



Visit to Laboratories in

- ◆ College of Science and Engineering
- ◆ College of Life Sciences
- ◆ College of Sport and Health Science



Tuesday 18th July, 2017

No.	College, Department	Laboratories	Coducted by	Theme	Programme	Venue
1	College of Science and Engineering, Department of Mathematical Sciences	Probability Theory Group	Assistant Professor Masanori KOYAMA	Applications of Probability and Statistics in Science	We will present applications of probability and statistics in control theory, inference theory, machine learning. Etc.	West Wing
2	College of Science and Engineering, Department of Physical Sciences	Laboratory of Spectroscopy and Physics of Spin in Materials	Professor Shin IMADA, Assistant Professor Toshiharu KADONO	Experimental Materials Science by Means of Synchrotron Light Source (Tour of the SR Center included)	According to laws of relativity and electromagnetism, strong light is emitted by electrons circulating almost as fast as light. Such "synchrotron light" from SR Center is utilized in various experiments in the field of materials science.	SR Center
3	College of Science and Engineering, Department of Electrical and Electronic Engineering	Sensing System Laboratory	Professor Shigeru TAKAYAMA	Visualization of Human behaviors and Nature phenomena	Students will learn and experience the dynamic measurement of 1) Landslide and Muddy river disasters, 2) Human behaviors in motion by telemetric sensing network system.	West Wing 3 F
4	College of Science and Engineering, Department of Electronic and Computer Engineering	High Performance Computing laboratory	Assistant Professor Lin MENG	Recognition of Oracle Bone Inscriptions Using Image Processing	We plan to introduce our project about recognition of oracle bone inscriptions using image processing.	ROHM Plaza 5 F

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5	College of Science and Engineering, Department of Mechanical Engineering	Local Area Fracture Control Lab.	Professor Akira UENO	What is "Metal Fatigue"?	A fundamental knowledge for "Metal Fatigue" will be lectured with simple experiments and observations.	East Wing 1 F
6	College of Science and Engineering, Department of Robotics	Humanoid Systems Laboratory	Associate Professor Sang Ho HYON	Let's teach some motions to a robot arm	We try to make a robot arm learn some motions by moving the arm directly.	East Wing 5 F
7	College of Science and Engineering, Department of Civil Engineering	Geosystems Engineering Laboratory / Geomechanics Laboratory	Professor Taizo KOBAYASHI	Laboratory demonstration of soil liquefaction	The role and importance of Geotechnical Engineering, a branch of Civil Engineering that deals with the study of behavior of earth materials (soils and rocks), will be discussed though an experimental demonstration of soil liquefaction during earthquakes.	EXL3 1F
8	College of Science and Engineering, Department of Environmental Systems Engineering	Water Environment Engineering Laboratory	Professor Satoshi SODA	Biological wastewater treatment system	We introduce biological wastewater treatment processes in Jokasou which is a decentralized sanitation system in our research building.	Tricea
9	College of Science and Engineering, Department of Architecture and Urban Design	Building Environment and Equipment Laboratory	Professor Tomoyuki CHIKAMOTO	Tour of our laboratory	The environmental consideration technology in Tricia and its verification results, wind tunnel experiment room, and the wind environment examination room, and real scale house model for ZEH (zero energy house) will be introduced.	Tricea

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10	College of Life Sciences, Department of Applied Chemistry	Organic Reaction chemistry Laboratory	Professor Yutaka OKADA	Organic reaction under microwave irradiation	In general, the organic reaction requires high temperature heating for a long time and requires a lot of energy. When the reaction is carried out under microwave irradiation, the reaction time is shortened in some cases. This method is attracting attention as "Green Chemistry" which is a sustainable and environment-friendly method of "Creation". Here, it is confirmed by using a microwave irradiation device which kind of substance is easily heated under microwave irradiation.	EXL2 2F
11	College of Life Sciences, Department of Biotechnology	Structural Bioscience Laboratory	Professor Hiroyoshi MATSUMURA	Crystallization of proteins	Observation of protein crystals	Bio Link 7F
12	College of Sport and Health Science		Assistant Professor Masahiro FUJIMOTO	Biomechanics of human balance and movement	I will give a brief introduction to "Biomechanics", the science which applies the laws of mechanics to biological systems to gain a greater understanding of human movement. We will then measure your reactive performance and balance stability with our state-of-the-art motion analysis system as hands-on activities.	Integration Core 1 F