



AY2015 Interactive Evening Lounge – Proposal/Report
2015年度 インタラクティブ・イブニングラウンジ企画書兼報告書

Please fill out the first page to propose an IEL and submit 3 weeks prior to the IEL. The content will be used to announce the plan to the GSDM students. After the IEL, please fill out the second page and re-submit the revised version. This report will appear in the GSDM website.

日時 Date/Time	2015年11月20日 17:30-20:00 17:30-20:00, 20 th November 2015
場所 Place	本郷キャンパス, 工学部8号館536 Eng.Bld.#8-536, Hongo Campus
タイトル Title	核融合の展望 Energy from Stars -Prospects for Nuclear Fusion-
企画責任者 (特任教員・研究員) Organizer	<ul style="list-style-type: none"> ・ Mr. Roberto Orsi 東京大学公共政策大学院、政策ビジョン研究センター、研究員 Lecturer, Policy Alternatives Research Institute, Graduate School of Public Policy, The University of Tokyo <p><Members></p> <ul style="list-style-type: none"> ・ Ms. Xi Zhao、工学系研究科、School of Engineering ・ Ms. Akiko Sasakawa、法学政治学研究科、School of Law and Politics ・ Mr. Seonwoo Kim、工学系研究科機械工学専攻、Department of Mechanical Engineering, School of Engineering ・ Mr. Yang Qian、工学系研究科機械工学専攻、Department of Mechanical Engineering, School of Engineering ・ Mr. Keigo Otsuka、工学系研究科機械工学専攻、Department of Mechanical Engineering, School of Engineering ・ Mr. Daniel del Barrio、工学系研究科社会基盤専攻、Civil Engineering ・ Ms. Na Jihyun 法学政治学研究科、School of Law and Politics
概要 Summary	<p><Summary></p> <p>In April 2014, the Japanese Government issued the “New Strategic Energy Plan” (Plan) in order to show to the public the basic direction of Japan’s energy policy under the Basic Act on Energy Policy. This Plan is based on current power generation technologies. Under this assumption, the re-starting of nuclear power plants appears as the only possible solution to provide the Japanese system with a reliable base energy source. Nevertheless, as recent history showed us with the development of shale gas, technological changes are commonly disruptive. Therefore, an analysis considering promising energy sources is needed. Among the different possibilities, Nuclear Fusion has the most chances to be successfully developed.</p> <p>Nuclear Fusion generation is one kind of power generating method with reactions in which hydrogen atoms combine to form a helium with the release of energy. It can generate three to four times more energy by unit of fuel mass, in comparison to nuclear fission, with less environmental damage.</p>



In this Interactive Evening Lounge (IEL), we would like to discuss with experts the following points;

1. History and challenges of Nuclear Fusion
2. Current technological progress
3. Implementation policies
4. International Cooperation and Political Implications

Global Leader Program for Social Design and Management (GSDM) is the high education program for the development of human resources with a balanced knowledge of both technologies and policies/systems. Nuclear technologies are a core energy system and as such one of the thematic pillars of the GSDM.

We are looking forward to your participation!

<Purpose>

To assess prospects for the needs of nuclear power plants re-starting based on future technologies development:

<Outline of IEL>

- Start registration <17:30-17:45>
(Offer the drinks for early birds!)
- Introduction <17:45-17:50> (by Energy Group Member)
 - Topic Introduction
 - ✧ Is there any real alternative to nuclear power plants?
 - ✧ Could fusion be that substituting technology?
 - Brief overview of fusion:
 - ✧ Technical aspects
 - ✧ History and challenges
 - Introduction of guests:
 - ✧ Mr. Shinichi Ishida, Director Planning and Co-ordination Office at Japan Atomic Energy Agency, Sector of Fusion Research and Development. Previously he was director of JT60SA Project, the Europe-Japan superconductor Tokamak, now under construction in Naka.
 - ✧ Mr. Juan Ramon Knaster, director of the IFMIF in Rokkasho, <http://www.ifmif.org/>. He also has previous experience working at ITER international team.
 - ✧ Mr. Philippe Cara, Project Manager of LIPAc in Europe
- Presentations from 3 Guests <20min + 10minQ&A each 17:50-19:20>:
 - Current status of Nuclear Fusion
 - Roadmap for technology development
 - Investment

	<p>Comparison among countries Thoughts on re-starting nuclear now Experience in international team work: motivation</p> <ul style="list-style-type: none"> - Panel Discussion <25min 19:20-19:45> (facilitated by Energy Group Member) - Closing Event <19:45-20:00> <ul style="list-style-type: none"> ➢ Present small gifts to the experts ➢ Final comments from Professor (TBD) ➢ Take Photo together - Free Discussion Time (with Pizza and Drinks) <p><Others> We will prepare 1) the posters for the advertisement and 2) the booklet to introduce the contents of the event (purpose, schedule and introduction of the experts with pictures) for distributing before and on the event, as well as to collect the questionnaire from the participants after the event.</p>
参加者数 N. of participants	<p>We expect 30 participants</p> <p>*The registration number was 32, including the experts and the faculty members</p>
学生担当 Student	<p>Ms. Xi Zhao、工学系研究科、School of Engineering</p> <ul style="list-style-type: none"> • Ms. Akiko Sasakawa、法学政治学研究科、School of Law and Politics • Mr. Seonwoo Kim、工学系研究科機械工学専攻、Department of Mechanical Engineering, School of Engineering • Mr. Yang Qian、工学系研究科機械工学専攻、Department of Mechanical Engineering, School of Engineering • Mr. Keigo Otsuka、工学系研究科機械工学専攻、Department of Mechanical Engineering, School of Engineering • Mr. Daniel del Barrio、工学系研究科社会基盤専攻、Civil Engineering • Ms. Na Jihyun 法学政治学研究科、School of Law and Politics
Impressions /Comments	<p>Dr. Shinichi Ishida presented on the “Fusion and Tokamak”, followed by Dr. Juan Ramon Knaster who made the presentation on “Material problems and research needs for fusion power” and Mr. Philippe Cara presented on “LIPAc project, one of the top three world accelerators in beam average power installed in Japan”. They shared their experience and views on how to create a “single team” to succeed in an international cooperation project.</p> <p>Having learnt the difficulties and the importance of building trust among different countries during the process of the project, it was inspiring to know that dense communication to build the trust and share difficulties is one of the key elements to make a successful international project, in addition to the high motivation and expertise.</p> <p>The attachment is the questionnaire collected after the IEL from some of the audience.</p>



