household fan.
Capacity Building Programs (Training and Workshops)	Three IPR workshops were organised by the centre in which 342 students participated. The sessions like Introduction to Intellectual Property Rights, Patent Procedure & Act, Generating New Ideas for Projects by Patent Search, Entrepreneurship Development, Fund Generation for Startup, Open Platform for Startup, Projects for startup

14. Collaboration National Level	13 events like Collections Make Connections-Exhibition, Science Seminar, Science Drama Festival, Street Plays, Orange City Science Fair, Birth Centenary of Dr. Vikram A Sarabhai, Handwriting Contest, National Mathematics Day, Inter School Science Quiz, National Science Day, Anniversary Week Celebration were organised in collaboration with other organisations in which 64472 students & general Public participated.
Collaboration International Level	3 programmes such as Popular Science Lectures, International Science Film Festival were organised in collaboration with US Consulate General Mumbai, Stanford University, USA, Goethe Institut & Max Mueller Bhavan. 2637 students, Teachers were

	benefitted.
Details of each programme are attached separately	

15. Participation in Government Programs/Initiatives	
Swachh Bharat Mission	33 different activities such as Swachhata Rally, Street Plays, Clean Water Campaign: Water Testing Workshop, Various activities on Cleanliness, Health & Hygiene, Popular Lectures, Mobile Science Exhibition on Health & Hygiene were organised during Swachhata Pakhawada I & II. 8723 students, teachers and general public got benefitted.
International Day of Yoga	Popular Lecture, Workshop on yoga practice were organised on the day. All the staff members were involved in Daily Yoga Practice for a fortnight.
Rajbhasha related Activities	During Hindi Pakhawada Hindi Bhashan Pratiyogita was organised for the students on the topic Chandrayan-AntarikshProudyagiki me Bharat ki Unnati. 22 students participated in it. Various Contests such as Hindi letter writing, Essay Writing, Hindi Typing, Hindi translation, Singing Hindi songs, and recitation of Hindi poems were organized for the RSC, Staff.

16. Recognitions	
Honours and Awards	NIL
NCSM in Media	Photographs sent separately.

17. Publications	Sci-Rama- A monthly newsletter (2 issues)
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