

# **World Knowledge Platform: Synergizing Core Competencies of Multiple Nations**

*Address to Fermilab Scientists  
25 April 2011*

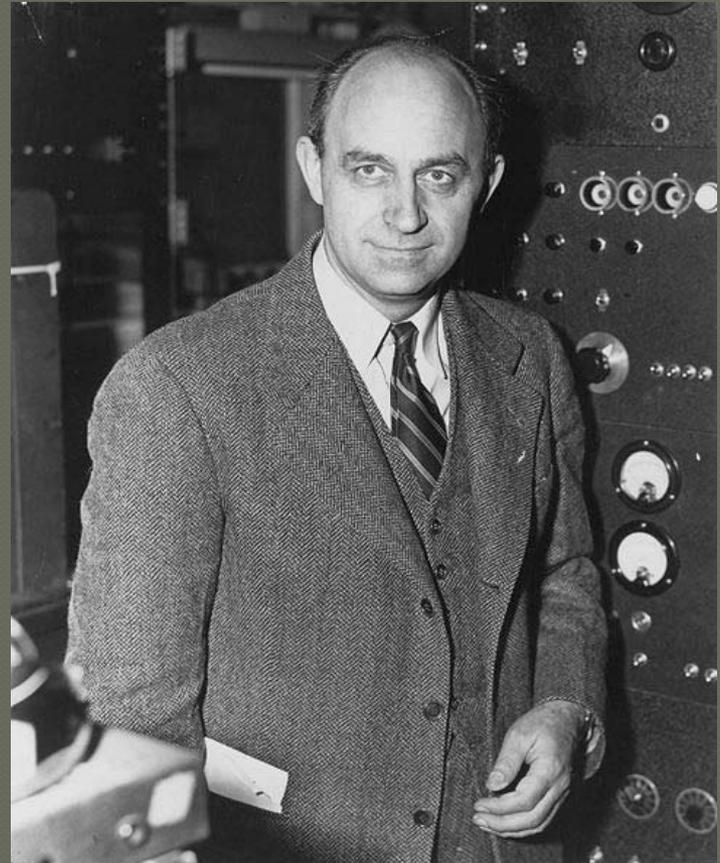
*Dr APJ Abdul Kalam  
11<sup>th</sup> President of India*

# Legacy of FermiLab

## ○ Enrico Fermi

- architect of nuclear science
- Nobel Laureate
- contribution in induced radioactivity

*“There are two possible outcomes: if the result confirms the hypothesis, then you’ve made a measurement. If the result is contrary to the hypothesis, then you’ve made a discovery.”*



# The Vision

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I climbed and climbed  
Where is the peak, my Lord?

I ploughed and ploughed,  
Where is the knowledge treasure, my Lord?

I sailed and sailed,  
Where is the island of peace, my Lord?

Almighty, bless my nation  
With vision and sweat resulting into happiness.

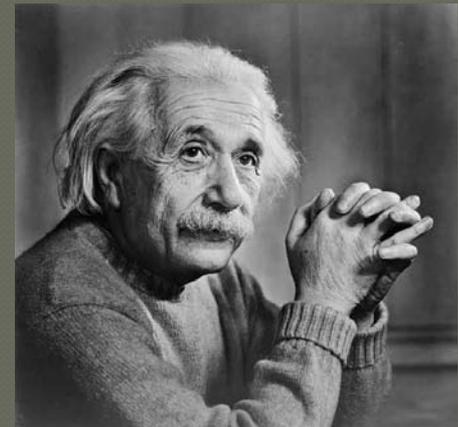
# Ignited minds of the youth

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# Research for Human progress

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- “...Concern for man himself must always constitute the chief objective of all technological effort, concern for the big, unsolved problems of how to organize human work and the distribution of commodities in such a manner as to assure that the results of our scientific [work] may be blessing to mankind and not a curse”



# Convergence of Technologies

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- The information technology and communication technology have already converged leading to Information and Communication Technology
- Information Technology combined with biotechnology has led to bio-informatics.
- When Nano technology and ICT meet, integrated silicon electronics, photonics are born and it can be said that material convergence will happen.

# Convergence of Technologies

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- The aspect being introduced is that of Ecology.
- This is the new dimension of the 21<sup>st</sup> century knowledge society, where science and environment will go together. Thus the new age model would be a four dimensional bio-nano-info-eco based.



# Think globally and act locally



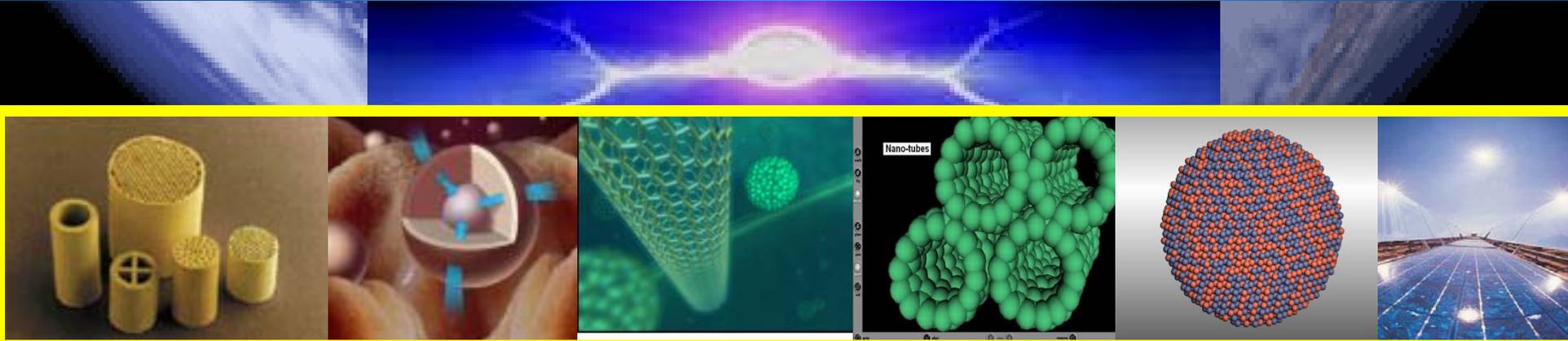
A world, where all citizens will have equitable distribution of clean and affordable energy.

A world where all citizens even in the remotest parts will have electronic connectivity and knowledge connectivity

A world where all citizens will have safe drinking water.

Planet earth will be transformed to prosperity without poverty, peaceful without fear of war and a happy place to live for the whole humanity using space technologies as one of the prime movers.

# WORLD KNOWLEDGE PLATFORM



Launch pad for many innovations that are waiting to be unearthed only by the combined power of partnering nations

The purpose of World Knowledge Platform

knowledge creation, knowledge dissemination; knowledge sharing and knowledge reuse

GIGABIT BROADBAND CONNECTIVITY ACROSS THE WORLD EXISTS TODAY  
Based on INTERNET 2 Platform

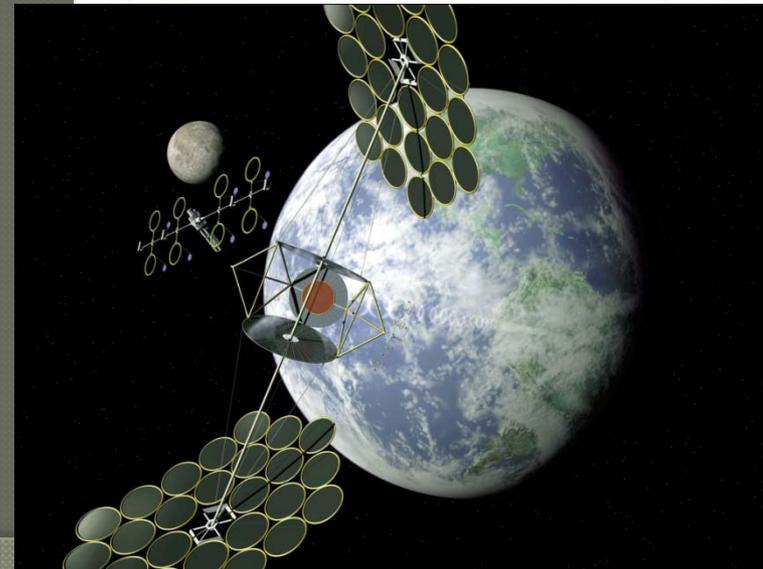
coordinated design and delivery of complex systems in the knowledge domain



Bangalore

# World Knowledge Platform Missions

- Energy Independence
  - shift towards renewable energy sources like hydro-power, solar power, wind power and nuclear power
  - space based solar power and energy nano packets



# World Knowledge Platform Missions

## ● Water

- Desalination of sea water using solar energy, channelization, networking of rivers, cost effective safe drinking water.



# World Knowledge Platform

## Missions

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### ○ Healthcare

- Diagnosis, drug delivery system, development and production of vaccines for HIV/TB, malaria and cardiac diseases
- Biomedical scientists use particle physics technologies to decipher the structure of proteins, information that is key to understanding biological processes and disease.



# World Knowledge Platform

## Missions

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### ○ Knowledge products

- Hardware, Software and Networking and Storage Products including handheld micro and nano electronic devices. Knowledge injection in traditional products can usher in a new era of superior products.



# World Knowledge Platform

## Missions

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### ◎ **Transportation systems**

- Fossil fuel free biofuel based transportation systems using biofuel like ethanol and bio-diesel. Also it is essential to develop transportation system to suit 100% biofuel



# World Knowledge Platform

## Missions

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### ① **Disaster Prediction and Management**

- Earthquake forecasting, assessing in advance the quantum of rain for particular cloud condition

### ② **Capacity Building**

- Quality human resource development for all the above areas including the development of personnel with world class skills

# World Knowledge Platform

## Missions

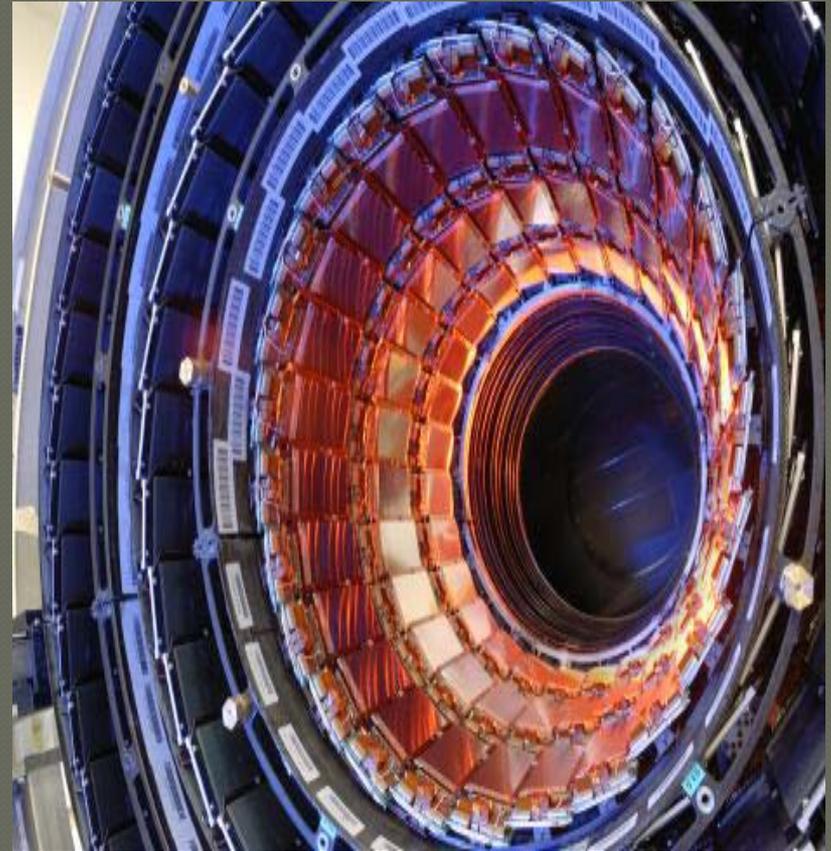
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- ① **Sustainable development:** Strategies, policies, education system and modeling.
- ② **Climate Change:** the aim will be to reduce the carbon footprint of every organization and also create carbon neutral cities, states and countries.  
personnel with world class skills

# World Knowledge Platform Missions

## ● Thorium Fuelled Reactors

- Safe
- Less Hazardous Waste
- Hard to Weaponize
- Higher yield per ton
- Abudantly found in US and India



- "the important elements that constitute a nation are: being disease free; high earning capacity; high productivity; harmonious living and strong defence"



# *Righteousness*

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“Where there is righteousness in the heart  
There is beauty in the character.  
When there is beauty in the character,  
there is harmony in the home.  
When there is harmony in the home.  
There is an order in the nation.  
When there is order in the nation,  
There is peace in the world.”