

## **Two-way Interview with Corporate Researchers**

Doctoral Programs in Applied Physics, Materials Science,  
and Nano-Science and Nano-Technology  
Graduate School of Pure and Applied Sciences  
University of Tsukuba

2019, Oct. 24 13:00-17:00

Bunkyo School Building, Tokyo Campus, University of Tsukuba

### Purpose

An event for Two-way Interview of graduate students with corporate researchers is being planned. There, the students are expected to present their research results and their own technical abilities such as research background, experimental techniques, and analyses, which have been acquired on the research process, on the poster. In front of the poster, the students and the corporate researchers can exchange opinions with each other. Students there will be urged to understand the industrial aspect of their research subject. Furthermore, students can polish their technological skills, upgrade their innovation and presentation capabilities, which will surely contribute to the success of their subsequent research. Moreover, the students will be able to use those upgraded skills also during their future employment. On the other hand, corporations can evaluate students before employment and find a chance to financially support a promising student or the laboratory.

By making a poster announcement effective, the academic advisor can obtain the advice on research from the industrial viewpoint, and extend the strong point in their research simultaneously. Innovative ideas of students and their laboratories can be stimulated, which can make this chance be developed into industry-university cooperation research. That is, such a chance can construct the research exchange with the best and highest interactivity for both University of Tsukuba (or a professor and a student) and a corporation.

### Program

1<sup>st</sup> Session (13:00-14:00)

- 1.1 Message from an alumnus of Doctoral Course and Corporation
- 1.2 Introduction of up-to-date Doctoral Course Student's spirit and Doctoral education

2<sup>nd</sup> Session (14:00-16:00)

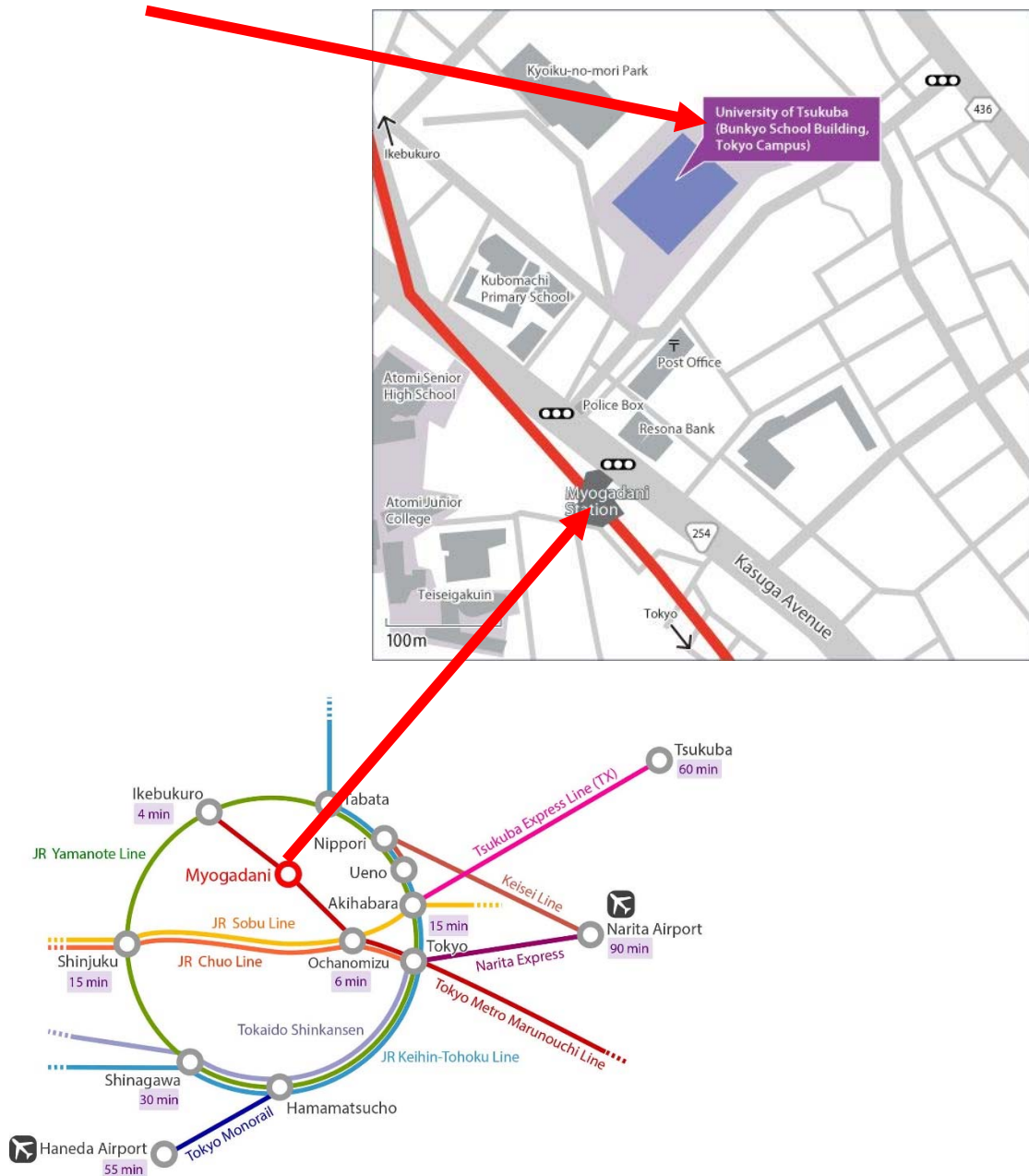
- 2.1 1-min presentation of posters
- 2.2 Poster presentation I

## 2.3 Poster presentation II

3<sup>rd</sup> Session (16:00-17:00)

### 3.1 Exchange of name cards, Group discussion, Individual interview

Map to Bunkyo School Building of Tokyo Campus, University of Tsukuba  
Tokyo Metro Marunouchi Line: Myogadani Station (about five-minute walk)



The passage and allowance to the participant student will be supplied.

The name card with the logo of University of Tsukuba will also be supplied.

# Two-way Interview with Corporate Researchers

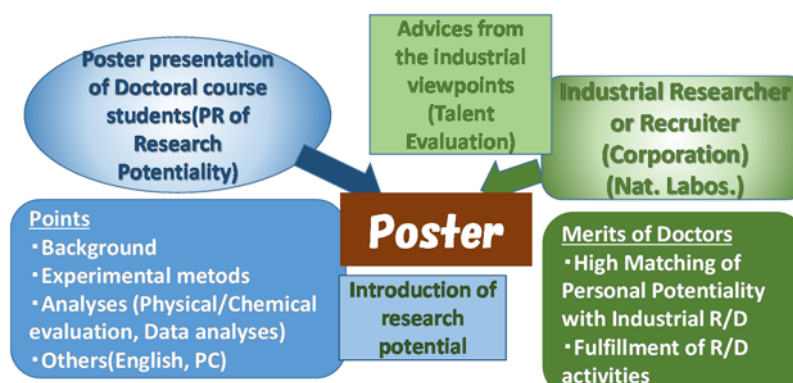
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Overseas alliance is increasing in wide area of industry. The doctor degree holder's activity in the field is becoming more and more appreciated. The mutual understanding of doctoral course students and companies is very important for the achievement of good employment matching. Then, the place is planned, in which students present their own abilities (for example, a research subject arrangement, the programming methods, experimental methods, evaluation /analysis methods, communicativity, etc.) mastered in the processes of their research execution. It is also expected that this interview will lead to a good opportunity for job-hunting and research collaboration.

In recent years, companies are changing remarkably. There, however, are few opportunities for students to know the current situation of companies. On the other hand, it is required that students understand the background of their research subject and the principle of the used evaluation and analysis. Here, you can clearly explain the things that you actually observed in the experiments by your own eyes and things that were imagined, and you can also present your research capabilities. When opinions from a view point of the industry to your imagination and capability are shown, the corporation researchers can find out the student's abilities and the students can know the industrial applicability of their own studies. In this two-way interview, students can demonstrate their abilities and can imagine an employment matching in their job-hunting with the corporations.

Various support from corporation in the future is also expected.



Information:  
Graduate School of Pure and Applied Sciences  
University of Tsukuba, Tsukuba, Ibaraki 305  
Room-TIA, Tel 029-853-4028

## Preparation for Two-way Interview to Fully Present Your Potentiality.

The purpose of this interview is to understand your technical abilities and enlarge employment chance based on the research exchange of the doctoral students with corporate researchers.

In this poster presentation, unlike a congress presentation, you are requested to spend half of the time, at most, for your research content, and use the other half for presenting your technical abilities as a researcher.

### ○Poster

Part of contents presented in a congress etc.

○Research abilities--- It is not necessary to correspond to all the followings.

Please introduce items learned as an ability of your own.

#### 1. Research

Background Research for the determination of your research subject.

Representation by your opinion.

Methods---Scientific societies, Papers (International Journals, etc.), Patents,  
Internet (Distinctive way), White papers, etc.

#### 2. Execution

##### 2.1 Experimental Technique

Equipment---Points of your originality

Vacuum System, Furnace, Thin Film Fabrication, Ultra-Cleaning,  
Micro patterning (Photo-Lithography, Electron Beam, Wet/Dry Etching,  
etc)

Programming—BASIC, Fortran, C, etc.

##### 2.2 Experimental Principle

##### 2.3 Used Basic Equation

##### 2.4 Calculation Program

Used Computing System (Big computer, PC, etc.)

#### 3. Evaluation/Analyses

##### 3.1 Measurements

Physical

---SEM/TEM/FIB, Ellipsometry, SPM (AFM/CAFM, etc.),

Optical Microscopy, FTIR, ESR, XPS etc.

Chemical ---NMR etc.

Electrical ---(GPIB:BASIC/FORTRAN, etc.)

--- High Precision (Resistivity, Current, Impedance,  
Carrier Concentration, etc.)

※Brief Explanation of Measurement Principle, Evaluation Achievements.

3.2 Simulation

Programming Software

4. Communicativity

4.1 Published English Papers

4.2 Presentation of International Conferences, English Conversation,  
WORD/EXCEL/Graphic, etc.