

CCMX Winter School 2019

Tribology

Nicholas Spencer ETHZ

Abstract

This course covers the fundamentals of friction, lubrication and wear. It starts with the issue of contact, and how real contact area determines friction and is in turn determined by load. It goes on to deal with lubrication, and different forms this can take, as a function of geometry, load, speed, and viscosity of lubricant. Finally, the topic is wear; quantification of wear will be discussed, along with the concepts of mild and severe wear, and the principal wear classifications.

Contact details

ETHZ – Professorship Surface Science and Technology Vladimir-Prelog-Weg 1-5/10, HCI H 523, 8093 Zürich

E-mail: <u>nicholas.spencer@mat.ethz.ch</u>