



# भौतिक अनुसंधान प्रयोगशाला, अहमदाबाद Physical Research Laboratory, Ahmedabad

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***PRL Ka Amrut Vyakhyaan-26***

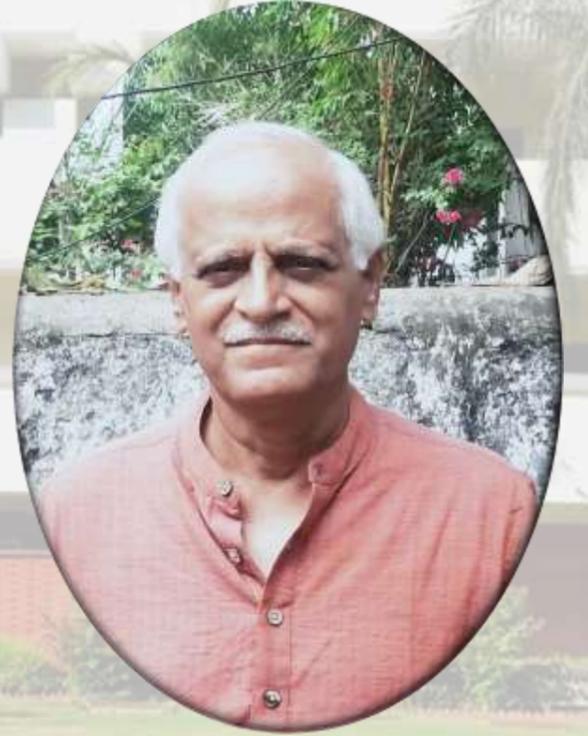
**Wednesday, 26 January 2022**

**@ 04:00 PM (IST)**

**“Grassroots Innovations: Mining  
the Minds of Masses”**

**Brigadier P Ganesham, VSM (Retd)**

Founder President,  
Palle Srujana,  
Secunderabad, Telangana



<https://youtu.be/9JjpboDLdp8>



## ***PRL ka Amrut Vyakhyaan-26***

**Title: “Grassroots Innovations: Mining the Minds of Masses”**

**Speaker: Brigadier P Ganesham, VSM (Retd)**

Founder President, Palle Srujana, Secunderabad, Telangana

**On Wednesday, 26 January 2022**

### **Abstract**

In the national eco-system of Innovation, main players are Public Innovations and Private innovations. Investment and guidance to Public Innovations is drawn from the Government. Over the years, these institutions have distanced themselves from the requirement of the general public and focused on the problems of the Industry and Government. Majority of the problems faced by the general public especially those in livelihood sector are not addressed by this category. Private Innovations are undertaken by corporate and other private investors with a view to promote their business and keep away from the problems of the masses. Monetary growth of business is possible with products of high cost, current technology, and for those customers who can afford to buy their products. Such innovations are driven by the need to improve upon their product based on perceived needs of the society. At times, they are found to aim at influencing the customer behavior and mostly they are not a result of customer needs. Thus, both the categories of Innovation eco system pay lip service to the masses of the nation resulting in their frustration, helplessness and anger. In such social scenario, a new category of Innovators emerges from these angry people and we may call them “Grassroots Innovators”. Instead of actively voicing the problems – insurgency, they take a step forward to solve the problem- innovation. They are there everywhere, every house, every village and attempt to innovate continuously. Their innovation – solutions to the problems around them are generally affordable and appropriate. They follow the Gandhi an Mantra of “More from less for Many – a principle of MLM” which has been propounded by Dr R A Mashelkar. These grassroots innovators attempt to find solutions to the local problems, using local resources and local technologies, thus making these creative solutions highly affordable. “Unmet Needs” of the villages are addressed by the creative villagers thereby reducing the pain of the people and enhancing the productivity. Dr Vergheese Kurien stated “India’s place in the Sun will come from the partnership between the wisdom of the rural people and the skill of its professionals.”

Atma Nirbharata can be achieved when we focus our attention on the strengths of the villagers, leverage their creativity and traditional knowledge and add to what they have for attaining the national development goals. “Strengthen the Strengths should be our approach towards villages. Ultimate goal of any development plan should be happiness of masses. Can we achieve it? ...

### **The Speaker**

Brig. Pogula Ganesham born in village Bhoompally of Telangana, is an engineering graduate from Osmania University and MBA from Delhi University. A specialist in Armored Fighting Vehicles served the Indian Army with distinction for over thirty five years including Command of a battalion in Kashmir in thick of counterinsurgency operations. He was instrumental in developing a multi-role weapon platform “Windy” for the Army, which was displayed on the Republic Day Parade 2004. He also obtained the patent for this vehicle, which is the first patent of the Indian Army. For his distinguished services, Brig. Ganesham was awarded “Vishisht Seva Medal (VSM)” by the President of India on the occasion of Republic Day 2005. Post retirement from the Army, he served Bharat Dynamics Ltd (BDL) as Director (Production) from 2006-9. He is a member of the Advisory Board of ECHS, Telangana and Andhra Pradesh, Rajya Sainik Board. He formed a voluntary group “Palle Srujana” with like minded friends to promote knowledge-based activity in unified Andhra Pradesh in 2005. In the last 15 years, he addressed over 90000 students in both Telugu states and walked over 4000 Kms across the country in remote areas visiting over 1200 villages. He built a voluntary network of 3000 in Telugu states, and they identified over 300 innovators and documented more than 2000 traditional knowledge practices in last 15 years. He conceived a new model “Grassroots Entrepreneurship” for disseminating the grassroots innovations which helps grassroots innovators in providing market and finance for manufacture. His major initiatives include “Gram Swayam Samruddhi”, “Rural Internship”, “Gyan shodh” and capturing creativity of school children- Ignite the minds. His mission is to highlight the significance of grassroots creativity for an equitable growth of the Nation to the students, industry, scientific community, society in general, and the Government.



## About PRL

The Physical Research Laboratory (PRL), known as the “cradle of space science” in India, is one



of the premier research institutes founded in 1947 by Prof. Vikram Sarabhai, a renowned Cosmic Ray Scientist, a great visionary and institution builder. PRL played a seminal role in producing a highly motivated cadre of space scientists and the technologists of highest international repute. The first scientific rocket launched from Thumba on 21st November-1963 and many other rockets launched thereafter contained payloads developed at PRL. Dr. Sarabhai initiated many of these scientific and technical activities at PRL which eventually led to the formation of the Indian Space Research Organization (ISRO). Therefore, PRL is known as the “cradle of space science” in India. Further, the research in the area

of Plasma Physics expanded to the formation of the Institute of Plasma Research (IPR).

As an institution PRL is unique in that it conducts fundamental research in a wide range of research areas from the Earth to the cosmos, and comprising Astronomy and Astrophysics; Solar Physics; Space and Atmospheric Sciences; Theoretical Physics; Geosciences; Atomic, Molecular and Optical Physics, Astrochemistry; and Planetary Sciences and Space Exploration. PRL is one of the rare research institutes of international repute wherein research in such diverse fields of sciences is carried out using several state-of-the-art experimental facilities that exist under one umbrella.

Along with the ongoing research, several new initiatives have been taken up during the last few years. The Multi-Application Solar Telescope (MAST) at Udaipur Solar Observatory has been operationalized. PRL initiated scientific programmes in frontier areas of research, which include a search for exo-planets, laboratory studies of interstellar grains, laboratory synthesis of cold astro-molecules and experimental studies in the field of quantum optics. PRL is also developing several scientific payloads as a part of ISRO’s larger vision and contributing to roadmap for competitive scientific exploration of the solar system and beyond. In particular, PRL has been contributing significantly not only in building instruments for space missions, such as Chandrayaan-1, Chandrayaan-2, AstroSat and upcoming Aditya-L1, Chandrayaan-3 and planetary and space missions, but also by bringing out new and insightful science results.

PRL contributes to several national and international research programmes and to human resource development through its Doctoral and Post-Doctoral Programmes, capacity building programmes, such as UN Course on Space Science, and science and engineering internship programmes. PRL contributes significantly to society through its Outreach Programmes by periodically organizing science exhibitions and Open Houses, planned visits of students of various school and college to PRL, and popular talks at various institutions to not only share the excitements of the advancements of contemporary scientific findings but also to encourage students to take up sciences as their research career.

