

## Oscillations and Dynamic Instabilities in Chemical Systems

Gordon Research Conference

July 17 - 22, 2022

Stonehill College

Display your poster at the board # and session indicated below. If your name does not appear in the list and you intend to bring a poster, please contact the conference chair to see if there is space for your poster to be accommodated.

Displaying 53 of 53 posters

#	Session	Name	Affiliation	Poster Title
1	Monday/Tuesday	Yotsumoto, Mai	Hiroshima University	Specific response of phospholipid membranes depending on the structure of odor molecules
2	Monday/Tuesday	Balog, Edina	University of Szeged	The impact of reaction rate on the formation of flow-driven confined precipitate patterns
3	Monday/Tuesday	Bordoh, Lawrence	Saint Louis University	Timescale Identification of Coupling Dynamics for Network Inference
4	Monday/Tuesday	Choudhury, Roy	University of Central Florida	Nonlinear Evolution and Persistence of Cellular Patterns in Self-Sustained Two-Dimensional Detonations
5	Monday/Tuesday	Fujita, Risa	Hiroshima University	Self-propelled object that feels the amphiphilic molecular layer and changes that interaction.
6	Monday/Tuesday	Gillet, Jean	Université Libre de Bruxelles (ULB)	Emergence of homochirality in reaction-diffusion systems: effect of precursor concentration and enantiomer asymmetric diffusion rates
7	Monday/Tuesday	Groce, Brecklyn	Louisiana State University	A Survey of Front Speeds in Frontal Polymerization
8	Monday/Tuesday	Knoll, Pamela	Université Libre de Bruxelles	The Effect of Calcium and Magnesium Ions on CO <sub>2</sub> Convective Dissolution and Carbonate Precipitation
9	Monday/Tuesday	Kumar, Pawan	University of Szeged	Programmable self-propulsion to dynamic assembly of gel beads
10	Monday/Tuesday	Leathard, Anna	The University of Sheffield	Investigating the Nonlinear Kinetics of Enzymatic Clock reactions in Vesicles.
11	Monday/Tuesday	Horvath, Dezso	University of Szeged	Spatiotemporal Dynamics of Autocatalytic Reversible Reaction Network
12	Monday/Tuesday	Zahorán, Réka	University of Szeged	Flow-driven fabrication of calcium phosphate/alginate composites

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13	Monday/Tuesday	Novakovic, Katarina	Newcastle University	Towards biocompatible pulsatile materials
14	Monday/Tuesday	Schreiber, Igor	University of Chemistry and Technology, Prague	Reaction network analysis of metabolic and circadian models of cyanobacteria in a photobioreactor
15	Monday/Tuesday	Stergiou, Georgios	Helmholtz-Zentrum Dresden-Rossendorf e.V.	Coacervation-induced viscous fingering by surfactant-polymer interaction in a radial displacement
16	Monday/Tuesday	takekawa, shoji	Keio University	Marangoni convection generated during evaporation binary solution spread on a solid substrate and its relation to cosmetic technology
17	Monday/Tuesday	Tetteh, John	Saint Louis University	Migration current coupling induced anti-phase synchronization of current oscillations in a branched microfluidic cell
18	Monday/Tuesday	Escala, Darío Martín	Université Libre de Bruxelles	Effect of a radial geometry on the dynamics of $A + B \rightarrow C$ chemical fronts
19	Monday/Tuesday	Vasquez, Desiderio	Pontificia Universidad Católica del Perú	Increase of speed for chemical fronts propagating against a Poiseuille flow
20	Monday/Tuesday	Wang, Jichang	University of Windsor	Drastic Effects of a Pt Wire on the Redox Behavior of the Belousov-Zhabotinsky Reaction
21	Monday/Tuesday	Unruh, Angus	The Pennsylvania State University	Programming Motion of Platinum Microparticles: From Linear to Orbital
22	Monday/Tuesday	Nakanishi, Shinobu	Shiseido	Effects of trans-2-nonenal and olfactory masking odorants on human keratinocytes
23	Monday/Tuesday	Kruzhilin, Vasily	Stanford University	Spatiotemporal dynamics of cortical voltage waves in awake and anesthetized mice
24	Monday/Tuesday	Barberi, Luca	University of Geneva	Self-organized localized states of the cell cortex
25	Monday/Tuesday	Peacock-Lopez, Enrique	Williams College	Dynamic Properties of a Self-Replicating Peptide Network with Inhibition
26	Monday/Tuesday	Szalai, Istvan	Eötvös Lorand University	Pattern formation in multi-channel gel reactors
27	Monday/Tuesday	Nakata, Satoshi	Hiroshima University	Self-organized motion under nonequilibrium

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1	Wednesday/Thursday	Aizawa, Amiko	Keio University	Generation of concentric precipitation patterns and their segmentalization during continuous permeation of solution of dye into porous media along with the solvent evaporation
2	Wednesday/Thursday	Tyler, Shannyn	West Virginia University	Novel modes of synchronization in star networks of coupled chemical oscillators
3	Wednesday/Thursday	Bigaj, Adam	Université Libre de Bruxelles (ULB)	Flow competition to make a bimolecular reaction oscillate
4	Wednesday/Thursday	ISHIKAWA, Hiroaki	Chiba University	Pairing-induced motion of the camphor disk and metal washer driven by the surface tension gradient
5	Wednesday/Thursday	Dolnik, Milos	Brandeis University	Turing patterns on growing domains and with obstructions
6	Wednesday/Thursday	Rubanov, Moshe	Johns Hopkins University	Constructing a Tunable RNA Gradient Generator using Photopatterned Hydrogels for Spatial Computation
7	Wednesday/Thursday	Kuze, Masakazu	Meiji University	Novel Self-propelled Droplets of Briggs-Rauscher Reaction
9	Wednesday/Thursday	Luongo, Ludovica	University of Sheffield	Engineering of enzyme-particle biosensors for ultrasensitivity and reusability
10	Wednesday/Thursday	Mader, Ariane	AMOLF	Multi-layered Barium Carbonate Structures Induced by the Small Organic Dye Acid Orange 7
11	Wednesday/Thursday	Mikami, Taishi	Tohoku University	Emergence of Adaptive Behaviors Through Entanglement in Tubificinae Blob
12	Wednesday/Thursday	Muzika, František	ICHF PAN	Influence of electric field on chemical computing BZ system of ferroin loaded cation resins
13	Wednesday/Thursday	Negrojevic, Luka	Université Libre de Bruxelles	Influence of radial advection on properties of autocatalytic fronts
14	Wednesday/Thursday	Ocampo Espindola, Jorge Luis	Saint Louis University	Diversity Promotes Synchrony: Random Heterogeneity for Enhanced Coherence in Networks of Chemical Oscillators
15	Wednesday/Thursday	Olsen, Robert	Stockton University	Sensitivity Analysis and Mechanism Reduction
16	Wednesday/Thursday	Papp, Paszkál	University of Szeged	Spatial precipitate separation enhanced by complex formation

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17	Wednesday/Thursday	Rana, Maheen	The University of Sheffield	Spatiotemporal control of localized base catalysis in micro( $\mu$ )-reactors using a double emulsion platform
18	Wednesday/Thursday	Silva-Dias, Leonardo	Federal University of Sao Carlos	Morphogenesis in Synthetic Chemical Cells
19	Wednesday/Thursday	Sumino, Yutaka	Tokyo University of Science	Control of gelation induced filamentous pattern by structured cell
20	Wednesday/Thursday	Tompkins, Nathan	Wabash College	Pattern Formation in Microfluidics — Utilizing Geometry and the Electric Potential
21	Wednesday/Thursday	van Campenhout, Christiaan	AMOLF	Uniform layer formation in mechanically active materials
22	Wednesday/Thursday	Yengi, Desmond	Alvernia University	Complex Oscillations in the Belousov-Zhabotinsky Batch Reaction with Methylmalonic Acid and Manganese(II)
23	Wednesday/Thursday	Manz, Niklas	The College of Wooster	Evolution towards the now accepted name Belousov-Zhabotinsky reaction
24	Wednesday/Thursday	Matsuo, Muneyuki	Hiroshima University	Self-Oscillating Droplet Swimmer
25	Wednesday/Thursday	Schuszter, Gabor	University of Szeged	Polymorph Selection of Zinc Zeolitic Imidazolate Frameworks via Kinetic and Thermodynamic Control
26	Wednesday/Thursday	Itatani, Masaki	Budapest University of Technology and Economics	Formation of Periodic Precipitation Pattern in pH-induced Metal Nanoparticles Aggregation System
27	Wednesday/Thursday	Miller, Pearson	Flatiron Institute	Mass-conserved pattern formation on curved domains