

Newsletter

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Nehru Centre



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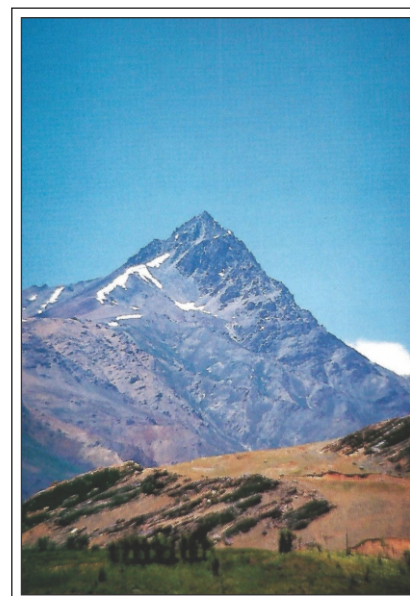
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Indian Armed Forces: In Service of the Country The Kargil War

In February 1999, the Prime Ministers of India and Pakistan signed the Lahore Declaration proclaiming that the Shimla Agreement would be implemented in letter and spirit and also agreeing to intensify their efforts to resolve all issues, including that of Jammu and Kashmir.

But in March 1999, Pakistani Army men dressed as Mujahids infiltrated into India violating the Line of Control (LOC). They selected such areas for intrusion which were vacated by the Indian Army during the winter. In the Kargil sector the Pakistan Army occupied areas of Batalik, Kaksar, Dras and Mashkoh and many more commanding heights, well-armed and well-equipped with the aim of holding ground permanently. By doing so, they secured a significant strategic and tactical advantage. They got a stranglehold on a vital communication link: the Srinagar-Kargil-Leh Highway on which the entire civil population of Ladakh and the military forces deployed there were dependent. Launching of an operation like that by the Pakistan Army soon after the Lahore Declaration took the Indian Army and the country by total surprise.



The majestic Tiger Hill

In the face of such a blatant act of aggression, India had no choice but to evict the enemy from the Indian soil regardless of likely heavy casualties. It was also necessary to have that done before the onset of winter so that Leh and Ladakh could be well stocked for the period of extremely cold weather. Moreover, if the Pakistanis had not been pushed out right away they would have consolidated their gains and perhaps made it extremely difficult for Indian armed forces to dislodge them later i.e. the next summer.



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Feedback, comments are welcome.

Published for Nehru Centre
by **Shri Chandrakant M. Rane**
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Since the Indian Army and the Indian Air Force had been forbidden by the Government of India from crossing the LOC, the Indian Army had to resort to physical assault on the heights encroached upon by the enemy. Before launching the offensive, the army had perfected the skill of deploying Bofors Guns in the direct firing which proved to be a boon to Indian troops and a bane to the intruders.

The deepest penetration into Indian territory was made by Pakistan in Drass sector by occupying Tololing peak which dominates the Srinagar-Kargil-Leh highway. Sitting atop Tololing, the enemy was able to prevent movement on the highway and access to Indian posts on the LOC. The recapture of Tololing peak was, therefore, essential. After hand to hand combat lasting five days, Indian troops prevailed and captured Tololing peak. In the battle of Tololing, on June 13, 1999, the first major victory for the army played a crucial role in the final defeat of the enemy. Once Tololing was taken, it took just six days for Indian troops to evict the well-entrenched intruders from four nearby outposts viz. Point 4590, Rocky Hill, Hump and Point 5140. It was the victory at Tololing which later led to the capture of the strategic Tiger Hill and all other heights in Batalik, Kaksar and Mashkoh Valley.

In ousting the Pakistani infiltrators, the Indian Air Force (IAF) too played a



Soldiers holding aloft the tricolour on one of the recaptured peaks

crucial role. The IAF prepared its mission plan in consultation with the army who identified the targets to be attacked and indicated the exact location of Indian troops in the target's vicinity. The targets were enemy gun emplacements, their supply lines and their bases. The Air Force went into action on May 26 1999. Unfortunately, two aircraft were lost in the beginning but the air attacks unsettled the Pakistani forces. When the IAF carried out air strikes at the enemy-occupied heights just before the Indian troops launched their attack to drive them out, they were on the run.

The fighter aircraft in the valley flew more than 2000 sorties including 250 by night. Helicopters flew 23 strike

sorties and 2100 sorties for other tasks. The enemy positions were targeted with 330 tonnes of bombs, 4000 rockets and many thousands of gun ammunition.

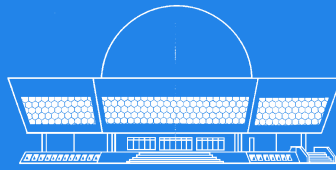
The Indian Army and the Indian Air Force succeeded in evicting Pakistani forces from Indian soil. The victory in the Kargil War resulted from the raw courage and indomitable spirit of Indian soldiers and air men and their commanders. The war came to an end on July 26, 1999 after a ceasefire was announced and Pakistanis departed from wherever they still remained on Indian positions along the LOC.

Photo credit:
From *Surprise to Victory* by
General V. P. Malik.

What Nehru said....

We have been accused of appeasement of Pakistan. The word has a bad odour and a bad history. I do not myself see where appeasement comes in, either on the side of the Government or the people... If an attempt to prevent a reversion to barbarism is appeasement, then perhaps the charge is true. But we learnt long ago in the school of Gandhi that there can be firmness with decency, and even conflict with the hand of friendship never withdrawn. That is not weakness, for if it is so, then Gandhi might be termed weak. And yet we all know that he was the bravest man that we have known and that he would never give in where high principle was concerned. How far we have moved from those days, when a handful of us could challenge an empire, and challenge it with a smile on our faces and with little of ill will in our hearts!

From Letters to Chief Ministers dated 15 April 1950



NEHRU PLANETARIUM

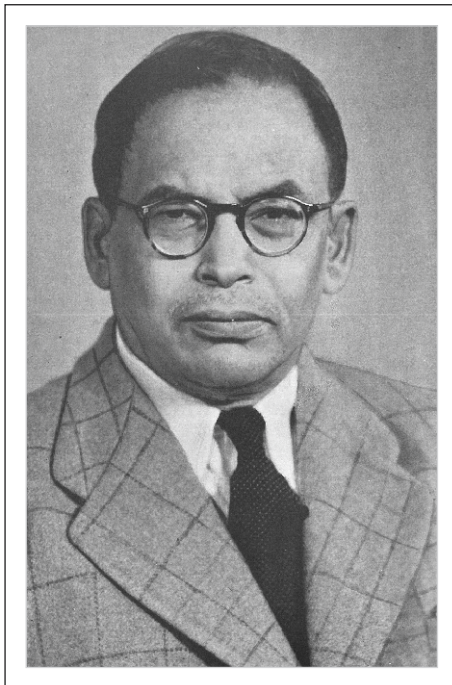
Meghnad Saha: The internationally renowned astrophysicist

On October 6, 1819, Bhubaneswari Devi, wife of Jagannath Saha gave birth to a boy, in a small village named Sheoratali near Dacca (now Dhaka). The boy who was their fifth child was named Meghnath after the Hindu god of the clouds.

The Sahas were a very poor family and Jagannath who owned a grocery shop barely managed to meet the family's requirements. He could not afford education for his children beyond primary school. However, Meghnath's elder brother found a benefactor in one Dr Anantha Kumar Das who supported Meghnath's higher education at a school at Simulia about 10 km from his village.

This was the turning point in Meghnath's life. Meghnath, who later changed his name to Meghnad, never forgot this timely help. In his later life, he never forgot to acknowledge Dr. Das, saying without his (Dr. Das's) help, he could not have completed his education.

In 1905, he went to Dhaka to join Dhaka Collegiate School, the oldest school in Bangladesh. He had to leave the school for his (alleged) participation in the Swadeshi movement. Kishori Lal Jubilee School, a private school in Dhaka accepted Saha. He was also given free studentship and a stipend. In 1909, Saha passed the Entrance Examination of the Calcutta



Meghnad Saha

University standing first amongst all the candidates.

In school, his favourite subject was mathematics and he also liked history. Among his favourite books were Rabindranath Tagore's *Katha O Kahini*, which glorifies the values of the Rajput and Maratha warriors and Michael Madhusudan Dutt's epic poem *Meghnad Badh Kavya* which is based on the demise of Meghnad (also called Indrajit), son of Ravana, the king of Lanka in the epic Ramayana. As a child, Meghnath was so fascinated by *Meghnad Badh* that he later changed his name from Meghnath to Meghnad.

In 1911, young Meghnad joined the Presidency College at Calcutta (now Kolkata) where he was taught by great scientists and academicians like Prafulla Chandra Ray and Jagadish Chandra Bose. Among his classmates was S N Bose, the great Indian mathematician and scientist. The founder of the Indian Statistical Institute, Prasanta Chandra Mahalanobis was his senior by a year.

Saha's career as a teacher and scientist started in 1916 when he joined the Department of Applied Mathematics at the University College of Science, Calcutta. Later both Bose and he got themselves transferred to the Physics Department at the same University. Here Saha started delivering lectures on hydrostatics, spectroscopy and thermodynamics to the post-graduate classes. Along with teaching, he also pursued research work. Between 1917 and 1919, Saha worked on diverse topics and published ten scientific papers.

In 1919, his dissertation on 'Harvard Classification of Stellar Spectra' was awarded the Premchand Roychand Scholarship. In the first half of 1920, he published four papers which were to become the base for his path-breaking work, the Theory of Thermal Ionisation, that is now known as the Saha Ionization Equation. This equation is one of the basic tools for the interpretation of the spectra of

stars in astrophysics. By studying the spectra of various stars, one can find their temperature and by using Saha's equation, determine the ionisation state of the various elements making up the star.

the public. Saha was also closely associated with the planning and establishment of the Central Glass and Ceramic Research Institute. He was instrumental in preparing the original plan for the Damodar Valley

of nuclear energy and had initiated the first Parliament debate on this subject.



Seated (L to R): Meghnad Saha, Jagadish Chandra Bose, Jnan Chandra Ghosh. Standing (L to R): Snehamoy Dutt, Satyendranath Bose, Debendra Mohan Bose, N R Sen, Jnanendra Nath Mukherjee, N C Nag (source Wikipedia)

Arthur Stanley Eddington, the English astronomer and physicist, wrote in the Encyclopedia Britannica, that Saha's theory is the twelfth most outstanding discoveries made in astronomy and astrophysics since the discovery of the telescope, in 1608, by Galileo.

Saha was a great institution builder. In 1932, upon advice from Einstein and Eddington, Saha was appointed the first professor of Physics and Head of the Department of Allahabad University. Saha made the Department of Physics one of the most active research centres in the country. In 1933, Saha founded the Indian Physical Society at Calcutta. Many eminent scientists like Raman and Krishnan regularly contributed their important papers to the Indian Journal of Physics published by the Society. Saha founded the National Institute of Science of India at Calcutta in 1935. Its main objective was to disseminate science amongst

Project. In 1952, Saha was appointed full time Director of the Indian Association for the Cultivation of Science and devoted considerable attention to its reorganization.

Saha did seminal work in the field of nuclear physics. He was determined to set up a nuclear facility like the cyclotron which he had seen at Berkeley to serve as the core of nuclear research. With the help of the then Prime Minister Jawaharlal Nehru, he obtained recurring grants from industrial houses like the Tatas and the Birlas. On April 1948, the Institute of Nuclear Physics was born. In 1952, Saha contested the Lok Sabha election as an independent candidate and won by a margin of 16% from the North-West Calcutta constituency. He wanted to be a Member of Parliament to actively participate in the planning of education, industrialization, health, and river valley development. Saha was an advocate for the peaceful use



Commemorative stamp in honour of Meghnad Saha

The Calendar Reform Committee under the aegis of the Council of Scientific and Industrial Research was constituted with Saha as its head to prepare an accurate calendar based on scientific study which could be adopted uniformly throughout India. The Committee published its report in 1955. The usage of the Indian National Calendar started officially on 1 Chaitra 1879, Saka Era, or March 22, 1957.

Saha died suddenly at the relatively young age of 62 years on February 16, 1956 when he was on his way to the office of the Planning Commission. An eminent scientist, D. S. Kothari who was a student of Saha wrote, "The life of Saha was, in a sense, an integral part of the growth of scientific research and progress in India" Renowned scientist Jayant Narlikar said of Saha, "Meghnad Saha's ionization equation which opened the door to stellar astrophysics was one of the top ten achievements of 20th century Indian science and could be considered in the Nobel Prize class."

Folk Dances of India - Haryana

Haryana is essentially an agricultural state where the farming community has a rich tradition of folk dances and folk songs befitting all occasions. These folk dances and songs provide recreation to men and womenfolk alike, with some popular ones described below.

Phag: *Phagun* (mid-February to mid-March) is the month when the farmer does not have much to do in his field. The trees that have shed their leaves start bearing sprouts, signifying the emergence of life all around. The Haryanvis celebrate the month with dance and song as if nature itself is welcoming the new life. In this mixed dance, women in their traditional costumes and men in coloured attire celebrate with vigour and enthusiasm. The dancers form a circle around a person with a *dholak* or a woman with a pitcher. To the beats of *dholak* or pitcher, the dancers start dancing in pairs, leading sometimes in groups of four. This dance has very simple movements.

Jhoomar: Jhoomar is a head ornament worn by married women and this dance derives its name from that ornament. This is a dance in which only women participate. The dance starts in a circle to the beats of a *dholak* and thali (steel plate). Dressed in colourful costumes, the dancers dance in rhythmical steps. This dance is also popularly known as the *Haryanvi Gidda*.

Daph: This mixed dance is performed to the beats of *daph*, or a one-sided drum. Like the Bhangra in Punjab, the *daph* is performed before the harvest starts after spring. The farmer expresses joy on seeing the wheat crop in sheafs of gold through this dance. This dance is also performed on the festivals of Diwali and Holi. Women perform the *daph* on their way to the village temple. Similar to the Jhoomar, this dance is also popular in the rural areas of Haryana.



Phag Dance



Jhoomar Dance



Daph Dance

SWARUPA BHOSALE



Painting by Swarupa Bhosale

Swarupa is a self-taught artist and has many shows to her credit. She paints nature and flowers in acrylic on canvas.

**Tuesday 5th October to
Monday 11th October 2021
(AC Gallery)**

**NEHRU CENTRE
ART GALLERY
STUDY CAMP WORKS**

Every year since 1993, the Nehru Centre Art Gallery has been conducting study camps where students from art colleges of Maharashtra visit scenic places in India. They paint on location along with a senior artist who guides them through the camp and also works with them. The works done during the camps will be displayed in the gallery.

**Tuesday 5th October to
Monday 11th October 2021
(Circular Gallery)**

GHANASHYAM GUPTA



Painting by Ghanashyam Gupta

Ghanashyam received B.F.A. from Aurangabad; M.F.A. from Baroda and M.F.A. in print making from London.

He has many awards for his paintings and sculptures in India and abroad.

**Tuesday 12th October to
Monday 18th October 2021
(AC Gallery)**

NEHRU CENTRE COLLECTION



Shivaji Tupe



C. V. Tirodkar



Amit Dhane



Jitendra Gaikwad

Artworks of senior artists who accompanied our study camps will be displayed.

**Tuesday 19th October to
Monday 25th October 2021
(AC Gallery)**

**Panchatatva
GANESH MHATRE
AJAY CHANDAK**



Painting by Ganesh Mhatre

Ganesh is a graphic designer and illustrator from Pune. He will display his landscapes in acrylic on canvas.

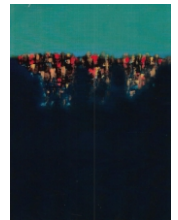
Ajay is a self-taught artist who captures the beauty of nature and weaves a fine blend of subtle human emotions, forms and texture in his paintings.

**Tuesday 19th October to
Monday 25th October 2021
(Circular Gallery)**

GROUP SHOW



Sanjukta Barik



Neeti Hegde

12 women artists will display their art works.

**Tuesday 26th October to
Monday 1st November 2021
(AC Gallery)**

RATI BHARGAVA

Rati's paintings are in various mediums like water colours, acrylic and silver wash.



Painting by Rati Bhargava

**Tuesday 26th October to
Monday 1st November 2021
(AC Gallery)**

UNESCO World Heritage Sites in India

25. The Jantar Mantar, Jaipur

The Jantar Mantar is an open-air observatory of twenty astronomical instruments built by King Sawai Jai Singh II. It features the world's largest stone sundial and is located within the precincts of the City Palace in Jaipur. The instruments in the Jantar Mantar allow the observation of astronomical positions in the sky.

Noticing defects in the brass astrolabes, sextants and sundials he had collected, Sawai Jai Singh II decided to design his own instruments. The metal instruments made by him were too heavy and had limited application; so he went on to design and construct gigantic instruments of stone and masonry to help him in his task of revising the planetary tables. The Jaipur observatory is the largest and best preserved. All the twenty instruments as well as three large metal ones are still to be seen here. Instruments of note in the Jaipur observatory are:

Samrat Yantra is an equinoctial sundial of gigantic proportions (the largest in the world) designed to measure local time, meridian pass time, zenith distance and the declination and altitude of the celestial spheres with greater precision. It consists of a 27 metre (90ft) high triangle-shaped wall topped with a domed *chatri*, the 44 metre (146ft) long hypotenuse of which is the gnomon pointing towards the north pole at an angle of 27 degrees, equivalent to the altitude of Jaipur. This is flanked by two quadrants of 15 metre (50ft) radius with graduations in hours, minutes and seconds where the shadow of the gnomon travels about 4 metres (13ft) an hour.

Jai Prakash Yantra is a multi-purpose instrument invented by Sawai Jai Singh II. It is an armillary sphere, which consists of two marble bowls sunk into a rectangular sandstone platform. The concave hemispheres represent the celestial sphere. The rim of the bowls represents the horizon which displays the relationship between the local and the equatorial system of coordinates.

Narivalaya Yantra is an instrument which can determine local time, ante and post meridian. It is a hemispherical sundial which consists of two cylinders with a diameter of 3 metres (10ft), and an axis parallel to the earth.

The Jantar Mantar was declared a UNESCO World Heritage Site in 2010.



Jantar Mantar



Samrat Yantra



Jai Prakash Yantra

Further reading at Nehru Centre Library:

- Insight guides: Rajasthan *by* Maria Lord; APA Publications, Singapore, 2005. Call No. R915.44/Lor. Barcode - 13676
- Jaipur City Palace *by* Vibhuti Sachdev & Giles Tillotson; Roli Books, New Delhi, 2008. Call No. 915.44/Sac/Til. Barcode - 15688

NEHRU CENTRE PUBLICATIONS

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Colourful art catalogues for sale

- (1) GOPALRAO DEUSKAR (1995)
 - (2) VINAYAKRAO KARMARKAR (1996)
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 - (5) BALAJI & HARISH TALIM (1999)
 - (6) D. G. KULKARNI (DIZI) (2001)
 - (7) NARAYAN L. SONAVADEKAR (2003)
 - (8) NAGESH B. SABANNAVAR (2004)
 - (9) SAMAKALEEN (2005)
 - (10) VINAYAK S. MASOJI (2006)
- and many others

ART FUSION catalogues

2007 / 2008 / 2009 / 2010 / 2011 / 2012 / 2013 /
 2014

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On coming back to the library

In the fall and winter of 2020, the think-tank *New America* embarked on a snapshot study to gather data on how - or if - people were discovering, accessing, and using their public libraries during the COVID-19 pandemic. It also explored how various libraries were adapting to the crisis.

Results from the study show a meaningful shift towards the use of online resources and a high level of goodwill for public libraries and what they make available online. But the study also illuminates a host of significant challenges for libraries to overcome, particularly in improving their outreach and services to the community.

The findings of the study were:

- Mixed awareness of the public library's resources.
- A shift towards online resources.
- Mostly positive attitudes toward the public library and its online as well as offline resources.

In the Indian context though, during the pandemic, access to online resources was very much limited as most areas have no or a difficult-to-regularly-maintain internet connection. Some local libraries still have manual catalogues and no computerized records and contents and could not even connect with their members.

Moreover, a person like me who enjoys a 'book-in-hands' experience found it difficult to connect effectively with online libraries. I enjoyed the ambience of the American Center Library during my college days and after many years, the Nehru Centre Library fulfilled my thirst for knowledge. I was yearning for the library to reopen and constantly inquired likewise with the library staff.

Before the pandemic restrictions were introduced in April 2020, I had seen a book *Hiroshima Nagasaki* by Paul Ham and had read a couple of opening chapters and was planning to read the whole book by regularly visiting the library. Unfortunately, lockdown was imposed and everything came to a standstill.

Then by October 2020, the Covid positive cases in India started showing a downward trend. Chances of opening up of libraries seemed a possibility. Alas, by mid-March 2021, the second wave started showing a dangerous trend. Hence, I could not visit the library.

Today, as the cases are steadily dropping and the Nehru Centre Library has opened, though with reduced timing and following strict Covid protocols, I am enjoying coming back and plan to read as much as I can. I hope, of course, that the pandemic soon becomes an endemic, majority of the people are completely vaccinated and libraries and planetaria begin functioning regularly again.

*This piece was contributed by an avid reader and regular visitor to the library,
 Shri S. Y. Sohani.*

<p>Editor Arati N. Desai Design & Layout Imtiaz Kalu</p>	<p> : nehru-centre.org/library.html</p> <p> : nehrucenliblibrary.blogspot.in</p> <p> : nehrucen-koha.informindia.co.in</p> <p> : www.facebook.com/NehruCentreLibrary</p> <p> : www.twitter.com/nehrucenlib</p>	<p><i>Partially open</i></p> <p>Please call to check timings.</p>
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