



4080 FLEMING BUILDING
503 THOMPSON STREET
ANN ARBOR, MICHIGAN 48191-1340
734 764-1185 FAX: 734 763-0085

June 7, 2011

President Barack H. Obama
The White House
1600 Pennsylvania Avenue, NW
Washington, DC 20500

Dear President Obama:

I am very pleased to learn of the National Materials Genome Initiative for Global Competitiveness being proposed by your administration. We at the University of Michigan are excited by and strongly support this initiative.

Materials innovations have been at the core of our nation's technological advances for decades and have played a unique and important role in our economic success. Now, as never before, it is important that new materials and products be developed rapidly and cost effectively. New advances in computational materials science and engineering hold great promise for accomplishing both these goals. Industrial application of the capabilities afforded by this burgeoning discipline is at the embryonic stage and, while there are notable successes, industrial scale tools are not yet widely available or applied. Thus the proposed initiative is not only timely, it is essential for our economic competitiveness. I am certain that this initiative will strengthen the US manufacturing industry.

It is clear that universities have an important role to play in this initiative, in educating the work force of tomorrow and in developing technical capabilities and fundamental science. The University of Michigan has anticipated this need and will invest on the order of \$30M in support of computational science and engineering over the next five years. Recent significant investments include:

- Establishment of the Institute of Computational Science and Engineering. This Institute is a cross-university endeavor that is creating opportunities in computational science research and education across the University and fosters a culture and community for scientific computing.
- Establishment of CIRRUS, a UM-based cloud to support computational and data-enabled science and engineering, and FLUX, its flagship machine for high performance computing.

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- Establishment of the Center for Integrated Computational Materials Engineering (ICME). This multi-faculty center will work with industry and government to develop new technical capabilities for engineering new materials and optimizing manufacturing processes.
- Establishment of the Integrated Computational Materials Education Summer School. This NSF supported program is designed for training faculty and post-doctoral fellows from around the country to implement new computational methods for materials into the classroom.

UM faculty have played leadership roles in the key studies and reports that have led to the Materials Genome Initiative. The University of Michigan will continue to play a leadership role and make significant investments in this important new field. We strongly believe that your Materials Genome Initiative is precisely the right program at the right time. We look forward to partnering with your administration, industry, other universities and national laboratories as this initiative moves forward.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Stephen R. Forrest". The signature is fluid and cursive, with a long, sweeping tail that extends to the right.

Stephen R. Forrest

SRF/lc

Cc: Dr. Cyrus Wadia, Senior Policy Analyst for Energy