SHORT COURSE 4:
Challenges and Solutions in Power Plant Operations

Length: 1 day
Location: Reykjavik University
Dates: October 24, 2021
Convenors: Eng. Yngvi Guðmundsson Chief Eng. HS Orka, Eng. Geir Thórólfsson, Eng. Naoko Yamaguchi, Fuji Electric

Scope of the short course

The short course will introduce the participant to the challenges of operating geothermal power plants. What makes it different to conventional thermal power plants. Geothermal power plants utilize the geothermal fluid directly from the source. Output from wells often fluctuates both long term and short term. The nature of the fluid can be corrosive and have scaling issues. This creates challenges to plant operators to ensure safe and reliable operation both sort term and long term. Measures taken during plant design stage to reduce the harmful effects of the fluid on the plant are discussed as well as how plant adaptability and continuous improvements modification can improve plant output and reliability.

Course outline
October 24

Introduction	08:00-09:00	Registration and coffee
	09:00-9:30	Aim of SC, outline, introduction and Practical matters – YG
	09:30-10:30	Geothermal plant operational challenges
	10:00-10:30	*Coffee/tea break*
Seam field and piping systems	10:30-12:30	Steam field piping system operational challenges - GT
	12:30-13:30	*Lunch*
Power plant Eq.	13:30-15:30	Plant equipment, flexibility and design considerations - NY
	14:30-15:30	Case examples – NY/YG/GET
	15:30-16:00	*Coffee/Tea break*
	16:00-17:30	Continuous plant improvement and adaptability – YG

Both on-site and virtual participation possible