

2022年10月吉日

## 「複合材風車ブレードの長期耐久性」に関する講演会のご案内

拝啓 秋晴の候、益々ご清祥のこととお慶び申し上げます。

さて、デンマーク工科大学の Jespersen 博士をお招きし、「複合材風車ブレードの長期耐久性」に関して、最先端研究についてご紹介いただきます。気兼ねなくご参加ください。

敬具

－記－

講 師：Dr. Kristine Munk Jespersen (Technical University of Denmark)

題 目：Fatigue of composite materials, Finite element modelling of composite materials

日 時：2022年11月7日(月) 14:45～16:15

場 所：西早稲田キャンパス 54号館 404教室

参加費：無料

講演概要

To follow the demand for renewable energy and improve the cost of energy, wind turbine blades has increased massively in size over the years, and will continue to do so in the future. The Department of Wind Energy at the Technical University of Denmark (DTU) consider practically all aspects of a wind turbine, and the composites analysis and mechanics section where the presenter is situated work with a large range of tests and analysis related to the composite materials used in wind turbine blades. The current presentation will focus on three selected studies by the presenter related to the composite materials used for wind turbine blades. The first study considers fatigue damage mechanisms in the load carrying parts of a wind turbine blades where x-ray computed tomography was used to understand the damage mechanisms in depth. The second study considers evaluation of interface properties using the uneven bending moment double cantilever beam test developed at DTU including the effect of thermal residual stresses. The third and final study presented will consider impact testing and modelling of rain droplets the coating on the leading edge of a wind turbine, which is a big current issue for larger wind turbines.

問い合わせ先

参加ご希望の方は、事前に細井 ([hosoi@waseda.jp](mailto:hosoi@waseda.jp)) までご連絡ください。

以上