

**NSF WORKSHOP ON SUSTAINABLE MANUFACTURING:
URGENT RESEARCH NEEDS AND MULTIDISCIPLINARY COLLABORATION**

National Science Foundation, Arlington, VA
August 20-21, 2015

WORKSHOP AGENDA

Day 1 - August 20, 2015	
8:00 – 8:30am	Registration/Breakfast
8:30 – 8:45am	Welcome Remarks <ul style="list-style-type: none"> • JoAnn Lighty, Division Director, CBET, NSF • George Hazelrigg, Deputy Division Director, CMMI, NSF
8:45 – 9:45am	Keynote Session on Advanced Manufacturing <ul style="list-style-type: none"> • Mark Johnson, Director, Adv. Mfg. Office, DOE • Michael Molnar, Director, Adv. Mfg. Prog. Office, NIST, DOC
9:45 – 10:00am	Break
10:00 – 10:20am	Workshop Objectives and Instruction for Breakout Yinlun Huang (Wayne State U.), Thomas Edgar (U. Texas Austin), Mahmoud El-Halwagi (Texas A&M U.), Cliff Davidson, Mario Eden (Auburn U.), and Bhavik Bakshi (Ohio State U.)
10:20 – 12:20pm	Breakout Session 1 – Sustainability Implications in Manufacturing Group 1.1 - Tech. Management Group 1.2 - Product/process Development Group 1.3 - Enterprise Management
12:20 – 01:00pm	Lunch
01:00 – 01:20pm	Breakout Session 1 Report on Findings and Prioritization
01:20 – 03:20pm	Breakout Session 2 – Research and Education Need Specifics Group 2.1 - System Design for Sustainability Group 2.2 - Sustainable Manufacturing Group 2.3 - Sustainable Industrial Networks
03:20 - 03:35pm	Break
03:35 – 03:55pm	Breakout Session 2 Report on Findings and Prioritization
03:55 – 05:00pm	Panel: Observations on Urgent Research Needs: Panelists: <ul style="list-style-type: none"> • Ignacio Grossmann (Carnegie Mellon U.) • Gintaras Reklaitis (Purdue U.)

	<ul style="list-style-type: none"> • Thomas Edgar (U. Texas Austin) • Timothy Gutowski (MIT) • Sudarsan Rachuri (NIST) • Richard Helling (Dow)
Day 2 - August 21, 2015	
08:00 – 08:30am	Registration/Breakfast
08:30 – 09:30am	NSF Officers' Speeches on Funding Focus and Opportunities: <ul style="list-style-type: none"> • Bruce Hamilton (Environ. Sustainability, CBET) • Khershed Cooper (NanoMfg, CMMI) • Zhijian Pei (MME, CMMI) • Chris Paredis (ESD & SYS, CMMI)
09:30 – 10:00am	Keynote on Multidisciplinary Collaboration and National Platform: NanoHUB <ul style="list-style-type: none"> • Michael Zenter, Purdue U.
10:00 – 11:30am	Breakout Session 3 – Major Collaboration Needs and Platforms Group 3.1 - Multidisciplinary Collaboration Group 3.2 - Academic and Industrial Collaboration
11:30 – 11:50am	Breakout Session 3 Report on Findings and Prioritization
11:50 – 12:00pm	Closing Comments
12:00pm	Adjourn