

Near Net Shape Manufacturing Workshop
April 11-13, 2012
iWireless Center • Moline, Illinois • USA
AGENDA as of 4/3/12

Presentations/breaks will take place at the iWireless in room DEF.

Wednesday, April 11

6:30 –

8:30 p.m. Welcome Reception (Cash Bar) at iWireless (*room AB*)

Thursday, April 12

7:30 a.m. Gather at iWireless

8:00 a.m. Opening Remarks – Colonel Fly – RIA/JMTC, Congressman Schilling (others)
Transportation to QCML

8:30-10:00 a.m. Tours to RIA/JMTC (continuous)

8:30-10:00 a.m. Tours and Demonstrations at QCML (continuous)

10:00 a.m. Return to iWireless

Attendees must pre-register for the Thursday morning Arsenal tour. Registration deadline was March 28.

10:10 a.m. – Welcome and Overview of QCML – Jim Sears, QCML (10 minutes)

12:00 p.m. 1) Applications in FSW – Jim Hutto, HF Webster (25 minutes)
2) FSW Capabilities at RIA & QCML – Casey Allen, HF Webster (25 minutes)
3) Overview of AI FSW at SDSMT – Christian Widener, SDSM&T (25 minutes)
4) SAPA Bridge Development and Production – Gregory Osbert, SAPA (25 minutes)

12:00 p.m. Lunch (60 minutes) at iWireless (*room C*)

1:00 - 1) Overview of Laser Additive Manufacturing – Jim Sears, QCML (25 minutes)
2:40 p.m. 2) Laser Additive Manufacturing for Part Enhancement – Richard Grylls, Optomec (25 minutes)
3) Replacement of Chromium with Laser Clad WC Cermets – Josh Hammel, SDSM&T (25 minutes)
4) Developments in Manufacturing using Direct Metal Laser Sintering (DMLS) – Scott Volk, GPI Prototype & Manufacturing Services, Inc. (25 minutes)

2:40 p.m. Break (20 minutes)

3:00 – 1) Overview of DoD Applications in SPS – Chris Haines, US Army, ARDEC (25 minutes)
4:40 p.m. 2) SPS Projects at QCML – Eric Faierson, QCML (25 minutes)
3) Commercialization of SPS – Jim Stanford, Cee6Cubed (25 minutes)
4) Modeling the SPS Process – Nick Winowich, WIU – Engineering (25 minutes)

4:50 p.m. Adjourn

6:00 p.m. Dinner at Johnny's Italian Steakhouse • Guest Speaker - Gil Silva, Eclipse Aerospace

Friday, April 13

8:00 –

- 10:05 a.m. 1) Powder Processing Challenges and Solutions for Lightweight Metals (Al, Mg, and Ti) – Iver Anderson, Ames Lab (25 minutes)
2) Developments in Magnesium Alloy Powders Technology - Rajiv Tandon, Magnesium Elektron USA (25 minutes)
3) Close-Coupled Gas Atomization of Titanium Alloy Powders - Andrew Heidloff, Ames Lab (25 minutes)
4) Status of Hydride-De-hydride Production of Titanium Powders – Colin McCracken, Reading Alloys/Ametek (25 minutes)
5) HIP of Complex Shape Parts from Various Ti Alloy Powders - Victor Samarov, Syntertech PM (25 minutes)

10:05 –

10:30 a.m. Break

- 10:30 a.m. – 1) Development of Materials for Sand Casting Ti – Jerry Thiel, U of N Iowa (25 minutes)
12:35 p.m. 2) Titanium Casting at Rock Island Arsenal (RIA) – Chris Parr, RIA-JMTC (25minutes)
3) Titanium Alloy Developments – Ralph Napolitano, Iowa SU (25 minutes)
4) The All Digital Casting Process – Dan Maas, ExOne ProMetal (25 minutes)
5) Predicting As-cast and Heat Treated Part Dimensions using MAGMASOFT Casting Process Simulation – Shelly Dutler, MAGMA Foundry Software (25 minutes)

12:40 p.m. Closing Remarks & Adjourn