



Name | David Keyes

Short CV (Biography)

David Keyes directs the Extreme Computing Research Center at KAUST, where he was the founding Dean of the Division of Mathematical and Computer Sciences and Engineering in 2009 and currently serves in the Office of the President. His scientific work is at the interface between parallel scientific computing, mathematics, and statistics, with a current focus on scalable algorithms exploiting data sparsity. Before joining KAUST he led multi-institutional scalable solver software projects in the US Department of Energy, ran university collaboration programs at US Department of Energy and NASA laboratories, and taught at Columbia, Old Dominion, and Yale Universities. Keyes is an elected Fellow of the Society for Industrial and Applied Mathematics, the American Mathematical Society, and the American Association for the Advancement of Science. He has been awarded major research prizes from the Association of Computing Machinery and the Institute for Electrical and Electronic Engineers. In 2011, the Society for Industrial and Applied Mathematics Prize awarded him their annual prize for Distinguished Service to the Profession. He earned a Bachelor's degree in Aerospace and Mechanical Sciences from Princeton in 1978 and a Ph.D. in Applied Mathematics from Harvard in 1984.

Contact Information |

Senior Associate to the President, KAUST, 4700 KAUST, Thuwal, 23955-6900 Saudia Arabia.

Email Address 1 | david.keyes@kaust.edu.sa **Mobile No |** +966 5447 0002

Lecture Title | Transformational Leadership Through Strategic Planning: A Tale of Two Plans

Abstract

KAUST is a graduate research institution with research thrusts in energy, environment, food, and water for a sustainable planet, founded in 2009. As an international academic village on the shores of the Red Sea, envisioned as a 21st century revival of the "House of Wisdom" in the tradition of the ninth century Bayt al Hikmah that gave the world much of its modern mathematics, physics, chemistry, and medicine, KAUST has been endowed with world-class facilities and has recruited a world-competitive research faculty and student body.

While KAUST implemented the Founder's plan during its first decade, science, society, and the role of universities have evolved. KAUST has therefore drafted its first internally generated strategic plan. We have solicited inputs from internal constituents and a wide variety of external stakeholders, including members of the Saudi ministerial, educational, and business communities.

The title of our resulting plan, Sustainability Through Change, has multiple meanings, which reflect multiple themes of the plan. We seek not merely to research, develop, and teach environmental and economic sustainability, but to practice and demonstrate them in our campus operations and culture. Our plan seeks to bring to life our best imaginations, to release us from self-limits, and to entrain the good will and collaboration of a community beyond ourselves in pursuit of missions in common. The speaker will reflect on KAUST's first decade and plans for the second, looking for extensions to other in-Kingdom institutions.