



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



**Full Name** :

**Organization** : WH-Steel

**Current Position** :

**Title of Presentation** : Intelligent Transformation: Unlocking the Next Decade for the Pipeline Industry

**Presentation Abstract:**

The pipeline industry is undergoing a revolutionary shift driven by intelligent technologies such as IoT, big data, and AI. By integrating smart monitoring systems, companies can achieve real-time diagnostics of pipeline integrity, reducing maintenance costs by up to 30% while enhancing operational safety. Innovations like predictive maintenance and automated leak detection are transforming traditional workflows, enabling proactive risk management. Furthermore, advancements in digital twins and machine learning optimize resource allocation and lifecycle management. These technologies not only boost efficiency but also align with global decarbonization goals, positioning the industry as a key player in sustainable energy infrastructure. The next decade will belong to those who embrace this transformation, turning challenges into competitive advantages.