Louis Mountbatten, the last Viceroy of India and the first Governor-General of independent India (1947-48), was given the arduous task of overseeing the smooth transfer of power in India. To achieve this, he met senior Congress and Muslim League leaders. In the words of Philip Ziegler, Mountbatten’s official biographer, “Gandhi remained skeptical about the underlying intentions of the British government. “The dawn of freedom had appeared,” he would say pensively, “but we do not feel the glow of its sunrise.”

Gandhiji and Lord Mountbatten met for the first time on 31st March 1947. When Mountbatten arrived in Delhi on 22nd March 1947, Gandhiji was on a ‘repentance tour’ in Bihar following the ghastly communal violence there. Gandhiji interrupted his tour and came to Delhi to meet the new Viceroy. Gandhiji arrived at Viceroy’s house at 3 p.m. and after the initial greetings, the Mountbattens conducted him to face a battery of cameramen. After the photo session, as the Mahatma was turning to go back into the building, he placed his hand on Lady Mountbatten’s shoulder. Alan Campbell-Johnson writes in his book Mission with Mountbatten, “Gandhi by his action was doing no more and no less than treating Lady Mountbatten in the same manner as his own grand-daughters on his way to his prayer meetings. Every gesture he makes has consciously or otherwise symbolic meaning, and this afternoon it was spontaneous friendship.” Lord Mountbatten noted: “Certainly I was quite unprepared to meet such a lovable old man, with a warm, human manner; charming manners; and perhaps most unexpectedly of all, an unfailing sense of humour. My wife and I welcomed him together, and friendly relations were effortlessly established. When I took him into my own study to speak with him alone, it was in order to give us both a chance to see what we thought of each other as human beings, and very soon we were talking, as the saying goes, ‘of everything under the sun.”

They met again on 1st April 1947 to discuss the transfer of power. Their meeting lasted for two hours during
Mahatma Gandhi always laid stress on moral values and warned us never to subordinate means to ends. After a generation of intense struggle with a powerful nation we achieved success, and perhaps the most significant part of it for which credit is due to both parties was the manner of its achievement. History hardly affords a parallel to the solution of such a conflict in a peaceful way.

From ‘Freedom from Fear’
Observing Clouds

Observing clouds : Altocumulus and Altostratus

With the arrival of September we start seeing receding monsoon clouds in the sky. The rain bearing clouds - cumulonimbus (see July Newsletter) and nimbostratus (see August Newsletter) give way to altocumulus and altostratus clouds. These clouds are seen at 2000 to 7000 meters above ground level. The prefix of 'Alt' to the names of these clouds is a slight misnomer as 'Altus' in Latin actually means high. Cirrus clouds are seen at even higher levels of 10,000 meters or more. The altocumulus and altostratus clouds come under the mid-level category.

Altocumulus

These clouds are formed by atmospheric convection just like cumulus clouds. They are dense and appear white or gray in colour. These clouds form in the sky in various shapes. Sometimes they are seen as wavy, rounded masses and, at other times, as long rolls. The presence of these clouds during warm and humid weather is often an indicator of approaching thunderstorms.

On formation, the temperature inside these clouds drops to 10 degrees below zero. They have super-cooled water droplets or ice crystals. Super-cooling is that property of material in which temperature of the liquid or gas falls below freezing point but it does not become solid, like the formation of ice in the case of water.

Altocumulus clouds have dark patches on one side that help us to distinguish them from another category of similar looking clouds, the cirrocumulus which form at higher altitudes.

Lenticular clouds (because they resemble lentil seeds) are another form of altocumulus clouds which are of great interest to pilots. Flights that pass through these clouds sometimes can get bumpy and pilots usually avoid them. But glider pilots use these clouds to 'lift' them up to reach higher altitudes and therefore travel to longer distances.

Altostratus

As the name suggests, these clouds appear as smooth sheets and gray or dark gray but never white in colour. These clouds usually form in many layers stacked one over the other. At times, these clouds produce light rain. If the thickness of these clouds increases, then they develop into rain bearing clouds, the nimbostratus.

The sun and the moon can be seen through these clouds but the images are not very sharp. They appear as if one is looking at them through a fine frosted sheet of glass. These clouds can cover a wide area in the sky and appear in many shapes. Altostratus clouds contain water droplets or icy crystals. When the sunlight passes through them, a display of beautiful colours is seen.

<table>
<thead>
<tr>
<th>Name</th>
<th>Altocumulus</th>
<th>Altostratus</th>
</tr>
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<tbody>
<tr>
<td>Short form</td>
<td>Ac</td>
<td>As</td>
</tr>
<tr>
<td>Temperature</td>
<td>-10 deg. C</td>
<td>-10 deg. C</td>
</tr>
<tr>
<td>Symbol</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Height</td>
<td>2000m - 7000m</td>
<td>2400m - 6100m</td>
</tr>
</tbody>
</table>

NEHRU PLANETARIUM

SKY SHOW : ‘Cosmic Life’

Timings
12 noon (Hindi) 1:30 p.m. (Marathi)
3:00 p.m. (English) 4:30 p.m. (Hindi)

(MONDAY CLOSED)
On July 27, 2019, the second lecture of the Satyendra Nath Bose Memorial Lecture series was delivered by Dr. B.N. Jagatap, Senior Professor at the Department of Physics, Indian Institute of Technology, Bombay. The title of his lecture was ‘The Road to Bose-Einstein Condensation’.

Prof Jagatap started his lecture with a reference to Bose’s famous letter dated June 4, 1924 to Einstein. This letter marked the beginning of an epoch in the history of quantum physics as it brought about the introduction of Bose-Einstein statistics. Bose–Einstein statistics (or B–E statistics) describe one of two possible ways in which a collection of non-interacting, indistinguishable particles may occupy a set of available discrete energy states at thermodynamic equilibrium. It was only in 1995 that this theory was demonstrated experimentally. Prof. Jagatap further said that, in recent years, Bose-Einstein Condensation (BEC) has become a subject of intense theoretical and experimental investigation, which includes several interesting and important concepts such as matter wave physics, atom laser, ultra-cold collisions, quantum information processing, ultra-precision measurements, quantum simulators, and slow light, to name a few.

Prof Jagatap spent a few minutes giving technical details of BEC and its background with a series of equations which a person without the background of physics would have found difficult to understand but the students who attended were immensely benefited. They put queries on this in a discussion with the speaker after the lecture.

Prof Jagatap also answered some pertinent questions, some of them being on the contribution of Indian scientists to further the work of S.N. Bose.

The next lecture in this series will be delivered by Prof Somak Raychaudhri, Director, Inter-University Centre for Astronomy and Astrophysics, Pune on 21st September, 2019.

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DIY @ The Lab - Homemade Laser Microscope

This experiment describes how one can use a simple laser to observe micro-organisms.

Material required: a laser pointer, a 5 or 10 ml doctor’s syringe (with needle taken out) and some water from a puddle where we expect to find some micro-organisms.

Set-up: Hang the syringe in such a way that one can push the piston just long enough that a drop of water is formed at the end of the nozzle of the syringe. When we throw a beam of light on this, we see a pattern on the wall or a screen. We may need to darken the room.

If the water sample has micro-organisms, we can see their magnified shadow images floating and moving around on the screen. Small single-cell living beings like paramecium appear as dark spots and some of them exhibit movements. Paramecium is a unicellular organism with a shape resembling the sole of a shoe. The size ranges from 0.5 mm to 0.05 mm. Some algae also appear in the sample.
Nehru Centre announces its 23rd Theatre Festival in 3 languages - English, Marathi and Gujarati. We dedicate this year’s festival to the memory of late Girish Karnad.

**Monday, 16th September, 2019**

**BROKEN IMAGES** (English)
Written by Girish Karnad
Directed by Alyque Padamsee
Produced by Raell Padamsee’s Ace Productions, Mumbai
Duration: 1 hr. without interval

**Thursday, 19th September, 2019**

**DHARMORAKSHATI** (Gujarati)
Written by Mihir Bhuta & Amee Trivedi
Directed by Nimesh Diliprai
Produced by Avni, Mumbai
Duration: 2 hrs. 10 minutes with interval

**Tuesday, 17th September, 2019**

**A PERFECT MURDER** (Marathi)
Written by Neeraj Shirvaikar
Directed by Vijay Kenkre
Produced by Badam Raja Productions, Mumbai
Duration: 2 hrs. 30 minutes with interval

**Friday, 20th September, 2019**

**SURGICAL STRIKE** (Gujarati)
Written & directed by Pravin Solanki
Produced by Phiroz Bhagat, Mrigasya, Mumbai
Presented by Kiran Bhat
Duration: 2 hrs. 10 minutes with interval

**Wednesday, 18th September, 2019**

**EPIC GADBAD** (Marathi)
Written by Makarand Deshpande
Directed by Makarand Deshpande
Produced by Rujuta Productions, Mumbai
Duration: 2 hrs. 30 minutes with interval

**HINDI KAVI SAMMELAN**

The participating poets:

Vishwanath Sachdev, Anup Sethi, Chitra Desai, Hastimal Hasti, Vijaykumar and Hari Mridul.

Smt. Chitra Desai will conduct the Hindi Kavi Sammelan.

Saturday, 21st September, 2019
6.30 p.m.
Hall of Culture

Entry: Free for poetry lovers

Review: **Megh Malhar 2019**

Nehru Centre organised the 31st edition of “Megh Malhar” - an evening of bandish and semi-classical forms of Malhar ragas, on 26th July 2019. The programme was dedicated to the memory of the doyen of Indian music, late Padmashri Shri Vasant Desai.

Smt. Mangala Khadilkar anchored the programme. Her comments were very informative. Shri Nachiket Desai along with Ms. Madhuri Karmarkar and Dhanashri Deshpande presented various ragas of Megh Malhar through famous film songs.

The programme was appreciated and applauded by the audience.
Programmes for September 2019

SANJUKTA BARIK

The show will display paintings in oils, acrylic, mixed media and murals.

Tuesday 3rd September to Monday 9th September 2019
(AC Gallery)

SMITA MARATHE

Smita paints in charcoal on paper. Her paintings depict women and their emotions.

Tuesday 3rd September to Monday 9th September 2019
(Circular Gallery)

BIRA KISHOR PATRA

His figurative paintings are on man’s spiritual journey in acrylic on canvas.

Tuesday 10th September to Monday 16th September 2019
(AC Gallery)

RUJKSHA HOODA

The artist has had many shows and won awards for her compositions in acrylic and charcoals on canvas.

Tuesday 10th September to Monday 16th September 2019
(Circular Gallery)

SURENDRA CHAWARE

The artist paints on spiritual subjects in acrylic, oil and mix media on canvas.

Tuesday 17th September to Monday 23rd September 2019
(AC Gallery)

SUDHIR KUMBHAR

Sudhir has won many awards for his water colour paintings and short animation films.

YOGESH LAHANE

Yogesh’s thematic compositions are in acrylic on canvas.

NIKHIL RAUT

Nikhil does figurative paintings in charcoal on paper and abstract compositions in oil on canvas.

Tuesday 17th September to Monday 23rd September 2019
(Circular Gallery)

AMALESH DAS

Amalesh will exhibit his figurative compositions in mix media on canvas.

Tuesday 24th September to Monday 30th September 2019
(AC Gallery)

SUSMITA GHOSH

Susmita’s paintings are based on nature in acrylic on canvas.

RANJANA MUKHERJEE

Ranjana’s compositions are in tempera on board.

ATISH MUKHERJEE

Atish is a sculptor working in bronze on various subjects.

Tuesday 24th September to Monday 30th September 2019
(Circular Gallery)

REENA NAIK

Reena’s works are in oil on canvas and pencil sketches.

Tuesday 24th September to Monday 30th September 2019
(Circular Gallery)

Review: ‘Chatak - 2019’

A monsoon show for professional artists

The show was held from 10th to 15th July 2019. Participating professional artists inaugurated the show. Thirty seven artists displayed their work.

All the art works were appreciated by art lovers.
UNESCO World Heritage Sites in India

1. Rock Shelters of Bhimbetka

The United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Sites are important places of cultural or natural heritage as described in the UNESCO World Heritage Convention, established in 1972. In this series, we will present the designated World Heritage Sites in India.

There are 38 designated World Heritage Sites in India. These include 30 cultural sites, seven natural sites and one mixed site that fulfils the nomination criteria under both natural and cultural heritage. India has the sixth largest number of sites in the world.

The Rock Shelters of Bhimbetka are located in the foothills of the Vindhya Range of hills in Madhya Pradesh. They are spread in sandstone formations extending over an area of 10,280 hectares (25,400 acres). The rock shelters, discovered only in 1957, comprise a group of five clusters of rock shelters with paintings. There are twenty one villages surrounding these treasures and they also reflect the traditions displayed in the rock paintings. This unique rock art was discovered in 400 painted shelters spread amidst dense forest with high diversity of flora and fauna. Legend says that the word Bhimbetka is derived from ‘Bhimbaithka’ meaning ‘the sitting place of Bhima’, from the Mahabharata.

Some of the Bhimbetka rock shelters feature prehistoric cave paintings and the earliest are about 30,000 years old. The oldest paintings have large figures, and the newer ones have smaller but elaborate figures, with religious motifs. The outline is filled with colour and other details. The rock paintings range in colour from white, red, green, and yellow. The oldest paintings are white and the newer paintings are in red. The colours were derived from minerals.

The paintings found in the rock shelters here have a striking resemblance to the ones discovered in Kakadu National Park in Australia; to the cave paintings made by the Bushmen of Kalahari Desert and the Upper Palaeolithic Lascaux cave paintings in France. Unfortunately, these paintings are on a surface that is also changing due to wind and weather putting this great archaeological treasure in danger.

Further reading at Nehru Centre Library:

- Prehistoric rock paintings of Bhimbetka: Central India by Yashodhar Mathpal, Abhinav Publications, 1984. Call No. 759.934 / Mat, Barcode- 5789
- Prehistoric Indian rock paintings by Erwin Neumayes, Oxford University Press, 1983. Call No. 759.934 / Neu, Barcode- 5725
New Arrivals: Books on Education

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<tr>
<th>Sr. No.</th>
<th>Title</th>
<th>Author/s</th>
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<td>1.</td>
<td>An idealist view of life</td>
<td>S. Radhakrishnan</td>
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<td>2.</td>
<td>Eastern religions and western thought</td>
<td>S. Radhakrishnan</td>
</tr>
<tr>
<td>3.</td>
<td>Once upon a story: Divaswapan and the Gijubhai method</td>
<td>Swati Popat Vats and Vinitha</td>
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<td>4.</td>
<td>The absorbent mind</td>
<td>Maria Montessori</td>
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<td>5.</td>
<td>The birth of an Indian profession: Engineers, industry, and the state, 1900–47</td>
<td>Aparajith Ramnath</td>
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<td>6.</td>
<td>The life divine</td>
<td>Sri Aurobindo</td>
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<td>The secret of the Veda</td>
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<td>The secret of childhood</td>
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<td>Gitanjali</td>
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<td>10.</td>
<td>Towards universal man</td>
<td>Rabindranath Tagore</td>
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Coloursful art catalogues for sale
1. GOPALRAO DEUSKAR (1995)
2. VINAYAKRAO KARMARKAR (1996)
3. MITTER BEDI (1997)
5. BALAJI & HARISH TALIM (1999)
9. SAMAKALEEN (2005)
13. HAREN DAS (2009)
14. ART HERITAGE OF MAHARASHTRA (2010)
15. G. N. JADHAV (2011)
16. J. B. DIKSHIT (2014)
17. DEENANATH DALAL (2015)
18. A. A. RAIBA (2016)
19. RAJA RAVI VARMA (2017)
20. SHIAVAX CHAVDA (2018)

ART FUSION catalogues
Set of five assorted gift cards
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DISCOVERY OF INDIA (VCD)
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Book Stall, Ground floor, Discovery of India Building, Nehru Centre, Worli, Mumbai - 400 018.

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Words for your Wellness
Conducted by Sakshi Singh, writer and poet
Learn writing exercises and techniques to enhance your mental health and well being, in a therapeutic writing workshop
Date: Saturday, 14th September 2019
Time: 10.30 a.m. to 12.30 p.m.
Limited seats: Only 10 persons
Registration required: aratidesai@nehru-centre.org

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