

3rd Annual Seminar of the Society for the History of Science Kolkata (SHSK)

organised by

H.K. Sherwani Centre for Deccan Studies &

**Department of History** 

**MAULANA AZAD NATIONAL URDU UNIVERSITY** 

on 15th-17th September 2025



# मौलाना आज़ाद नेशनल उर्दू यूनिवर्सिटी مولانا آزادنيتشنل اُردو لو نيورستى MAULANA AZAD NATIONAL ÜRDU UNIVERSITY A Central University under Ministry of Education Government of India



# 3rd Annual Seminar of the Society for the History of Science Kolkata (SHSK) organised by

H.K. Sherwani Centre for Deccan Studies
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Department of History
MAULANA AZAD NATIONAL URDU UNIVERSITY (MANUU), Hyderabad
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The third annual seminar of the Society for the History of Science Kolkata (SHSK) is going to be held at Maulana Azad National Urdu University (MANUU), Hyderabad on 15th-17th September 2025 and is being organised by H.K. Sherwani Centre for Deccan Studies and the Department of History. The theme of the seminar is "Science in the Deccan: A Historical and Contemporary Perspective."

The Deccan has a rich history that includes significant scientific advancements and contributions. The seminar is an attempt to revisit the origin and development of science in the Deccan and explore the scientific achievements, advancements and contributions originating from the region through different periods of time. From ancient mathematical theories to modern technological advancements, the Deccan played a vital role in shaping India's scientific landscape. The Deccan saw the intersection of various cultures and knowledge systems due to its strategic location. Ancient Deccan was home to significant advancements in science. During the medieval period, Arab scholars and traders brought Islamic scientific advancements to the region, influencing local developments. Throughout its history, the Deccan region has been a melting pot of cultures and ideas, fostering a dynamic environment for scientific inquiry and innovation. Here are some key aspects of science in Deccan's history.

Astronomy and Mathematics: The Deccan was home to several renowned astronomers and mathematicians. One of the most famous was Bhaskaracharya (also known as Bhaskara II of Patana in Chalisgaon of Maharashtra), who made significant contributions to mathematics and astronomy during the 12th century. His work "Siddhanta Shiromani" is divided into four parts called *Lilavati*, *Bijagaṇita*, *Grahagaṇita* and *Goladhyaya* which deal with arithmetic, algebra, mathematics of the planets, and spheres respectively.

Medicine and Healthcare: The Deccan region had a tradition of Ayurveda, the ancient Indian system of medicine. Many scholars and physicians in the Deccan made contributions to Ayurvedic medicine, including advancements in herbal medicine, surgery, and medical texts. Acharya Nagarjuna, Buddhist philosopher of 2nd century CE from Andhra, was the most prominent scholar in the field of Indian alchemy. He wrote books like *Rasaratnakar* and *Arogyamanjari* on chemistry and medicine. It is believed that he initiated the use of mercury ash as medicine. He advocated the use of allopathy along with herbal medicine.

**Engineering and Architecture**: The kingdoms of the Deccan like Chalukyas, Kakatiyas, Hoysalas, Rashtrakutas, the Bahmanis, Deccani Sultanates and Vijayanagar, were known for their impressive

architectural achievements. Engineers and architects through ages developed innovative techniques in construction, water management (like the elaborate systems of tanks and reservoirs, the *qanat* system), and fortifications. The construction technology behind these greatly involved building science.

**Botany and Agriculture**: The Deccan has diverse flora and fauna, and scholars in the region studied plants for medicinal purposes and agriculture. Traditional knowledge about plants and their uses was documented in texts like "Nighantu" and "Dhanvantari Nighantu." The word *Nighantu* in Ayurveda implies the group of drugs, synonyms, properties and their description of part used. *Dhanvantari Nighantu* is one of them and is oldest Ayurvedic text placed between 8th-10th AD. The Deccan was known for its agricultural innovations, including techniques for water management, which were critical for sustaining civilizations in the plateau's semi-arid climate. Cosmology, Astrology and magic prevalent in medieval Deccan influenced garden design and practices. Specific *nakshatras* (constellations) were used for planting trees, and drew a connection between the zodiac and the variety of plants that were to be grown.

Metallurgy and Technology: The Deccan region had significant developments in metallurgy, particularly in the production of high-quality steel (Wootz steel used for making Damascus swords), which was renowned for its strength and sharpness. This steel was highly valued and traded across the ancient and medieval world. In medieval times Golconda became a hub for manufacture and export of Wootz steel ingots to Arabia. The kingdom of Bijapur, like the Qutb Shahi kingdom, possessed iron deposits. Vijayanagar had a good supply of iron and the kingdom of Bijapur used to import considerable quantities of these commodities from there. Bijapur undoubtedly benefited from the iron deposits in Vijayanagar when it annexed much of the territory. The existence of diamond mines in the Qutb Shahi and Adil Shahi kingdoms has been noted by all the travellers who visited the Deccan during the sixteenth and seventeenth centuries. This demonstrates the mining exploration science in the region.

**Literary and Scientific Institutions**: The Deccan has centres of learning in ancient and medieval times. Examples include Nagarjunakonda in Andhra Pradesh and Manyakheta in Karnataka. Cities like Warangal, Vijayanagara, and Gulbarga attracted scholars from across the region and beyond. These institutions facilitated the exchange of scientific knowledge and fostered intellectual growth.

Overall, science in Deccan reflects a vibrant tradition of innovation and scholarship across various fields, contributing to the broader scientific heritage of India and the world.

#### **Sub Themes**

- 1. Archaeological and textual evidence for development of technologies and sciences
- 2. History of Science and Technology in Deccan from the accounts of foreign travellers
- 3. Traditional Scientific knowledge of astrology, geomancy, magic and numerology
- 4. Scholars, academicians, educationists and scientists of the Deccan
- 5. Scientific and Technological Practices
- 6. Literary and Scientific Institutions
- 7. Astronomy and Mathematics
- 8. Medicine and Healthcare
- 9. Engineering and Architecture
- 10. Botany and Agriculture
- 11. Metallurgy and Technology
- 12. Plant and Animal Science

Abstracts are invited on the above sub-themes from interested scholars.

The paper presenters should send their abstracts in PDF as email attachment clearly mentioning the title of the paper, name, designation, institutional affiliation, and contact details (email and mobile number). The abstract should be within 500 words. The paper presenters must submit a one-page CV in PDF highlighting list of significant publications and conference presentations, along with their abstract. To be considered for presentation at the seminar, one publication in a reputed journal (Indian Journal of History of Science, for example) is mandatory.

The full paper, if selected, should adhere to the style guide of Indian Journal of History of Science. For more information, consult the website of the journal:

https://link.springer.com/journal/43539/submission-guidelines

A selection of the papers given during the seminar will be published in an edited book from a reputable publication house or special journal issue.

Abstracts, CV, and full papers should be sent to <a href="mailto:shskmanuu2025@gmail.com">shskmanuu2025@gmail.com</a>.

#### S.P. Banerjee Memorial Prize for the History of Engineering & Technology

The Society has established the S.P. Banerjee Memorial Prize for the History of Engineering & Technology at its second annual seminar at Banaras Hindu University, Varanasi in 2024. The award carries cash prize of ₹ 10,000 and a certificate. The paper must focus on early modern, modern, and contemporary South Asian history, and it should be presented at the Society's annual seminar. The prospective candidate should be under 40 years of age. They must submit proof of age (Aadhaar Card/PAN/High School Certificate) along with the full paper. If a researcher would like their work to be considered for the award, they need to declare this on both the abstract and the first page of the full paper, along with the appropriate documentation confirming their age.

#### **Important Dates**

Last date of abstract submission: **30 April, 2025** Intimation of list of selected abstracts: **31 May, 2025** 

Submission of full papers: 31 July, 2025

There would be no registration fee and local hospitality would be provided, but the participants are expected to become members of the Society – annual or life. For more information, please visit the website of the Society <a href="https://www.societyforthehistoryofscience.com/">https://www.societyforthehistoryofscience.com/</a>. For videos of the Society visit the YouTube channel <a href="https://www.youtube.com/@societyforthehistoryofsciencek">https://www.youtube.com/@societyforthehistoryofsciencek</a>.

#### Chairperson

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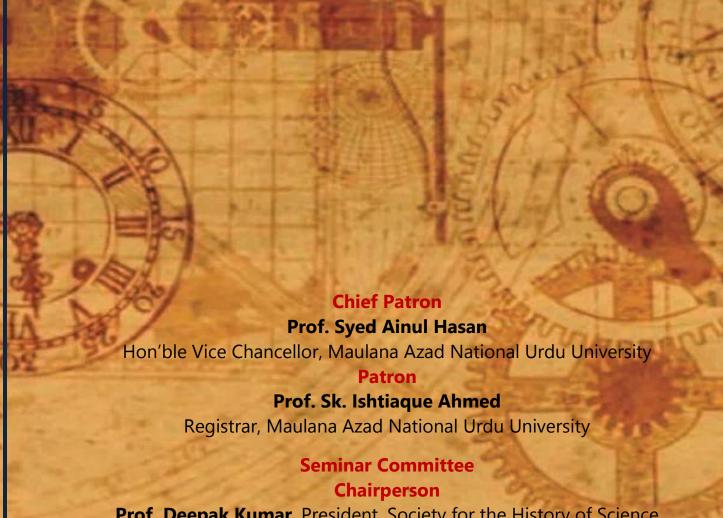
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## **Honorary Members**

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