

Bharatiya Nirdeshak Dravya: India Reference Materials

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In news

The Prime Minister dedicated the Bharatiya Nirdeshak Dravya: India Reference Materials to the nation during National Metrology Conclave 2021.

About the Conclave

- The Conclave was organised by Council of Scientific and Industrial Research-National Physical Laboratory (CSIR-NPL), New Delhi, on its 75th year of inception.
- The theme of the conclave is 'Metrology for the Inclusive Growth of the Nation'

About Bharatiya Nirdeshak Dravya: India Reference Materials

- Bharatiya Nirdeshak Dravyas (BNDs) i.e. Indian reference materials are Certified Reference Materials (CRMs) developed by CSIRNPL.
- CSIR-National Physical Laboratory has taken a lead for the production of Indian Reference Material registered trademark as Bharatiya Nirdeshak Dravya (BND) in association with the ministry of commerce and industries for self-reliant India.
- BND activity at CSIR-NPL has recently been reinforced aiming to bring a paradigm shift in socioeconomic fabric of the country through quality control assurance for export, import and domestic consumer products in every sector and versatile job creation.
- The availability of BNDs is poised to enhance the national quality infrastructure and equip the quality regulatory bodies of almost all the ministries of the Government of India.

- CSIR-NPL is developing BNDs by its own and in collaboration with specific reference material producers (RMPs) following the stringent conditions of ISO17025 and ISO 17034 & 35.

Significance of Bharatiya Nirdeshak Dravya

- Bhartiya Nirdeshak Dravya dedicated to the nation recently, would help the industry to make quality products in sectors like Heavy metals, Pesticides, Pharma and Textiles by drafting a 'Certified Reference Material System'.
- Certified reference materials (BNDs) are essential for quality assurance of life in terms of calibration, quality control, and method validation, assignment of values to other materials and to establish measurement traceability to SI units.
- Complying with the International standards will help the large foreign manufacturing companies coming to India to find a local supply chain
- It will also provide quality goods to the general consumer of India and reduce the problems faced by the exporter.

CSIR-National Physical Laboratory, India (NPLI)

- The National Physical Laboratory **is the National Metrology Institute of India and a Premier Research Laboratory in the field of Physical Sciences.**
- **NPLI is the Time Keeper of the Country and is responsible for highest level of time and frequency measurements in India at par with the international standards**
- The National Physical Laboratory **was conceptualized in 1943 by the Governing Body of Council of Scientific and Industrial Research (CSIR)** , with a view to pave way for using science and technology as a means for industrial growth and development, as well as to give fillip to the

fledgling Indian industry.

- **Pandit Jawaharlal Nehru, the then Prime Minister of India, laid the foundation stone for the laboratory on January 4, 1947** and it was one of the first National Laboratory to be set-up under the CSIR.
- In 1956, the Legal Metrology Act entrusted NPLI to establish a measurement foundation of the country at par with international ones and to create and implement the programs needed for inclusive growth of the nation and the quality of life.
- In 1956, NPLI also became a permanent member of the International Bureau of Weights and Measure (BIPM), France.