

Table of Contents

Open Trial Lectures ...1  
International Symposium ...2  
Joint Seminar ...2  
Report on Open Trial Lectures ...4  
Other Activities ...4

目次

公開模擬講義 ...1  
国際シンポジウム ...3  
共同セミナー ...3  
Report on Open Trial Lectures ...4  
その他の活動 ...4

Contact

Basin Water Environmental Leaders  
Promotion Office  
River Basin Research Center  
Gifu University  
1-1 Yanagido, Gifu 501-1193, Japan  
TEL: +81-58-293-2085

連絡先

〒501-1193  
岐阜市柳戸 1-1  
岐阜大学流域科学研究センター  
流域水環境リーダー育成プログラム推進室  
電話: 058-293-2085  
E-mail: bwel@green.gifu-u.ac.jp  
HP: http://www.green.gifu-u.ac.jp/BWEL/

Open Trial Lectures

Trial lecturing is a compulsory part of the special practice subject "Environmental Solution II" designed for the doctoral course students of BWEL in order to train their teaching and ideas-delivering ability needed as future professors or researchers.

On July 15 and 29, two open trial lectures on campus were given in English by Zuhud Rozaki (D3, United Graduate School of Agricultural Science) and Laming Mohammad Irwan (D2, Graduate School of Engineering) under the general titles of "Agriculture: Past, Current Situation and Future Perspective" and "Global Warming: Current Status, Future Forecast and Mitigation", respectively. After each lecture, evalua-

tion by audience (students and professors) was implemented through questionnaire survey. The details on the evaluation can be found in the final page.

Other four trial lectures were scheduled to offer for middle or high school students in Gifu-city by four female PhD candidates (Chantsal Narantsetseg, D2; Zhang Junfang, D2; Rahma Yanda, D2; and Tharangika Ranatunga, D2) with the cooperation of the Gender Equality Promotion Office of Gifu University. Their research achievements, and motivations and experiences of studying abroad must be a good incentive and encouragement for the school students.



Zuhud Rozaki さん (D3) による講義  
Lecture by Zuhud Rozaki (D3)

公開模擬講義

公開模擬講義は、博士課程の学生を対象に環境リーダーとしての教育および考えを伝える能力を習得するために設計された BWEL プログラム必須科目「環境ソリューション特別演習 II」の中で行われています。

2016年7月15日に Zuhud Rozaki さん(連合農学研究科博士課程3年)が公開模擬講義「農業-これまでの農業と将来展望-」を行いました。

2016年7月29日に Laming Mohammad Irwan さん(工学研究科博士後期課程2年)が公開模擬講義「地球温暖化-現状および将来予測とその緩和-」を行

ました。各講義の後、聴講学生と教員による授業評価が行われました。授業評価の内容は最終ページに掲載してあります。

4名の博士課程2年の女子学生(Chantsal Narantsetseg さん, Zhang Junfang さん, Rahma Yanda さん, Tharangika Ranatunga さん)は岐阜大学男女共同参画推進室の協力を得て、中学・高校などで出前講義を順次行っています。彼女らの研究の話や日本への留学の動機や経験の話は、中高生にとってよい刺激となるでしょう。



Laming Mohammad Irwan (D2) さんによる講義  
Lecture by Laming Mohammad Irwan (D2)

## International Symposium

The 5th UGSAS-GU & BWEL Joint International Symposium on Agricultural and Environmental Sciences was held on August 30, 2016 under the co-organization with the United Graduate School of Agricultural Science (UGSAS-GU). As a part of The 5th UGSAS-GU Roundtable & Symposium 2016, totally 138 participants (including 36 scientists and researchers from 15 Asian countries) attended the symposium.

In the poster session, 35 posters from UGSAS-GU, BWEL, the Graduate

School of Applied Biological Sciences of Gifu University and the Division of Agriculture, the Graduate School of Integrated Science and Technology of Shizuoka University were presented. From BWEL, 15 students presented their individual research achievements, and Haixia Du (D3, Graduate School of Engineering) and Masaya Toyoda (M2, Graduate School of Engineering) were selected as the best presenters and won the prize of "Best Presentation Award".



優秀発表賞授与式の様子と発表者の記念写真  
Best Presentation Award ceremony and Group photo of Poster presenters

### Presentation outlines by the prize winners from BWEL

Mixed treatment of vegetable waste and waste activated sludge  
by microbial fuel cell

Haixia Du ( D3, Graduate School of Engineering )

The main objective of this study was to investigate the effects of anaerobically cultured waste activated sludge (WAS) on the performance of Microbial Fuel Cell (MFC) treating solid potato. For this, four two-chamber MFCs fed with mixtures of WAS to potato and inactivated WAS to potato at the ratios of 1:2 and 1:4, respectively were operated together with another three MFCs fed with solid potato, WAS and inactivated WAS alone.

Pseudo-global warming experiments for intensity change of  
typhoon Haiyan (2013)

Masaya Toyoda (M2, Graduate School of Engineering )

In this study, in order to project the typhoon intensity changes under future climate conditions, pseudo-global warming experiments were carried out using a regional climate model driven by future-climate general circulation models. This model approach was validated due to its effectiveness in reproducing the Haiyan's intensity changes with a reasonably high accuracy.

## Joint Seminar

In this academic year, Joint Seminar is provided as "Global Environmental Social Studies" for master's course students and "Global Environmental Seminar I" for doctoral course students. The topics are different from those in last year but the style of the class is similar. Grouping was made for all students, with each group being consisted of 2 or 3 students with different nationalities including 1 Japanese student. Each group selected a topic from the whole topics (151 in total) prepared by the BWEL Promotion Office. For each topic, the teaching members of the office conduct throughout discussions with students regarding the content students proposed to include in the presentation materials to be finalized by students in English, and check presentation materials and make relevant corrections with students together. In addition to oral presentation in English, the students of each group are also responsible for leading followed audience's group discussions and summarizing the discussions. The newly introduced point this year is to give an assignment to students via short report, which should include the followings: the main points of the

topic(s), the points considered important but were not covered in the presentation materials of the speakers, for the purposes of further deepening students' understanding and strengthening their English-writing ability.

In the first semester, 7 groups formed by 19 students finished their presentations. The topics they presented included "Agricultural production and water resource", "Diet and global environmental change", "Causes of flooding in Asian countries and possible countermeasures", "Air pollution and the impacts on life of Asian countries", "Can we eat dolphins?", "Water and other environmental problems of major rivers in Asia", "Environmental problem seen from disposable chopsticks". In addition to these topics, two D3 students, Diana Hapsari and Haixia Du, introduced their thesis research entitled "The relationship of water discharge and suspended sediment in coniferous and broadleaved forests: case of Kuraiyama, Japan" and "Treatment of raw vegetable waste by microbial fuel cell and improvement of its efficiency by mixed feed of boiled vegetable and excess activated sludge", respectively.

## 国際シンポジウム

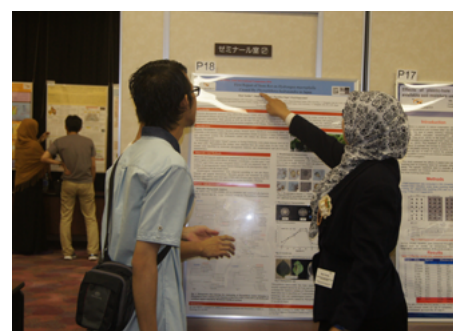
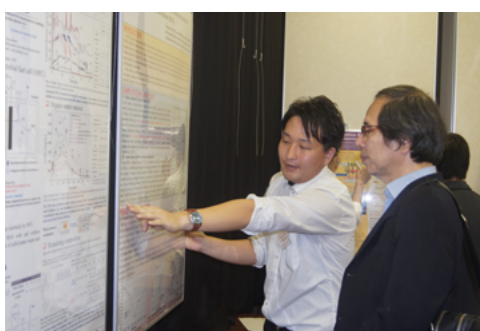
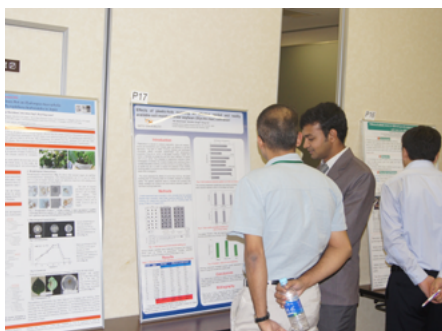
8月30日に連合農学研究科と合同で「The 5th UGSAS-GU & BWEL Joint International Symposium on Agricultural and Environmental Sciences」を開催しました。本シンポジウムはThe 5th UGSAS-GU Roundtable & Symposium 2016の一環として行われ、36名のアジア15カ国の研究者を含む138人が参加しました。

本シンポジウムでは学生によるポスター発表が行われ、連合農学研究科、

流域水環境リーダー育成プログラム、応用生物科学研究科、静岡大学総合科学技術研究科農学専攻から合わせて35題のポスター発表が行われました。流域水環境リーダー育成プログラムからは15名の学生が発表し、工学研究科博士後期課程3年 杜海霞さん、工学研究科博士前期課程2年 豊田将也さんの2人が優秀発表賞を受賞しました。

Presenters from BWEL program and their presentation titles/ 流域水環境リーダー育成プログラムの発表者と題目

Presenter (発表者)	Title
Zuhud Rozaki (ズフッド・ロザキ)	Effects of climate change on Indonesian agriculture; Based on farmers' perception in Regency Karanganyar Indonesia
Pengfei Zhang (張 鵬飛)	Effects of salinity stress at different growth stages on tomato growth, yield and water use efficiency
Kader Mohammad Abdul (カデリ・ムハマド・アブドゥル)	Plastic-hole mulching effects on effective rainfall and total readily available moisture under soybean ( <i>Glycine max</i> ) cultivation
Rani Yosilia (ラニ・ヨシリア)	First report of stem rot on Hydrangea macrophylla caused by <i>Phytophthora hedraiondra</i> in Japan
Wenzhuo Feng (馮 文卓)	Development of a loop-mediated isothermal amplification assay for rapid detection of <i>Pythium uncinatum</i>
Kazuma Morita (守田 航馬)	Primer design of microsatellite markers for <i>Pythium irregulare</i>
Ali Rahmat (アリ・ラフマ)	Relationship snow cover, soil temperature, and soil moisture under evergreen coniferous forest in central Japan
Siyu Chen (陳 思宇)	The variability in concentration and fluxes of dissolved organic carbon in water fluxes of a cool-temperate broad-leaved deciduous forest in central Japan
Huijuan Shao (邵 慧娟)	Released DOM characteristics and its effect on cesium sorption: comparisons of different forest and agricultural soils
Hongjie Gui (桂 洪杰)	Release potential and characteristics of NOM from different forest and agricultural soils
Trianda Yenni (トリアンダ・イエニ)	Impacts of water circulation on suspended solid behavior in Johkasou system
Tomonari Fujisawa (藤澤 智成)	Composition of suspended particles in the treatment process of Johkasou
Guangyu Cui (崔 广宇)	Feasibility of composting for pelletized dewatered sludge by earthworms
Haixia Du (杜 海霞)	Mixed treatment of vegetable waste and waste activated sludge by microbial fuel cell
Masaya Toyoda (豊田 将也)	Pseudo-global warming experiments for intensity change of typhoon Haiyan (2013)



ポスター発表の様子  
Scene of Poster Presentation

## 共同セミナー

本年度の共同セミナーは地球環境社会特論（修士課程）と地球環境セミナーI（博士課程）として開講されています。共同セミナーでは、昨年までと同様に日本人学生を含む出身国の異なる2～3人のグループをつくり、プログラム推進室の教員より提示された151のテーマ案の中からグループ毎に昨年度とは異なるテーマを選択しました。推進室教員と学生はテーマの発表内容についての討論を行い、その後学生が作成した英語の発表資料を推進室教員が学生と一緒に確認し、修正します。発表日の講義において学生は英語での発表に加えて、受講者によるグループディスカッションの進行役を務め、議論のまとめを行います。今年新たに導入された点は、学生に対しショートレポートの課題を講義毎に与えることです。ショートレポートでは学生はテーマの要点と自分は重要だと考えるが発表には含まれていなかった点を記述します。ショートレポートにより学生はテーマに対してより理解を深めると共に、英作文の能力も向上します。

前期期間中では、7グループ計19人の学生が発表を行い、加えてD3の学生2名（杜海霞さん、Diana Hapsariさん）が学位研究の紹介を行いました。



共同セミナーにおける学生による発表  
Presentation by students in Joint Seminar

## Report on Open Trial Lectures

### Voices from student lecturers

One reason I chose Agriculture as the title of my lecture was due to the fact that this sector plays very important roles in human being's life, such as providing foods, materials for manufacture, livelihood, etc. Another reason was to deliver my strong feeling to students that we should give more respect to farmers and foods through this lecture. Without farmers, we don't have food, cannot have an active and healthy life. Not wasting food is one of the best ways to respect farmers, I think. This kind of trial lecture is really good for both lecturers and students. Especially for lecturers, it is a wonderful opportunity for future professional training and a good experience leading to lecturing confidence. At the same time, I am also sure that it will become the most impressive experience of my student life to root deeply in my memory.

— by Zuhud Rozaki

The purposes of the lecture are to provide some recent information on the current status of global warming, including the positive and negative

impacts, and give students some insights on what the future holds for the world under the changing caused by global warming using latest projections from the International Panel of Climate Change (IPCC)'s Assessment Report 5, 2013. Also, some forms of well-known renewable energy as mitigation measures of global warming, and a new prospect called Renewable Hydrogen (RH2) are introduced. Lecture finished earlier than expected; remaining time was used for small group discussion for brainstorming on students' ideas of ways that can contribute to mitigate global warming through simple actions applicable in their daily lives. Several interesting ideas were exchanged and some students realized that they can have a role to play in the struggle to mitigate global warming. This program really provides a good chance to learn and practice on how to prepare and perform a lecture. It's a valuable experience and will be beneficial to all students, especially to those planning to become a lecturer or professor in the future.

— by Mohammad Irwan Laming

### Evaluation by students

After each lecture, class evaluation by all auditors was conducted through a questionnaire survey containing the following 6 questions:

1. Was the lecture well organized and prepared?
2. Did the lecturer explain all points clearly?
3. Did the lecturer manage and control the lecture well?
4. How helpful was the lecture to your understanding of the related field?
5. Since this is a trial lecture for teaching training, we decided to use the Blackboard rather than PPT. For this effort of us, how do you evaluate?
6. For today's lecture, what are the best points that you consider?

Almost all students highly appreciated the class and felt that the lectures were well prepared and smoothly executed. Understanding the positive

impacts of global warming and the term of RH2, which were unknown for most students, together with the future changing trend of global warming and the relationship between energy and global warming, and the prepared teaching material with a lot of pictures that made the content easy to understand, were thought to be the best points of the lecture "Global Warming". While, the interactive teaching style and plain explanation from the lecturer of "Agriculture", students said, made them realize again the importance of agriculture, and the necessity to reset their mind of taking care of a thing. However, some students also pointed out that the material for agriculture's future perspective was not enough, needing more data and more detailed explanation. As for "Global Warming", some improvements including "strengthening the communication between lecturer and students", "adding personal experience on Global Warming and concrete examples of global warming in daily life", are also expected.

## Other Activities / その他の活動

- Jun. 30: BWEL certification ceremony was held for Wang Siqinbilige (The United Graduate School of Agricultural Science; from China). She was awarded the Certificate of International Environmental Leadership from Dr. Hisataka Moriwaki, President of Gifu University. 連合農学研究科の王斯琴畢力格さん（中国出身）のための修了式が行われ、森脇学長より流域水環境リーダー（博士）の修了証書を授与しました。
- Sep. 5-9: Domestic group internship for 11 international students was conducted at the Gifu Environmental Management Technology Center. 国内グループインターンシップ（留学生 11 名対象）を一般財団法人岐阜県環境管理技術センターにおいて実施しました。
- Sep.12-19: Overseas group internship for 4 Japanese students was conducted in Nanjing and Shanghai, China. 海外グループインターンシップ（日本人学生 4 名対象）を中国南京・上海市にて実施しました。
- Sep. 26: BWEL certification ceremony was held for Kader Mohammad Abdul (Graduate School of Applied Biological Sciences; from Bangladesh). He was awarded the Certificate of International Environmental Leadership from Dr. Hisataka Moriwaki, President of Gifu University. 応用生物科学研究科のKader Mohammad Abdul さん（バングラディッシュ出身）のための修了式が行われ、森脇学長より流域水環境リーダー（修士）の修了証書を授与しました。
- Oct. 3: 6 new international students are enrolled in BWEL program (5 research students: 3 from China and 2 from Indonesia as candidates of the master's course BWEL students and one (from Indonesia) as master's course BWEL student (He is also a student of the special English course program of the Graduate School of Applied Biological Sciences). 新たに 6 名の留学生を本プログラムに迎えました。来年度の修士課程の入学を目指す育成対象候補者 5 名（中国出身 3 名、インドネシア出身 2 名）と秋季特別英語プログラムの学生として応用生物科学研究科に入学した 1 名（インドネシア出身）です。