



Charles M. Vest  
President

September 13, 2012

Dear NAE Member:

Since 1964, the NAE has provided independent, expert advice to the federal government on matters related to engineering and technology. We have engaged students, parents, educators, policymakers, and the general public in order to improve the public understanding of engineering and to promote the Nation's progress and competitiveness. As we approach our 50<sup>th</sup> Anniversary in 2014, we hope to involve our members and friends to help us ensure that the NAE can be a national voice for engineering for another 50 years and beyond. More information about supporting the NAE's 50<sup>th</sup> Anniversary celebration can be found at [www.nae.edu/50thgiving](http://www.nae.edu/50thgiving).

For the past 5 years, I have had the privilege of serving as the president of the National Academy of Engineering. During my tenure, I have seen NAE members and staff conduct an impressive array of projects that have advanced and, we expect, will continue to advance the standing of engineering in America and across the world. We initiated Frontiers of Engineering Education, a program to encourage collaboration and innovation in engineering education. We published the report on the Macondo well - Deepwater Horizon blowout and explosion and provided recommendations for improving the safety of offshore drilling. We announced 14 Grand Challenges for Engineering ([www.engineeringchallenges.com](http://www.engineeringchallenges.com)) that highlight the essential importance of engineering to improving the human condition. And, we developed "Changing the Conversation", aimed at effectively communicating the value and nature of engineering, especially to young students. Your time and your contributions to the NAE Independent Fund have made these and other initiatives possible. These activities provide important service to the nation and the engineering profession, so I hope you will consider supporting the NAE this year.

Under the capable leadership of NAE member Larry Burns, the NAE has launched a Manufacturing, Design and Innovation (MDI) Initiative. We kicked off this initiative with the 2011 Annual Meeting Forum in Washington, D.C., and followed up with a workshop in June of this year. The committee has developed a new framework to represent the entire process of creating and delivering products, services, and processes that have value to customers and society. To "make value" in this holistic sense requires a recognition of global supply webs, the establishment of integrated ecosystems to support future work, and changes to promote rapid innovation in the U.S. Our intent is to replace the current tired, nostalgic, and simplistic view of manufacturing with a forward-looking concept of "making value."

In March of 2013, the NAE will co-host the first Global Grand Challenges Summit in London with the Royal Academy of Engineering and the Chinese Academy of Engineering. This summit will engage business, government, and engineering leaders, as well as university students. By bringing together bright minds from around the world, we can begin to develop the networks, collaborations, and enthusiasm needed to pursue the Engineering Grand Challenges in a more integrated and global manner.

At the end of this month, the NAE will hold its Annual Meeting in Washington, D.C. The Monday morning Forum, *Educating Engineers: Preparing 21<sup>st</sup> Century Leaders in the Context of New Modes of Learning*, will explore challenges and opportunities in engineering education. We will engage a panel of speakers such as Salman Khan, founder of the Khan Academy, a non-profit organization dedicated to providing a world-class free education online to anyone, anywhere; Anant Agarwal who launched MIT's massive open online course and now heads up the MIT-Harvard-Berkeley online learning initiative; and Rick Stevens, Senior Vice President for Human Resources at Boeing. The panel will be moderated by CNN's Ali Velshi and is sure to be a highlight of the meeting.

Engineering is an extremely creative and vital activity. To solve the grand engineering challenges of our time, engineers, together with business leaders, politicians, and citizens-at-large, will have to dare to dream of a better world and then make it a reality. We must plan, design, and collaborate on a scale we never before imagined. I hope that you will join me in supporting the NAE's role in encouraging an engineering profession that is up to these tasks by making a gift to the NAE Independent Fund today.

Sincerely yours,

A handwritten signature in black ink that reads "Charles M. Vest". The signature is written in a cursive style with a large, sweeping initial "C".

Charles M. Vest