

International Affiliated Double-Degree Program

Summer School

August 2–6, 2010

Center for International Cooperation in Engineering Education
Graduate School of Advanced Technology and Science
The University of Tokushima
Tokushima, Japan

Sponsors

- Center for International Cooperation in Engineering Education (CICEE),
The University of Tokushima,
- International Center, The University of Tokushima.

Contents

Course Details

- (i) Materials Science and Nano-biotechnology Engineering Course
- (ii) Electrical and Electronic Engineering Course
- (iii) Civil and Environment Engineering Course

General Information

The Center for International Cooperation in Engineering Education (CICEE) at The University of Tokushima is pleased to announce that it will be hosting a summer school program for engineering graduate students who are studying at The University of Tokushima or its partner institutions. This program offers the following three courses: Materials Science and Nano-biotechnology Engineering, Electrical and Electronic Engineering, and Civil and Environment Engineering Course. Students may enroll in only one of the three courses. All courses are offered in English by both guest lecturers and faculty members of The University of Tokushima.

Registration

Students are required to submit a registration form to the CICEE Office by e-mail, fax or post prior to the program, no later than Wednesday, June 30, 2010. No fee is required for the registration, but students are responsible for their travel expenses to The University of Tokushima and any other living expenses while in Tokushima.

Schedule

Each course has its own schedule for most of the period of the Summer School. Additionally, here is the common schedule--for all participants.

(i) Opening Ceremony

Date and Time: Monday, August 2, 10:00-10:30.

Registration begins at 9:30 a.m. Please be prompt.

Place: M705, Mechanical Engineering Building, Josanjima campus

Opening Remarks:

1. Prof. Makoto Wada (Vice President, The University of Tokushima, Japan)
2. Prof. Tokuo Ohnishi (Dean, Faculty of Engineering, The University of Tokushima, Japan)
3. Prof. Kiyoshi Fukui (Director, International Center, The University of Tokushima, Japan)

Common Lectures

Date and Time: Monday, August 2, 10:30-11:30.

Dr. Hiroshi Sakata (The University of Tokushima)

“ Japanese Culture and Communication”

Date and Time: Monday, August 2, 11:30-12:00.

Dr. Satoshi Hashimoto (The University of Tokushima)

“Survival Japanese”

(ii) Common Visits to Laboratory

Laboratory visits.

Date and Time: Wednesday, August 4, 13:00-16:00.

(iii) Intercultural meeting

Date and Time: Wednesday, August 4, After the laboratory visits.

(iv) Field Trip For Students

Date and Time: Friday, August 6, 8:00-16.00

Meeting Place: In front of the CICEE office, K building, First floor

Schedule:

8:00 Departure from Tokushima University.

9:00 Awaji bridge, Maiko

12:00 Lunch

13:00 Departure from Awaji bridge

13:30- Sightseeing around Awaji bridge

15:00

15.00 Departure from Awaji

16.00 Arrival at Nichia Hall, Shinkura campus

(v) Closing Ceremony

Date and Time: Friday, August 6, 16:30-17:00.

Place: Nichia Hall, Shinkura Campus

Closing Remarks:

1. Prof. Susumu Kagawa (President, The University of Tokushima).

Materials Science and Nano-biotechnology Engineering Course

Place: M 311 (Mechanical Engineering Building, 3rd Floor)

Schedule

	9:00-9:50	10:00-10:50	11:00-11:50	11:50-13:00	13:00-13:50	13:55-14:45	14:50-15:40	15:45-16:35
Mon, August 2		(i)		Lunch break	(1)	(2)	(3)	(4)
Tue, August 3	(5)	(6)	(7)		(8)	(9)	(10)	(11)
Wed, August 4	(12)	(13)	(14)		(ii) and (iii)			
Thu, August 5	(15)	(16)	(17)		(18)	(19)	(20)	(21)
Fri, August 6	(iv)							(v)

- (1) **Biomimetics - nano design by learning from the biological world**, Dr. Mark Jones (Auckland University, New Zealand)
- (2) **Separation Technology**, Dr. Masahiro Katoh (The University of Tokushima, Japan)
- (3) **Behavior of Colloidal Sol in the Presence of Combined Electric and Magnetic Fields: Application to Water Purification Efforts**,
Dr. P. S. Neelakantha (Florida Atlantic University, USA)
- (4) **Fundamentals of Transmission Electron Microscopy**, Dr. Tatsuya Okada (The University of Tokushima, Japan)
- (5) **Thermoelectric properties of 1-D nanostructures**, Dr. Heiko Reith (RheinMain University, Germany)
- (6) **Surface Analysis and Characterization Methods**, Dr. Daisuke Yonekura (The University of Tokushima, Japan)
- (7) **Technology for SiC Ceramic Development**, Dr. Han Ki Yoon (Dong-eui University, Korea)
- (8) **Material processing with femtosecond laser**, Dr. Shigeki Matsuo (The University of Tokushima, Japan)
- (9) **Fabrication of nanomagnetic particle and applications in biomedicine**, Dr. Xiaoping Song (Xi'an Jiaotong University, China)
- (10) **Biocompatible surface processing technique and implantable biosensor fabrication**, Dr. Mikito Yasuzawa (The University of Tokushima, Japan)
- (11) **DLC Coating Application Technology**, Dr. Tae-kyu Kim (Pusan National University, Korea)

- (12) **Theory and Application of Microreaction Technology**, Dr. Ken-ichiro Sotowa (The University of Tokushima, Japan)
- (13) **Application of composite materials to the ocean industry**, Dr. Yun-Hae Kim (Korea Maritime University, Korea)
- (14) **Crystallization of nanometer-sized molecules and particles**, Dr. Yoshinao Suzuki (The University of Tokushima, Japan)
- (15) **Vacuum arc of nanostructured materials**, Dr. Zhimao Yang (Xi'an Jiaotong University, China)
- (16) **Physicochemical properties of phospholipid bilayer membranes**, Dr. Hitoshi Matsuki (The University of Tokushima, Japan)
- (17) **Fabrication and characterization of transparent conductive oxides films by Sol-gel method**, Dr. Keh-moh Lin (Southern Taiwan University, Taiwan)
- (18) **Ramie fibers and its composite**, Dr. Santoso Heru (Gajahmada University, Indonesia)
- (19) **Controlling optical property of oxynitride pigments through their stoichiometry**, Dr. Toshihiro Moriga (The University of Tokushima, Japan)
- (20) **Supersonic plasma sprayed nanostructured Yttria-stabilized Zirconia coatings**, Dr. Bingjun Ding (Xi'an Jiaotong University, China)
- (21) **Characterization of Variability and Reliability-based Design Optimization for Viscoelastic Damping Materials**, Dr. Dooho Lee (Dong-eui University, Korea)

Common Activities

- (i) Opening Ceremony
- (ii) Laboratory visits
- (iii) Intercultural meeting
- (iv) Field trip
- (v) Closing ceremony

Electrical and Electronic Engineering Course

Place: C10 (Information Science and Intelligent Systems Building, 1st Floor)

Schedule

Schedule							
	9:00-10:00	10:00-11:00	11:00-12:00	12:00-13:30	13:30-14:30	14:30-15:30	15:30-16:30
Mon, August 2		(i)		Lunch break	(1)		
Tue, August 3	(2)				(3)		
Wed, August 4	(4)				(5)		(iii)
Thu, August 5	(6)				(7)		
Fri, August 6	(iv)				(v)		

- (1) **Design and test for realizing high reliability in VLSIs**, Dr. Hiroyuki Yotsuyanagi and Dr. Masaki Hashizume (The University of Tokushima, Japan)
- (2) **Introduction to electric energy**, Dr. Masatake Kawada (The University of Tokushima, Japan)
- (3) **Design of intelligent controller and its application**, Dr. Takashi Yasuno (The University of Tokushima, Japan)
- (4) **Oscillation conditions in circuits and systems**, Dr. Tetsushi Ueta (The University of Tokushima, Japan)
- (5) **Solving combinatorial optimization problems exploiting neural networks and chaos**, Dr. Yoko Uwate and Dr. Yoshifumi Nishio
(The University of Tokushima, Japan)
- (6) **Semiconductor device and its application**, Dr. Jin-Ping AO and Dr. Yasuo Ohno (The University of Tokushima, Japan)
- (7) **Biomedical engineering and biocybernetics**, Dr. Masatake Akutagawa (The University of Tokushima, Japan)

Common Activities

- (i) Opening Ceremony
- (iii) Intercultural meeting
- (iv) Field trip
- (v) Closing ceremony

Civil and Environmental Engineering Course

Place: Room A508 (Civil Engineering Building, 5th floor)

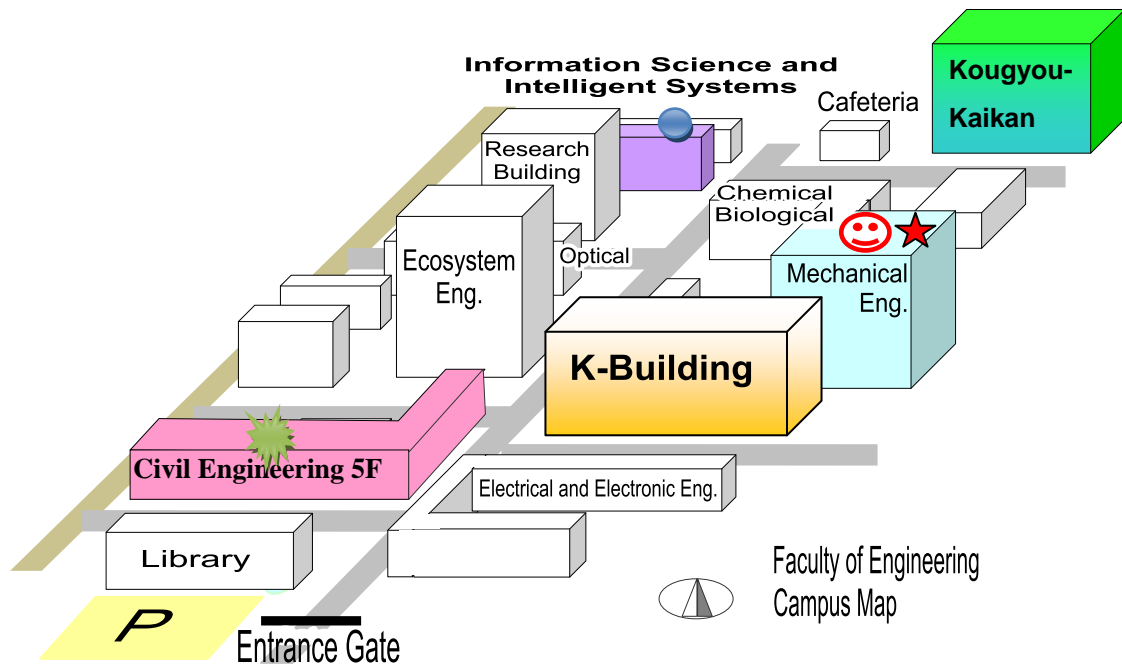
Schedule

	9:00-10:30		10:45-12:15	12:15-13:30	13:30-15:00		15:15-16:45		
Mon, August 2		(i)		Lunch Break	(1)		(2)		
Tue, August 3	(3)		(4)		(4)	(5)			
Wed, August 4	(6)		(7)		(ii) and (iii)				
Thu, August 5	(8)		(9)		(9)	(10)			
Fri, August 6	(iv)						(v)		

- (1) **Introduction to wind engineering**, Dr. Fumiaki NAGAO and Dr. Minoru Noda (The University of Tokushima, Japan)
- (2) **Introduction of nondestructive testing (NDT) of concrete**, Dr. Takeshi Watanabe (The University of Tokushima, Japan)
- (3) **Restoration of eutrophicated coastal environment**, Dr. Yasunori Kozuki (The University of Tokushima, Japan)
- (4) **Soil-water-air coupled analysis with porous media theory**, Dr. Ryosuke Uzuoka (The University of Tokushima, Japan)
- (5) **Settlement prediction and controlling for shield tunneling construction in soft soil**, Dr. Xiong-Yao Xie (Tongji University, China)
- (6) **Maintenance and repair of concrete structures**, Dr. Takao Ueda (The University of Tokushima, Japan)
- (7) **An approach to combining simple soil investigation and quasi-3D ground response analysis**, Dr. Atsushi Mikami
(The University of Tokushima, Japan)
- (8) **River restoration works in JAPAN: Linking engineering and ecology**, Dr. Yoichi Kawaguchi (The University of Tokushima, Japan)
- (9) **The mechanics of earthquake and faulting**, Dr. Tsuneo Ohsumi (The University of Tokushima, Japan)
- (10) **Three-dimensional slope stability and back analysis of slope failures**, Dr. Jing-Cai Jiang (The University of Tokushima, Japan)

Common Events

- (i) Opening Ceremony
- (ii) Laboratory Visits
- (iii) Intercultural meeting
- (iv) Field trip
- (v) Closing ceremony



😊 Opening Ceremony : Room No. 705, Mechanical Engineering Building, Josanjima campus.

😞 Closing Ceremony : Nichia Hall, Shinkura campus.

★ Materials Science and Nano-biotechnology Engineering Course: Room M311

🔵 Electric and Electronic Engineering Course: Room C10

🌟 Civil and Environment Control Engineering Course: Room A508