



Embassy of India, Berne

# INDIA SCIENCE AND INNOVATION WEEKLY

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*Ask the right questions, and nature will open the door to her secrets*

*- Dr. C.V. Raman, The Nobel Prize in Physics 1930*

## IISc researchers developed technology for producing alkali-activated bricks/blocks

Indian researchers at Indian Institute of Science (IISc) with funding from the Department of Science and Technology, Govt. of India developed a technology for producing alkali-activated bricks/blocks by utilising fly ash and furnace slag. This technology would help to produce energy-efficient walling materials using construction and demolition (C&D) waste. These alkali-activated binders are called low-C bricks which do not require high-temperature firing, and also avoid the use of high-energy materials such as Portland cement, further the technology would also solve the disposal problems associated with C&D waste mitigation.

## Indian scientists developed new sustainable & affordable solution for converting keratin waste to fertilizers, pet & animal feeds

Indian scientists at Institute of Chemical Technology, Mumbai developed a novel sustainable and affordable technology for converting keratin waste i.e. human hair, wool, and poultry feathers to fertilizers, pet and animal feeds. The novel technology has been patented and is easily scalable, environment-friendly, energy-efficient, and it would make amino acid-rich liquid fertilizers more economical as compared to currently marketed products.

## Indian researchers developed High-quality transparent ceramics

For the first time in India, Indian researchers at International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI) developed transparent ceramics, reaching theoretical transparency through a technique called colloidal processing followed by simultaneous application of temperature and pressure. The transparent ceramics material could be used for thermal imaging applications, especially in harsh service conditions and personal protection systems such as, helmets, face shields, and goggles.

## Govt. approved Production Linked Incentive (PLI) Scheme for Auto Industry

Under the aegis of Aatmanirbhar Bharat, Govt. of India approved Production Linked Incentive (PLI) Scheme for Auto Industry which would incentivize emergence of Advanced Automotive Technologies global supply chain & also herald a new age in higher technology, more efficient and green automotive manufacturing in India. Govt. also informed that the PLI Scheme for auto sector would bring fresh investments of over INR 42,500 crore in five years and incremental production of over INR 2.3 lakh crore.

## Special Update: PLI Scheme for Drones and Drone Components approved

Government of India under the collective vision of an Aatmanirbhar Bharat approved the Production-Linked Incentive (PLI) scheme for drones and drone components as Drones offer tremendous benefits to almost all sectors of the economy i.e. agriculture, mining, infrastructure, surveillance, emergency response, transportation, geo-spatial mapping, defence, and law enforcement. Some of the main highlights of PLI Schemes for Drones and Drone Components are as:

- i. INR 120 crore is allocated for the PLI scheme, which is spread over 3 Financial Years
- ii. Incentive for a manufacturer of drones and drone components shall be as high as 20% of the value addition
- iii. Govt. agreed to keep the PLI rate constant at 20% for all three years
- iv. The PLI scheme covers a wide variety of drone components, which can be expanded by the Government from time to time, as the drone technology evolves