ernments, setting a research infrastructure with diverse experimental techniques to study materials.He established the High Energy Physics group, which he later led to collaborate with CERN (Centre for European Nuclear Research in Geneva), a collaboration that brought a lot of

recognition and funding for Rajasthan University. He coordi-

nated an International program in Physical Sciences benefiting

many faculty members in differ

ent areas of physics from a post doctoral training in Sweden. In

addition to his well acclaimed book on Quantum Mechanics, he

had major contributions in a pro

gram to teach Physics through

Experiments.His lifelong com mitment to physics and education

munities. Prof. Lokanathan will

be deeply missed by his family,

colleagues and students who

cherish the academic values

imbibed from him.He was, in the

words of many "an outstanding

professor of physics from the

golden age of Rajasthan

University." His dedication,

humility, and brilliance inspired

generations of students, col

leagues, and science enthusi-

asts.Prof. Lokanathan is survived

by his family, who, along with the

wider academic and scientific

community, mourn his loss

deeply. His legacy - as a teacher,

**#OBITUARY** 

Scientific Thought and

An Architect of

PROF. S. LOKANATHAN

(1929-2025)

and revered educator,

passed away peacefully

at his home in Bengaluru on April 30,

2025, at the age of 96.

With 14-year experience of

working in US and UK, including

a Ph.D. in Columbia with Jack

Steinberger (Nobel Laureate

1988), and working in Oxford for 7

years, he joined IIT-Delhi in mid

60s. Realizing the need for good

teaching in Universities, settled

in Rajasthan University in 1969.

He retired in 1989, was an emeri-

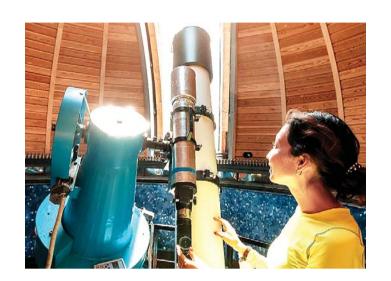
tus scientist for 5 years, and con-

**Education in India** 

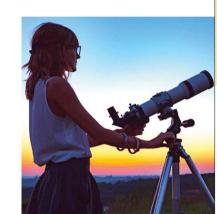
राष्ट्रदुत

## Gazing Beyond

Exploring the cosmos, one starry night at a time, how International Astronomy Day brings the universe closer to us all.



International Astronomy Day, a global tribute to the wonders of the cosmos and humanity's endless curiosity about the universe. This special day, observed on a Saturday between mid-April and mid-May (and again in the fall), is more than just stargazing, it's a celebration of science, exploration, and



#### A Starry Beginning

nternational Astronomy Day was first celebrated in 1973, thanks to Doug Berger, then president of the Astronomical Association of Northern California. His vision was simple yet powerpeople. Telescopes were set parks and shopping malls, inviting passersby to pause and peek into the vast unknown. Since then, the initiative has grown globally with amateur astronomers. educational institutions, and science organizations hosting events, workshops, and

#### stronomy isn't just about A stars and planets, it's a

Why Celebrate Astronomy?

gateway to understanding our place in the universe. From ancient civilizations that aligned temples with missions probing the edges of our solar system, astronomy

has always pushed the boundaries of human knowledge. It blends art, science, history and even philosophy. On International Astronomy Day, people are encouraged to explore this fascinating field regardless of their background or age.

### What Happens on Astronomy Day?

ll over the world, observatories open their doors for public Planetariums hold special shows, schools organize spacethemed activities, and astronomy clubs invite the public to view celestial wonders through telescopes. From lunar craters and Saturn's rings to far-off

galaxies, the universe becomes a little more accessible. In the digital age, even those in lightpolluted cities or cloudy regions can join in. Virtual observatories. livestreams from NASA or ESA, and mobile stargazing apps make it possible to explore the skies from anywhere.

## **India's Cosmic Connection**

India has a rich astronom-Lical heritage, from ancient texts like the Surya Siddhanta to modern marvels like the Indian Space Research Organisation (ISRO). Institutions like the Nehru Planetarium in New Delhi and the IUCAA in

events to mark the occasion. Indian amateur astronomy groups are also highly active. conducting public observation sessions, astrophotography competitions, and educational webinars in regional

### **Looking Forward**

L Day reminds us that curiosity has no boundaries. It invites us to look beyond the noise of daily life and into the silence of space, a place that holds endless questions and possibilities. Whether vou're a budding astronomer or just someone

who enjoys a quiet evening under the stars, this day is your invitation to reconnect with the universe.

So, this Astronomy Day, step outside, look up, and remember: we're all part of something much bigger, and far more beautiful, than we can ever imagine.



# Did Jahangirnama Fall Prey To His Son's Dislike Of Him?

Jahangir's memoirs make it clear that many artists and craftsmen travelled with him, even if their names or activities are rarely mentioned. Therefore, when Jahangir left Agra for the city of Ajmer in Rajasthan in 1613, and remained there for almost three years, signed and dated paintings depicting the emperor must have been done in the city. His son also had his own small entourage of artists accompanying him, even when he undertook military campaigns, as Nanha's depiction of the submission of the redoubtable Rana of Mewar reveals, the artist has included himself at work in the painting.



Jahangir's wine cup, nephrite jade, probably by Saida-ye- Gilani, 1613.

Wildlife Enthusiast

nlike Babur, Jahangir

commissioned his

paint some of the

events, people, birds

and animals that he

described. He men-

tions multiple copies

being made of the

Jahangirnama in 1618

but no illustrated intact volume

exists. Nevertheless, at least part of

one was definitely finished, a folio

depicting the submission of the

Rana of Mewar to Jahangir's son

Khurram in 1614, which has a

catchword in the lower left of the

painting, used in manuscripts to

link the painting to the text that

intended for a copy of the

Jahangirnama, but ended up in an

album created for his son when he

became emperor. It demonstrates

Jahangir's close interest in the nat-

ural world and also provides infor-

court and presented the emperor

with rare and exotic birds and ani-

mals. One was an African zebra, an

animal Jahangir had never seen

before and which seemed like a

In 1621, a delegation came to

mation not given in his memoirs.

Another painting was certainly

follows on the next page.



horse painted with stripes. He

wrote, "One might say the painter

of fate, with a strange brush, had

left it on the page of the world." He

intended it to be sent to Shah

Abbas of Iran, with whom he regu-

larly exchanged valuable or rare

presents, but there is no mention of

the name of the artist to whom he

gave an order to record the ani-

mal's appearance. However, on the

right of the painting, the emperor

himself has written in his distinc-

tive spidery hand that it was the

work of one of his two leading

artists. Mansur, and includes

details of how and when the zebra

court was nomadic, with long

absences from the major capital

cities of Agra and Lahore. Formal

transfers between these two cities

involved travelling with a vast tent-

ed city to accommodate the women's quarters, the nobility, the

servants and camp followers. Two

sets of tents were needed so that

one could be set up ahead, at the

next halting place. A reduced camp

travelled across long distances.

sometimes being absent from the

clear that many artists and crafts-

men travelled with him, even if

their names or activities are rarely

mentioned. Therefore, when

Jahangir left Agra for the city of

Ajmer in Rajasthan in 1613, and

years, signed and dated paintings

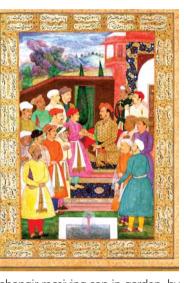
depicting the emperor must have

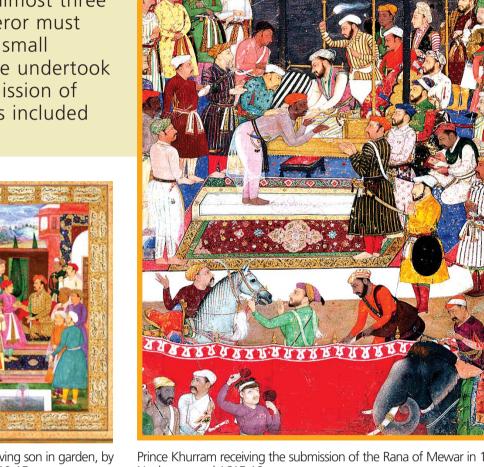
Jahangir's memoirs make it

capitals for years at a time.

The life of Jahangir and his

came to court

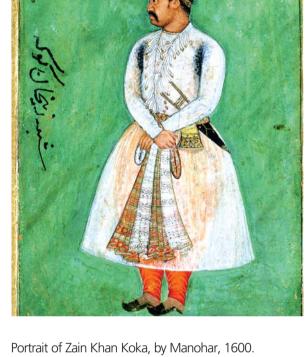




Prince Khurram receiving the submission of the Rana of Mewar in 1614, by Nanha, around 1615-18.



The Gujarati land-owners Rao Bharah and Jassa Jam,



reign. His skills were many and

varied. In addition to being a poet.

he was a calligrapher, a lapidary

(cutter, polisher or engraver of

cialists who was able to inscribe in

minute lettering the title of

Jahangir on his personal posses-

sions made of precious stones, jade

or imported Chinese porcelain. He

was also a goldsmith who was

given the position of head of the

perhaps explains the appearance,

during Jahangir's reign, of objects

made of nephrite jade that were

inscribed with the emperor's titles.

One of these is a wine cup

inscribed with Persian verses, the

hiiri date 1022, and the regnal year

8 (corresponding to the first half of

1613). The verses can be connected

to Sa'ida-ye Gilani, who almost cer-

The raw material, imported

from Khotan, was probably already

in the royal treasury when

Jahangir became emperor, but no finished artefacts can be reliably

dated before his reign. The tech-

niques used to fashion nephrite

iade, which cannot be carved but

has to be abraded or incised using

diamond drills and small lap

wheels, are the same as those used

to shape objects of rock crystal, a

material commonly found in the

subcontinent and already used for

rajeshsharma 1049@gmail.com

To be continued..

tainly made the cup.

His ability to work hardstones

goldsmiths department.

gemstones), and one of several spe-

begun under Akbar but reached

unprecedented levels of accuracy

used as templates to transfer the

image to scenes of court assemblies.

A portrait of Mirza Ghazi, with its

plain pale green background, is

reproduced at exactly the same size

in a group scene of Jahangir and his

used to fill in the outline of the

group portrait than were used on

The portrait has beautifully

painted gold flowering plants on

indigo-dved paper, and decorative

borders of great inventiveness

were added to paintings and calli-

graphic specimens that were pre-

served in the albums of Jahangir,

raphy, often dating to much earlier

times and treasured as the work of

a great master, were themselves

decorated with small panels depict-

ing animals, or with shimmering

European engravings, probably

ders of Netherlandish prints of

Biblical scenes owned by the

Jesuits and often brought out by

oirs an Iranian poet who had been

given the title 'Bibadal Khan, the

Peerless One.' His name was Sa'ida

and he probably arrived at the

Mughal court early in Jahangir's

Jahangir mentions in his mem-

them in court gatherings.

seen by Mughal artists in the hor-

The flowers were derived from

golden illumination and flowers.

Sometimes, the panels of callig

Different colours have been

Single portraits were clearly

in Jahangir's reign.

the single portrait.

now all dispersed.

#### tinued his passion by teaching builder - will continue to illumistudents in planetarium in nate the path for many in the field Bengaluru since then. He provided an impetus to research in the of physics. department of physics through international conferences and **#CANINES**

May his soul rest in peace.

## Protect Your Pup

### The Essential Vaccination Checklist for Dogs

need timely vaccinations to protect them from serious and often fatal diseases. Whether you're a first-time pet parent or a seasoned dog lover, staying on top of your dog's vaccination schedule is crucial to ensure their long-term health and safety. Here's a handy checklist of core and non-core vaccines that your dog should

#### Core Vaccines (essential for all dogs)

. Rabies: Legally mandated in most places, this protects against a deadly virus transmittable to humans. 2. Canine Distemper: A highly contagious virus affecting the respiratory, gastrointestinal, and nervous systems.

3. Parvovirus (CPV): Often fatal in puppies, it causes severe vomiting and diarrhea 4. Adenovirus (CAV-1 & CAV-2): Protects against infectious

hepatitis and kennel cough.

#### Non-Core Vaccines (based on lifestyle and location)

l. Leptospirosis: exposed to standing water or



Bordetella bronchiseptica: Helps prevent kennel cough common in boarding or social

Lyme disease: Ideal for dogs in tick-prone areas.

Canine Influenza: For dogs that frequent parks, daycare. or grooming centers.

> Puppy Vaccination Tip: Begin core vaccines at 6-8 weeks of age and follow up every 3-4 weeks until 16 weeks. Adult dogs need booster shots annually or every three years, depending on the vaccine. Consult your veterinarian to tailor a vaccination plan for your furry friend. A few serious health risks later. Is your

dog up to date with their shots?

By Jerry Scott & Jim Borgman

## **#THE ARTS**



Portrait of Mirza Ghazi, 1610.

been done in the city. His son also had his own small entourage of artists accompanying him, even when he undertook military campaigns, as Nanha's depiction of the submission of the redoubtable Rana of Mewar reveals, the artist has included himself at work in the

the major cities may explain the apparent reduction in the number of artists in royal service. The



Illuminated calligraphy, by Mir Ali, 1610-20.

House of Books that included the huge imperial library must have remained in the palace at Agra, but the leading artists and calligraphers accompanied Jahangir on his travels. In 1618, when he mentions copies of the Jahangirnama being made, and the artist Abu'l Hasan painting a splendid frontispiece for the royal copy, the court was in Ahmadabad, the capital of Gujarat. This was also the only opportunity that another artist,

Bishndas, had to study two minor rulers of Gujarat, Rao Bharah and Jassa Jam, who never travelled out of the province.

Portraiture unprecedented level of naturalism under Jahangir, a phenomenon that is usually attributed to the royal artists' exposure to European portraits. Famously, the English ambassador Sir Thomas Roe, who visited Jahangir in Ajmer and then travelled with the court for a time,

# showed the emperor a miniature by

es of individuals at court had

ecognising his own

### Calligraphy, by Mir Ali, 16th century.

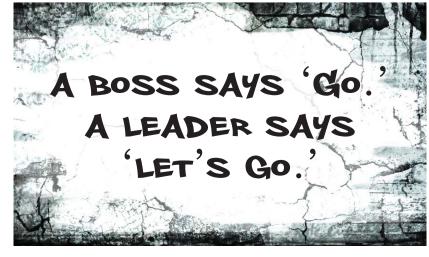
Isaac Oliver. This was such a treasured possession that Roe was anwilling to give it to Jahangir, but allowed him to borrow it. One of the leading court artists was ordered to make a copy of it, and when Roe was shown the original, accompanied by five identical versions, he had some difficulty in The practice of taking likeness-







## THE WALL



### **BABY BLUES**



BLAH BLAH BLAH. MOMS ARE SO DUMB.

EAT YOUR FRUIT.

DOES DON'T LISTEN YOURS

TO TRENT." SAY?

By Rick Kirkman & Jerry Scott ZITS