

n e w s l e t t e r



Faculty of Engineering, Kyoto University

京都大学工学部国際交流ニュースレター

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Visit of Student Representatives from Delft University of Technology to Kyoto University



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On February 8, 1999, a facsimile message arrived from the Student Representative Council (ORAS: Organization of Rational Students) of Delft University of Technology (TUDelft). It announced a wish to honor the 400-year relationship between the Netherlands and Japan, and to do so, a delegation of seven students would visit Japan. Their goal was to learn about student life in Japan and to establish an active student exchange between TUDelft and representative universities in Japan. Since Kyoto University has a relationship with TUDelft, the Dutch students wanted to visit the School of Engineering and to make contact with the local student community. This Dutch student council is authorized and financially supported by the university. A letter from the Senior Policy Advisor on Internationalization (Marietta Y.M. Spiekerman-Middelplaats) was attached. My introduction to this group was through an old friend of mine, Prof. de Swaan Arons of the Faculty of Chemical Technology and Materials Science, TUDelft.

The delegates were in Japan between April 21- May 1, and in addition to Kyoto University, they enthusiastically visited University of Tokyo, Osaka University, and Kyushu University to meet with respective students groups. They were in Kyoto between April 28 - 30.

With the consultation to Prof. Kenjiro Suzuki of the Dept. of Mechanical Engineering, the chairman of the Committee for International Academic Exchange of Kyoto University, and Prof. Takeshi Tamura of the Dept. of Civil Engineering, the acting chairman of the Committee for International Academic Exchange of School of Engineering, a group of student volunteers as representatives to meet with the students delegates of TUDelft was organized: Mr. Shinsuke Nagamine (Dept. of Chemical Engineering), Mr. Kazuya Tatsumi (Dept. of Mechanical Engineering), Miss Sayuri Kimoto (Dept. of Civil Engineering), Mr. Fumitsugu Kojima, Miss Yoko Kamimoto (IAESTE), Mr. Ken Kurata (KIXS). These student representatives enthusiastically met the

visiting students at Kyoto Station in the evening of April 28, arranged a sight-seeing trip on April 29, and held a discussion and party on April 30 with the help of about thirty volunteer students.

Fourteen Japanese students joined the sight-seeing trip of April 29. The excursion between Ginkakuji temple to Kiyomizu temple was basically on foot and everyone seemed to have had a good time. The excursion and the party that followed allowed everyone to get to know each other.

On April 30, the TUDelft delegates were invited to Kyoto University to visit the Center for Student Exchange, and the labs of Prof. Suzuki, Prof. Tamura, and myself in the morning. The formal meeting took place in the discussion room in the Dept. of Chemical Engineering from 14:00 to 17:30. After the introduction of Kyoto University (especially the School of Engineering) by myself and the presentation by the TUDelft students, active discussions were carried on into the party, and continued until 10:00pm. It was a pleasant surprise to the staff members who attended the meeting to see how vigorously our students engaged in the discussion. Both sides learned that each others' university is of a high level and both groups agreed to use this occasion to extend the mutual student-level relationship.

The education system in the Netherlands requires 5 to 6 years of study to obtain a Diploma. This corresponds to the combination of Bachelor and Master courses for us. Though the percentage of the foreign students at TUDelft is currently 8%, the university is hoping to increase it to 25% in the near future. To meet this objective, many departments have started to offer "Master of Science Program", in which all lectures are given in English and graduates are awarded a MS degree. Student financial support is arranged in a variety of ways. Other information brought about by TUDelft students was their plans to hold a "JAPANESE WEEK" at TUDelft in the year of 2000 to commemorate the 400 year-relationship between Japan and the Netherlands. They hope student representatives from Kyoto University can join them for this occasion.

Kyoto University has agreements on exchange programs with approximately 40 foreign universities at the university level and many on the School of Engineering and Departmental levels. Efforts are needed to increase student exchange, especially to help our students to study abroad. An authorized and financially supported student organization like ORAS would be helpful to encourage further student exchange with foreign universities.

Memories of Student Life in KAIST



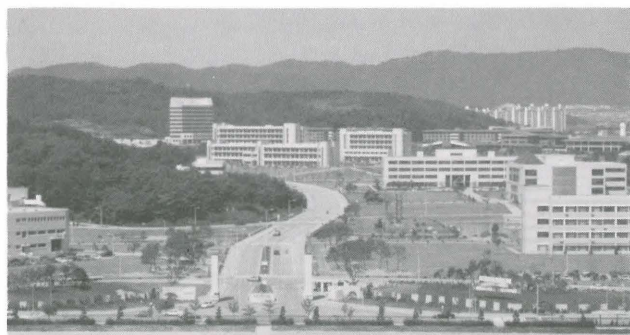
Jeong Gyu PARK

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Every male Korean must serve in the military for twenty-six months. Consequently, my university life began with the agonizing decision: serve now or later. Half of my colleagues discontinued their studies and joined the army after sophomore year; the rest continued on to graduate school. After getting a Master's, a man will be exempted from the draft if he is selected to continue as the researcher at an approved domestic research center. The required length of time to work in the research center is five years, however for graduates of KAIST (Korea Advanced Institute of Science and Technology), it is only three years since two years as a student in KAIST is regarded as service in the military. KAIST students are treated specially compared to those in ordinary colleges. These facts form part of the background of KAIST.

In the 60s, Korea was a poor country just starting to develop industrially. At that time, the government realized the importance of science and technology. Their response was to establish KIST (Korea Institute of Science and Technology) to which they invited Korean scientists and engineers from foreign countries. In order to nurture highly qualified scientists and engineers, a graduate school, KAIS (Korea Advanced Institute of Science), was founded in 1971. Its name was changed to KAIST in 1981. Unlike all the other Ministry of Education-governed universities, KAIST was established by and remains under the Ministry of Science and Technology, and it is research-oriented university. Therefore three year-obligatory term in its research center is required of KAIST graduates in place of military service. (I was extremely unlucky however. Just after I entered KAIST, that privilege was rescinded! Alas!)

There are other distinctive features in KAIST: the number of graduate students is twice that of undergraduates. In ordinary colleges, fourth-year undergraduate students are called 'seniors' since they are older and have a higher standing than other students. But in KAIST, these 'seniors' are just fourth-year undergraduates, neither older nor of a higher rank. Another distinction is that all KAIST students are given a stipend for living allowances, and not required to pay tuition. Also, if they wish, they can live in a KAIST dormitory free. Regarding dorm life, student lifestyles are divided into followers of Apollo and Dionysus. Consequently, there were those who rose early to work and those that preferred to sleep late



Overview of KAIST Campus

and work late into the night. In the free and lively dorm atmosphere, most students adhered the Dionysian lifestyle. In fact, I'm sure ninety percent of them did as I did. Once, when I was a first year student in KAIST, I slept only five hours over three days time, struggling to do homework by myself. After that exhausting experience, I changed my mind and did my homework with friends, even though it still took a lot of time. For my first year in KAIST, I was almost buried alive under homework and class load.

After completing all that hard course work, we did research. The presentation of a Master thesis is usually started around Christmas day, and sometimes, if the result is not good enough, graduation will be postponed by one or two semesters. That unfortunately, happened to my roommate. At the defense, he failed to satisfy the faculty, meaning that his graduation would be put off. A few days later, he disappeared leaving only a message, "Send my books and baggage to my hometown." It shocked and worried us very much because we feared that he might try to kill himself on Mt. Seolak, a place he always said he wanted to go. Friends and I went to the snowy mountain to search for him. It was Christmas Eve and I canceled my date. After a few days, we found out that he had no intention of committing suicide, but just wanted to climb that mountain. Thanks to him, I had a terrible Christmas, but at the same time, that adventure came to represent for me the tough life of students at KAIST. One irony is that this friend continued his studies and successfully received a Ph.D. this year; whereas, I, who was anxious about him, have just started my Ph.D. studies. Such is life.

After studying all night, even now I remember the bright and beautiful sun rising in the dawn sky, bathing in the Yuseong spa, then sleeping peacefully afterward through the remainder of the morning. These memories of student life at KAIST will never leave me.

Staying Longer



Bodo FIEDLER

Guest Lecturer for Advanced Research
Mesoscopic Materials Research Center

In 1996 I made my first experiences about living and working in Japan when I spent two weeks in the framework of JSPS-DFG collaboration at the Mesoscopic Materials Research Center, Faculty of Engineering, Kyoto University. Two years later, I got the opportunity for a longer stay as a researcher in the same laboratory. It was not difficult to catch the chance because of the very good experiences I have made. My wife and I could imagine living in Kyoto as well. Our departure from Germany was shifted from April to July, because our son Robert was born in May. Nevertheless we were looking forward to live in Kyoto as a small family in an international student house, which is guided by Swiss and Japanese house parents. When we arrived in July (Robert was six weeks old) we first had to stand the high temperature and humidity. We are from Hamburg (in northern Germany) where the temperatures in summer are around 24 degrees with a little wind for about six weeks and the other time there are often rainy days and lower temperature. Shortly we got accustomed to Japanese summer and air-condition became an object of value for us.

Working and studying at Kyoto University differs from that at my German University. The difference is not so much the different way of thinking, the major difference is that at German Universities Ph.D. students are not students, they are full-paid employees of the laboratory, also several employed technicians belong to each laboratory. On the other hand the students education is much more separated from life in the departments. For example students have no desks or never share an office like here. For that reason it is impossible that such a close and familiar atmosphere between students and professors like here could grow at German Universities. I really enjoy this way of working together with the students, beside the work I took part in a two days laboratory trip at a sports resort. We spend a nice time together and afterwards we had fewer problems in language. I think it is very important for Japanese students to practice English speaking as much as possible because they have a wide vocabulary but they are often too shy to express. Maybe it is a culture shock for them to say "you" and to call each other by first name. Nevertheless I was impressed of their hard work and responsibility. After some weeks I changed to the Japanese style working time and obtained successful results. So I got the opportunity to attend national and international conferences. In this way it was possible to come in contact with many professors and to visit several universities all over Japan. Finally I became an invited speaker at a conference held in Tokyo. On all trips my family accompanied me and we made several experiences with the Japanese railway system and also the Tokyo City subway system, which was very impressive for us.

The flexible working time is also a big advantage for me staying with my family, at daytime we sometime spend the spare time together and visited famous locations and festivals in Kyoto. When you are travelling with your family, especially with a small child, you have to think about much more things than going only by yourself. We made so positive experiences, because Robert made the Japanese hearts wide open and it was easy to come in contact with them. From the picture of Robert with the schoolgirls you may be able to imagine. All mentioned above and much more was only possible with the help of my professors S. Ochiai and M. Hojo. I would like to take this opportunity to thank them for their support not only on the field of science but also in all cases of living here in Kyoto. Often they spend much time to solve the upcoming problems that I can never balance the efforts they made.

Also for my wife and son the living situation is quite nice, for example my wife is used to go to the Kyoto City International Community House several times a week and enjoys learning Japanese language, Origami, Calligraphy etc. The lessons are also a good chance to get in contact with many people and to learn more about Japanese culture. I think there is nothing comparable in Germany in offering courses in language and culture for foreigners.

Because of the very helpful and familiar behavior of the Japanese people our son developed into a cheerful boy. We really feel at home and decided to stay longer than originally planned in Kyoto and Kyoto University.



Making Friends (Ryoanji Temple)

京大の優秀なイメージと現実の相違



Hom Bahadur RIJAL

環境地球工学専攻
修士課程2年

日本では、京大で勉強しているという、優れた人物として尊敬される。これは、京大の教育や研究業績が全国的に大きな影響力を持っているからである。レベルの高い大学を目指して子供の頃から受験戦争をしてきた日本人の立場から考えてみれば、京大の存在位置がよく理解できる。私自身も京大生については優秀で「選ばれた者」として誇りを持つ人々のイメージがあり、京大についてはその学生達をさらに優秀に育て上げるイメージがあったため、厳しい競争を覚悟して入学したのだった。しかし、今ではそのイメージと現実のズレを感じている。私はネパールの大学を卒業して来日し、日本語学校を経て、私立大で4年間学び、さらに京大の大学院で一年半学んできた。ここでは、これらの経験の元に私の感想を京大に限定して述べるが、「入学が難しく卒業が簡単」といわれている日本の大学事情から考えれば、以下で述べる京大の問題意識は他大学でも同じだと思う。

果たして京大生の皆が天才だろうか。京大生の多くは生まれ付きの「天才派」というより、子供の時から学問の練習や訓練する環境で知識を積み重ねてきた、「努力派」である。一生懸命努力して京大に入学した優秀な学生であるが、彼らの中には、授業の欠席や遅刻が多い、授業中に寝る、分からなくても質問しない、出席表を代筆する、自分で考えずに友人のレポートを写す、というような行為がよく見られる。教室の前部の席に座るのを避けたり、単位をとって卒業することが目的になっているように思う。

京大生がこのような状況に陥っている原因は、一方的な授業方針、広くて浅い授業内容(あるテーマについて具体的に追求しない授業)、さほど厳しくない成績評価という教育システムにあるのではないだろうか。学生に刺激的な印象を与える授業が少ない。先生が寝ている学生を注意しないまま講義を続けることを不思議に思う。私もウトウトしてしまうことがあるが、後悔しながら原因を考えると、先生と学生が互いに質問、議論、反論して問題意識を投げかける場が少ないことが思い付く。また、一つのクラスに学生が多く、先生が学生全員に十分な指導を行うことが出来ないと思う。勿論、これらのシステムに疑問を持たない学生自身にも疑問がある。

このように学生の消極的な態度、一方的な教育システムでは、学生の能力を十分に引き出すことが出来ないと思う。先生が学生に「一方的に知識を与える教育システム」よりも、「互いに議論し問題意識できる教育システム」が必要とされている。学生の自由な発想や能力を引き出すために、「数をこなす教育システム」から「質を追求する教育システム」に展開する必要がある。つまり、京大から大勢の人材を社会に送ることより、京大でいかに優秀な人材を育てるかの方が大事だと思う。成績評価をもっと厳しくし、授業での教官に対する学生の積極的発言が求められるような教育環境になれば、自然と学生の態度も改まるのではないだろうか。京大に集まった優秀な学生の自由な発想を展開し、京大にしか出来ない独創的な教育や研究を行って欲しい。

京大に入学したからには、社会の期待に応えられるように優秀な実績を上げる必要がある。今後の社会では、京大を卒業したかどうかより、実社会に出て何が出来ることが問われる。京大で優秀な指導者、教育者、研究者を育成し、社会の基盤を創り上げるために、京大の教育システムの改革が求められている。そうすれば、いつまでも京大に対する優秀なイメージと現実がマッチするだろう。

上海交通大学との交流



石田 亨

情報学研究科
社会情報学専攻教授

中華人民共和国の上海交通大学（Shanghai Jiaotong University）は、1896年に南洋公学の校名で設立された中国でも最も伝統のある技術系大学である。南洋公学は清王朝末期の特殊な社会情勢の下、西欧の科学技術を吸収するため、広告メディア、政治と鉄道行政、経済統制の指導者養成や、電動機械、造船、航海の専門育成等を目的に開校し、その後辛亥革命や日中戦争等の動乱の中で組織は南洋大学、交通大学上海学校、交通大学重慶分校等と幾度か改変されたが、1959年には各地に分散していた交通大学（分校）が、北部地域は西安交通大学に、南部地域は上海交通大学に統合され、現在に至っている。

この間一貫して鉄道、船舶運輸に関する研究に優れた業績を残し、一方で世界の最先端科学技術を学ぶため日、米、英をはじめ先進各国の大学や研究機関に多くの学生を派遣して自らの水準の向上に努め、現在では中国東南地域において最も高い評価を得るに至り、科学と文化に関する知識を広める先駆けの役割を果たしている。現在、4つの学院と27の専攻、41の研究センターと研究所を有し、教員数は2570名、学生の総数は13020名で、このうち大学院生は1384名である。世界各国から約100名の留学生を受入れ、欧米、ロシア、日本等に約200名を留学させている。

江沢民総書記の母校でもある上海交通大学は、1984年には中国政府の国家主要プロジェクトとして承認され、上海市の全面協力により近郊に新キャンパス地が提供され、現

在は14専攻が移転し、1995年に設定された計画では、応用科学、電動工学、電子情報工学、人間・社会科学、マネジメント、材料科学、材料工学、造船学、海洋工学の7つの学院に再構成し、両キャンパスを併せて2万人を擁する大学となる予定で、新しい歴史を刻み始めている。

学術交流協定の締結に関しては、平成9年に上海交通大学を訪問した折り、Shen Huanye（盛煥燁）副学長から打診を受けたのがきっかけとなった。偶然にも研究テーマも近く、協定を結んだ後に実質的な交流を始めることができると考え、工学部国際交流委員長代理の田村 武先生や研究協力掛の方々にご苦労をおかけしながら準備を進めた。その結果、平成11年1月に、上海交通大学と工学部・工学研究科及び情報学研究科並びにエネルギー科学研究科の4部局が連名で締結し協定が発足した。

研究室では具体的な交流も始まっている。都市の情報化を考える「デジタルシティ」を研究テーマに据え、本年9月から博士課程学生を短期で定期的に受け入れる。学生の相互交流を基礎に、大学間の共同研究を模索していきたい。上海と京都という異なる文化を背景に、新しい発想を必要とするデジタルシティの開発を通じて、両国の将来を担う若い世代の相互理解に寄与できればと思う。



上海交通大学のキャンパス

国際交流日誌（平成11年2月9日～平成11年8月5日）

平成11（1999）年

- 2月9日（火）国立シンガポール大学 Chung Ho Ling 教授外1名来訪
- 3月10日（水）ノルウェー科学技術大学 Emil Spjøtvoll 学長他3名来訪
ガボン共和国マスク科学技術大学 Jacques Lebibi 学長来訪
- 18日（木）マサチューセッツ工科大学 Japan Program 担当 Patricia Gercik 氏他1名来訪

- 3月24日（水）工学研究科・工学部国際交流委員会 マラヤ大学 Tan Sri Dato' Dr. Abdullah Sanusi Ahmad 副学長他1名来訪
- 4月1日（木）ジョモ・ケニヤット農工大学 Frederick Ngawo Onyango 副学長来訪
- 28日（水）工学研究科・工学部国際交流委員会
- 5月26日（水）工学研究科・工学部国際交流委員会
- 6月30日（水）工学研究科・工学部国際交流委員会
- 8月5日（木）工学研究科・工学部国際交流委員会

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