

Multibody simulations in Wind Energy

Introduction

Simulation is currently an essential tool during the product development phase, as it eases the assessment of different design approaches with relatively low cost compared to prototyping. However, it comes with its challenges in building up a physically and mathematically correct model which can replicate reality with the required fidelity. Multibody systems simulation has been the state-of-the-art and state-of-the-industry in the last 15 years in the wind turbines industry, where it has been used as conceptual and detailed design tool. Here, we will have a short yet broad introduction to the applications of multibody simulations of wind turbines.

Agenda:

- Introduction to simulation of wind turbines: different kinds, usage of each kind, etc.
- Introduction to multibody simulations
- Multibody simulations in wind energy
- Open discussion

Biography:

- Omar Kamel graduated from Ain Shams University, Mechatronics program in 2014.
- He completed his M.Sc. in the field of computational structural mechanics from the University of Stuttgart.
- He is currently working as research engineer at Mesh Engineering GmbH and pursuing his PhD at Chair of Wind Energy at Technical University of Munich.



Date:

Sunday, 13 December, 2020, 3 – 5 pm.

Venue:

Virtual Reality Lab
Toshka Building, Fourth Floor
Faculty of Engineering, Ain Shams University.