TIME - AS UNIQUE BASE QUANTITY

Gheorghe DRAGAN, www.gdfdatabanks.ro dragan_gdf@yahoo.com gdf.dragan@gmail.com

This idea is based on long and intense experience and can open a new horizon in science and technology, but only with the help of METROLOGY. For this purpose it is essentially and necessary to keep it working properly first.

1. Viscosity measurement has no metrology support. None of metrology labs is able today to calibrate viscometers correctly.

HOWEVER:

- 1.1. PTB has issued ISO/TR 3666-1998 stating water as base standard for viscosity taking into account 2 works proved as fake. None metrology labs has established a procedure defining standard fluids for viscosity.
- 1.2. Accreditation organisms from different countries have accredited labs for measurement of viscosity, but in fact most of them do not measure viscosity (see NATA-Australia).
- 1.3. There are some famous companies selling standard fluids for viscosity without correct metrology base. For instance, Barry RADLEY (UK) and Nilay SHAH (US) as product managers from Brookfield head office and engineer labs did hear for first time about metrology at their technical presentation at 6th August 2010, Parramatta, Australia.
- 2.Estimation of the uncertainty of measurement is unknown for almost all people performing measurements, even metrologists. Furthermore, they do not take into consideration the basic rule that technical norms (ASTM, DIN, BS, etc.) are optional while metrology norms are compulsory.
- 3. Temperature is mostly used quantity in human activity, but there are some important unsolved metrology aspects:

(i) most of calibration procedures are not correct (see for instance dry well calibrators);

(ii) ITS-90 should be urgently corrected taking into account important progresses made in measurement techniques

THOSE MALFUNCTIONS CAN BE AVOIDED ONLY BY NEW ORGANIZING PRINCIPLES OF METROLOGY MAINLY BASED ON COMPULSORY PARTICIPATION OF ALL ORGANISMS WHOSE ACTIVITY IS BASED ON MEASUREMENTS

If someone is honestly interested about this new idea of TIME AS UNIQUE BASE QUANTITY I suggest to read first carefully the paper and to contact me for further details and to organize common experiments.