

Institute for Integrated Cell-Material Sciences

物質-細胞統合システム拠点



Overview of *iCeMS*



- Started in 2007 as a WPI institute.
- Joined KUIAS in 2017.
- Focus is interdisciplinary cell biology and materials science



iCeMS research



Missions:

- Develop materials to understand cell functions
- Produce materials to control cell processes
- Create cell-inspired materials.



- 13 PIs, around 85 researchers in total (2017)
- Around 25 % foreign researchers, around 25 % female researchers
- English is the official language

iCeMS

Principal Investigators

Cell Biology



Jun Suzuki



Ryoichiro Kageyama



Peter Carlton



Mineko Kengaku



Kazumitsu Ueda



Michiyuki Matsuda



Mitinori Saitou

Tissue Engineering



Dan Ohtan Wang



Motonari Uesugi



Itaru Hamachi



Kouichi Hasegawa



Ken-ichiro Kamei

Chemical Biology



Shuhei Furukawa



Fuyuhiko Tamanoi



Hiroshi Sugiyama



Daishi Fujita



Hiroshi Imahori



Yasuo Mori



Kaoru Sugimura

Materials Science



Easan Sivaniah



Satoshi Horike



Ryu Abe



Daniel Packwood



Susumu Kitagawa



Hiroshi Kageyama



Hiroshi Kitagawa



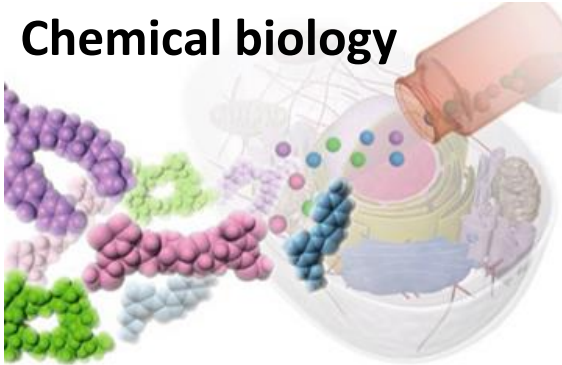
Koichiro Tanaka

Director

Biophysics

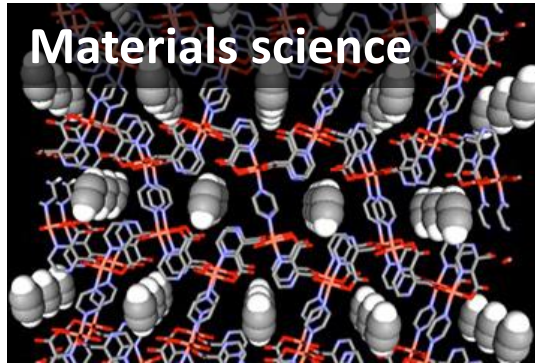
Some iCeMS research topics

Chemical biology



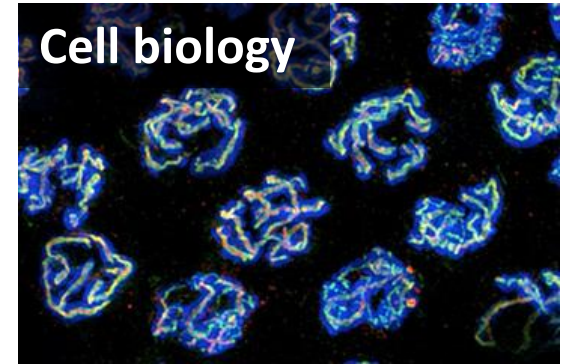
- RNA in neurons
- Synthetic molecules for cell and gene control
- Nanoparticles for cancer therapy
- Protein encapsulation

Materials science



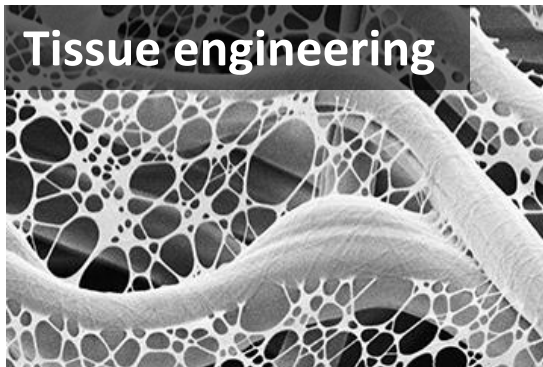
- Porous organic frameworks
- Polymer membranes
- Supramolecular chemistry
- Materials theory and mathematics

Cell biology



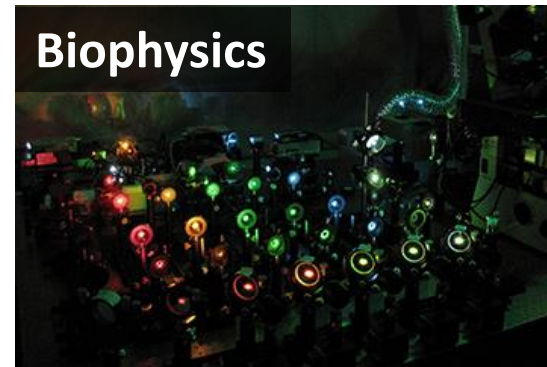
- Neuroscience
- Cell membrane proteins
- Stem cell biology
- Developmental biology

Tissue engineering



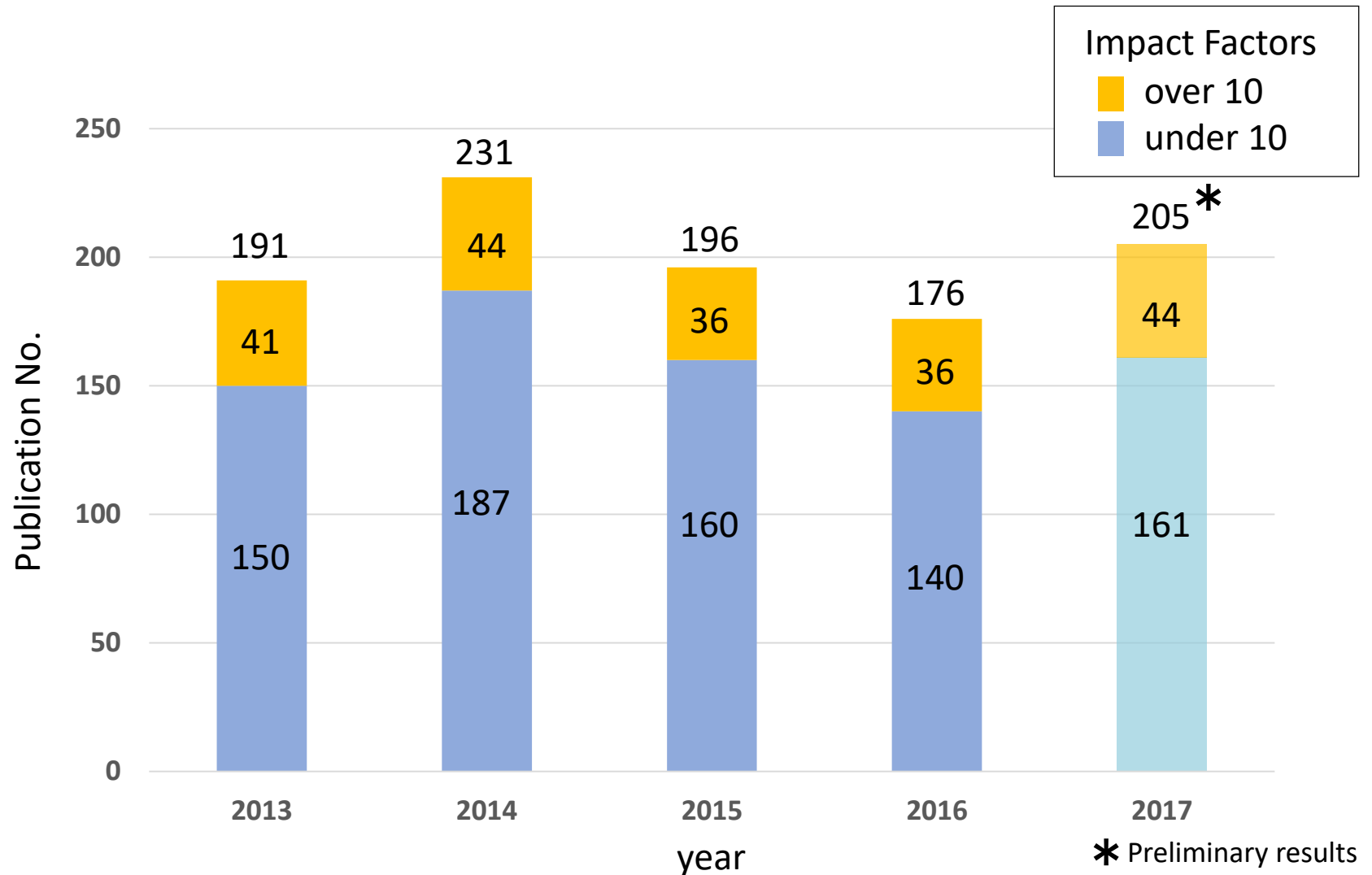
- Body-on-a-chip
- Stem cell engineering

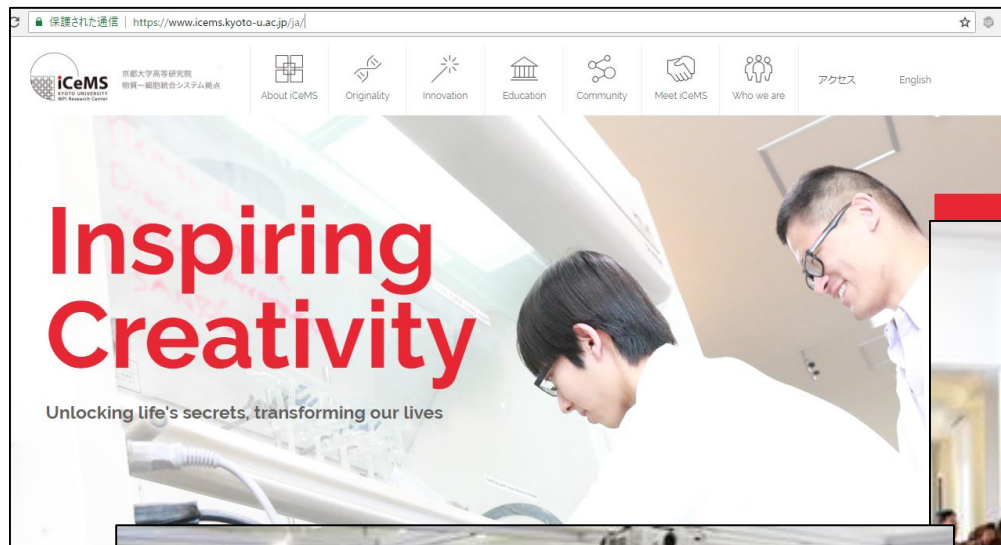
Biophysics



- Laser spectroscopy
- Cell and tissue mechanics

Paper publications (articles, letters, reviews)





How to interact with iCeMS?



- **Feel free to join our seminars and outreach events!**
- **Information is displayed on the iCeMS website.**
<https://www.icems.kyoto-u.ac.jp/ja/>