# Online training courses in small groups

### Applied rheology – theory and practical application



You are a **newcomer** and would like to acquire a basic understanding of rheology?

You are a **re-entrant** and would like to refresh and expand existing knowledge?

You are a **perfectionist** and want to exploit the maximum measuring possibilities and optimize your measuring methods?

This application-oriented basic training will benefit users in research and development, in the production process and in quality control.

#### Your benefits

- Secure virtual training environment
- No travel necessary participate comfortably from anywhere
- Two training modules to choose from (3 hours each)
- Practical part with step-by-step instructions
- Time available to ask live questions
- Comprehensive training materials
- Certification of participation



## thermo scientific



#### Online training courses applied rheology

Detailed theoretical and practical knowledge will be imparted by our rheology experts, enabling you to conduct reliable measurements and to interpret the measuring data. The relevance of rheology for research and development, production and quality control will be discussed and demonstrated by presenting various application examples. Questions will be answered directly in the chat or live during the group discussion following the presentation. The training comprises two, three-hour modules, which can be booked individually or in combination. Detailed training materials will be provided. The number of participants is limited (not more than 20). Your participation in the seminar will be certified.



#### Module 1: Basics of rheology and rotational testing

In this module rheological terms and principles are explained and different measuring systems are presented. In the practical part, step-by-step sample handling, measurements and evaluations are demonstrated.

- Introduction to rheology and rotational testing Basic principles, definitions and explanations
- Rheological behavior
  - Flow behavior, yield stress and thixotropy
- Rheological measuring instruments Overview of various measuring principles (standards compliant), measuring geometries and accessories
- Practical measurements with representative samples
  Short introduction to the Thermo Scientific<sup>™</sup> HAAKE<sup>™</sup> RheoWin<sup>™</sup> Software, creation of typical measurement and evaluation routines for flow and viscosity curves as well as for yield stress and thixotropy determination



#### Module 2: Viscoelasticity, creep and creep recovery testing, measurements in oscillation

This module focuses on how viscoelastic properties can be measured, evaluated and interpreted. In the practical part, typical measurements and evaluations are shown.

- Viscoelasticity
- Basic principles, definitions and explanations
- Creep and creep recovery testing
- Measurements in oscillation
- Amplitude, frequency, temperature and time sweeps
- Practical measurements with representative samples
  How to create typical measurement and evaluation routines for creep and creep recovery tests as well as amplitude and frequency sweeps



#### Dates, registration and prices

22 March 2022 and 11 October 2022	Module 1 (language English, 9 am – 12 pm CET)
23 March 2022 and 12 October 2022	Module 2 (language English, 9 am – 12 pm CET)

List price 2022 per participant	Catalogue number	Price
One three-hours module of your choice	777-0205	460 € plus VAT
Special price for modules 1 and 2	777-0206	660 € plus VAT

We reserve the right to cancel the online training up to 14 days before the respective date.

## Further information and registration: thermofisher.com/LearnWithUs

E-mail address for enquiries: seminar.mc.de@thermofisher.com



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