

# 第 242 回

## 物質科学セミナー

総合科学プロジェクト「要素-システム研究」セミナーとの共催

題名 : Experimental study of decanol droplets life-like behaviour

講師 : Jitka Čejková 氏

(Chemical Robotics Laboratory, University of Chemistry and Technology Prague, Prague, Czech Republic)

日時 : 2017 年 7 月 11 日 (火) 16:20 – 17:50

場所 : 総合科学部 J303

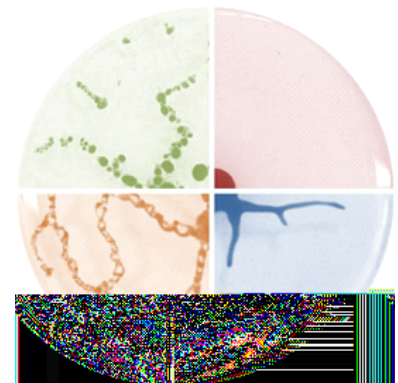
### 講演要旨 :

Our focus is on the experimental study of decanol droplets life-like behaviour. We have observed that decanol droplets exhibit a variety of life-like behaviours. We have described the observed behaviours in detail in our recent work (1).

We have also observed that decanol droplets exhibit a variety of life-like behaviours. We have described the observed behaviours in detail in our recent work (2). Chemotaxis is a well-known phenomenon in biology. We have observed that decanol droplets exhibit chemotaxis towards a chemical gradient (3). We have also observed that decanol droplets exhibit a variety of life-like behaviours. We have described the observed behaviours in detail in our recent work (4). We have also observed that decanol droplets exhibit a variety of life-like behaviours. We have described the observed behaviours in detail in our recent work (5).

In the present work, we have observed that decanol droplets exhibit a variety of life-like behaviours. We have described the observed behaviours in detail in our recent work (6). We have also observed that decanol droplets exhibit a variety of life-like behaviours. We have described the observed behaviours in detail in our recent work (7). We have also observed that decanol droplets exhibit a variety of life-like behaviours. We have described the observed behaviours in detail in our recent work (8). We have also observed that decanol droplets exhibit a variety of life-like behaviours. We have described the observed behaviours in detail in our recent work (9). We have also observed that decanol droplets exhibit a variety of life-like behaviours. We have described the observed behaviours in detail in our recent work (10).

1. Čejková J, Banno T, Štěpánek F, Hanczyc MM. Droplets as Liquid Robots. *Artificial Life Journal*. 2017. (accepted)
2. Čejková J, Novák M, Štěpánek F, Hanczyc MM. Dynamics of Chemotactic Droplets in Salt Concentration Gradients. *Langmuir*. 2014; 30(40):11937-44.
3. Čejková J, Holler S, Quyen NT, Kerrigan C, Štěpánek F, Hanczyc MM. Chemotaxis and chemokinesis of living and non-living objects. In: Adamatzky A, editor. *Advances in Unconventional Computing*, Springer; 2017. p. 245-60.
4. Čejková J, Štěpánek F, Hanczyc MM. Evaporation-induced pattern formation of decanol droplets. *Langmuir*. 2016; 32(19):4800–5.



5 研究科共同セミナーの認定科目です

世話人 : 宗尻修治 (内 6362)