

In almost every area of experimentation and research work, readings and results are often found to be non-reproducible in an accurate manner. This is specially so in the hands of laymen, school and university students, young or inexperienced engineers and scientists. Reasons for non-reproducibility and inaccuracy of the results are:

- ❖ Lack of sensitivity, R & D experience and essential and basic science education of experimenter or researcher.
- ❖ Lack of Knowledge in proper recording of observed results which may be due to a lacuna of Research Culture.
- ❖ Total reliance on, or continuation with R & D results quoted by or extracted from another party's or published, related research work.
- ❖ Incorrect readings and results obtained;
 - a.) due to emergency or circumstantial needs by colleagues or subordinates with lack of laboratory and R & D experience.
 - b.) By one or more persons with grave personal errors.
- ❖ Low-quality apparatus, components, gadgetry, devices and raw materials available due to practicing of outdated tender/purchase procedures where lowest quotation is accepted or lack of funds.

- ❖ Total reliance on instruments and equipment performance, ignoring possible malfunctioning.
- ❖ Use of new, worn out or malfunctioning equipment and instruments without due malfunctioning.
- ❖ Effects and distortions caused by known or undetected sources of stray or variable magnetic and electromagnetic fields-sunspots occurring in the nearly 11 year solar cycle; the present cycle is expected to peak sometime between June, 1999 too January 2001 – sound (including supersonic and ultrasonic) and static electricity, and by variable climate and thundering and lightning mechanical vibration, x-rays, perfumes, chemicals, smoke, fumes and gases in the vicinity of storage facilities laboratories, studios and R & D sites and rigs.
- ❖ Varying production qualities of tools, instruments, components raw materials and chemicals supplies etc. with respect to time and location; and their storage under unreliable or variable conditions (power, water and gas supply sources, climate, deep freezing, thermostating, dehumidifying, air-conditioning, fumigation, disinfecting, insect attack bacterial infection etc.)
- ❖ Sabotage due to professional, personal, interdivisional, inter-organizational academic and/ or political rivalries.