

2nd International Conference and Exhibition on **Industrial Engineering**

November 16-18, 2015 Dubai, UAE

Industrial Engineering vision-2017 (Global)

P C K Sharma

National Institute of Technology Warangal, India

Three to four decades of pioneering efforts by eminent people like F W Taylor, Henry Fayol, Gilbreth Couple, Elton Mayo, John Maynard and some others has led for development of Industrial Engineering (IE) profession. Reputed consultants IBCON have continued that work and implemented IE techniques for productivity improvement. Experiences, experiments and excellence of IE in 70 years (1940-2010) are of very high magnitude, running into thousands of pages. This should be utilized for the MDG (Millennium Development goals) of UNO. The eighth goal "Global Partnership for development" is a continuous exercise. Reinforcement of this goal helps progress towards other goals easy. Hence, it would be great service to mankind if IE professionals revisit, review, revises the IE function to meet future challenges if necessary, the IE can be renamed to suit the new objectives of developing competitive organizations. Present graduation courses in engineering prepare a person to do design and delivery of a product or process. With disruptive innovation expanding, the process/product itself may become obsolete or may be having a better substitute by the time its performance become excellent. Hence, competition engineering has to be developed as a new package of courses to achieve sustainable competitiveness in all the adverse situations. This paper comprises the concept about IE function leading for establishing a new function 'Competition Engineering'. It is an extension to IE but excludes business management courses. A 500 day action plan can be commenced on 01-04-2016 to conclude on 15-08-2017. Implementation can be taken up on the UNO day of 2017 (i.e., 24th October). Hence it is called IE global vision-2017.

pcksharma@gmail.com

Total performance assurance for sustainable manufacturing: Opportunities and challenges

Pradip Kumar Ray

Indian Institute of Technology Kharagpur, India

In the fast-changing technology-intensive, innovation-centered and human-focused international scenario, organizations in any sector of a national economy need to improve their performance continually emphasizing on all its critical dimensions and issues with respect to business goals, quality of work life and environmental and social sustainability concurrently. An organization's knowledge, expertise and effort are required to be directed to plan, assess and control its performance in totality. Robustness of organizational systems, assurance of total performance and sustainable development within the societal framework are three main aspects to be considered at both strategic and operational levels of any organization for development of world-class benchmarked products, processes and work environment. Briefing the current status and practices in some leading countries in respect of relevant issues and factors in this context, details of a total performance assurance system with its implementation potential in organizations are presented in this presentation. Discussing the kinds of problems to be dealt with in establishing sustainable manufacturing processes and systems and the managerial roles and responsibilities in designing such an assurance system with information and technology system support as required in the current scenario, the presentation highlights the research issues and specific challenges to be addressed for assurance of benchmarked performance of any organizations.

pkrr@vgsom.iitkgp.ernet.in