

# The University of Queensland and IIT Delhi Research Academy

## KNOWLEDGE NEXUS SEMINAR SERIES



### Dr. Alexander Y. Klimenko

Reader

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## Energy transition in Australia: First steps & Implications

### ABOUT THE TALK

We are witnessing yet another technological surge, which is largely associated with a transition to renewable sources of energy.

Australia, with its abundant land, solar, and wind resources, is projected to become one of the world leaders in energy transition.

While Queensland is deemed to become the main Australian renewable hub in the long run, the energy transformation began in another Australian state -- South Australia.

We analyse the first outcomes of such a transition and briefly discuss implications for India and other countries.

### ABOUT THE SPEAKER

Dr. Klimenko has major research interests in energy and modelling of reacting flows, especially in the context of the transition to pollution-free and renewable sources of energy. His contribution to science and engineering includes: introducing conditional and sparse-Lagrangian methods for modelling of turbulent reacting flows, suggesting the 4/7 power law and IDFE methodology for turbulent premixed combustion, deriving the 4/3 power law of vortical motion subsequently detected in hurricanes, tornadoes and firewhirls, introducing principles of competitive thermodynamics and theory of leaping cycles in complex evolutionary systems, demonstrating that thermodynamic interference can lead to apparent CPT violations in CPT-preserving quantum systems. His recent interests are largely related to energy transition and hydrogen production. Alex has more than 200 publications cited more than 4500 times. He has been elected a Fellow of the Combustion Institute and holds a High Doctorate in Engineering from The University of Queensland. He is the director of the research Centre for Multiscale Energy Systems at UQ and IITD-UQ Theme Lead for Energy and Sustainability

**Tuesday, 13 August, 2024**

Time: **10:30 am IST / 3:00 pm AEST**  
onwards

Venue: **LH212, First Floor, Lecture Hall  
Complex, IIT Delhi**

**LINK TO ATTEND ONLINE**

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