Master Thesis:

Investigation of very heavily soiled PV module



The Helmholtz Institute Erlangen-Nuremberg for Renewable Energies (HI ERN), part of the Forschungszentrum Jülich, researches and develops material- and process-based solutions for climateneutral, sustainable and cost-effective utilization of renewable energies.

Aim: To investigate how different types of solar module behave under very heavily soiling

Project Steps:

- 1. Research about different possibilities of heavily soiling (e.g. bird drops, layers of dust, ect.)
- 2. Performing tests in the lab at the soiling test stand
- 3. Prepare a small PV string setup to measure the influence within a string
- 3. Analyze the data in terms of performance at the single module and within the string

Qualifications:

- Master student in energy technology, renewable energies, engineering
- Profound technical knowledge
- Experience in a programming language (Python) and data analysis is beneficial

Note: Students of MWT, NT, Energy Technology, Advanced Materials & Processes (MAP) can be directly examined. Students from other disciplines require an examinor from their department.



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