

The Project for Capacity Development of the Faculty of Engineering Science Technology, the National University Timor Lorosa'e (CADEFEST Project Phase II)

# **CADEFEST News**

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#### UP COMING EVENT:

- SC Meeting
- JCC Meeting
- Seminars
- JICA Intern Dispatch
- Short Term Training in Japan
- Japanese Expert Dispatch and Special Lectures

## **Message from CADEFEST Project Manager**

Welcome to fourth edition of our project newsletter!

On behalf of CADEFEST project, I would like to express our gratitude for all stakeholders who support our project, and my appreciation to those who give us their time and effort to develop our faculty.

Through this 4<sup>th</sup> edition of JICA CADEFEST Phase II Project newsletter, we can found many activities that show the progress of the Capacity Development of the Faculty of Engineering Science and Technology, UNTL.

As the Project Manager and Dean of Faculty of Engineering science and Technology, I am extremely proud of this progress of this project. I would like all readers to desaminate our progress



to your freinds and give us some ideas and suggestion to developm the faculty furthermore!

Please enjoy reading our fourth edition!

Dr. Ruben Jerónimo Freitas Project Manager, CADEFEST Project Phase II Dean, Faculty of Engineering Science and Technology-FoEST

## Message From Chairman of Japanese Supporting University



Hidekazu FUKAI, Ph.D. Chairman of Japanese Supporting Universities Committee

The first half period of the CADEFEST phase 2 project JICA has passed.

From this phase, two departments, i.e., Informatics and Geology & Petroleum joined as the targets of the JICA support. Regarding the objectives of our support, we also started focusing on cooperative researches between researchers from different fields and also between academia and government, under the cooperation unit (CU). So far, these activities have achieved grate successes.

The UNTL is a unique national university in Timor-Leste. We hope our activities provide a base of the development of the nation.

### **Message From Chief of Cooperation**



Câncio Monteiro, Ph.D.

Chief of Cooperation Unit, Vice Dean Cooperation and Research Affairs, Faculty of Engineering Science and Technology, UNTL I am glad with this CADEFEST news that's always provides valuables information. Hopefully, from the content of this 4<sup>rd</sup> CADEFEST project news will respond all you want to know about project activity done so far.

As a chairman of Cooperation Unit I appreciated the good cooperation and collaboration of all parties of the project by conducting many activities to support study quality in our faculty and contribute to society needs.

During this semester, many activity has been conducted in Faculty of Engineering Science and Technology-UNTL that supported by JICA CADEFEST Project Phase II.

Those activities where Launching Ceremony of REER Group, Special Lectures, Site Visit and Handover Electronics Equipment.

## **Director General of JICA HQs Visit**



Mr. Ogawa Shigenori, Director General of Southeast Asia and Pacific Department in JICA HQs visited the Faculty of Engineering Science and Technology, UNTL, Hera Campus on 23<sup>rd</sup> November 2018. Firstly, Mr. Ogawa Shigenori, The Director General Southeast Asia and Pacific Department inspected the new building construction of FoEST in Hera Campus. Ms. Yuka Kobayashi, consultant Yamashita Sekkei.inc explained the new building design and the progress of new building construction by Japanese Company, Rinkai Nissan Construction.

After the inspection, Mr. Ogawa Shigenori visited the Faculty and welcomed by Dr. Ruben Jerónimo Freitas, Dean of FoEST, Vice Deans and Lecturers. They were invited to observe the equipment in Mechanical, Civil and Electronics Department that provided by JICA .

### Japanese Audit Visit



On Monday 4<sup>th</sup> March 2019, audit team from Japan visited Faculty of Engineering Science and Technology, UNTL. The purpose of the audit visit was to inspect the inputs to the faculty from the series of JICA Projects since 2006.

Dr. Ruben Jerónimo Freitas, Dean of the Faculty of Engineering Science and Technology, UNTL made a presentation about cooperation from Japanese Government to Faculty of Engineering Science and Technology and he introduced noticeable achievements through long history of the cooperation between UNTL and JICA. He also explained the current condition of equipment which was supported from Japan government to audit team and responded some questions from them. After the presentation, team visited the solar panel site and laboratories to inspect the real condition of the equipment, which was provide by JICA Projects.

## **Mid-Term Review Mission Visit**



The Mid-Term Review Mission visit



On 15<sup>th</sup> July 2019, Dr. Nakano Kyoko, Senior Advisor (Higher education) and Ms. Nukata Sena, Technical and Higher Education

> Team, Higher Education and Social Security Group Human Development Department in JICA HQs visited Hera Campus as mid-term review mission. The purpose of mid-term review mission is to evaluate the progress of JICA CADEFEST Project phase II and make recommendations for project activities in the latter

half of the project. The mission had several meetings with Rector of National University Timor Lorosa'e, Director General of Ministry of Higher Education, Dean, Vice Dean and Directors in each Department. At the last day of mission, The minutes of meeting was signed between Mission and the Faculty of Engineering, Science and Technology.

### The 8th & 9th Steering Committee Meeting



The 8th Steering Committee Meeting

The 8<sup>th</sup> and 9<sup>th</sup> Steering Committee meeting held in February and June 2019, respectively. The participants were Dr. Ruben Jerónimo Freitas, Dean of Faculty of Engineering Science and Technology, UNTL, Prof. Dr. Koichi Shimakawa,

Chief Advisor of JICA CADEFEST Project, Vice Deans and new structures of Departments, Directors and Vice Directors.

The aims of this meeting were to monitor, evaluate and review the project activities last three months and to plan and confirm the project activities for next three month. Participants exchanged their views and discussed counter measures to solve issues for implementing the Project.

## **Special Lectures**

## **Mechanical Engineering**

#### **Renewable Energy**



Prof. Tomonao Kobayashi from Gifu University

On 22<sup>nd</sup> March 2019, Prof. Tomonao Kobayashi from Gifu University conducted special lecture for Mechanical and Electronics students at Electrical Department room, Hera Campus. Prof. Kobayashi presented renewable energy and weather prediction system.

It was really attractive lecture and students asked many questions.

## **Civil Engineering**

#### Tsunami Disaster



Prof. Koji Asai from Yamaguchi University

On 9th February 2019, Prof. Koji Asai conducted special lecture on "Tsunami disaster" to Civil Engineering Department, Faculty of Engineering, Science and Technology, National University of Timor Lorosa'e, UNTL. On his special lecture, he explained the meaning of word Tsunami which comes from Japanese language. "Tsu" means "port" and "nami" means "wave". Then, he also explained the Tsunami disaster in engineering point of view by using math method and displaying some video about tsunami disaster in the past. The student was exited to get some knowledge from the special lecture and many questions were raised.

### **Electronics and Electrical Engineering**

26<sup>th</sup>

2019,

Hiroki

dents in Elec-

#### **Electrical Shock "Grounding"**



Prof. Hiroki Yoshida from Gifu University

tronics and Prof. Yoshida Electrical Department. presented the Electrical Shock-Grounding system. This special lecture was very useful for Electrical students to be aware of the safety for electrical experiments.

#### **Circuit Analysis**



Prof. Yasuhiro Takahashi from Gifu University

On 26<sup>th</sup> March 2019, Professor Yasuhiro Takahashi from Gifu University conducted а special lecture for students in Electronics main room. Hera

Campus. Prof. Takahashi presented on Circuit Analysis trough "Electronics SPICE Simulation". In addition, students had learned how to use SPICE Simulation software.

## **Informatics Engineering**

#### **Basic Telecommunication**



Prof. Shan Lu from Gifu University

On 20<sup>th</sup> March 2019, Prof. Shan Lu conducted a special Lecture on "Basic Telecommunication" in informatics room, Hera Campus. The main objective of the special lecture was to introduce basic telecommunication and the transferring data system. It was useful for students to understand telecommunication in general.

#### **Natural Language Processing**



Prof. Satoshi Tamura from Gifu University

On 22<sup>nd</sup> March 2019, Professor Satoshi Tamura and his PhD student Mr. Asahi, had special lectures on Java room, Hera Campus. The topics were related to Natural Language Processing. Prof. Tamura presented on "Recent Technology in speech and Text Processing".

## **Geology and Petroleum**

#### **Geological of Coral Reefs**



Prof. Atsuko Yamazaki from Kyushu University

many questions were raised!

On 26<sup>th</sup> March 2019, Prof. Atsuko Yamazaki had a special lecture on "Geological of Coral Reefs" for Geology students in Hera Campus. Prof. Yamazaki taught the uplifted coral reefs terrace in late Pleistocene composes the north-east coast of Timor-Leste. In addition, she explained how Age-determination of uplifted coral reefs could provide us the information about tectonics and sea-level change. And the lastly, she also explained that modern and fossil coral skeletons will reveal Indo-Pacific monsoon (ITCZ) change with global climate. This special lecture attracted students and

## **Japanese Professor Dispatch**

**Mechanical Engineering** 

#### **REER Group**



Prof. Tomonao Kobayashi support REER Group

**F**rom 18<sup>th</sup> March too 22<sup>nd</sup> March 2019, Prof. Tomonao Kobayashi was dispatched to Faculty of Engineering Science and Technology, UNTL. The main purpose of Professor dispatched was to support Renewable Energy and Environment Group. The REER is the first interdisciplinary research group that jointly established between mechanical and electronics and electronical department.

#### Lecturer's Research



Prof. Ikuo Tanabe support research

On 1<sup>st</sup> April 2019, Prof. Ikuo Tanabe JICA expert from Nagaoka University of Technologywas dispatched to support Mechanical Engineering Department, Faculty of Engineering Science and Technology, UNTL. Professor Ikuo Tanabe supported mechanical department for ongoing research activities.

#### **Equipment Operation & Maintenance Training**



**Equipment Operation Training** 

On 1<sup>st</sup> April 2019, Mr. Hoshino Hideo from Nagaoka University of Technology, Japan came to support Mechanical Department, Faculty of Engineering Science and Technology, UNTL. Mr. Hoshino stayed for two weeks to give operation and maintenance training to Lecturers of Mechanical Department. Through this training, effective equipment utilization was expected in Mechanical Engineering laboratory.

### **Civil Engineering**

#### **GPS** Training

On 23<sup>rd</sup> to 28<sup>th</sup> February 2019, Professor Shinichiro Nakashima from Yamaguchi University as a JICA expert, stayed in Timor-Leste to support Civil Engineering Department, Faculty of Engineering Science and Technology, UNTL. During his stay, he conducted GPS training for lecturers and students in civil Engineering Department.



Prof. Shinichiro Nakashima from Yamaguchi University

#### **Final Thesis Research Support**



Prof. Koji Asai Advises final thesis

From 2<sup>nd</sup> to 9<sup>th</sup> February 2019, Prof. Koji Asai was dispatched to support Civil Engineering Department,

During his stay in Timor-Leste, Prof. Koji Asai advised the final research project (water pump), which is supervised by Mr. Alfredo, Civil Engineering Department.

#### **Students' Exchange**



Prof. Masahiko Sekine from Yamaguchi University

On 24<sup>th</sup> March 2019, Prof. Masahiko Sekine from Yamaguchi University and his three Japanese students stayed in Timor-Leste for one week to do some join activities in Civil Engineering. The purpose of three students was to exchange experience with students in Civil Engineering UNTL. Prof. Sekine conducted GPS and drone operation training to lecturers and students in Civil Engineering. The three students helped to develop GPS and Drone operation manual for the practice. Prof. Sekine also advised students final thesis which is related to water filtration.

### **Electronics and Electrical Engineering**

#### **Transmission Line**

On 20<sup>th</sup> March Prof. Hiroki Yoshida from Gifu University, supported Electronics and Electrical Engineering, Faculty of Engineering Science and Technology, UNTL to operation training for Transmission line.



Prof. Hiroki Yoshida from Gifu University

#### **Electrical Experiment Support**



Prof. Mitsuo Yamaga from Gifu University

From 23<sup>rd</sup> February to 16<sup>th</sup> March 2019, Prof. Mitsuo Yamaga from Gifu University as a JICA expert, stayed in Timor-Leste to support Electronics and Electrical Engineering Department, Faculty of Engineering Science and Technology, UNTL. Prof. Yamaga conducted training for oscilloscope to support students' experiment class..

## **Informatics Engineering**

### Meeting with Informatics Department



Prof. Hidekazu Fukai meeting with IT Director and Vice Director

From 25<sup>th</sup> February to 8<sup>th</sup> March 2019, Prof. Hidekazu Fukai as a JICA expert was dispatched to support Informatics Department, Faculty of Engineering Science and Technology, UNTL. During his stay, he had meetings with lecturers from Informatics Department to share the ideas about research and teaching methods. Thus, Professor also had meeting with lecturers whom wanted to discuss individual research activities. Other than that, Professor had discussed the Japan Students Services Organization (JASSO) scholarship which can give oppor-

tunities to students to participate in short term training in Gifu University.

#### **Meeting with Informatics Lecturers**



Prof. Satoshi Tamura and Prof. Shan Lu has Meeting with Informatics Lecturers

On 18<sup>th</sup> March 2019, Professor Satoshi Tamura and Professor Shan Lu from Gifu University came to Hera Campus to support Informatics Engineering Department, Faculty of Engineering Science and Technology, UNTL. During their stay, they had conducted many activities such as meeting with lecturers, advising lecturer's research, discussing lecturers future research plan, special lectures

for students to share experience to students and others. The advice from Professors were also helpful for final year students.

## **Geology and Petroleum**

#### Microscope Analysis Training and Research Activities

**F**rom 16<sup>th</sup> to 30<sup>th</sup> March 2019, Prof. Shoichi Kiyokawa and Prof. Atsuko Yamazaki from Kyushu University came to Hera Campus as JICA Experts to support Geology and Petroleum Department, Faculty of Engineering, Science and Technology, UNTL. During their stay, they gave training to Department of Geology and Petroleum Lecturers about make mapping and analyzed sample using microscope. Furthermore, Prof. Yamazaki conducted to geological survey in Baucau and Manatuto to collect the coral samples in those areas.





Prof. Kiyokawa and Prof. Yamazaki from Kyushu University

## **Short Term Training**

From 13<sup>th</sup> January to 16<sup>th</sup> February 2019, Mr. Leandro Madeira Branco, lecturer in Civil Engineering, Faculty of Engineering Science and Technology, UNTL, had short term training in Yamaguchi University, Japan.



From 10<sup>th</sup> February to 15<sup>th</sup> March 2019, Ms. Maria Elias and Ms. Aniceta de Araujo, Lecturers of Geology and Petroleum Department, Faculty of Engineering Science and Technology, UNTL, had short term training in Kyushu University, Japan. They had training on "Thin section, FRx Analysis and Mining". They also visited some geological places and museum in Japan.



## **Research Collaboration**



Mr. Abelito presented his research in APORTIL

## APORTIL Dili

On 8<sup>th</sup> March 2019, Mr. Abelito Filipe Belo, lecturer of Electronics and Electrical Engineering, Faculty of Engineering Science and Technology, UNTL visited APORTIL Dili. He presented his research topic "Fluctuations in Tide Level" to APORTIL staff as the first collaboration between Electronics Department, FoEST, UNTL and APORTIL. This research analyzed the tidal

date which APORTIL collected for a certain period.

## **Graduate Tracer Survey**

On June 2019, the graduate tracer survey has been conducted and the result is shown as the table below

Graduation	Total	Responded	No Response	Employed	Unemployed	Employment Rate
Month /Year		(A)		(B)		B/A X 100
November 2016	101	40	61	29	11	73%
May 2017	67	38	29	25	13	66%
November 2017	95	51	44	32	18	63%
May 2018	87	58	29	35	23	60%
November 2018	80	62	18	17	45	27%
June 2019	92	74	18	12	62	16%



The employment rates for those who graduated few months ago (June 2019), half year ago (November 2018), a year (May 2018), one and half year (November 2017)after, two years ago (May 2017) and two and half years could achieve 73%, 66%, 63.%, 60%, 27% and 16% respectively. The current students in Hera Campus are expected to prepare well to get job after the graduation to improve this situation. We here express our appreciation towards to the graduates who responded this tracer survey.

Some of equipment that use in each department for research:







Civil









Informatics

Geology

## **OTHERS**

## **REER Launching Ceremony**



Renewable Energy and Environment Research Group Launching Ceremony

On 21<sup>st</sup> March 2019, the Renewable Energy and Environment Research group officially launched in Hera Campus, Faculty of Engineering, Science and Technology, UNTL. Dr. Victor da C. Soares, Chairperson of REER group made opening remarks.

Prof. Tomonao Kobayashi, JICA expert from Gifu University, Japan also made

speech as a REER advisor by encouraging all members to work together between tow departments such as Mechanical Department and Electronics and Electrical Department. After the ceremony, REER members presented their ongoing research and Prof. Kobayashi gave some advice on them. The launching ceremony ended by closing remark by Dr. Ruben Jeronimo Freitas, Dean of FoEST.

## **The Equipment Handover**



The Electronics Equipment Handover

On 14 March 2019, electronics equipment handover was held in meeting room, Faculty of Engineering Science and Technology, UNTL Hera Campus. The participants were, Prof. Dr. Koichi Shimakawa, chief advisor JICA CADEFEST II. Prof. Mitsuo Yamaga, JICA expert, Dr. Cancio Monteiro, Vice Dean Cooperation and Research affairs, Mr. Abelito Filipe Belo, Director of Electronics Department, and Mr. Rui and Mr. Celestino. The equipment is to use in Elec-

tronics and Electrical Department laboratory for student practice purpose.

## **JICA Internship**

## Kohei Natsume San

**F**rom 17<sup>th</sup> February to 24<sup>th</sup> March 2019, Mr. Natsume Kohei from Nagoya Institute of Technology, Japan stayed in Timor-Leste, as a JICA intern to support basic Mathematics and Physics for students of the Faculty of Science and Technology, UNTL. During his stay, he taught basic mathematics for students of Mechanical Department and also conducted extra class for students of other departments on their free time to improve their basic Math skill and knowledge. He also shared his knowledge in the field of Mechanics for students in Mechanical Department to prepare final thesis topics.





Basic Math Class Conducted by Kohei Natsume San

## Kawasaki Yukiko San



Basic Math Class conducted by Yukiko san

From 17<sup>th</sup> February to 24<sup>th</sup> March 2019, Ms. Kawasaki Yukiko from Naruto University of Education, she stayed as a JICA intern to support basic Math and Physic for students of Faculty of Engineering Science and Technology, UNTL. During her stay, she supported basic math in Electronics and Electrical Department and also conducted extra class for other Department in their free time. The students enjoyed the class and requested to have more Yokiko san 's class.



#### JICA CADEFEST PROJECT PHASE II

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#### **Up Coming Event...!**

- JCC Meeting
- Seminars
- JICA Intern Dispatch
- Short Term Training in Japan
- Japanese Expert Dispatch and Special Lectures

## **Osaka Gas Scholarship**



On 25<sup>th</sup> April 2019, the presentation of the Osaka Gas Foundation of International Cultural Exchange (OGFICE) scholarship was held in Auditorium UNTL. The OGFICE offered scholarship for 30 engineering students this year and has allocated \$15.000 for this program.

"This is my first time to receive a scholarship through the Osaka Gas Foundation. Since Osaka Gas Foundation Scholarship started, we have been motivated to get this competitive scholarship. It makes positive and creative environment of our study. I would like also to take this opportunity to convey appreciation from our families to Osaka Gas Foundation for financial support. It will be helpful for our school life. We hope that this program will be continued for our juniors ". said Deonisio da Silva Sousa, one of the students who is awarded this scholarship.

The OGFICE scholarship students are selected based on their academic performance. Those who want to get this scholarship, Please study hard to get this valuable opportunity in next year.

Juz

Editors are happy to receive suggestion and comments to improve this newsletter.