

SCIENCE CENTRE NEWS LETTER

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SCIENCE CENTRE

Volume 3, Issue 02

WHAT'S NEW IN SCIENCE

GSLV successfully launches South Asia Satellite.

India's Geosynchronous Satellite Launch Vehicle (GSLV - F09) Successfully launched the 2230kg South Asia Satellite (GSAT-9) into its planned Geosynchronous Transfer Orbit (GTO) day of May 05, 2017. Launch of GSLV was its eleventh and took place from the Second Launch Pad at the Satish Dhawan Space Center SHAR, Sriharikota, the spaceport of India. This is the fourth consecutive success achieved by GSLV carrying indigenously developed cryogenic upper stage. In its oval shaped GTO, the South Asia Satellite is



now orbiting the Earth with a perigee of 169km and an apogee of 36,105km an orbital inclination of 20.65 deg with respect to the equator. Few seconds before launch countdown reached zero, the four liquid propellant strap-on motor of GSLV - F09, each carrying 42 tons of liquid propellants,

were ignited. At count zero and after confirming the normal performance of all the four strap-on motors, the 139 tons solid propellant first stage core motor was ignited and GSLV lifted off at 16:57 IST. The major phases of the flight occurred as scheduled. About seventeen minutes after lift-off.

South Asia Satellite was successfully placed in GTO. Soon after separation from GSLV, the two solar arrays of the Satellite were automatically deployed in quick succession and the Master Control Facility (MCF) at Hassan in

Karnataka assumed control of the satellite. South Asia Satellite is a communication satellite built by ISRO to provide a variety of communication services over the South Asia region, for this, it is equipped with ku-band transponders.

SCIENTIST OF THE MONTH

Sir Ashutosh Mukherjee

Sir Ashutosh Mukherjee was born on June 29, 1864 at Bowbazar Kolkata. He was a well-known mathematician, did his Masters in Mathematics in 1885. He was the Vice-Chancellor of Calcutta University during 1906-24, the Puisne Judge, Calcutta High Court, Calcutta and acting Chief Justice.

Sir Ashutosh Mukherjee's name will always be written in letters of gold in the history of the progress of education in India, particularly scientific education and research. His firm determination and courage prevailed over the major difficulties that came in the

way of establishing the foremost institute of science in India.



Sir Ashutosh Mukherjee is credited with the publication of several papers on differential equations in the 'Journal of the Royal Society of Bengal'. He has authored more than sixteen papers on pure mathematics but the unavailability of proper facilities for research diverted him towards the profession a lawyer, which alone offered bright professional prospects for Indians in the then pre-independent India. He died on 25 May 1924 (age-59) at

Patna, British India.



Timings

Tuesday to Friday
9.30 am to 4.30 pm

Saturday - Sunday
& Public Holidays
11.00 am to 6.30 pm

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SCIENCE FACTS JUNE 2017

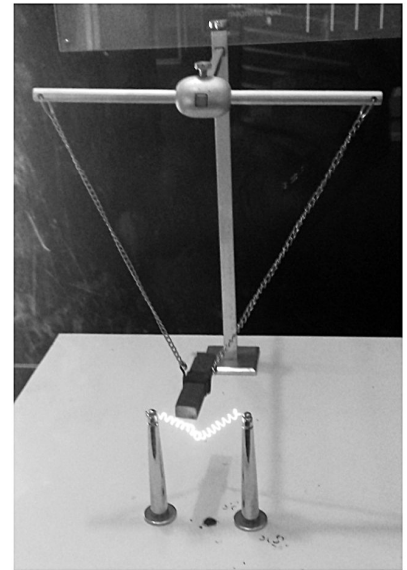
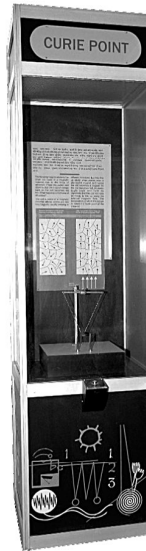
1th June	International Children's Day
5th June	World Environment Day
5th June 1783	Discovery and first launching of primary Balloon
6th June 2012	The astronomical event "Transit of Venus" happened on this day
7th June 1811	Mr. James Young Simpson (who invented Chloroform) was born on this day
7th June 1979	India Launched first low orbit Earth observation Satellite - "Bhaskar" into the Space
8th June	World Brain Tumour day
8th June	World Ocean day
8th June 1936	Indian State Broadcasting Service (ISBS) was renamed as "All India Radio" (AIR) on this day
10th June	Ballpoint Pen Day
11th June 1963	First Lady Astronomer "Valentina " came back from journey to Space
12th June	World Day against child labour
12th June 1872	Railway train started in Japan
14th June	World Blood Donor Day (WHO)
15th June 1752	Well-known Scientist Mr. Benjamin Franklin had done experiment of Kite on this day
18th June 2016	The third Sunday of June is celebrated as " International father's Day"
19th June	World Sickle cell Anaemia Awareness Day
21st June 1948	It is the longest day of the year in Northern Hemisphere and longest night of the year in Southern Hemisphere because Sun's rays strike normally in Northern Hemisphere
22nd June 1973	Successful landing of the astronomer of Skylab in Pacific Ocean after revolving around the earth for 28 days
23rd June	United Nations Public Service Day (UN)
24th June 1961	Successful launching of first Indian "Super Sonic Fighter A. A"
30th June 1880	Longest total Solar Eclipse of millennium
U. N. : United Nations	
WHO : World Health Organization	

Quiz Answers: 1) d, 2) a, 3) a, 4) c, 5) c

KNOW THE EXHIBITS AT FUN SCIENCE GALLERY

Curie Point

The hanging magnet sticks to the small coil made of a magnetic material due to the force of attraction. Press the switch and observe that the magnet swings back as the coil becomes red hot. What happens to the force of attraction? The coil is made of a magnetic material whose atoms act like tiny magnets. Usually pointing in easily when placed near a permanent magnet and hence the coil becomes a magnet. As the coil becomes hot, its atoms jiggle back and forth so vigorously that they can no more be made to line up along the external magnetic field. The temperature at which this occur is called the Curie point of the material.



SCIENTIFIC QUESTION

Do You Know About Animal And Plant Life In The Desert?

A desert is a region where only a special kind of life can exist. The most popular desert plants are the cacti.

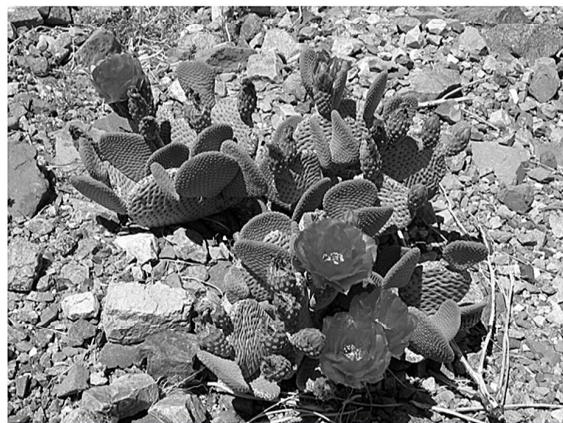


season arrives. As far as the animal life concerned, they should be of the kind who could survive without



They have thick, fleshy stems without true leaves. Small leaves or rather no leaf surface prevents the excess evaporation of water from the plant. It is for this reason that desert shrubs have small leaves. Many plants have thorns and spines. Desert plants usually lie dormant during the dry season or drop seeds that can survive such a period. In their growing season, the seeds germinate and give rise to plants that rapidly flower and drop more seeds. After this, they again become dormant, till the next growing

water for long periods or be able to reach water holes at great distances. The camel fulfils this requirement. It has padded feet to walk on sand, a water storing



stomach, humps of fat as a reserve supply of energy and nostrils that can be closed to keep out sand during sandstorms. Many small desert creatures do not need water at all. They fulfil their requirement from the sap of food plants and from night dew on leaves or stones.

SCIENCE QUIZ

1) Which instrument is used to measure depth of ocean?

- a) Galvanometer b) Sonometer c) Endoscope d) Fathometer

2) Who discovered Atom?

- a) John Dalton b) Madam Curie c) James Chadwick d) Rutherford

3) Which gas is used in fire extinguishers?

- a) Carbon dioxide b) Nitrogen oxide c) Carbon monoxide d) Sulfur dioxide

4) Who is regarded as father of modern chemistry?

- a) Rutherford b) Einstein c) Lavoisier d) C.V. Raman

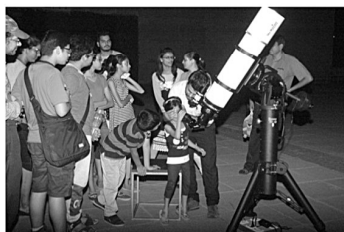
5) The largest part of the human brain is?

- a) Medulla oblongata b) Cerebellum c) Cerebrum d) Mid-brain

SUMMER CAMP

Summer Camp

Summer Camp was organized at first floor of Art Gallery, Science Centre Surat from 1st to 10th May 2017. This Summer Camp included Art, Science and Calligraphy. Children of age 7 to 12 Years are in A Group and children of age 13 to 16 Years are in B Group.



SCIENCE CENTRE

Science Centre forms the main part of the entire complex; it displays thematic galleries in the field of Science and Technology. The ground floor of Science Centre showcases 3D Theatre and Souvenir Shop. The first floor of Science Centre showcases Planetarium, Fun Science Gallery and Power of Play Gallery and second floor of Science Centre showcases Diamond Gallery, whereas Entering into Space, Textile Gallery, Cosmos Gallery and Polar Science Gallery are under development.

3d Show	Tuesday to Friday (Time)	Saturday, Sunday & Holidays (Time)
English	09:15, 11:20, 12:00, 02:40, 04:00	11:20, 12:00, 02:40, 04:00
Hindi	10:00, 10:40, 12:40, 01:20, 02:00, 03:20	12:40, 01:20, 02:00, 03:20, 04:40, 05:20, 06:00
Science Centre + Planetarium + Museum + Diamond Gallery		
Above 18 Years	Rs. 100	
3 Years to 18 Years	Rs. 65	
Science Centre + Museum + Diamond Gallery		Planetarium
Above 18 Years	Rs. 60	Tuesday to Friday
3 Years to 18 Years	Rs. 40	Saturday, Sunday & Public Holidays
Science Centre + Planetarium + Museum + Diamond Gallery + 3D Show		09:30 to 10:20 English
Above 18 Years	Rs. 120	10:30 to 11:20 Gujarati
3 Years to 18 Years	Rs. 80	11:30 to 12:20 Gujarati
Planetarium		12:30 to 01:20 English
Above 18 Years	Rs. 50	01:30 to 02:20 Gujarati
3 Years to 18 Years	Rs. 40	12:30 to 01:20 English
3D Show		01:30 to 02:20 Hindi
Above 18 Years	Rs. 60	02:30 to 03:20 Hindi
3 Years to 18 Years	Rs. 40	03:30 to 04:20 Gujarati
		02:30 to 03:20 Hindi
		03:30 to 04:20 Gujarati
		04:30 to 05:20 English
		05:30 to 06:20 Gujarati