

From: Mark Haynes <haynesmd@k-state.edu>
To: "Gupte, Prasad" <IMCEAEX-
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CN=RECIPIENTS_CN=Guptep@nist.gov>
Cc: "Schen, Michael A. Dr." <michael.schen@nist.gov>
Date: Sat, 18 Aug 2012 20:49:53 -0400
Subject: Re: National Network for Manufacturing Innovation (NNMI) Involvement?
Prasad,

Thanks for the information you sent me back in May. I have had a very busy summer schedule and did not have the chance to give it much consideration up until now. I reviewed the information you sent me about the initial pilot institute. I would like to submit a proposal for this project. Would it be possible for us to schedule a brief phone meeting for sometime next week? I am certain there are several research areas in the field of additive manufacturing that I or Kansas State University could be of great service. I would like to discuss with you which areas in the field of additive manufacturing currently need focus, as well any requirements that must be met in order to submit a proposal.

I would be happy to discuss any areas of research that the agency feels are most needed; in addition, below is a brief list of areas of research I am particularly interested in fulfilling.

- Dynamic Focal and Intensity for Rapid Laser Sintered Additive Manufacturing
- Robust Medium Laser Sintering Processes for Diverse Functionality of Additive Manufacturing Machines
- Computer Vision Feedback for Quality Control and Improved Tolerances of Additive Manufacturing Processes
- Submersed or Actively Cooled Laser Sintering of Metallic Alloys for Faster Solidification of Molten Media
- Cost Effective Additive Manufacturing Platforms
- Scalable Multipurpose Additive Manufacturing Platforms
- Standardization for Additive Manufacturing Machine Components
- Cost Effective High Tolerance Linear Guide Systems

I greatly appreciate your consideration.

Thank you,

Mark Haynes
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From: Mark Haynes [mailto:haynesmd@k-state.edu]

Sent: Wednesday, May 16, 2012 4:07 PM

To: Schen, Michael A. Dr.; Gupte, Prasad

Subject: National Network for Manufacturing Innovation (NNMI) Involvement?

Dr. Michael Schen,

I am a PhD candidate at Kansas State University studying Industrial and Manufacturing Systems Engineering. I have a deep background in low cost automated manufacturing technology and am interested in learning how I may get Kansas State University involved in NNMI. Additionally I own a start up company, Free-Works LLC, which is focused on the research and development of affordable modular additive and subtractive rapid prototyping solutions. I am interested in learning if there are any opportunities to for Free-Works LLC to get involved as well. I believe both Kansas State University and Free-Works LLC have a great deal to offer in the development of additive rapid prototyping solutions. Please contact me at your convenience at [\(316\)213-8092](tel:3162138092) or at haynesmd@ksu.edu.

Thank you,
Mark Haynes