Workshop on Science, Technology, Engineering and Mathematics (STEM) Enterprise: *Measures for Innovation & Competiveness*

21 October 2009 | George Washington University | Washington, D.C.

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Workshop Home

We would like to invite you to join us in a one-day workshop, STEM Enterprise: Measures for Innovation and Competitiveness, on Wednesday, 21 October 2009, at George Washington University, Washington D.C. Science, Technology, Engineering, and Mathematics (STEM) are the driving force for the U.S. and worldwide economical and social advancements. Our goal is to bring leaders to discuss important questions facing STEM and to develop policy positions based on concrete data and proven algorithms. It is prudent to develop STEM policies that are derived from incorruptible data and measures to best plan for a healthy and productive enterprise, future economic growth, and rapid innovation.

Input to the STEM R&D enterprise is generally considered to be the funding that includes federal, state, industry, and academics. But what are the outputs, and more importantly the outcomes, from that investment? Is bibliometric data reasonable in measuring output, both quantity and quality, or are new data sources needed to quantify output? What data exists to follow interactions among the STEM enterprise sectors: federal, state, academic, and private industry? What is the outcome or impact of the R&D investment on society and quality of life? How can we measure and assess the outcomes?

The workshop will provide a forum to discuss these issues to come up with policy positions and recommendations. The workshop will have sessions on:

Input/Funding
What is the National Expenditures on R&D both in the public and private sectors with the research portion broken down by basic and applied research? What is the breakout among federal, industry, and academia and by mission, physics chemistry, engineering, etc?

Work Force
This would incorporate such data as S&T employment, un-employment, under-employment, education level of population, and breakout among the STEM enterprise by sector; federal, industry, and academia; or by

Output/Measures
This area would cover data such as scientific publication, patents awarded and other public and private data banks. Data mining from such sources as: Information Science Institute, ISI now know as Thompson Scientific, Rand's RaDIUS Data Base, American Association for the Advancement of Science data on the S&E federal budget, the National Science Foundation's Science and Technology Indicators, and data bases from the Department of Commerce, the Department of Labor Statistics, the Patent Offices and the Organization for Economic Co-operation and Development

Outcomes/Productivity
Some examples in this area are citations, top 1% of citations measuring high quality and high impact and/or influence, rankings and prizes, etc. Given the output and measures, how to measure productivity?

There will be keynotes in the plenary session to address the broader policy issue.

Thank you for your support.

Dr. Gordon Day
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2009 IEEE-USA President

Registration Fees

Registration	Fee
IEEE Member & Sponsoring Societies	**$125**
Others	$175
Students	$75
Congressional Staff	**No Charge** - RSVP to b.concepcion@ieee.org

Registration includes continental breakfast, lunch and all coffee breaks.

Note: if you need to update your registration, go to **Registration Update**

The Event Code is 19H. From your confirmation form you will need your attendee reference code # which will be on your email copy of the registration.

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