





Greetings from Pushpa Gujral Science City.

It gives me immense pleasure to share that a new 3D flim-DINO SAFARI has been launched in the 3 D Theatre, where you get on-board, enjoy a unique tour of a dinosaur reserve and get within touching distance of a giant Diplodocus and the ferocious T-Rex as you travel through the jungle. Isn't that exciting!

During the reporting quarter, PGSC celebrated its 18th Founders Day by organizing INNOTECH 2023 in which > 300 students from different Engineering & Polytechnic colleges of Punjab demonstrated their innovative models. PGSC Anthem was also launched at this occasion. Four major events were organized - Domesticated Animal Biodiversity (Dog) Show; Floral Biodiversity (Flower) Show; Food & Nutrition Show & Mission LiFE-Lifestyle for Environment- an international mass movement towards "mindful and deliberate utilization, instead of mindless and destructive consumption" to protect and preserve the environment. Some of the important Days celebrated in this quarter were National Science Day, World Wetlands Day, International Day of Women and Girls in Science, International Womens Day, World Cancer Day, Forestry day and birthdays of several eminent scientists .

I wish you all a very warm welcome to the new academic year 2023-24. As always, we will continue to popularize science in a Mission Mode, building scientific temper and supplementing formal science education through non-formal means with an objective to simplify science for the general public and students by explaining complex scientific concepts through interactive exhibits and extra-curricular activities and spread the message that science can be fun.

I look forward to have you at Science City.

18th Founders Pay celebration

INNOTECH-2023 (18.03.2023-19.03.2023)

PGSC celebrated its 18th annual day by organizing INNOTECH-2023. More than 300 students from different Engineering & colleges of Polytechnic Punjab demonstrated their innovative models at this occasion. A team of experts from NIT Jalandhar (Dr. S.K Tiwari, Dr. Sikander, Dr. B.S Saini and Dr. Mahesh Kumar Sah) evaluated the models.

The Founders Day address was given by Dr. Neelima Jerath, DG, PGSC. Dr. G Sridhar, Director General, Sardar Swaran Singh National Institute of Bio Energy was the Chief Guest. Dr. Sridhar said, "Innovation is a major driving force for a nation's sustainable and competitiveness globalization. Innovative ideas by individuals lead towards making complex processes simple, easy and economical resulting in products, technologies opportunities and thus ensuring sustainable growth. The people of Punjab, especially in rural areas, are well known for their creativity and innovativeness. platforms, therefore, need to be provided to channelize the potential of Punjabi Youth to nurture their talent."

The Science City Anthem was launched by Dr Neelima Jerath, Director General, at the occasion. The lyrics of the anthem are composed by her, whereas the music is composed by Sh. Parduman Kumar, Nagma Player from HMV College, Jalandhar.













"Innovation is the practical implementation of ideas that result in the introduction of new goods or services or improvement in them. Some of the key practical benefits of innovation are improved productivity, reduced cost, increased competitiveness, better brand recognition and increased turnover and profitability as the nation moves towards indigenization and self-sustainability. It is therefore, important to encourage youth to think out-of-box and keep them abreast of latest developments in various areas of science, technology and business."

Dr. Neelima Jerath, Director General, PGSC



ਸਾਇੰਸ ਸਿਟੀ ਦਾ ਗੀਤ Science City's Anthem

ਇਹ ਨਗਰੀ ਹੈ ਵਿਗਿਆਨ ਦੀ, ਤਕਨੀਕਾਂ ਦੇ ਸਨਮਾਨ ਦੀ। Where Science is valued and technology acclaimed......

ਅਸੀਂ ਨਵੀਂ ਸੋਚ ਨੂੰ ਲਿਆਵਾਂਗੇ, ਘਰ-ਘਰ ਵਿਗਿਆਨ ਪਹੁੰਚਾਵਾਂਗੇ। We endeavour to foster new ideas and take science to all

ਸਾਡੇ ਸਭ ਵਿੱਚ ਇਕ ਵਿਗਿਆਨੀ ਹੈ, ਇਹ ਗੱਲ ਅਸੀਂ ਪਛਾਣੀ ਹੈ। Recognizing the scientist within each of us, big or small!

ਅਸੀਂ ਪ੍ਰਸ਼ਨ ਕਰਾਂਗੇ ਪੁਛਾਂਗੇ, ਆਪਣੇ ਉੱਤਰ ਵੀ ਲੱਭਾਗੇਂ। We will question, enquire, investigate and comprehend

ਨਵੀਆਂ ਕਾਢਾਂ ਨੂੰ ਵਧਾਉਣਾ ਹੈ, ਚੌਗਿਰਦਾ ਵੀ ਬਚਾਉਣਾ ਹੈ। Encouraging innovation, environment protection and sustainable development!

ਜਦ-ਜਦ ਅਸੀਂ ਨਵਾਂ ਸੋਚਿਆ ਹੈ, ਕੁਝ ਨਵੀਂ ਖੋਜ ਨੂੰ ਖੋਜਿਆ ਹੈ। Stimulating ingenuity and furthering inventions

ਆਉ ਸਾਰੇ ਹੱਥ ਫੜਾਓ, ਰਲ-ਮਿਲ ਕੇ ਜਾਗ੍ਰਿਤ ਹੋ ਜਾਓ। Let us join hands to enlighten ourselves and awaken!

ਅਸੀਂ ਨਵੀਂ ਸੋਚ ਨੂੰ ਸਜਾਉਣਾ ਹੈ, ਇਕ ਨਵਾਂ ਸਮਾਜ ਬਨਾਉਣਾ ਹੈ। And induct new vision & actions to kindle social transformation

ਅਤੇ ਅੱਗੇ ਵਧਦੇ ਜਾਣਾ ਹੈ। Come, Let us together move forward.....

> ਅਤੇ ਅੱਗੇ ਵਧਦੇ ਜਾਣਾ ਹੈ। Come, Let us move forward.....

> ਅਤੇ ਅੱਗੇ ਵਧਦੇ ਜਾਣਾ ਹੈ। Come, Let us move forward.....

> > Lyrics: Dr. Neelima Jerath, Director General, PGSC Music Composer & Singer: Mr Parduman Kumar, HMV College, Jalandhar Music Arranger: Mohit Kashyap Chorus : Som Bahadur, Mridul Talwar, Navneet, Sarah and Jaideep

Celebration of Republic Day (26.01.2023)

Pushpa Gujral Science City celebrated 74th Republic Day at its campus. A General Quiz competition was organized jointly with National Institute of Technology, Jalandhar involving participation of >300 students from 31 Government and Private schools from all over Punjab. Cash prizes, sponsored by Xovian, Kendel Innovations, Career Vyas, Antriksh and NIT Jalandhar (1st Prize: Rs 10,000/, 2nd & 3rd Prizes: Rs 5,000/- each), were awarded to the winners.



New 3D film "Dino Safari" launched



Sh. Vishesh Sarangal, IAS, DC, Kapurthala while launching the film "Dino Safari" at the occasion of National Science Day.

Get on-board your jeep and enjoy a unique tour of our dinosaur reserve. You'll get within touching distance of a giant Diplodocus and the ferocious T-Rex as you travel through our jungle. But when disaster strikes and we have a major security breach... chaos reigns. Who will escape: you or the dinosaurs? Remember, keep your arms inside the vehicle at all times!

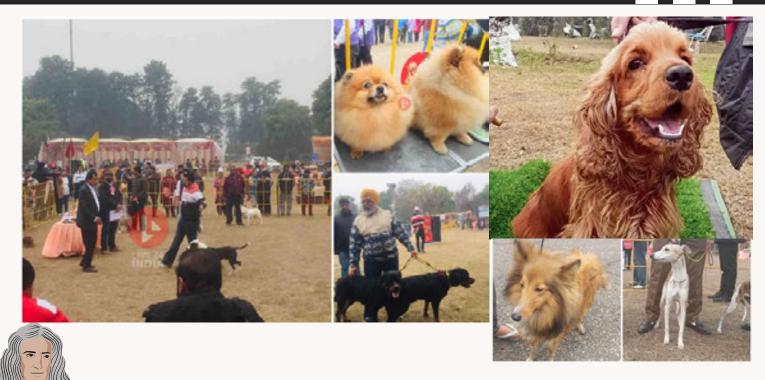




Domesticated Animal Biodiversity (Dog) Show (29.01.2023)

An Exhibition on domesticated faunal diversity and 15th & 16th All Breed Dog show was organized jointly with Kennel Club of India (KCI). The objective was to highlight the importance of domesticated animal diversity. A team of prominent international judges, comprising Azim Farooqui from Pune, Kasim Ali Khan from Hyderabad and Adarsh Chibber from Kotkapura, judged dogs during the show.

155 dogs of > 40 breeds such as German Shepherd, Labrador Retriever, Doberman Pinscher, American Bulldog, Boxer, Great Dane, Rottweiler, among others, and more than a thousand dog lovers participated in the event.



Newton's Day (04.01.2023)

A talk on "Newton and his works" and hands-on activity was organized to commemorate the birthday of Sir Isaac Newton, an English mathematician, physicist, astronomer, alchemist, theologian, and author. Newton formulated the laws of motion and universal gravitation that formed the dominant scientific viewpoint for centuries until it was superseded by the theory of relativity. Newton used his mathematical description of gravity to derive Kepler's laws of planetary motion, account for tides, the trajectories of comets, the precession of the equinoxes and other phenomena, eradicating doubt about the Solar System's heliocentricity. 25 students attended.

Birthday of Hargobind Khorana (09.01.2023)

A talk on "Life and contribution of Hargobind Khorana" was organized

to commemorate his birthday. Dr. Khorana was an Indian-American biochemist. He shared the 1968 Nobel Prize for Physiology or Medicine with Marshall W. Nirenberg and Robert W. Holley for research that showed the order of nucleotides in nucleic acids, which carry the genetic code of the cell and control the cell's synthesis of proteins. A short film on his research projects was also shown. 50 students attended.



Stephen Hawking was an English theoretical cosmologist, physicist, and author whose scientific works included a collaboration with on gravitational singularity Roger Penrose theorems in the framework of general relativity, and the theoretical prediction that black holes emit radiation, often called Hawking radiation. In 1963, at age 21, Hawking was diagnosed with an early-onset slow-progressing form of motor neurone disease that gradually, over decades, paralysed him. After the loss of his speech, he communicated through a speech-generating device initially through use of a handheld switch, and eventually by using a single cheek muscleA talk on "Life and achievements of Stephen William" Hawking in the field of science" was organized at the occasion of his birth anniversary. Hawking was the first to set out a theory of cosmology explained by a union of the general theory of relativity and quantum mechanics. He was a many-worlds vigorous supporter of the interpretation of quantum mechanics. students and teachers attended.

Birthday of Benjamin Franklin (17.01.2023)

PGSC organized an expert talk to commemmorate the birthday of Sir Benjamin Franklin, an American polymath who was active as a writer, scientist, inventor, statesman, diplomat, printer, publisher, forger and political philosopher. Dr. Harvinder Kaur Jassal, Associate Professor, Physical Sciences, Indian Institute of Science Education & Research (IISER), Mohali delivered a talk on "The World of Galaxies"



World Wetlands Day (02.02.2023)

World Wetlands Day is celebrated on the second day of February every year. Dr. Himender Bharti, Director, Centre for Restoration of Ecosystem in Punjab, Punjabi University, Patiala delivered a talk on "Anthropocene: Where do we stand in terms of Ecological Restoration". During his talk, he highlighted that the current ecological crisis is the outcome of various threats, which include habitat destruction, habitat fragmentation, habitat degradation, overexploitation biological resources, spread of invasive species, pollution, diseases, and global climate change. At this occasion, Poetry competition was also organized. >200 students participated. Artificial islands were also released by school students in Science City water body to provide spawning habitat for aquatic birds.

Winners of Poetry competition

1st Prize: Gurleen Kaur from Guru Amar Dass Public School, Goindwal Sahib Road, Kapurthala 2nd Prize: Navdeep Kaur from Shri Guru Harkrishan Public School, RCF, Kapurthala 3rd Prize: Baldesh Singh, Govt. Sr. Sec. School, Wadala Kalan, Kapurthala



World Cancer Day (04.02.2023)

World Cancer Day is an international day marked on 4 February to raise awareness of cancer and to encourage its prevention, detection, and treatment. Dr. Parmeet Kaur, Chief Dietician, Department of Dietetics, AIIMS, New Delhi delivered a talk (online) on "Diet and Cancer". Dr. Kaur said, "Diet can have an impact on your risk of developing many types of cancer and one can reduce his overall risk by following a healthy diet that includes plenty of fruits, vegetables, and whole grains."



Workshop on Low Cost Teaching Aids (08.02.2023)

In the workshop, various low cost activities like, concept of pressure, Newton disc, how to make fan with plastic bottles, Bernoulli principle, momentum, etc. were conducted.

B'day of Thomas Alva Edison (13.02.2023)

A talk on "Life and Inventions of Thomas

Edison" was organized to commemorate the Birth Anniversary of Thomas Alva Edison, an American inventor and businessman. He developed many devices in fields such as electric power generation, mass communication, sound recording, and motion pictures. These inventions, which include the phonograph, the motion picture camera, and early versions of the electric light bulb, have had a widespread impact on the modern industrialized

Steve Jobs B'day (24.02.2023)

world.

A talk on 'Biography and achievements of Steve Jobs' was organized at PGSC. to commemmorate the birth Anniversary of Steve Jobs, He was the cofounder, chairman, and CEO of Apple and a pioneer of the personal computer revolution of the 1970s and 1980s.

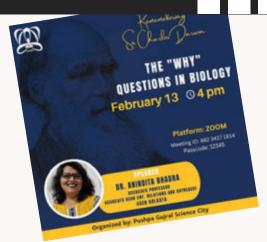




WINNERS OF DECLAMATION CONTEST (NSD-2023)

1st prize:Suchi, K.V CRPF Sarai Khas

2nd Prize: Janisha Bhatia, St.Joseph Convent School, Jal **3rd Prize:** Vanshdeep, DIPS Maksoodan, Jalandhar



B'day of Charles Darwin (13.02.2023)

Charles Darwin was an English naturalist, geologist, and biologist, widely known for his contributions to evolutionary biology.Dr. Anindita Bhadra, Associate Professor & Associate Dean (Int. Relations and Outreach), IISER Kolkata delivered a talk (on-line) on 'The "Why" Questions in Biology'.

National Science Day (28.02.2023)

National Science Day is celebrated in India on February 28 each year to mark the discovery of the Raman effect by Indian physicist Sir C. V. Raman on 28 February 1928. For his discovery, Sir C.V. Raman was awarded the Nobel Prize in Physics in 1930. The day was celebrated in collaboration with Punjab State Council for Science & Technology at PGSC campus. Expert Talk on "Entrepreneurship and Innovation" was delivered by Dr. Himesh Sharma, Advisor, Regional Centre for Entrepreneurship Development (RCED). Dr. Sharma said that entrepreneurship education aids students from all socio economic backgrounds to think outside the box and nurture unconventional talents and skills. A good entrepreneur utilizes the scientific method to start their own Ventures. Entrepreneurship education can shape students mind set, attitudes and behavior to become a true entrepreneur that could create job opportunities, he added. A Declamation contest was also organized. Cash prizes were awarded to the winners. >250 students participated.

Dr. Neelima Jerath, DG, PGSC was invited by HMV College, Jalandhar to deliver expert talk at this occasion. Dr. Jerath spoke on "Global Science for Global Resources".

Mission Life program of NITI Aayog and World Water Day (22.03.2023)

Pushpa Gujral Science City in collaboration with Punjab State Council for Science & Technology (PSCST) (catalysed and supported by MoEFCC, GoI) organized the following programs under Mission LiFE:

- ·Expert Talk on "Mission LiFE and Circular Economy Waste Management" by Dr. Naresh Bhardwaj, Assistant Director, PMIDC, Department of Local Government, Punjab
- ·Street Play Competition (theme "Lifestyle for Environment")
- ·Poster Making Competition (theme "Pro Planet")
- ·Green Quiz on Environment Economy and Water

World Water Day-2023 was also celebrated. 231 students participated. Cash prizes were awarded to the winners. An exhibition on Mission LiFE was also displayed by PGSC.

Food and Nutrition Show under Mission LiFE and International Year of Millets (26.03.2023)

The show was organized under the following themes:

- ·Health & Traditional Food
- ·Food from Millets

Competitions on traditional recipes and millet based recipe were organized for students of Hotel Management Colleges/ Institutions / Schools and Amateurs. 104 students / public participated and shared their recipes. The judgement was made by Executive Chef, ITC Fortune Hotel, Jalandhar and HoD, Hotel Management, Lovely Professional University, Phagwara. Cash Prizes were awarded to the winners.

HEALTH & TRADITIONAL FOOD

Hotel Management Colleges/ Institutions / Schools

1st Prize: Rohit Prasad, CT Institute, Jalandhar **2nd Prize:** Mehakpreet , NFCI, Jalandhar **3rd Prize:** Amit Gill, Aroma Institute, Phagwara

FOOD FROM MILLETS

Hotel Management Colleges/ Institutions / Schools

1st Prize:Shubkarm, GNA University 2nd Prize:Sidhi Gupta, HMV College 3rd Prize: Uravsh, GNA University

Amateur

1st Prize:Anahad Bains 2nd Prize:Sukhwinder 3rd Prize: Gursharan Singh

Amateur

1st Prize:Jyoti Kadam **2nd Prize:**Shriya Mani

DISH OF THE DAY Sonu, GNA University





Alexander Graham Bell's B'day (03.03.2023)

Alexander Graham Bell was a Scottish-born inventor, scientist and engineer who is credited with patenting the first practical telephone. A talk on biography of Alexander Graham Bell and sound related activities were organized by PGSC to commemorate his birth anniversary.

International Women's Day (08.03.2023)



PGSC celebrated International Women's Day in collaboration with Punjab State Rural Livelihood Mission, & ITC Mission Sunehra Kal, Manav Vikas Sansthan, Kapurthala on the theme "DigitALL: Innovation and Technology for gender equality". The rural women were made aware on how Innovation, Technology and Digital knowledge can help in achieving gender equality and women empowerment. At this occasion, DG, PGSC Dr. Neelima Jerath was invited by Sardar Swaran Singh Institute of Bio-Energy, Kapurthala to deliver an expert talk. She delivered a talk on "Women: Powering the Future".





Pushpa Gujral Science City INTERNATIONAL DAY FOR Action for Rivers Rejuvenation of Water Badies in Arid and Semi-arid Conditions March 14, 2023 © 4 pm

International Day of action for rivers (14.03.2023)

International Day of Action For Rivers, observed on March 14 every year, is a day that is dedicated to saving, celebrating, and creating awareness about the importance of rivers. Dr. Brijesh Kumar Yadav, Prof. & Head, Department of Hydrology, IIT, Roorkee, delivered a talk on "Rejuvenation of Water Bodies in Arid and Semi-arid Conditions".

World Forestry Day (21.03.2023)

Forest sustainable management and their use of resources are key to combating climate change, and to contributing to the prosperity and wellbeing of current and future generations. Forests also play a crucial role in poverty alleviation and in the achievement of the Sustainable Development Goals (SDGs). Yet despite all these priceless ecological, economic, social and health benefits, forests are endangered by fires, pests, droughts, and unprecedented deforestation. To create awareness on the importance of forests for survival of living beings, tree plantation was done by PGSC at Lyallpur Khalsa College, Kapurthala. 85 students participated.





World Sparrow Day (20.03.2023)

To raise awareness about house sparrows and other common birds affected by the environment, an Expert talk & demonstration on nest making was organized for school students by PGSC. 48 students participated.

From the Innovation Hub

Workshop on Electronics for beginners (23.01.2023)

The workshop was organized for students from Lord Krishna School, Sultanpur Lodhi involving participation of 24 students. Students learnt working of various components like capacitors, ICs, diodes, transistors, resistors etc., concepts about power supply circuits and made rectifiers wherein they learnt how to convert AC voltage into DC.

Workshop on Fun with Robots (30.01.2023)

The students learned the basic working of Robot, how to assemble a line follower robot using sensor through interactive kits, coding technique to program a robot, how to operate and program the robot. 16 students attended the workshop.

Workshop on Electronics Circuit Designing (20.02.2023)

The workshop was organized online by Innovation Hub for students of Army Public School, Beas involving participation of 21 students. Students learnt about integrated circuit IC 555 and were guided to make timer circuit in electronics using Tinkercad software. The workshop introduced the students to tilt sensor and how to control devices using the sensor.





NIGHT SKY WATCHING

During the reporting period, Night Sky watching activity was organized for 300 students at HMV College, Jalandhar; St. Soldier Elite Public School, Jalandhar & Public Sr. Sec. School, Talwara.

SD-ASK (Sustainable Development – Attitude, Skills and Knowledge) Program

- PGSC organized a virtual tour to Kamla Nehru Public School to give first-hand experience to the SDASK clubs about how sustainable development goals can be adopted by them at school level on 28.01.2023. The School has set a benchmark in this direction and adopted SDGs since its inception in 2015.
- "Meet the Woman Scientist" at the occasion of International Day for girls and women in Science (11.02.2023)

The International Day of Women and Girls in Science is an annual observance adopted by the United Nations General Assembly to promote the full and equal access and participation of women Science, Technology, Engineering Mathematics (STEM) fields. The First Woman President of the Astronomical Society of India, Dr. G.C. Anupama (Visiting Professor, Former Dean & Senior Professor, Indian Institute of Astrophysics) was invited to deliver a talk (on-line). Dr. Anupama discussed various options available in the country for pursuing a career as a professional researcher in astronomy and astrophysics. She also shared glimpses of her personal journey as astronomer.

Dr. Neelima Jerath, Director General, PGSC and First Woman to Head a Science City in the country also addressed the participants.









Domesticated Floral Biodiversity (Flower) Show (25.03.2023)

To celebrate and raise awareness on floral diversity, PGSC organized a Flower show.

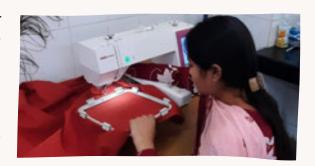
Various competitions like Floral Rangoli Making, Flower Arrangement (Dry and Fresh) and Potted Flower Competition were conducted. Gatka show was also organized. About 146 students and teachers participated in the show. This event gave an opportunity to the visitors to appreciate floral biodiversity.

Women Technology Park

Empowerment of Rural Women through Science based skill development' is an initiative taken by Pushpa Gujral Science City in collaboration with SEED Division, Department of Science & Technology, GoI to empower the women in rural areas. The project offers training to the rural women in Mushroom Cultivation (with special focus on *Pleurotus sajor caju*), Preparation of Cow Dung Logs & Pots and Value Addition to textiles (Hand Block Printing and Computer Assisted Embroidery). During the reporting quarter,

- Orientation Program on livelihood generation at village Hamira (04.01.23), Karhal Kalan (12.01.23), Jairam Pur (08.02.23) and Gadani (14.02.23) was organized. 31 women participated.
- 6 women completed long term training in Block printing and Computer Embroidery.
- 32 women completed 45 day training in *Pleurotus sajor caju* in Vill. Bazidpur, Mohali.







Ticket Prices

TICKET	ADULT	STUDENT / CHILDREN	FAMILY (2 ADULT + 2 CHILDREN)
Entry Ticket Package Ticket: 1	180*	125*	550**
Entry to Galleries, Large Format Theatre or Digital Planetarium Laser Show, 3D Show and Climate Change Theatre (without Simulators)	405*	310*	1285**
Package Ticket-I Group for Group > =25	395*	295*	1220**
Package Ticket: 2 Entry to Galleries, Large Format Thea or Digital Planetarium, Laser Show, 3D Show, Climate Change Theatre, fli simulator, Earthquake simulator		350*	1505**
Package Ticket:2 for Group > =25	460*	330*	1450**

Note:

- -Special discounted packages (@50%) to orphans, handicaps, bpl, War Widow and families, senior citizens etc.
- -Entry of one teacher is complimentary with the group of at least 25 students. Additional teachers will be charged ticket rates equivalent to that of students.
- *includes food coupon of Rs.20/-
- **includes food coupon of Rs.80/-

Annual Ticket Charges

You can visit PGSC any no. of time within one year of purchase of Annual Ticket. The cost of ticket is recovered in less than three visits. The Annual ticket rates are: Student / Teacher: Rs 635/-

Adults: Rs 900/-

Orphans/ Handicapped / BPL Students: 320/-Family (2 Adults + 2 Children (<18 yrs)): Rs 2750/-

Senior Citizens / Handicapped / BPL Adult member: 450/-

BPL / War Widow Families: Rs 1375/-

To know about membership benefits, please contact:

Ms. Manpreet Kaur; M: 7889291007

HOSTEL FACILITY FOR STUDENTS/TEACHERS

AC accommodation for 100 students and 10 teachers is available. Separate arrangement for boys and girls. Stay charges: Rs 150/- per person (Food charges extra). For hostel booking, contact: Mrs Harsimran Arora; Phone: 01822-501963, 501964

NIGHT SKY WATCHING

Science City provides Night Sky Watching facility when clear sky offers best view of the planets. Students/ Teachers/Adult: 60/-. Science City also provides Night Sky watching facility on demand of educational institutions at their own premises. Student / Teachers: Rs. 60/-. Minimum students required for booking: 100 + to and fro Travelling @ Rs.12 per km + stay facility for PGSC team for 1 night. For more details & reservations, please contact: Ms. Kanika Sharma; Mobile: 8837897789

BUSINESS OPPORTUNITIES

Register yourself as a Tour Operator or Be our Sponsors. For More Information, Please Contact: Dr. Munish Soin, Scientist D; M: 8146580387

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