



Okinawa Institute of Science and Technology  
Graduate University

## Minisymposium: Yielding and Flow of Soft Matter Systems

**Day 1:** 28<sup>th</sup> February 2023 (location: OIST Center Building Room C209)

9:10-9:25 Opening remarks by Prof. Amy Q. Shen

9:25-9:40 Overview of program and introduction of speakers by Simon Haward

**Session 1** (chair: Simon Haward, OIST)

9:40-10:40 Gareth McKinley, MIT, USA

Title: **“Models, Protocols and Nomenclature for Distinguishing the Responses of Thixotropic Elastoviscoelastoplastic (TEVP) Fluids”**

10:40-11:00 Coffee break

11:00-12:00 Tsutomu Takahashi, Nagaoka University of Technology, Japan

Title: **“Microscopic Rheological Characterization of Concentrated Dispersion Fluids using Nano-Indentation Tests with a Spherical Indenter”**

12:00-14:00 Lunch, group photo, and campus tour

**Session 2** (chair: Amy Shen, OIST)

14:00-14:30 Simon Haward, OIST, Japan

Title: **“Geometric Effects on the Dynamics of Viscoelastic Porous Media Flows”**

14:30-15:00 San To Chan, OIST, Japan

Title: **“Edge Fracture and the Tanner Number”**

15:00-15:20 Coffee break

15:20-16:20 Thibaut Divoux, ENS Lyon, France

Title: **“Continuum Modeling of Shear Startup in Soft Glassy Materials”**

16:20-17:20 (*Zoom, Kanpur time 12:50-13:50*) Yogesh Joshi, IIT Kanpur, India

Title: **“Are Thixotropic Yield Stress Fluids Necessarily Plastic?”**

18:30-20:30 Dinner at **Local Restaurant “Umusannoniwa” in Onna Village**

**Day 2:** 1<sup>st</sup> March 2023 (location: Seaside House)

**Session 1** (chair: John Tsamopoulos)

9:00-10:00 Emanuela del Gado, Georgetown University, USA

Title: **“Yielding, Flow, and Memory of Shear in Soft Jammed Materials”**

10:00-10:30 Stylianos Varchanis, OIST, Japan

Title: **“Modeling and Simulations of Thixotropic Elastoviscoplastic Fluids”**

10:30-10:50 Coffee break

10:50-11:20 Mohamed Abdelgawad, OIST, Japan

Title: **“Tuning the Extensional Behavior of Elastoviscoplastic Fluids”**

11:20-12:20 Yilong Han, HKUST, Hong Kong

Title: **“Colloidal Polycrystalline Grain Growths and Solid-Solid Transition Under Shear”**

12:20-13:30 Lunch

13:30-18:30 Free time/excursion by bus to Churaumi Aquarium (<https://churaumi.okinawa/en/>) and Ocean Expo Park (<https://oki-park.jp/kaiyohaku/en/>).

Note: aquarium entrance fee is 2180 JPYen (approx. \$16.50US)

19:00-21:00 Dinner at **Chura Hall, Seaside House**

**Day 3:** 2<sup>nd</sup> March 2023 (location: Seaside House)

**Session 1** (chair: Emanuela del Gado)

9:00-10:00 (*Pre-recorded + ZOOM, NY time 19:00-20:00*) Sarah Hormozi, Cornell, USA  
Title: **“The Fluid Mechanics of Bacterial Swimming in Elastoviscoplastic Fluids”**

10:00-10:20 Coffee break

10:20-11:20 Simon Rogers, UIUC, USA  
Title: **“What We Learn About Yielding from Recovery Rheology”**

11:20-12:20 Yoko Yamanishi, Kyushu University, Japan  
Title: **“Emergent Functions of Electrically-induced Bubble”**

12:20-13:40 Lunch

**Session 2** (chair: Stylianos Varchanis)

13:40-14:40 John Tsamopoulos, University of Patras, Greece  
Title: **“Buoyancy Driven Rise of Bubbles in Elasto-Visco-Plastic Fluids”**

14:40-15:00 Coffee break

15:00-16:00 Marco Rosti, OIST, Japan  
Title: **“Turbulence in Elastoviscoplastic Fluids”**

16:00-17:00 (*ZOOM, UK time 07:00-08:00*) Suzanne Fielding, Durham University, UK  
Title: **“Shear Localisation during Yielding of Amorphous Materials”**

17:00-18:30 Free time

19:00-21:00 Dinner at **Local Restaurant “Chinuman” in Onna Village**