

# SCIENCE & TECHNOLOGY ACHIEVEMENTS & HIGHLIGHTS

## Contents

Message

Foreword

Preface

### ACHIEVEMENTS

1. Chandrayan-I finds water on Moon
2. Indian Nuclear Submarine - Arihant
3. First Sea Bridge in India

### HIGHLIGHTS

Sub - Section  
Number  
1

#### Space

- a. RISAT-2 and Anusat Satellites
- b. Launch of Seven Satellites
- c. Bacillus Aryabhata - Highly resistant to ultra violet radiation

2.

#### Biotechnology

- a. Long lasting Basal Insulin for Diabetics  
Basalog TM
- b. Another door opened
- c. Multiplex kit for DNA Testing of Basmati Rice
- d. First world cure for HIV/AIDS at Third world Cost

3.

#### Medical Sciences

- a. Artificial Heart for the price of a Nano
- b. Silver nano particles to prevent Blood Clots
- c. Vision Inspection System

- d. Safety in Radiation Treatment
- e. Balloon Kyphoplasty

**4. Drug & Pharma**

- a. Anti Malaria Combination Molecule
- b. Herbal Relief for Radiotherapy Patients
- c. Major Strides in Pharmaceutical R&D
- d. Traditional Medicines joining mainstream

**5. Energy Generation**

- a. Largest Solar Power Project- A zero carbon project
- b. Wind Turbine Generators from Tamil Nadu
- c. Thermal Baffle for Fast Breeder Reactor
- d. First Indigenous 700 MW Nuclear Power Plant
- e. Enhancing productivity in underground coal mines
- f. Bio mass Gasifier-A gift to rural residents

**6 Energy Utilisation**

- a. Worlds Largest Solar Power Cooking
- b. Largest Carbon Credit Project
- c. Thermally Efficient Cement Plant

**7. Defence**

- a. Agni-II Missile is Now Ready
- b. T-90 Tanks strengthen the Army
- c. First Carbon Fiber Manufacturing Plant
- d. Integral Armour with Ceramic Composites

**8. Information/Communication Technology**

- a. Low cost GIS Software
- b. First Doppler Radar for Delhi
- c. LIPS Live Technology

- 9. Food**
- a. A new Submergence tolerant Rice variety
  - b. Indigenous Rice Bran Technology commercialised
  - c. New Nutritious Maize will combat Malnutrition
  - d. Herbal Health Drink will beat health Stress
- 10. Water Conservation & Utilisation**
- a. Award winning Rain Water Harvesting System
  - b. Low Thermal Desalination
  - c. Nano-Silver Ceramic Water Filter
  - d. Zero Discharge Toilets are travelling
- 11. Building and Construction**
- a. Colour Next 2009-World's first India Specific colour forecast
  - b. Tallest building in Delhi
  - c. Metro Tunnelling Excellence
  - d. Metro trains to roll past Sound proof Parapets
- 12. Textiles**
- a. Removal of organic dyes and contaminants
  - b. Excellence in Textile dye Machinery
  - c. Technical Textiles grows in Gujarat
- 13. Environment**
- a. Bio processing Technology for leather
  - b. Oil Zapper for Oil Spills
  - c. Atmospheric Aerosols should be capped
- 14. Health Care/Diagnostics**
- a. Affordable Eye implant
  - b. Chikungunia Antigen in early detection kits.
  - c. Award Winning Root-Canal Treatment

- d. A Rare domino Liver Transplantation
- e. Handy kit for Heart Ailment Detection

**15. Transportation and Fuels**

- a. Electric Cycle Rickshaw(ELECSHA)
- b. Repair pot holes in 30 minutes
- c. Upgrading Fuel Oil Components
- d. Multifunctional Additive for Diesel

**16. Electronics, Electrical or Mechanical devices and Production**

- a. Deaerating Condensor
- b. Electrical Museum in Gujarat
- c. Mobile Teleclock receiver to enter the Market
- d. Remotely Operated Vehicle
- e. Best Manufacturing Practices at Chennai factory
- f. Awards Galore for Welspun

**17. Miscellaneous**

- a. Geophysical Modelling
- b. Textile Technologists Honoured
- c. Gold for Indian Youths at Olympiads

**ANNEXURES**

- 1. List of illustrations
- 2. Abbreviations