

OCT
8

4th National Conference on Multidisciplinary Design, Analysis and Optimization

MAXWELL, RANKINE, AIRY AND MODERN STRUCTURAL ENGINEERING DESIGN



William F. Baker

Skidmore, Owings & Merrill, LLP, Chicago

6.30PM

Mr. William F. Baker is a world-renowned structural engineer and is currently a partner in office of Skidmore, Owings & Merrill, LLP (SOM). Educated in University of Missouri (Bachelor's in Civil Engineering) and University of Illinois (Master's), he has been involved in engineering many supertall buildings as well as long-span roof structures in the world. The most famous among them is Burj Khalifa, the tallest structure in the world today, for which he was the chief structural engineer and designed the *buttressed core*. Mr. Baker is He is a fellow of the Royal Academy of Engineering, the American Society of Civil Engineers, and many others. He has been studying the classical works of Maxwell and others to gain insights into topology optimization of structures.

The lecture will review some of the seminal contributions of James Clerk Maxwell, William John Macquorn Rankine and George Biddell Airy to the theory of structures and how those theories can be applied to modern structural engineering design.