Day 1 – Sept. 9

7:15 a.m.  Breakfast/Pick up registration packets

Moderator: Susan Sinnott (Penn State)

8:15 a.m.  Welcome from the dean: Dean Lee Kump, Penn State College of Earth and Mineral Sciences

8:30 a.m.  Overview of workshop and objectives: Susan Sinnott (Penn State)

9:00 a.m.  Perspective within a rapidly growing student body: David Bahr (Purdue)

9:30 a.m.  Perspective from a growing MatSE department: Amy Moll (Boise State)

10:00 a.m.  Break

10:15 a.m.  Materials science and engineering—it’s unique: Dean Janet Callahan (Michigan Technological University)

10:45 a.m.  Panel on industry perspective
Discussion leader: Kathy Wahl (Naval Research Laboratory)
Panel members: Dawne Moffatt-Fairbanks (Corning), Edward Sobota (TSI Titanium), Erik Lord (Blue Origin), and Lazo Trkulja (ArcelorMittal USA)

12:00 p.m.  Lunch

Moderator: Angus Rockett (Colorado School of Mines)

1:00 p.m.  Impact on graduate recruiting and enrollment: Isabel Lloyd (Maryland)

1:30 p.m.  Managing M.S. program populations: Michele Manuel (Florida)

2:00 p.m.  Materials science and engineering and computing education: Michael Falk (Johns Hopkins)

2:30 p.m.  Break

3:00 p.m.  Integrating student and instructor perspectives to improve material retention: Matthew Begley and Victoria Christensen (UCSB)

3:30 p.m.  Engaging and exciting next generation leaders: Scott McCormack (UIUC/PCSA ACerS)

4:00 p.m.  Panel on national laboratory perspective
Discussion leader: Dawne Moffatt-Fairbanks (Corning)
Kathy Wahl (Naval Research Laboratory), James Warren (NIST), Charles Ward (AFRL), and Peter Green (NREL)

5:15 p.m.  Adjourn
5:30 p.m. Reception—Steidle Atrium
6:00 p.m. Optional tours of Steidle Building
6:30 p.m. Dinner (on your own)
Day 2 – Sept. 10

7:15 a.m.  Breakfast
Moderator: R. Allen Kimel (Penn State)

8:00 a.m.  Senior design in increasingly large materials programs: Angus Rockett (Colorado School of Mines)

8:30 a.m.  Managing laboratories in times of enrollment growth: Jessica TerBush (UIUC)

9:00 a.m.  Integrating communication and lab work into a growing undergraduate materials science and education curriculum: Thomas Staley and Christine Burgoyne (Virginia Tech)

9:30 a.m.  GT effective team dynamics initiative: changing the way teams work: Mary Lynn Realff (Georgia Tech)

10:00 a.m.  Break

10:15 a.m.  The Materials Research Society—Your partner for career advancement: Michael Fitzsimmons (MRS)

10:45 a.m.  Panel on the government agency perspective
Discussion leader: Michael Williams (Clark Atlanta)
Panel members: Lynnette Madsen (NSF), Julie Christodoulou (ONR), and Linda Horton (DOE)

12:00 p.m.  Lunch
Moderator: Hatem Zurob (McMaster)

1:00 p.m.  Preparing materials science and education students for the real world: Vanessa Chan (UPenn)

1:30 p.m.  African American participation in STEM: The leaky pipeline: Michael Williams (Clark Atlanta)

2:00 p.m.  Panel on diversity, inclusion, access and affordability
Discussion leader: David Bahr (Purdue)
Panel members: R. Allen Kimel (Penn State), Viola Acoff (University of Alabama), and Veda Chandler (Clark Atlanta)

3:15 p.m.  Break
Moderator: Hatem Zurob (McMaster)

3:30 p.m.  Connecting materials science and engineering undergraduate education with other majors: Marcus Young (North Texas)

4:00 p.m.  Incorporating sustainability into materials science and engineering curricula: Julie Schoenung (UC-Irvine)
Since the floodgates have opened—the role of entrance-to-major in the enrollment numbers of MatSE: R. Allen Kimel (Penn State)

The materials innovation and learning laboratory: A new paradigm in peer-to-peer experimental learning for materials science: Mark Losego (Georgia Tech)

Adjourn

Reception in the Millennium Science Complex

Optional tours of Millennium Science Complex

The Materials Research Institute: Daring new discoveries across scientific frontiers: Clive Randall (Penn State)

Dinner (on your own)
Day 3 – Sept. 11

7:15 AM  Breakfast

Moderator: Ibrahim Karaman (Texas A&M)

8:00 AM  Perspective from private institutions: Pawel Keblinski (RPI)

8:30 AM  Impact of the evolution of specialized research topics in materials science and engineering on the undergraduate curriculum over the coming decade: Orla Wilson (Johns Hopkins)

9:00 AM  Outlook from Canada: Hatem Zurob (McMaster)

9:30 AM  How Missouri S&T is managing our ABET accredited B.S. programs in Ceramic Engineering and Metallurgical Engineering, and where our students are going: Gregory Hilmas (Missouri University of Science & Technology)

10:00 AM  Break

Moderator: Pawel Keblinski (RPI)

10:15 AM  Challenges and rewards associated with starting a new materials science and engineering department: Ibrahim Karaman (Texas A&M)

10:45 AM  Developing an ABET accredited B.S. degree in materials science and engineering at the University of Virginia: J.R. Scully and J.M. Fitz-Gerald (University of Virginia)

11:30 AM  Summary and next steps: Susan Sinnott (Penn State)

11:45 AM  Adjourn