

Public SIRFN Workshop

Grid-forming inverters – Validation and testing challenges

Grid-forming converters (GFC) establish a stable and controllable voltage at their output terminal without requiring external angle reference, which enables the GFC to be a candidate for providing black start services. The inherent voltage and frequency regulation attributes of GFC pose significant challenges to the conventional validation and testing methods, which incorporates the physical power converter in the emulated power grid.

The proposed workshop will focus on challenges related to the validation and testing of GFC. International speakers will present methodologies-related research results, entailing the design and optimization of methods that are dedicated to the robust and high-fidelity testing of GFC. In addition, a hands-on demonstration of GFC at the AIT Microgrid Laboratory will conclude the program.

[Register here!](#)

	15 March 2024
	09:00- 13:00
	AIT Giefinggasse 2 1210 Vienna (AT)

****Note: Due to limited seating capacity we cannot guarantee that your registration will allow for your participation in the workshop. Workshop participants will receive an official confirmation.*

Time		Topic and activity
08:30	09:00	Welcome at AIT
09:00	09:15	Workshop opening <ul style="list-style-type: none"> Friederich Kupzog (AIT) Head of Competence Unit Power and Renewable Gas Systems Roland Bründlinger, Mihai Calin (AIT) Austrian SIRFN National Experts Ron Brandl (Fraunhofer IEE) SIRFN Workgroup Manager
09:15	09:30	Introduction to SIRFN, Global Network, accomplishments and plans (Ron Brandl)
09:30	10:00	Challenges of the inertial response validation & testing for the Grid-forming power converters (Zoran Miletic, AIT)
10:00	10:30	Technical presentation 2 (TBD)
10:30	11:00	Overview of the European and national standardization activities related to grid-forming capabilities of generating units <ul style="list-style-type: none"> RfG 2.0 European Network Code on Requirements for Generators (Roland) EN 50549-20 on Testing of Grid-Forming capabilities (Roland) VDE FNN Hinweis "Netzbildende Eigenschaften..." (Ron)
11:00	11:15	Coffee break
11:15	13:00	Lab Demo of Grid-forming inverter features at the AIT PE Micro Grid Lab (Anja Banjac, Zoran Miletic, AIT)

13:00 | Optional Lunch @ AIT Restaurant