Investing in archaeology

Another important archaeological puzzle could be solved on February 17 when the results of the DNA tests conducted on the celebrated Tutankhamun mummy will be revealed by the Egyptian government. This should establish the lineage of the short-lived pharaoh and determine his relationship with other mummies, including that of King Amenhotep III. The significance of these tests goes beyond furthering historical knowledge about Egypt's ancient history. They are yet another convincing demonstration of how science can advance the frontiers of archaeology. It is a timely reminder to the Indian archaeological establishment that it must act purposefully to close the gap with the rest of the world in the application of science to the field. Where archaeology has embraced cutting edge methods, more of the unseen have been sighted, historical records have been set straight, and new directions discovered. If things go as planned for Egypt, robots will soon walk the hidden passageways of the Great Pyramid of King Khufu to reveal their secrets.

But what about the state of archaeology in India? The science branch of the Archaeological Survey of India was established as early as 1917, but it is mostly limited to chemical analysis and conservation. Limited studies in archaeomaterials have been taken up, but important disciplines such as Archaeological Prospection have not gained the attention they warrant. Central as well as State archaeological establishments need to get multidisciplinary and invest substantially in emerging sciences. It was only in 2008, following a 'first-of-its-kind' initiative by IIT Kanpur and the University of Allahabad that the ASI signed a Memorandum of Understanding to set up a Centre for Archaeological Sciences and Technologies at IIT Kanpur. This is a good beginning. However, given the large number of unexplored sites, such efforts need to be significantly scaled up and also be available at the State level. Two decades ago, permission was denied to researchers for making test-pits to study the foundation of the 1000-year-old Brihadisvara temple at Thanjavur. It is understandable that such techniques were treated with caution in that age. Today, difficult investigations can be safely undertaken with the help of less invasive methods such as three-dimensional, multi-offset ground-penetrating radar imaging. A well-researched road map for applying advanced S&T to uncovering the past must be the first new step towards closing the gap. It must be taken without wasting any further time.