▲ ▲ 京都大学農学部国際交流 ▲ ▲ ▲

Neuus Leiter

Foreign Student Service, Agriculture

留学生と12年

石 田 祐三郎 「京都大学名誉教授」 水産学教室

私の所属した水産微生物研究室は,門田教授の当時から, 海外の研究者の往来が繁しく、しばしば彼らのセミナーが 行なわれた。また、海洋微生物の日米セミナーや細菌胞子 の日米セミナー, イタリアやネパールなどとの海外学術調 査、それに伴う相手国の研究者の滞在など引きも切らずだ ったが、留学生は皆無であった。最初の留学生は1981年に 国費で来日した Kla Patarungsi 君 (タイ国) で、彼の場 合は希望するテーマと大学が一致せず結局, 当研究室で1 年間研究生として汚水処理のテーマに取り組んだが、身が 入らず,健康を崩して帰国した。門田教授のご停年の前年, 文部省から問い合わせがあり、貴研究室で海洋微生物学の 研究を希望するチリー国からの国費留学生候補者がいるが お引き受け願えるかと。当初より当研究室での研究を希望 しているなら間違い無かろうと、1年間研究生と言う条件 で承諾した。このようなわけで、留学生としての大学院生 受け入れは、私が講座を担当してからである。

嘗て私は、国際交流は、研究者間の研究交流として位置づけ、留学生教育は手足まといになると考え極めて消極的であった。たまたま、本年3月まで在籍していた水産微生物学研究室における草分け的留学生3名の受け入れを通じて得たさまざまな貴重な経験がそれが誤解であることに気付かせてくれた。ここに、私の国際交流に対する反省と、彼らを立派に育てることができたという自負(無論彼らの能力と努力によるのであるが)から、彼らのプロフィールを紹介し留学生教育の一助としたい。

1983年10月に地球の裏側のチリからやって来たカルロス・リケルメ君は、ベルパライソ・カトリカ大学の修士課程を終了後、大学の助手として石油分解細菌の生態を研究し、すでに論文3報を発表していた。半年間の日本語研修の後、一年間の研修員の期間*,舞鶴湾に面した農学部付属水産実験所で、赤潮の発生に伴う海洋細菌相の年間の変動を調査研究した。翌年博士課程に進学し、調査を継続するとともにその解析を行い、赤潮藻 Asterionella glacialis の増殖が特定の細菌の生産する物質に依存していることを明らかにした。1988年9月論文をまとめ、課程博士を授与された。その少し前、本人の強っての希望で、2ヵ月ばかりクルマエビなどの種苗生産の技術を習得するため山口県内海栽培漁業センターにお世話になり、帰国後の研究(甲殻類の病気駆除のための細菌作用など)に多いに役立てている。彼

の帰国に先立ち、指導教官として是非とも彼の研究意欲を 持続させたいと願い、チリの微生物関係の大学、研究所並 びに JICA 関係へ彼の就職依頼を可能なかぎりの手を打っ た結果、彼のカトリカ大学当時の学部長から彼は優秀な学 生であることは良く存じているのでアントファガスタ大学 の海洋研究所の助教授に推薦するから来ないかとの打診が あり、そこに就職した。現在は教授として多くの学生を育 て、その活躍は名実ともに研究所 No. 1 との評判が高い。 彼の教え子の女性 2 名が現在、博士課程 2 年と修士課程 2 年に在籍し、活躍している。

二人目は、1985年、文部省科学研究費助成海外学術調査「ネパールヒマラヤにおける微生物の分布・適応・進化に関する研究―II」でネパールの湖沼の調査を行った際、カウンターパートとして参加したトリパン大学自然史博物館員(講師)でもっとも活躍したケシャブ・シュレスタ君です。国費留学生として大学推薦で受理された彼は1986年10月に来日し翌年3月まで研修員の後、修士課程に入学し、上記の学術調査で採取した緑藻 Gonium pectorale にチベットや琉球地域のを加えアイソザイムによる系統分類をテーマに1992年まで活躍し課程博士を取得した。その後、彼は日本の環境科学技術や環境アセッスメント制度などを習得するため、海外技術者研修協会の留学後技術研修制度に応募し、受理され、関西総合環境センターに置いて研修を重ね、1994年帰国した。帰国後も、カトマンズ周辺の環境改



新入留学生歓迎パーティーでの筆者 (平成5年4月)

善に尽力し、しばしば来日し関係者とのネットワークを深めている。

三人目は,韓国からの留学生金 昌勲君である。彼は, 釜山水産大学校藻類学研究室で修士課程を終え,1983年 JICA の研究生として三重大学生物生産学科で赤潮藻の研 修のために来日した。一旦帰国後、1985年から2年間国費 留学生として同大学修士課程で修士を終了後,1987年から 京都大学の我々の研究室に麻痺性貝毒原因渦鞭毛藻の生理 生化学的研究を希望して転学してきた。研修機関も含めて 5年間,必至になって研究に励み,ついに,麻痺性貝毒(サ キシトキシンやゴニオトキシン)の生合成が,共生細菌(?) によるのでなく、渦鞭毛藻自体の染色体に依存して生産さ れることを明らかにした。博士号取得後帰国し、母校釜山 水産大学校海洋産業開発研究所の教授に就任した。我々と 交流を深め,現在では韓国赤潮研究の中核的研究者として 活躍している。この度、政府間協定に基づく日韓合同会議 に水産微生物学講座(現、海洋分子微生物学分野・内田有 恒教授)との有毒赤潮共同研究が提案されている。

彼らの研究に対する真摯な態度は我々の研究室の者のみならず他の研究者にも高く評価されるとともに、彼らが帰国後も多いに活躍し、今日まで彼国との深い交流が続いている。また、現在、海洋分子微生物学分野において活躍している留学生(現在、韓国から博士課程3年の金武燦、2年の申美仙、チリからの2年のパメラ・クラカワ、修士2年のグラディス林田の4名)に連鎖的に好影響をもたらし

ている。

この留学生との関りの12年間を振り返って見ると、必ずしも順調なわけでなく、言葉に言い表せない、教官、院生、学生、事務官の苦労があったことを見逃すわけには行かないだろう。研究の進行状況と日常生活の相乗効果が精神面に大きな影響もたらし自信喪失につながる恐れがある。本人だけでなく奥さんや子供に病気が出れば誰彼と無く積極的に相談に乗り、下宿が騒がしいと言えば他の下宿を探したり、学会発表が近づけば日本語を教えたり、研究に行き詰まっている様子をいち早く発見して、元気付けたり尻をたたいたり、出産となれば相談に乗ったり、時には保証人になったり。これらのことを除けば、研究面では日本人と全く対等に扱い、厳しく指導することが彼らの成長に欠かすことが出来ない要素と信じている。

これからますます増加するであろう留学生を立派に育て、帰国後、彼の国においてのみならず国際的にも活躍できる研究者にすることが、わが国に学んだ彼らとその国に対する礼儀であろう。そのためにも、留学中の彼らを研究面での厳しい指導と個人の生活に対する心のこもったフォローが大切である。

"Do to others as you would be done by"

* 私の方針として、原則として、修士課程にしろ博士課程にしろ 必ず一年間研修員として研究能力を見定めた後、修士または博士課程に進学させることにしている

交流の歩み (10)



Visiting Professor in Biogeochemistry

Myron J. Mitchell

外国人客員部門 Professor, State University of New York, College of Environmental Science and Forestry, U.S.A.

I was a Visiting Professor from January through May 1996 in the Laboratory of Forest Ecology in The Faculty of Agriculture. The Faculty of Agriculture had completed a reorganization and new school division was established that was named "Science and Technology of Regional Environment". As part of this reorganization, funds were made available to invite a foreign scientist in the field of environmental biology. I came to Kyoto University as part of my sabbatic leave. This leave was granted by the State University of New York, College of Environmental Science and Forestry, Syracuse, New York, U.S.A. where I am a Professor in the Faculty of Environmental and Forest Biology.

On this trip I was accompanied by my wife, Deborah, and a seven-year-old son, Michael. We lived at the Shugakuin International House which provided excellent accommodations for us. My twenty-one-year-old daughter, Charlotte, came for a two-week visit during her last semester as an undergraduate at Syracuse University. She graduated in May 1996 with a B.A. degree in Information Science. My son attended first and second grade at Shugakuin Elementary School in Kyoto. Michael had wonderful educational and cultural experiences at this school. The principal, Mr. Takahashi, and his teacher, Ms. Tsuneto, as well as

other members of the staff were very supportive. My wife assisted individuals, including other residents of the Shugakuin International House, with their conversational English during our stay. All the members of my family found our stay in Japan to be exciting and culturally enriching. We enjoyed interacting with a wide range of people and greatly appreciated the many facets of Japanese culture including the food, temples, shrines and various traditions such as festivals some of which we had the privilege to attend.

I am very grateful for the hospitality provided by the Faculty of Agriculture, especially my host Professor Goro Iwatsubo and other members of the Laboratory of Forest Ecology including Associate Professor Hiroshi Takeda and Instructor Naoko Tokuchi. Instructor Nobuto Ohte in the Laboratory of Erosion Control was very helpful in making operational the computer software and hardware which I used extensively while at Kyoto University. While at Kyoto University, I was involved with a variety of activities. I taught a graduate seminar course in Biogeochemistry. The course was taught in English and it had an enrollment of twenty-five students who were from programs in soils, hydrology and forest ecology. The two major purposes of the course were to introduce the students to some current topics in biogeochemistry and allow them to practice speaking and giving presentations in English. I also had informal discussions with students, staff and faculty in various research areas including forest ecology, hydrology, soils and biogeochemistry. I helped scientists at Kyoto University in developing manuscripts that were to be submitted in English to various international journals.

I presented two formal seminars on Feb. 15 and March 13 at Kyoto University entitled "Nitrogen Saturation in Japanese Forested Watersheds" and "Climatic Control on Nitrogen Losses from Forested Watersheds in the Northeast U.S.," respectively. I also gave a seminar on April 16 at Lake Biwa Research Institute

entitled "Biogeochemistry of a Forested Watershed in the Adirondack Mountains of New York: Regional Implications to the Eastern U.S.".

During my stay in Japan, I had three major excursions. On Feb. 22–25, I went to Miya-Jima to see some coastal forested sites and also went to Hiroshima. At Hiroshima, I visited the "Peace Museum" that commemorated the dropping of the first atomic bomb during World War II. This was a memorable visit and was a compelling reminder of the horrors of war. From March 28–31, I visited research sites at the Forest Research Institute at Kumamoto in Kyushu. On April 19, I went on a field excursion in which we visited a series of forested watersheds in the Lake Biwa catchment.

At Kyoto University I did research on biogeochemistry. My major research focus was the evaluation and synthesis of information on the nitrogen biogeochemistry of forested watersheds in Japan. This work was initiated before leaving for Japan and is continuing. I currently have a Japanese post-doctoral associate working in my laboratory in the United States and we have a paper in press entitled "Nitrogen Saturation in Japanese Watersheds" that will be published in *Ecological Applications*. We are developing another manuscript on this topic and will be presenting this information at a Chapman Conference on "Nitrogen Cycling in Forested Catchments" to be held at Sunriver, Oregon on September 16–20, 1996. I am a member of the program committee and a discussion leader for this Chapman Conference.

I also was engaged in other activities while in Japan including working on journal articles and book chapters that had been initiated before my sabbatic leave. I also made substantial progress in the organization of a Gordon Conference on the "Hydrobiogeochemistry of Small Forested Catchments". This Gordon Conference is being held in the United States at Colby Sawyer, New Hampshire from August 3–8, 1997 and I am serving as co-chair along with Professor Matzner from Germany. We were able to finalize the program and identify discussion leaders while I was in Kyoto. I hope that some of my Japanese colleagues can attend this conference. I also had considerable contact with individuals involved with my research and teaching program in the United States including faculty, staff and students at the College of Environmental Science and Forestry. This entire process was greatly facilitated by using the Internet. I used the Internet for E-mail as well as for sending and receiving data, manuscripts, reports, tables, figures, etc.

I found this sabbatic leave to be professionally and personally rewarding. I was able to be actively involved in both teaching and research with faculty, students and staff in Japan. I am anticipating continuing this collaboration with Japanese scientists. There are many interesting and important environmental issues with biogeochemical implications that are emerging in Asia. These issues include global warming, air pollution, and water pollution. I anticipate that my stay at Kyoto University will help promote interactions between Japanese scientists and members of the international scientific community. I hope that I will have the opportunity to return to Japan and Kyoto University sometime in the future.

留学生の眼(14)



I THINK I HAVE BEEN, AND AM, LUCKY

Maria Carmen Alvarez (Division of Fisheries, Spain)

Many people ask me why I decided to come to Japan. Really this is a very difficult question to answer for me. In Spain, the economic situation was very bad for any profession, especially for general biologists. This made us, my boy friend and I, once ended our degrees, take the decision to go somewhere to get more specialized so once back we would be more competitive.

Which field is it good enough to get specialized? Of course, aquaculture. Now decided the field, the only thing to do is to chose the country and try to find a scholarship. At that moment, we met a couple of biologists in Ayamonte, south part of Spain, managing a shrimp farm belonging to one of the biggest national companies in Spain. They had obtained one scholarship from Japanese government several years ago, so they knew very well what we had to do to apply. Japan sounded great, but there was only a small problem: the language. How could we learn Japanese! In Spain, we have a feeling that Japanese and Chinese are almost impossible languages to learn. Those friends told us that we would have a 6 months intensive language course when we get the scholarship. We thought: *It is not enough but...* Any way, we decided to take this way and focused all our energy on

that line. We got in touch with a Japanese professor, Professor Tanaka, our present supervisor, who really helped and encouraged us for the almost one year of application. Finally, we succeeded and this is why we are here. Just before we come to Japan, we resolved to get married; so, when we arrived to Japan, we where settled in a 3 year honey moon.

My first impressions of Japan was very simple, maybe because I didn't have any preconception. For me, all the streets were clean, there were green mountains everywhere. Interestingly, some cars could speak: Migini magari masu. There where some elections when we arrived, I never knew what for, it was interesting to see all that people wearing white gloves, giving speeches to invisibles listeners. At the beginning it was just as if I was living in a cloud; I was so excited that I hardly slept. I wanted to be all day long in the street to observe everything. One day, we decided to go to the Takaragaike park to have a walk with some friends. We climbed up to one of the hills of the park and on our way down we saw a kind of squared iron boxes on the side of the hill. It looked like a barbecue area, but the ground was to steep for it. We thought: What a strange people! Several months later, we knew that they were for the 16th of August. During Daimonji, those barbecue boxes were used for lighting a kanji.

Several days after our arrival, cherry trees bloomed. It was wonderful, the best welcome that the city could give us. We enjoyed sight-seeing, besides all Tetsugaku no michi and Kamo river.

During this year I had a lot of good and some bad moments. We have travelled quite a lot around Japan thanks to the famous *juuhachikippu*. This special pass permitted us to visit a lot of places—Hiroshima, Fukuoka, Ehime prefecture, Tokyo...—and to meet different people. We spent the end of the year with the

family of a Japanese friend, so we could experience the typical food and traditions of new years day of Japan.

Some people come to Japan because they have always dreamed of it, others because this scholarship is famous in their countries. But in our case, there was not a concrete reason. We can say that the reason for us to come to Japan was our destiny. Now I know that this has been, and is going to be, one of the greatest experiences in my life.

Here in Japan we have met really good people, Japanese and foreigners. With some of them we shared very nice time, and became as brothers. When they went back home, I felt as if part of me went away with them. It seems to me that being far from our real family makes you feel more friendly and friends can become a real second family.

For me, the most difficult moment to face was Christmas time being far from the family. Usually we have big family dinner, so we miss them a lot especially in this period. Even though, this was my first Christmas with my husband, as a family, and with some very special friends. My husband and I cooked a sea bass and our friends grilled a turkey (there is no real Christmas without a turkey). But then a problem happened: the turkey was too big for our small oven! After several hours of trial we found the way

to place it. My God! It appeared so easy to do when my mother cooked it! The night of 24th, the food was delicious—as a perfect Christmas dinner—and we where having a good time, also it was funny to think our celebration was six hours before the once of our families in Spain. Then, at midnight, a miracle occured. It was snowing! We were so happy that we put on our shoes and went out for a long walk. It was like an omen that something very special was happening. At that moment I didn't know, but as the best Christmas present, I was pregnant.

Eight months have passed now and my belly is enormous. I have to say that my professor is very generous to me. He has helped me for in everything I need. I thank him a lot. I feel really lucky. During this months I had to do a lot of papers for the hospital and the ward office. Everywhere I visited, everybody was very kind to me in spite of my terrible Japanese. I don't know if this paperwork made me improve my Japanese, but I am sure I have improved my sense of intuition.

Probably when you read this article, I am already a mother. Now I am waiting the moment with impatience. Everywhere we met people who is ready to help us, so I can only say we are lucky to be in Japan.

留学生室ニュース

新入留学生のためのオリエンテーションと歓迎パーティ

平成8年度、農学研究科は15ヵ国から22名の新入留学生を迎えました。4月12日には、オリエンテーションに引き続いて、教職員および在学留学生約150名の参加を得て、恒例の歓迎パーティが農学部大会議室で盛大に行われました。開催に当たり、農学部国際交流推進後援会、アサヒビール、キリンビール、サントリー、月桂冠、宝酒造、雪印乳業、京都大学生活協同組合から援助ならびに御高配を賜りました。ここに記して感謝いたします。

農学部国際交流推進後援会の会員加入について

本年は、7月に平成8年度の会員加入のお願いをご案内しました。学内および学外の皆さん(9月末日現在、125名、7団体)からご賛同を頂いております。

見学旅行

平成8年度も農学部留学生見学旅行(7月21・22・23日)を企画し、総勢15名が金沢市、志賀町、輪島市を訪問しました。兼六園、武家屋敷等市内散策後、翌日志賀町では北陸電力原子力発電所の見学、3日目には輪島の朝市、日本海など体験し、北陸・能登路の歴史・文化や自然を満喫することができました。

ア・ラ・カ・ル・ト

私費外国人留学生の大学院修士課程入試の結果

8月28日~30日にかけて,平成9年度大学院修士課程入試が実施されました。その結果,食品工学専政2名(中国),生物資源経済学専攻2名(中国,韓国),森林科学専攻1名(中国),応用生物科学専攻1名(インドネシア),計6名の方々が私費外国入留学生として合格されました。

新たな短期留学推進制度

毎年本学部・研究科からウィスコンシン大学(米国)へ日本人

学生を派遣してきたプログラムが制度的に廃止され、代わりに短期留学推進制度が始まりました。平成8年度短期留学推進制度(派遣) プログラムでは、修士課程地域環境科学専攻の大学院生がウィスコンシン大学へ派遣されることになりました。

日本語教室の正規開講

昨年度後期から試験的に始めた日本語教室の平成8年度の開講 および運営について、農学部国際交流委員会の場で検討いただき ました。その結果、本年4月から初級、中級、上級の3コースが 週1回のカリキュラムで開講されることになりました。新入留学 生、短期招聘研究者などをはじめ、多くの留学生が日本語能力の 研鑽に努力しています。



日本語教室の福本先生(中央)と受講学生

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