



TNCHE Asia 2025 Conference
**"Accelerating Industrial Decarbonization:
Digital-AI and Energy Transformation "**
Presenter's Biodata & Abstract



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Current Position : R&D Director

Title of Presentation : Integrated Pathways for Decarbonization: Energy Efficiency, Carbon Capture and Hydrogen Technologies

Presentation Abstract:

In response to growing global momentum toward decarbonization, UOP offers a comprehensive portfolio of solutions designed to help industries improve energy efficiency, reduce carbon emissions, and advance hydrogen integration. This presentation will highlight key projects and proven technologies that enable energy-intensive operations to transition toward lower-carbon outcomes without sacrificing performance or reliability.

The session will focus on three core areas: advanced energy improvement strategies using digital optimization and heat integration; modular, scalable carbon capture systems designed for retrofit and new-build applications; and hydrogen production pathways—particularly blue hydrogen via autothermal reforming (ATR) with integrated CO₂ capture. These technologies are engineered for flexibility, fast deployment, and economic viability across a wide range of industrial sectors.

Through project examples and performance data, attendees will gain insights into how UOP solutions are being applied today to support customers' sustainability goals. This integrated approach enables stakeholders to take actionable steps toward net-zero emissions, aligning with both environmental targets and long-term operational resilience.