



**KOÇ
UNIVERSITY**



**BOĞAZIÇI
UNIVERSITY**

Tasoglu Lab (T-Lab), affiliated with both Koc and Bogazici University, is now looking for 5 highly motivated, creative and self-initiative students to join us as M.Sc. or (preferably) Ph.D. students for the Spring 2020 semester (Feb. 2020). T-Lab has laboratory spaces in both Koc and Bogazici Universities. Students to be recruited will be either affiliated with Koc or Bogazici University (TBD based on the program requirements and students' preference). Interested students are expected to have strong background or demonstrated interest in either engineering (e.g. robotics, system integration, electronics etc.) or biological sciences (cell/tissue culture, immunochemistry, animal research etc.). Strong background in both is not expected.

Please visit our website to have more information about T-Lab:

<https://tasoglulab.net>. Please watch videos here: <http://tasoglulab.net/videos.html>. Our lab specializes in applying micro and nano-scale technologies to problems at the interface of medicine and engineering. Main research areas are:

- 1. Bottom-up tissue engineering:** Tissues are made up of repeating functional units. Bottom-up tissue engineering aims to assemble mm-scale hydrogels as building blocks to form organized 3D tissue constructs with spatial control over micro-architecture mimicking native tissues (Figure 1).
- 2. Bio-space research:** T-Lab is interested in levitating particles (hydrogel blocks, cells, etc.) to understand biological events at the microgravity settings.
- 3. Self/directed-assembly of building blocks for complex material fabrication:** Self-assembly occurs from molecular to planetary scale. We're interested in both self- and directed- assembly of microparticles to create heterogeneous materials (Figure 2).
- 4. Bio-fluidics / micro-physiological system engineering (both analytical and experimental):** T-Lab is interested in developing organ-on-a-chip models combining tissue engineering, microfluidics, microfabrication and 3D printing.

For further information or to apply, please contact **Asst. Prof. Savas Tasoglu** (savas.tasoglu@gmail.com).

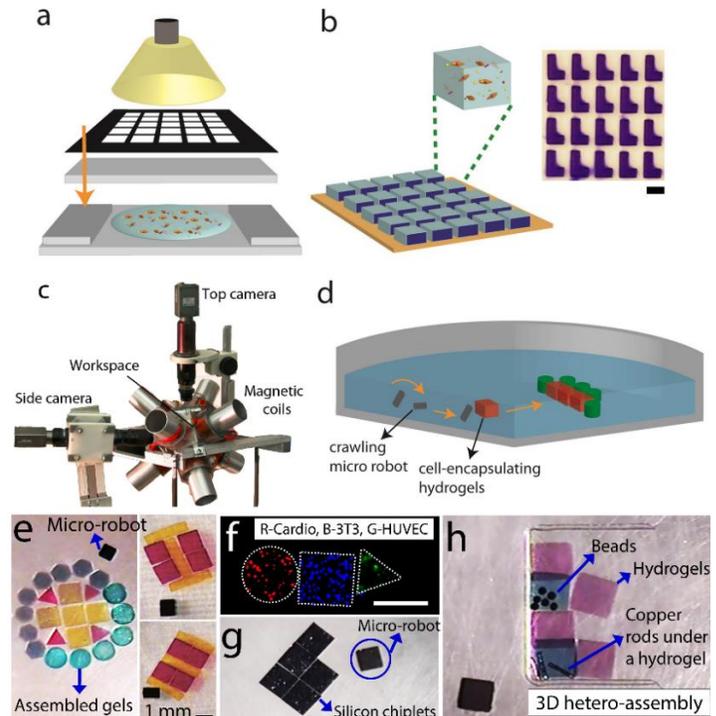


Fig. 1. Untethered micro-robotic coding of three-dimensional material composition, Tasoglu et al. **Nature Communications**, 5, 3124.

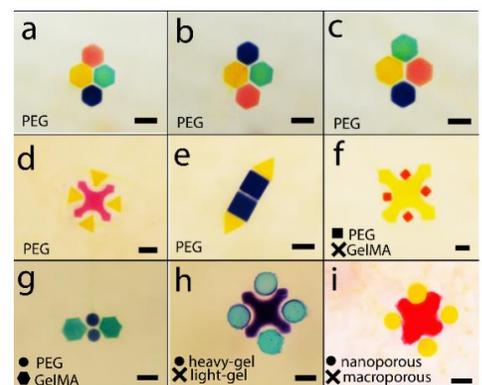


Fig. 2. Guided and magnetic self-assembly of tunable magnetoceptive gels, Tasoglu et al. **Nature Communications**, 5, 4702.