

IEEE Peru Section



**TUTORIAL:**

**NOVEL TENDENCIES ON  
MODELLING AND  
SIMULATION USING  
POWERFACTORY**

The background of the slide is a photograph of the ancient Inca city of Machu Picchu, showing its terraced structures and stone buildings nestled in a valley with steep, forested mountains in the background.

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TECHNOLOGY AND INNOVATION  
FOR ANDEAN INDUSTRY

## TUTORIAL: Novel Tendencies on Modelling and Simulation using PowerFactory

 September 12, 2024

 09:00 - 12:00 hours (GMT-5)

**PLACE:** Paraninfo Universitario - Main Hall



**ADDRESS:** Plaza de Armas del Cusco

This tutorial provides an excellent opportunity to gain a comprehensive view of the latest trends in modeling and scripting with DigSILENT PowerFactory. It is designed to give participants a thorough understanding of the topic, specialized skills acquisition, and an update on the latest advancements.

### DETAIL CONTENT

- *Tendencies for modelling and simulation in energy transition*
- *Dynamic modelling: Concept*
- *DIgSILENT Simulation Language (DSL) Framework*
- *Example of DSL framework • Modelica: Concept and basics of discrete-time modelling.*
- *Example of Modelica framework*
- *Modelica modelling framework in DIgSILENT PowerFactory*
- *Needs for scripting in power system analysis.*
- *DIgSILENT Programming Language (DPL) framework*
- *Example of DPL framework.*
- *Interfaces of PowerFactory to third-party software*
- *Co-simulation concept.*
- *Python API and Scripting in PowerFactory: Framework*
- *Example 1: Using Python API in PowerFactory (inside a DPL)*
- *Example 2: Using Python API in PowerFactory for remote control.*
- *Advantages/Disadvantages of using DPL versus Python.*



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### PAYMENT CATEGORY

Participant	Participation Rights
IEEE PES MEMBER	30 USD*
OPEN TO THE PUBLIC	50 USD*

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