



RITSUMEIKAN UNIVERSITY - ILLINOIS COLLEGE 2016

Poster **S**ession

Ritsumeikan University,
Biwako Kusatsu Campus

June 23, 2016

Illinois College



Ritsumeikan University

Poster



Session

2016.06.23^{Thu}
18:30~20:00

Place: Link Square 2F entrance hall,
Ritsumeikan University

Eight students from Illinois College (USA) are currently studying at BKC as part of the **Summer Research Trip in Japan Program**. A collaborative poster session presented by students of Illinois College and Ritsumeikan University will be held on the above date. Feel free to participate in this poster session!

Contact: Life Sciences Administrative Office
Link Square 2F
10:00~17:00 (Closed 11:30~12:30)



Welcome to the poster session at Ritsumeikan University.

Illinois College and Ritsumeikan University have had a 30-year collaborative relationship since 1986. We decided upon the 'student exchange agreement' then and still exchange students every year. Not only do students of the Graduate School of Science and Engineering participate in this exchange, but also students of the Graduate School of Life Sciences participate in this program every year.

Two professors and one student from the Graduate School of Life Sciences were invited to the 1st and 2nd International Symposium on Science, Sustainability and Teaching held in 2014 and 2016 at Illinois College and gave oral presentations on their research.

Illinois College received the Luce Initiative on Asian Studies and the Environment (LIASE) grant from The Henry Luce Foundation and currently uses it to strengthen its relationship with Ritsumeikan University.

It is our great pleasure to host a poster presentation session as a part of the Illinois College–Ritsumeikan University Joint Project.

We would like to express our grateful acknowledgement to Profs. Kevin Klein and Laura Corey, and Ms. Mioko Webster from Illinois College, and Profs. Mikio Nishizawa, Hisaaki Mihara, and Tsukasa Yamanaka from the College of Life Sciences from Ritsumeikan University. We would also like to thank all of the poster presentation authors.

We hope this poster presentation session will inspire and benefit all of the participants and continue to develop the relationship between Illinois College and Ritsumeikan University.

Thank you.

Kazuo Kojima
Dean of the College of Life Sciences, Professor
Ritsumeikan University



Schedule Thursday, June 23

18:30~18:35 Opening Speech

<Dean of Graduate School of Life Sciences, Prof. Kojima>

18:35~19:15 Poster Session

(Group with odd number)

19:15~19:55 Poster Session

(Group with even number)

19:55~20:00 Feedback

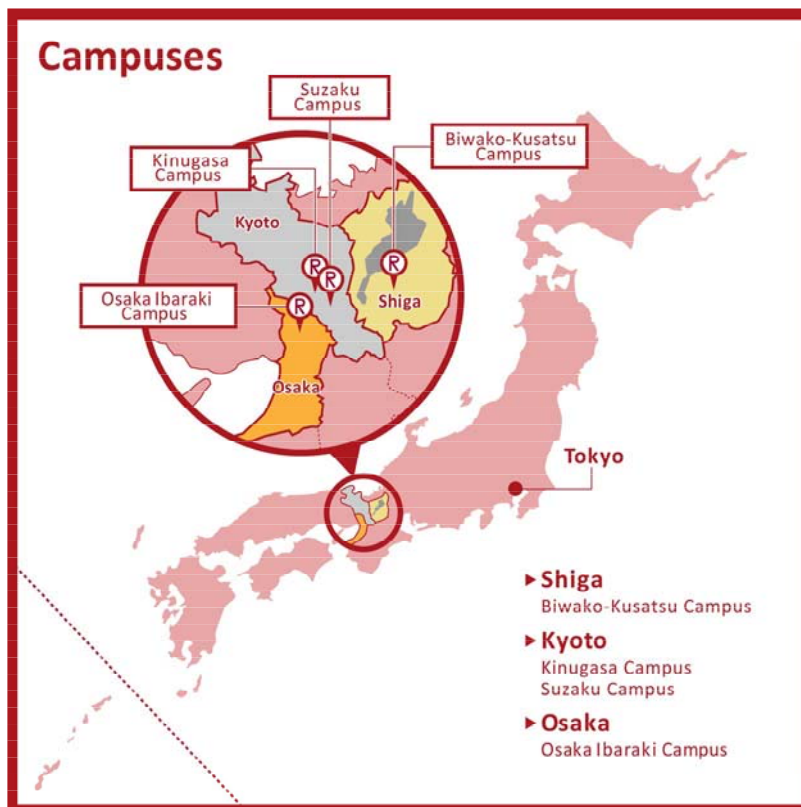


Poster presenters

No.	Title	Author(s)
IC-1	The Energy Life Cycle of Food Production and Consumption in Japan	Rochel Buente
IC-2	The Economic and Environmental Implications of the Fukushima Daiichi Nuclear Disaster	Julia Mendez Tuan Le Anh, Victoria Wynecoop
IC-3	The Future of Unconventional Gas Extraction in Japan: Economic Opportunity or Environmental Disaster	Kristen Wiley
IC-4	Decreasing the Populations of Nonindigenous Species in Lake Biwa, Japan	Jill Friedrich
IC-5	The Impact of Human Activity on Lake Biwa and the Need for Water Management	Samuel A. Welbourne
IC-6	Green Transportation: Bicycles in Japan	Dayana Vazquez Buquer
RU-1	The method of treatment of diabetes	Yuki Izuishi, Kouhei Nakano, Chisaki Takeuchi, Syotaro Kiyokawa
RU-2	The sunlight of hope will shine down -Methods with sunlight alternative to petroleum-	Koki Narita, Tae Fujimori, Syoya Hanamura, Takahito Tokura
RU-3	Celegans Potentiality	Shoichi Nakanishi, Takuma Nagata, Junya Ueda
RU-4	A bridge to the space -Challenge to make a space elevator-	Atsushi Ota, Hare Yamazaki, Miko Achiwa, Syo Yamamoto
RU-5	Touch and Meet -Activation of the under-populated disaster area, Minami-sanniku-	Syotaro Yamamoto, Masaya Nakamura, Kaito Seki, Risa Kakeshita
RU-6	In-Situ XAFS Investigation of Redox Reactions for Cu Species Supported on Silica	Koki Nakamura, Shohei Yamashita, Misaki Katayama, Yasuhiro Inada
RU-7	Effects of sulfur electrolyte additives on rate characteristics of lithium ion batteries	Shota Kikuzaki, Chihiro Yogi, Tomoe Sanada, Kazuo Kojima, Misaki Katayama, Yasuhiro Inada, Toshiaki Ohta
RU-8	Photoluminescence and Electroluminescence of Mn^{2+} -Doped Zn_2GeO_4 and Li_2ZnGeO_4 Thin Films Phosphors Prepared by Sol-Gel Method	Masahiro Karita, Daiki Fujioka, Tomoe Sanada, Aisubiro Tanaka, Noriyuki Wada, Kazuo Kojima
RU-9	Preparation of Tb^{3+} -doped Ta_2O_5 fluorescent, spherical particles by sol-gel method using W/O emulsion and their characterization	Shohei Oku, Daiki Fujioka, Tomoe Sanada, Aisubiro Tanaka, Noriyuki Wada, Kazuo Kojima
RU-10	Synthesis of New Metal-Organic Frameworks (MOFs) from Cobalt(II) Acetylacetonate and 1,4-Naphthalenedicarboxylic Acid	Daichi Kojima, Tomoe Sanada, Daiki Fujioka, Kazuo Kojima, Ryo Kawano, Shigeyuki Yamada, Osamu Tsutsumi
RU-11	Analysis of Tellurate Reduction in <i>Bacillus</i> sp. NTP-1	Honoka Ikuta, Ryuta Tobe, Yuu Hirose, Prakash Tejo, Hisaaki Mihara
RU-12	Identification of Selenium Delivery System for Selenophosphate Synthetase in Bacteria	Atsuki Shimizu, Satoru Hagita, Ryuta Tobe, Prakash N. Tejo, Hisaaki Mihara
RU-13	Pruni cortex (cherry bark) suppress the production of nitric oxide in interleukin 1 β -treated hepatocytes	Yuko Yamauchi, Tetsuya Okayama, Yukinobu Ikeya, Mikio Nishizawa
RU-14	Tuning of luminescent color from a gold complex without modification of molecular structure	Ryo Kawano, Shigeyuki Yamada, Osamu Tsutsumi
RU-15	Photoluminescence Behavior of Polymer-Stabilized Liquid Crystals Containing Gold Complexes	Hussain Sami, Shigeyuki Yamada, Osamu Tsutsumi
RU-16	Luminous Nanoparticles Consisting of Gold Complexes and Tuning Their Luminescence Color by Particles Size	Manami Nakata, Kyoosuke Nakamura, Shigeyuki Yamada, Osamu Tsutsumi, Mie Ota, Kei Ameyama
RU-17	Ion Conductivity in Hybrid Materials Containing Organic Polymer and Polyoxometalate	Keita Sawada, Shigeyuki Yamada, Osamu Tsutsumi
RU-18	Photoluminescence and Phase Transition Behavior of Rod-Like Gold Complexes with Polyfluorinated Structure	Kensuke Taneki, Shigeyuki Yamada, Osamu Tsutsumi
RU-19	Photoluminescence Behavior of Liquid-crystalline Gold Complexes Having Siloxane Terminal	Fumika Mitsuhashi, Shigeyuki Yamada, Osamu Tsutsumi
RU-20	Novel Organo Gels Containing Luminous Gold Complexes	Ryota Fukuhara, Shigeyuki Yamada, Osamu Tsutsumi
RU-21	The ER Effect of the Liquid Crystalline CycloSiloxane Derivatives with Side-on Mesogens	Yuki Kishi, Kosuke Kaneko, and Tomonori Hanasaki
RU-22	The Synthesis of the Cyclic Siloxane Tetramers with the Side-On Chiral Mesogens and Their Physical Properties	Yuta Kitajima, Kosuke Kaneko, and Tomonori Hanasaki
RU-23	Dielectric Characteristics and ER Effect of Dual Frequency Liquid Crystals	Takato Fukui, Kosuke Kaneko, Yasushi Okumura, Hirotsugu Kikuchi, Koji Fukao, Yoshimori Takikawa, Hiroshi Orihara, and Tomonori Hanasaki
RU-24	The Synthesis of Gold Nanoparticles Coated with Fluorescent Mesogens and the Measurement of Their Physical Properties	Naoaki Yamada, Kosuke Kaneko, and Tomonori Hanasaki
RU-25	The Synthesis and Physical Properties of Silica Nanoparticles Coated with Fluorescent Mesogenic Groups	Yuji Ogida, Kosuke Kaneko, Tomonori Hanasaki, and Kazuo Kojima
RU-26	Direct reprogramming of cardiomyocytes influences on cell cycle and metabolism	Yukihiko Harada, Soya Nakayama, Satoshi Takaki, Tomoe Ueyama, Tasuku Tsukamoto, Dai Ihara, Yuka Akagi, Teruhisa Kawamura
RU-27	Problems in the Japanese infant organ transplantation	Ryosuke Okuda
RU-28	The Ways of Getting along with Blue Light	Kei Watanabe, Kazuha Shimoda, Daisuke Fukutoka
RU-29	The war on Humans by Artificial Intelligence	Shiro Kato, Maho Yamamoto, Tatsuya Takahashi, Takahiro Nishikawa

Ritsumeikan University

College of Life Sciences and Graduate school of Life Sciences



Location:

Biwako-Kusatsu Campus

Bio Link

The new building “Bio Link” was completed in February 2015, offering research environment space to develop the creativity of researchers and students.



College and Graduate School of Life Sciences pursues education and research with the aim of contributing to the development of the life science field and a sustainable society, in which humankind and nature coexist harmoniously.

College of Life Sciences

Degree: Bachelor of Science or Engineering

English Degree Program: N/A

Location: Biwako-Kusatsu Campus

- Department of Applied Chemistry
- Department of Biotechnology
- Department of Bioinformatics
- Department of Biomedical Sciences

Graduate School of Life Sciences

[Master's Program]

Degree: Master of Science or Engineering

English Degree Program: International Program for Life Sciences

Location: Biwako-Kusatsu Campus

»»»Majors in Advanced Life Sciences

- Applied Chemistry Course
- Biotechnology Course
- Bioinformatics Course
- Biomedical Sciences Course

[Doctoral Program]

Degree: Master of Science or Engineering

English Degree Program: International Program for Life Sciences

Location: Biwako-Kusatsu Campus

»»»Majors in Advanced Life Sciences

PROJECT-BASED ENGLISH PROGRAM

Do your own projects in English and share your findings with global world!

Colleges of Life Sciences and Pharmaceutical Sciences
Ritsumeikan University at Biwako-Kusatsu

<http://www.pep.sk.ritsumeikan.ac.jp>, <http://ja-jp.facebook.com/ProjectBasedEnglishProgram>

Basic Concepts

Life science and pharmaceutical science are among the most globalized fields.

Life scientists must participate in global projects.

English is mandatory in global projects.

Find your own issues and solutions through projects.

Share ideas with people in global communities.

Project-based English Program

Two modules, Projects and Skill-workshops.

Projects for projecting ideas.

Skill-workshops for building up English skills.

Online participation in global communities.

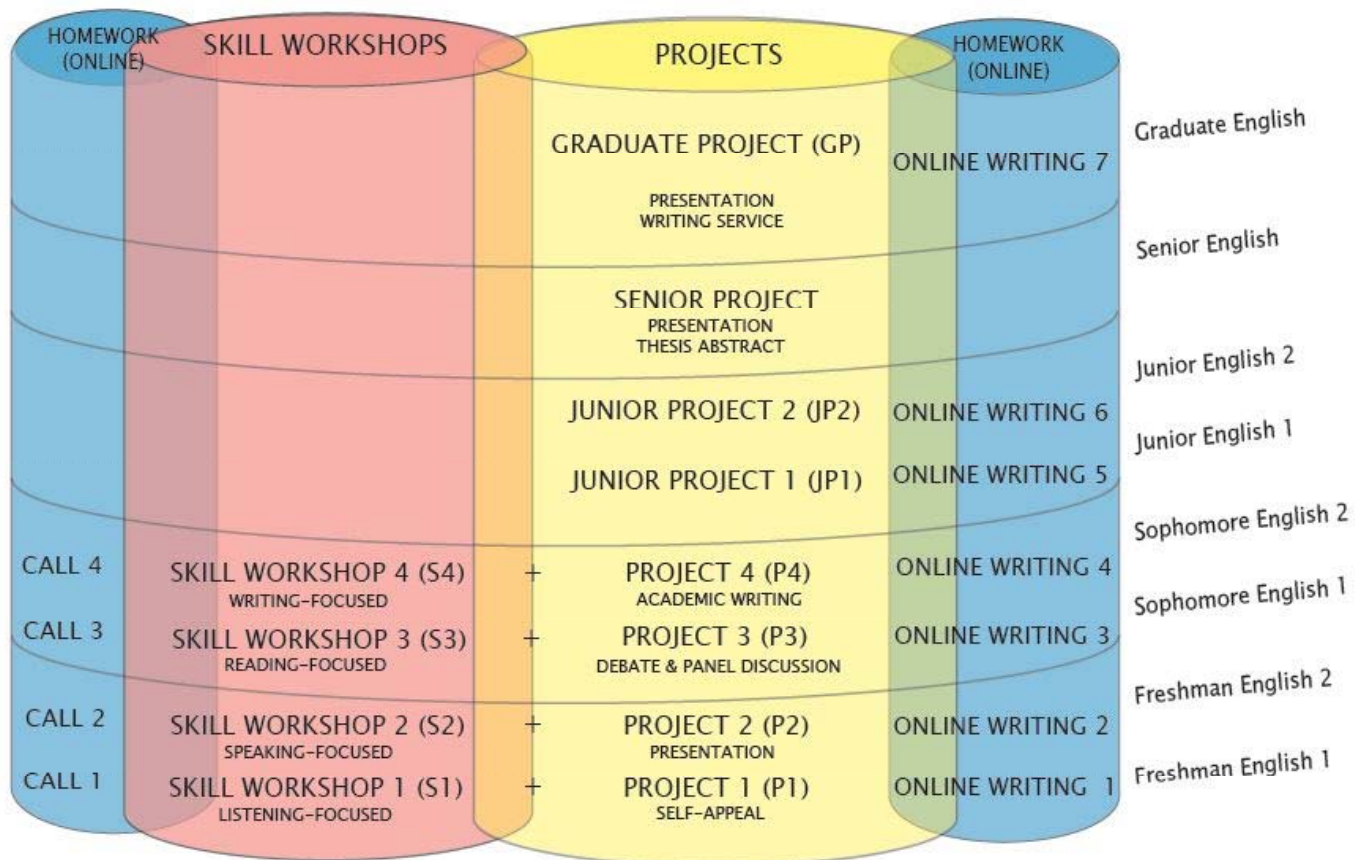
What do we mean by "project"?

Communication = producing and perceiving messages.

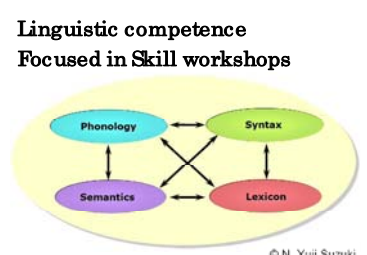
Project = pro + jacere (to throw)
messages = producing messages.

Inject = in + jacere (to take in)
messages = perceiving messages.

Project thereby means communication.



Major skills to learn



Project 1: Self-appeal, mini-project and mini-presentation

- Simple projects, daily interests.



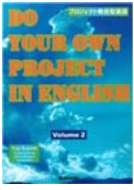
Project 2: Project, research, discussion and presentation

- Full projects.



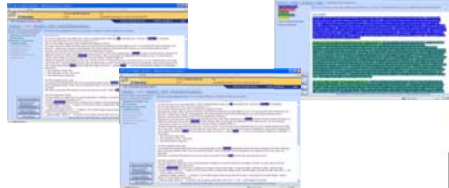
Project 3: Group project, debate and panel discussion

- Group projects, academic interests.



Project 4: Advanced project, academic writing and conference-style presentation

- Advanced surveys and projects, academic settings.



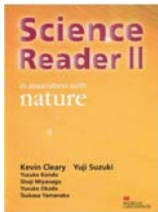
Facebook (<http://ja-jp.facebook.com/ProjectBasedEnglishProgram>)



Website (<http://www.pep.sk.ritsumeai.ac.jp>)

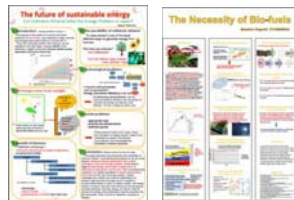
Junior Project 1: Life science reading, research and project

- Read articles in *Science Reader II in association with Nature*.
- Group-projects, scientific topics, poster presentations.



Junior Project 2: Life science lecture, research and project

- Listen to online lectures on life science.
- Individual or group projects, formal poster presentations.



Graduate Project: Advanced life science research and project

- Starting in April, 2012.
- Write research papers in corporation with ongoing projects in the master's program.
- Distinctive papers will be recommended for online writing consultation (to be offered by overseas writing centers).

TOEIC-IP Scores, Colleges of Life Sciences and Pharmaceutical Sciences from June 2008 to currently

	June (1) Freshman	December (2) Freshman	June (3) Sophomore	December (4) Sophomore	Compared with June (1) Freshman
Class 2013					
Life Sciences, Total	452.2	462.5	-----	-----	Up 9.7 ↗
Applied Chemistry	452.6	463.0	-----	-----	Up 9.4 ↗
Biotechnology	455.1	470.9	-----	-----	Up 15.8 ↗
Bioinformatics	422.9	423.8	-----	-----	Up 0.9 ↗
Biomedical Sciences	476.6	466.3	-----	-----	Up 9.7 ↗
Pharmaceutical Sciences	514.7	529.9	-----	-----	Up 15.2 ↗
Class 2012					
Life Sciences, Total	457.0	448.6	492.1	500.1	Up 43.1 ↗
Applied Chemistry	460.7	444.2	489.9	498.1	Up 37.4 ↗
Biotechnology	456.2	447.6	494.1	492.5	Up 37.3 ↗
Bioinformatics	445.1	431.9	463.7	476.7	Up 31.6 ↗
Biomedical Sciences	477.3	477.5	526.4	539.0	Up 61.7 ↗
Pharmaceutical Sciences	489.2	468.8	525.6	533.7	Up 44.5 ↗
Class 2011					
Life Sciences, Total	436.0	462.7	472.7	445.4	Up 9.4 ↗
Applied Chemistry	442.7	468.0	475.6	461.6	Up 18.9 ↗
Biotechnology	455.0	470.0	481.8	446.5	Down 8.5 ↘
Bioinformatics	406.0	430.2	443.7	419.9	Up 13.9 ↗
Biomedical Sciences	433.3	476.4	482.6	445.8	Up 12.5 ↗
Pharmaceutical Sciences	477.0	488.5	501.9	478.7	Up 1.7 ↗
Class 2010					
Life Sciences, Total	437.5	449.3	458.1	485.9	Up 47.4 ↗
Applied Chemistry	426.3	447.3	443.1	490.7	Up 54.4 ↗
Biotechnology	461.8	476.2	484.5	490.7	Up 28.9 ↗
Bioinformatics	413.4	403.6	421.2	448.1	Up 34.7 ↗
Biomedical Sciences	448.4	459.7	478.6	517.4	Up 69.0 ↗
Pharmaceutical Sciences	488.5	513.4	511.2	526.8	Up 38.3 ↗
Class 2009					
Life Sciences, Total	389.7	407.2	427.5	429.4	Up 39.7 ↗
Applied Chemistry	380.9	412.2	427.0	433.9	Up 53.0 ↗
Biotechnology	409.1	420.1	444.5	454.7	Up 45.6 ↗
Bioinformatics	372.8	377.5	402.0	393.1	Up 20.3 ↗
Biomedical Sciences	392.2	414.6	432.3	427.1	Up 34.9 ↗
Pharmaceutical Sciences	446.6	466.5	478.1	502.2	Up 55.6 ↗
Class 2008					
Life Sciences, Total	392.9	432.3	431.7	444.8	Up 51.9 ↗
Applied Chemistry	389.3	436.1	427.3	434.3	Up 46.0 ↗
Biotechnology	379.3	414.3	419.2	425.8	Up 46.5 ↗
Bioinformatics	382.3	419.4	418.1	447.4	Up 65.1 ↗
Biomedical Sciences	422.3	461.1	463.4	475.5	Up 53.2 ↗
Pharmaceutical Sciences	407.3	444.0	456.3	466.5	Up 59.2 ↗

Notes

- Total number of examinees: 793 (in December 2013)
- In December 2012: above 900 = 4, above 800 = 8, above 700 = 32, above 600 = 121, above 500 = 215

REFERENCES

Suzuki, N. Yuji, *The Semantics of the English Modals: A Case of Multi-sensory, Multi-lateral Generation of Meaning in Communication*. Tokyo, Liber Press, 2002.
 Suzuki, N. Yuji, *Exploring D.F. Benson's Neurology of Thinking—A Search for the Neurological Foundation of Communication and Language*. Tokyo, Keio University Press, 2006.
 Suzuki, N. Yuji, *Exploring Antonio Damasio's Descartes' Error: Emotion, Reason, and the Human Mind—How Do Emotion, Reason, and Semantic Modality Cooperate in Reasoning or Deciding?*
 Suzuki, N. Yuji, et al. *Do Your Own Project In English Volume 1*. Tokyo, Ikubundo, 2008.
 Suzuki, N. Yuji, et al. *Do Your Own Project In English Volume 2*. Tokyo, Ikubundo, 2009.
 Suzuki, N. Yuji, Kevin Cleary, *Science Reader 2 in association with Nature*. Tokyo, Macmillan Language House, 2011. (With associate co-authors: Tsukasa Yamanaka, Yusuke Okada, Shoji Miyayaga et. al)

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