Summary of Achievements

Prof. Bharat Raj Singh

Prof. (Dr.) Bharat Raj Singh did B.E. (Mech.) in 1972 from SVNIT, Surat; M.E. (Analysis & Design) in 1988 from MNNIT, Allahabad and Ph.D. in Mechanical Engineering in 2010-11 from Uttar Pradesh Technical University, Lucknow. He is currently working as **Chairman**, CV Raman Research Centre and **Director**, School of Management Sciences, Lucknow. He dedicated his life for more than 4-decades in Industry, Administration, Academics and Social works and is continuing his journey to serve the society at large by his rich thought processes after retiring from UP Rajkiya Nirman Nigam Ltd., Lucknow.

Public Works:

He set many mile stones in executing projects much before their scheduled period. He completed the projects of the *State Sugar Mill*, Rae-Bareilly in 13 months against 48 month's schedule (i.e. in January 1979) and *BHEL's Insulator Plant Project*, Jagdishpur in 18-months against the target of 24 months (i.e. in February 1981) and many more such projects in UP. He also has the privilege for saving about Rs.13 crores of state's budgets that was reverted to the treasury during 1998-2001.

Academic Achievements:

His areas of specializations are: Unconventional Manufacturing Processes, Industrial Engineering, Thermodynamics and Automobiles. His remarkable contributions are in Sustainable Energy Resources, Environment and Development of Zero Pollution Air Engines.

Carbon Foot Print, Global Warming Environmental and Disaster Science is his current works. He published more than 75-papers in leading International, National Journals, Conferences, Symposium and Seminars and has published *4-Books* and *5-Book Chapters* on Novel Air Engine, The Air Pollution; Fossil Fuel and The Environment; Friction Stir Welding; Global Warming and Climate Change - Realities and Risks.

He is member of over **35**- leading International Journals including: ASME, USA; IMechE, UK; Elsevier, USA; JME, Korea; Academic Journals, Africa; World Academics of Science, Engineering and Technology, Turkey etc. and **reviewed** more than **85**- papers. He has been members of Institution of Engineers (India) in 1978, Chartered Engineer (India) in 1985, Fellow (FIE) in 1985 and International Association of Engineers; IAENG-105641 (M) in 2010.

Highlights on Social:

His book on **Global Warming** cautions that *New York City* will get submerged by heavy storm in the next decades; literally, a heavy damage to life and property was registered with the cities at the coastal areas by Sandy Hurricane on October 31, 2012 soon after his

this book became public. *Seven pages* of his book on **Climate Change** on realities, Impacts over Ice Cap, Sea Level and Risks have been selected as course curriculum by Cengage Learning Publication for **Basic Education in USA**.

Dr Singh has been a very creative thinker during his academic career. For the last 8-9 years, he has been working on the burning issues of **Global Warming**. He has invented an **Air Engine** exhibited before **Hon. President of India** on 10th May, 2013 that runs on *compressed air* releasing zero emission. Its engine size is 4 inches (100mm) in diameter and produces 5.5 HP (4.1 Kw) power to run any motorbike without releasing *Green House Gases.* It is under process of being patented and tried on motorbike successfully. For detail logon to: **www.brsinghindia.com**

He confirms, if this technology is used on *two-wheeled vehicles*, it can curb **carbon emission about 50-60%** and can reduce **Global Warming** and issues related to frequent change in Climate and Disaster.

Patent: *Rotary & Vane Type Air Engine* -Patent office, Govt. of India- Registered on 8 October, 2010, vide No: 2412/DEL/2010; Notified on 13-04-2012 vide: Issue No. 15/2012 Friday 13 April, 2012 -Page 5783.

Felicitations & Recognitions:

- **1965-State Junior Scientist Award-** by Hon. Governor of Uttar-Pradesh.
- **1981-Best Officer Award-** by Govt. of UP for Developmental Projects.
- **1994-Samaj Sri Award-** for earth quake relief work in Uttarkashi, Tihari & Chamauli.
- **2003-Chief Minister of UP-** for best contribution in State Developmental Works.
- **2010- VII-Position** in the world for propagation of **Carbon Capture** technique.
- **2012-Shiksha Gaurav Award** by Uttar-Pradesh Award Society.
- **2012-Life-Time Achievement Award**-conferred by **ISAM**, USA **& IIT-BHU**, Varanasi for illustrious contribution in promoting Engineering & Professional Education.
- **2012-2013-Certificate of Excellence** by IIT-Bombay for Aakash Workshop during Nov. 2012; RMET during Feb. 2013; AAAP during March, 2013 and DBMS during May, 2013.

Dr. Singh's researches and innovations in the field of **Science & Technology** have always been of noble cause and have added an impetus for a world-wide technological development. His grave concerns over *Global Warming* and *Climate Change* issues have also put us in a position to give a second thought over our activities of development. His invented **Zero Emission Turbine Engine** fitted in motorbike exhibited before **Hon**. **President of India on 10th May, 2013**; if implemented widely, it may have greater impact on curbing **Global Warming** that is going to be a strong boon for the benefit of generations to come.