

Rheology: The do's and don'ts

6 - 10 October 2025

Wageningen Campus, the Netherlands

Picture credit: Akanshy Majhi, PCC

BACKGROUND

Rheology is the study of flow and deformation of materials. Rheology is important in foods like mayonnaise and artificial meat, in processing but also for their sensory perception. It is also important for the design of products such as toothpaste gels, or concrete walls, or glue on a post-it note, or protein surfactants in an emulsion. Rheology is therefore a widely used tool relevant for both applied and fundamental research. The versatility of the subject makes that a broad understanding of the underlying concepts is essential to perform experiments and interpret data. This course aims to offer such a broad view.

PARTICIPANTS

The course is useful for persons who need to get involved in or improve on their rheology experiments. An ideal knowledge background consists of the WUR courses FPH-10306, MAT-14803/14903, FPE-20806, PCC-20806, PCC-12303 and/or the equivalent basics in linear algebra, multivariable calculus, differential equations, physics of polymers/fluids and states of matter. A knowledge of Matlab and/or Python is helpful to do some of the (optional) exercises in data analysis.

PROGRAMME TOPICS

- Essential concepts in rheology and materials science
- Selecting rheology methods
- Common sources of errors in experiments
- Introduction rheology theory; Maxwell model and variations
- Combining rheology with other methods
- Tribology

The course consists of lectures and tutorials. The final day of the course is organised as a mini-symposium in which course participants present their work.

COURSE LECTURERS

- Dr **Joshua Dijkman**, Soft Matter Group, van der Waals-Zeeman Institute and Institute of Physics, University of Amsterdam
- Dr **Leonard Sagis**, Physics and physical chemistry of foods, Wageningen University & Research, the Netherlands

COURSE FEES

	Early Bird Fee**	Regular fee**
WUR PhD candidates* / PhD candidates & Postdocs of the J.M. Burgerscentrum for Fluid Mechanics	€ 275	€ 325
All other PhD candidates / VLAG postdocs and staff	€ 500	€ 550
Postdocs and other academic staff / Non-profit	€ 725	€ 775
Participants from the private sector	€ 1600	€ 1650

*Affiliated with one of the Wageningen Graduate Schools, with an approved TSP

**Early bird registration deadline is 30 June 2025.

For more information and registration



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<https://www.vlaggraduateschool.nl/en/courses/course/rheo25.htm>