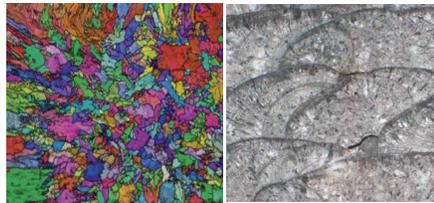


July 2015 Workshop

Advanced Qualification of Additive Manufacturing Materials using *in situ* sensors, diagnostics and modeling

- Venues:** La Fonda on the Plaza - Santa Fe – July 20 - 21, 2015
Los Alamos National Laboratory – July 22, 2015 (*LANL participants only*)
- Sponsors:** Los Alamos National Laboratory:
Institute for Materials Science (IMS) and MaRIE
- Cost:** \$250 fee with the New Mexico Consortium (*NMC workshop registration site to come*)
- Web:** ims.lanl.gov – see **EVENTS**



V. Livescu

R. Grey

Invited Speakers

- | | |
|---|--|
| Prof. Suresh Babu - University of Tennessee | Prof. Pan Michaleris - Penn State University |
| Dr. Mark Benedict - AFRL | Prof. Todd Palmer - Penn State University |
| Prof. Kevin Chou - University of Alabama | Prof. Natalie Rudolph - University of Wisconsin, Madison |
| Prof. Christian Leinenbach - EMPA Switzerland | Prof. Hans-Joachim Schmid - University of Paderborn, Germ. |
| Dr. Lyle Levine - NIST | Dr. Chantal Sudbrack - NASA |
| Prof. Jyoti Mazumder - University of Michigan | Prof. Chris Tuck - University of Nottingham |
| Dr. Kalman Migler – NIST* anticipated | |

Workshop scope: Additive manufacturing (AM) offers distinct advantages over conventional manufacturing processes including the capability to both build and repair complex part shapes; to integrate and consolidate parts, and thus overcome joining concerns; and to locally tailor material compositions as well as properties. A variety of fields such as aerospace, military, automotive, and biomedical are employing this manufacturing technique as a way to decrease costs, increase manufacturing agility, and explore novel geometry/functionality. To increase acceptance of AM as a viable processing method, pathways for qualifying both the material and the process need to be developed and, perhaps, standardized.

Our goal is to define opportunities and research gaps within AM and to engage the broader scientific/engineering community to discuss future research directions. In light of this, the organizing committee would like to extend an invitation for you to attend a workshop in Santa Fe, NM - “Advanced Qualification of AM Materials – using *in situ* sensors, diagnostics, and modeling”. Invited speakers from universities and research centers, both US-based and Europe-based, will provide updates on their advanced qualification strategies or will present process-microstructure-property-performance results that motivate the need for an advanced qualification methodology. Talks over the course of the 1.5-day workshop will be mixtures of metals, non-metals, experimental, and modeling. Included in this Gordon style workshop will be panel discussions with the invited speakers. This open atmosphere will allow for extended discussions in areas of interest to the audience. We would appreciate your participation in this full event and look forward to seeing you in Santa Fe in July.

Organizing Committee

Alexander Balatsky * Rick Martineau * John Carpenter * Marianne Francois * Rusty Gray * Terry Holesinger * Boris Maiorov * Nate Mara * Jen Martinez *
Alex Mueller * Toni Taylor * David Teter * Dan Thoma

Join LANL and Internationally Renowned Scientists for the July Workshop: [Advanced Qualification of Additive Manufacturing Materials](#)

Technical Contact – Jen Martinez – jenm@lanl.gov – 505 665 0045 n Administrative Contact – Caryll Blount – caryll@lanl.gov - 505 665 3950
New Mexico Consortium Contact – Shannan Yeager - syeager@newmexicoconsortium.org - 505 412 6898