

## ENERGY COLLOQUIUM

# Energy for the Coming Decades: Trends and Technologies



### Steve Koonin

BP Chief Scientist

Thursday,  
September 22, 2005  
Stata Center  
32-123 Kirsch Hall

3:30 pm Reception  
outside 32-123  
4:00 pm Lecture in 32-123

Reception follows outside 32-123

Sponsored by  
The Energy Research Council and  
The Laboratory for Energy and the Environment

#### Abstract:

Ensuring adequate energy supplies in an environmentally acceptable manner is one of the most significant challenges facing society in the coming decades. New technologies will play a central role in meeting this challenge, albeit conditioned by the economic, social, and political contexts in which they are developed and deployed. This talk, from the perspective of a global energy company, explores the major forces shaping the world's energy future and the technologies required to respond to them.

After three decades serving on the Faculty and as Provost at the California Institute of Technology, Steve Koonin joined BP plc. in 2004 as Chief Scientist. His appointment was seen as reinforcing BP's shift in recent years toward a future characterized by alternative energy technologies. Among Koonin's responsibilities at BP is formulating the company's long-term technology strategy.



Koonin received his B.S. in physics in 1972 at Caltech and his Ph.D. in theoretical physics in 1975 at MIT, after which he joined the Caltech faculty. His research interests have included global environmental science, nuclear astrophysics and theoretical nuclear, many-body, and computational physics. He remains engaged in a programme of systematic observations of earthshine reflected from the lunar surface to determine variations in the global albedo, an important parameter of the climate system. In 1998, he received the E.O. Lawrence Award in Physics from the Department of Energy (DOE).



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