

Work by B'luru-based IIA critical in project 'Surya Tilak'

TIMES NEWS NETWORK

Bengaluru: The Indian Institute of Astrophysics (IIA), Bengaluru has played a crucial role in the "Surya Tilak" project at Ayodhya — where sunlight was directed onto the forehead of Ram Lalla idol at 12pm Wednesday, on the occasion of Ram Navami.

"The team led by IIA carried out calculations of the Sun's position, designed and optimised the optical system, and performed the integration and alignment at the site. As the temple is not fully completed now, IIA experts modified the design (with four mirrors and two lenses) to suit the existing structure and performed image optimisation," Abhay Karandikar, secretary, department of science and technology, said on

social media platform X.

The final design of the Surya Tilak, with four mirrors and four lenses, will be implemented once the full temple is constructed by placing the mirrors and lenses in their permanent fixtures.

"We've employed a scientific design based on the principles of periscope and the system had to go into the building in a specific place based on the temple architecture. The project was commissioned around three years ago. Once the concept was finalised, we had to demonstrate and then we went into publication. Once this was done, IIA gave technical consultation, based on which Optica, Bengaluru, manufactured the device and Central Building Research Institute (CBRI) carried

ed out the implementation of the opto-mechanical system at the site," IIA director Annapurni Subramaniam told TOI.

The English calendar date of Ram Navami festival changes every year as it follows the Lunar Calendar. Therefore, Karandikar said, the position of the Sun in the sky changes every year on the day of Ram Navami.

"Detailed calculations show that the English calendar date of Ram Navami repeats every 19 years. Calculating the position of the Sun in the sky on these days requires expertise in astronomy. The IIA team led the estimation of the size, shape and location of mirrors and lenses in the system for sufficient light to fall on the idol for about 6 minutes," Karandikar added.