

# Renewable Energy Research at GE Global Research



## **Masterstudent / -studentin** zum Thema **„Energy Harvesting Technologies for low power (< 1kW)“**

Bei diesem Projekt geht es darum, Pipelines, die über >100 km Flüssigkeiten und Gase transportieren, vor Korrosion zu schützen. Eine Technologie dafür ist der kathodische Korrosionsschutz, für den elektrische Energie benötigt wird. Aufgrund einer fehlenden Energieversorgung entlang der Pipeline sollen alternative Energiegeneratoren untersucht, entwickelt und auch bewertet werden (PV, Wind, Peltier, Vibration, etc.), hinsichtlich Umgebungsbedingungen, Wartungsbedarf, Kosten, Einbauaufwand, etc.

Idealerweise bringen Sie dazu mit:

- Studium z.B. im Bereich Elektrotechnik / Electrical Engineering / Systems Engineering
- Gute Kenntnisse im Elektrophysik
- Breites Wissen über Energiewandlermethoden
- Eigenständige Arbeitsweise und „Packen-wir’s-an“-Mentalität
- Gute Englischkenntnisse in Wort und Schrift

Ihre Bewerbung (kurzes Anschreiben und Lebenslauf) schicken Sie bitte per Email an Prof. Dr.-Ing. Oliver Mayer unter [oliver.mayer@research.ge.com](mailto:oliver.mayer@research.ge.com).

### **About GE:**

GE Global Research – Europe employs approximately 200 engineers and scientists from more than 30 different countries. Our scientists and technologists come from a variety of disciplines and backgrounds, including chemistry, physics, mathematics, engineering, sciences and materials research.

Located in the heart of southern Germany, Global Research – Europe sits on the Garching campus of the Technical University of Munich. This creates a unique blend for our scientists to be in a university setting, while performing research in a world-class industrial lab that is dedicated to bringing new technologies to market. The facility also operates closely with technology teams at GE businesses across the globe, ensuring effective transition of breakthrough innovations from the lab into advanced products and services. Within the R&D community, the center maintains close partnerships with numerous universities, research institutions and technology companies in Germany and abroad.

Current research at the facility focuses on automated manufacturing of composite parts, waste heat recovery for industrial and power applications, grid integration of renewable energies, molecular imaging for cancer diagnostics, high power electronics for stationary and mobile applications and advanced compressor technologies.