

Master thesis: Automatic frequency response measurement

Solvina is searching for a master thesis student to perform the above stated thesis.

If you comply with the following, you might be the one we are looking for:

- MSc student within electric power, automation, signals and system or similar
- Looking for an environment with highly competent colleagues
- · High performing and challenge driven, open to innovative ideas
- Meriting competencies:
 - Electric power technology
 - Signal processing
 - o Programming (LabView)

Thesis Description

Design and implementation of an automatic system for frequency response measurement on a power generator excitation system

A widely used method for obtaining the frequency response (i.e. Bode plot) of a linear system is to apply random noise or other type of wide-band signal and compare the received output to the applied signal by Fourier analysis. This thesis work is about designing a system for frequency response analysis of the excitation system of a power generator, for which many practical limitations exist. The properties of the excitation system and the generator, as well as the impact on the power system, must be taken into consideration so that the analysis can be performed reliably and safely on any generator while it is connected to the power grid.

Solvina's offering:

An exciting thesis work with a clear final result performed in a highly competent environment with expert areas such as electric power engineering, process and control engineering and engineering management. The thesis will be performed at our headquarters in Gothenburg.

Your application

If you have any questions about the thesis, please contact Bengt Johansson at bengt.johansson@solvina.com or 031-709 63 66. Send your application to work@solvina.com and write "ex2018-003 - Frequency response measurement" as subject. Selection takes place continuously.