

15-19 May 2023



8th Pacific Rim Conference on Rheology *Biomaterials and Biological Systems*

University of British Columbia, Point Grey Campus, Mathematics & Geography Buildings 1984 Mathematics Rd / 1984 West Mall Vancouver, BC V6T 1Z2 CANADA

Tuesday 16 May

10:30

Biomaterials and Biological Systems

Session | **Location:** Geography Building, Room 100, 1984 West Mall Vancouver, BC V6T 1Z2 | **Convener:** Yaman Boluk

10:30-10:50

Poroelastic Modelling Reveals The Cooperation Between Two Mechanisms For Albuminuria

Speaker

Zelai Xu

10:50-11:10

Hydrodynamics and rheology of fluctuating, semiflexible, inextensible, and slender filaments in Stokes flow

Speaker

Prof. Aleksandar Donev

11:10-11:30

TRIBOLOGY AND RHEOLOGY OF HYALURONIC ACID BASED CELLULOSE NANOCRYSTAL SUSPENSIONS

Speaker

Akshai Bose

11:30-11:50

Self-organized cable formation and force transmission in an active vertex model for biological tissues

Speaker

Mingfeng Qiu

11:50-12:10 No talk scheduled

12:10 14:00

Biomaterials and Biological Systems

Session | **Location:** Mathematics Building, Room 104, 1984 Mathematics Rd Vancouver, BC V6T 1Z2 | **Convener:** Dana Grecov

14:00-14:40

KEYNOTE: Bioprinting of collagen hydrogels in supported gel environment

Speaker

Prof. Yaman Boluk

14:40-15:00

EFECTS OF GELATION CONCENTRATION ON CYCLIC DEFORMATION BEHAVIOR OF POLYSACCHARIDE HYDROGELS

Speaker

Jun-ichi Horinaka

15:00-15:20

TENDON FASCICLE-INSPIRED COLLAGEN MULTIFILAMENT BUNDLE PRODUCED BY MULTI-PIN CONTACT DRAWING OF AN AQUEOUS COLLAGEN-POLYETHYLENE OXIDE **SOLUTION**

Speaker

Dr Hessameddin Yaghoobi

15:20-15:40

EFFECT OF HOMOGENIZATION OF RAW MILK ON THE PHYSICAL PROPERTIES OF

Speaker

Prof. Isamu Kaneda

15:40

16:10

Biomaterials and Biological Systems

Session | Location: Mathematics Building, Room 104, 1984 Mathematics Rd Vancouver, BC V6T 1Z2 | Convener: Nicky Eshtiaghi

16:10-16:30 Reversal motion of E-coli bacteria in nematic liquid crystals

Speaker

Dr Martyna Goral

16:30-16:50 DIFFUSION OF LIPID NANOPARTICLES THROUGH AIRWAY MUCUS

Speaker

Mohammad Reza Rokhforouz

16:50-17:10

Oscillatory microfluidic thromboelastograph (micro-TEG) analysis of whole blood coagulation and fibrinolysis

Speaker

Prof. SeHyun SHIN

17:10-17:30

SCALE-DEPENDENT RHEOLOGY OF SYNOVIAL FLUID LUBRICATING **MACROMOLECULES**

Speaker

Leonardo Martín Alarcón

17:30-17:50

RHEOLOGY OF CORN STOVER SLURRIES UNDERGOING DILUTE-ACID **PRETREATMENT**

Speaker

Prof. Joseph Samaniuk

17:50