



Basics of Rheology

An online short course in rheology and rheometry for beginners

Presented by the Australian Society of Rheology

Rheology is the study of the flow and deformation of matter. Some materials are Newtonian and their simple behaviour has constant viscosity as a function of time and rate, whereas many materials demonstrate much more complicated behaviour. Whether you're interested in paints, minerals tailings, wastewater sludges, polymer melts or a plethora of other industrially relevant materials, understanding and measuring their rheological behaviour is crucial for process optimisation and product formulation.

This short course will provide an overview of the basic concepts in rheology include definitions and discussion of concepts such as pseudoplasticity, dilatancy, viscoelasticity, and thixotropy. The content will also include an overview of simple models used to describe rheological behaviour and different methods for measuring rheological responses. This course is designed for engineering and science students and industrial practitioners who are new to the field of rheology. By the end of the course, attendees will have an understanding of rheological concepts, and an appreciation of how to measure and describe rheological responses.

When: Tuesday 8 December, 11.00 am to 2:45 pm

	Topic
11.00 – 12:00	Introduction <ul style="list-style-type: none">- Why Rheology Matters- Rheological Concepts and Definitions
12:00 – 12:30	Break / Online Discussion
12:30 – 1:30	Non-Newtonian Fluids, Viscoelasticity and Viscoplasticity
1:30 – 1:45	Break / Online Discussion
1:45 – 2:45	Rheometry and Rheological Responses

Where: The course will be held via Zoom, with login details provided upon registration.

To register, go to Eventbrite. www.eventbrite.com/e/basics-of-rheology-tickets-128699711301

Cost: \$80 for students, \$160 for non-students. Includes one-years free membership to the ASR (worth \$22/\$44).

Attendees will receive a Certificate of Attendance.

This course can be used to meet Continuing Professional Development requirements.

Contact Dr Anthony Stickland (stad@unimelb.edu.au) for more information.

Please note that there is also a free ASR Online Seminar from 9 am to 10.30 am on Tuesday 8 December by Prof Ronald Larson (Department of Chemical Engineering, University of Michigan, Ann Arbor) titled 'Industrial Strength Rheology: Multi-Scale Modelling of Polymers, Colloids, and Surfactant Solutions'. More details at www.rheology.org.au. To register, go to www.eventbrite.com.au/e/australian-society-of-rheology-seminar-8-december-2020-registration-128574346331