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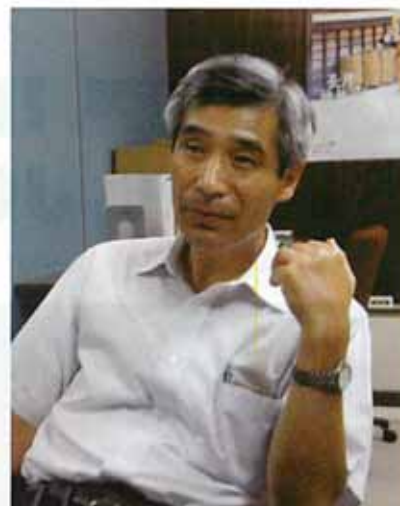
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Kyoto Institute of Technology

Seeking to Create a Cutting-edge International Academic Foundation for the Scientific Study of the Next Generation of Fibers

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Director of the Center for Fiber and Textile Science
 Director of R&D Center for Bio-based Materials
 Professor, Department of Biomolecular Engineering, Graduate School of Science and Technology



When our Center for Fiber and Textile Science began operation last April, we were searching for a new undertaking, and we received an inquiry as to our interest in participating in the Asia/Africa Science Platform Program run by the Japan Society for the Promotion of Science (JSPS).

While recognizing the importance of continuing research and education at the center, we were also aware of the importance of building relations with those involved in the same and related fields overseas. We decided to submit our proposals to JSPS, and fortunately, the plan was approved. The project is soon to be under way.

Meanwhile, we had applied for and were also granted Research and Education Funding of the Ministry of Education, Culture, Sports, Science and Technology (MEXT). This is intended to contribute to the establishment of a research center, or to lay the foundation in Japan for research in the field of what is now called neo-fiber technology. More specifically, it is intended to fully utilize the research concepts of KIT, e.g., recombinant silk worm DNA technology, and techniques used to polymerize biogenic substances such as lactic acids to develop environmentally friendly new biofibers or biomimetic fibers. In other words, we intend to establish our position at the forefront of research and development in the field of new fiber technology in the 21st century.

Due to Japan's advanced fiber technology, we are expected to play a leading role in the field of fiber internationally. To this end, we have decided to start in Asia and Africa. Since the industry relies heavily on Asia and Africa as suppliers of raw materials and fiber products, we aim to infuse the project with the perception that the academic base for fiber science in this particular region of the world will become a platform for

developing the fiber industry worldwide.

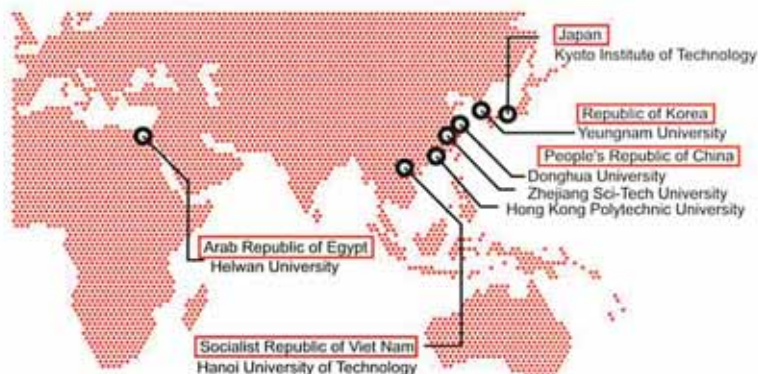
Among Asian countries, Hong Kong, Korea, China, and Vietnam drew our attention as partnership candidates. Hong Kong and Korea are known for their close ties with Europe and America, and the advanced approach of their clothing industries. China is known as the workshop of the world and Vietnam is a promising new contender in the fiber industry. With the variety of technologies now being transferred from China to Vietnam, Vietnam is a definite focus for our interest.

In Africa, we decided to invite Egypt to join the project, considering the contact we have with the country's governmental agencies and our increasing academic involvement with Helwan University in Egypt. In the future, we would also like to invite Iran, India, and later, Turkey to join us.

The six partner universities working on this project (including Helwan University, which is soon to obtain KIT partner status) are each unique in their approach to fiber studies, and this fact will surely make for an extensive and substantial project.

We are planning to create a new international academic base for fiber science, while transferring technologies based on Japan's world-leading fiber technology to other institutes and countries to help develop this technology.

The first step in this direction is an exchange of personnel. We are planning seminars that will allow our partner universities to examine our technologies, to see the progress in our joint studies, and to discuss strategies for strengthening our partnership. Recognizing the importance of educating future generations, we encourage young scientists to participate in the program to foster inter-generational exchanges that will contribute to our joint research.



The Seminar Series 2 will be held in Egypt in January, 2008.
http://www.cftskit.ac.jp/asia_africa/index.html

Autumn and Winter Sketches of Kyoto

In autumn, the mountains around Kyoto are ablaze with red maple-leaves, and this signals the start of the Jidai Matsuri (Festival of the Ages). The Jidai Matsuri is one of the three most important festivals held in Kyoto, and is the final one of the year. In the festival, people parade through Kyoto wearing period costumes representing the Meiji Restoration, the Edo period, the Azuchi-Momoyama period, the Nanboku-cho period (the Northern and Southern Courts period), the Kamakura period, and the Heian period. The festival began back in 1895, and was originally created to raise Kyoto's morale after the Meiji Restoration, when Kyoto lost its status as capital and Imperial Court to Tokyo in 1868. People built the Heian Shrine in order to commemorate the 1100th anniversary of transfer of the capital to Kyoto. The Jidai Gyoretsu (Historic Pageant) was then introduced to celebrate the anniversary further with a display of chronological changes of Kyoto's history. The pageant becomes larger every year. About 2000 people take part now, and they parade over a route around two kilometers in length, fascinating viewers with their gorgeous costumes, accessories and the profundity of Kyoto's history.

Kyoto's cold winter chills us to the bone. On New Year's Eve, Yasaka Shrine is filled with thousands of visitors waiting for the Joya-no-Kane (bell-ringing ritual) to start at midnight. They visit Yasaka Shrine to receive the sacred flame of okera. Okera is a kind of medicinal herb belonging to the chrysanthemum family. It emits a potent fragrance when it is burned, and people have been using it as a talisman from ancient times. They set fire to a wick made of bamboo fiber rope from the okera lanterns in the grounds of the shrine, and carry it home carefully so that the flame isn't extinguished accidentally. It is believed that if they use the fire to cook zouni (soup with rice cakes and vegetables), they will be blessed with sound health and peace throughout the coming year.

Visitors go home with happiness and hope for the year ahead, carrying home their sacred flame on the rope, which is known as kitcho nawa.



KIT International Academic Exchange Club News: Messages from Key Station Chairs

YOSHII Tsutomu

Director of International Planning Division

It is already more than 20 years since the foundation of the International Student Section in this university. We went into full operation in 1985, catering to all aspects of the lives of international students at KIT. Now operated by twelve staff, the International Planning Division is working for the International Exchange Center under the leadership of the Director of the Center, Professor Kunugi. The total number of international students who have studied with us since the foundation of the institute has surpassed 1,000 from more than 60 countries across the world. Many of our former students now occupy distinguished positions in politics, economics, education and research, not only in Japan but also in their countries of origin.

I would like to take this opportunity to thank all of you who cooperated with me when you were international students in Japan while I was serving as Chief of the International Student Section. Your acceptance of

the important task of opening Key Stations in your respective countries is highly appreciated. The chairs featured here are now actively involved in this program, promoting KIT throughout the world, sending our official information far and wide, facilitating communication among international students everywhere, who once studied in Kyoto, as well as offering support to our Japan Education Fair activities. I am pleased to be able to share five messages from the following Chairs of respective countries, which express their expectations, hopes and dreams.

Setting up a Key Station in China



Liu Xiao Min

(1993 Graduate)

Key Station Chair in China

President of Shanghai Nandasoft Information Technology Ltd.

It has been long time since I graduated from KIT. Since then, I have been in touch with teachers of the International Exchange Center, senior graduates, recent graduates and current students. I have noticed there are many Chinese international students who play active roles not only in Japan but also in many parts of China, after graduating from KIT. When I realized this, I strongly believed that there should be a reliable network where

those people could contact each other.

Fortunately, the Key Station in China for KIT has been set up. I cordially hope this will strengthen such a network for the many former graduates in China, and also that this Key Station will assist future Chinese international students to Japan by providing information, advice, and idea exchange.

Our Relationship is Becoming Closer



Kang Koo

(1993 Graduate)

Key Station Chair in Korea

Professor, School of Textiles at Yeungnam University

The summer here has been very hot and humid. My summer this year has been busy, on top of the heat and humidity. As in previous years, KIT held a symposium for members from Korea, Japan, and China this year. Thirty-three members from Korea visited Japan this time. We really appreciate the hospitality of the Japanese people during that time.

I was requested to write some comments on behalf of the Key Station in Korea for the KIT International Academic Exchange Club. In May 2004, I organized a list of 25 Korean KIT graduates, and the number has grown to 34 now. I set up the Key Station and also did my best to promote exchange between KIT and Yeungnam University (YU). Normally, peo-

ple regard an international exchange as a mere student exchange program or an opportunity for just exchanging information. However, considering the relationship between KIT and YU, we acknowledge that reliabilities and responsibilities based on our shared Asian heritage are the key for success. Although this symposium takes place only once a year, people are able to develop strong connections not only by exchanging information or having common interests, but also by caring for each other. I believe this is truly the beginning of an international exchange.

I hope our relationship with KIT, which we see as our leading partner institute, remains positive and develops further in the future.

Setting up a Key Station in Vietnam



Ta Thanh Van

(1999 Graduate)

Key Station Chair in Vietnam
Department of Biochemistry, Hanoi Medical University

Two years ago, representatives of former international students of KIT from different countries all agreed to formulate an International Academic Exchange Club. Dr. Ta Thanh Van from Hanoi Medical University of Vietnam has been appointed as contact person among Vietnamese students

graduated from KIT. Five of them are currently working in Hanoi, Vietnam. They all are keeping key positions in their career. Two are working in the

same university (Dr. Pham Thien Ngoc and Dr. Ta Thanh Van), two others working in the same institute (Dr. Nguyen Kien Cuong and Dr. Thanh Thi Thu Thuy). Luckily, some of us work in the same field therefore we have been able to set up a joint research project supported by the Vietnamese government. In addition, we communicate each other regularly to share working and life experiences as well as to update information concerning our former lab in KIT where we all have grown in our profession. We would say this is a kind of continuous training.

Setting up a Key Station in Thailand



Saikwan Trisunan

(1995 Graduate)

Key Station Chair in Thailand
Bangkok Office, Chul Thai Silk Co., Ltd.

The most important investment anyone will have to make these days is an investment in education. We all have to decide to make this investment for ourselves and for our children. Education not only demands a financial investment, but it also demands an investment of time. Thus, careful research must be done in order to choose the most appropriate institution for one's investment.

The education itself is never all but it can be seen as one foundation for life. KIT is small in its scale comparing with other universi-

ties in Kyoto, but has a long history of more than a hundred year.

KIT is a university founded by the Japanese Government and one of the leading universities in the field of science and technology.

KIT has produced many successful scientists and business personnel so far.

I feel very proud to be one of the KIT alumni, in honor of 120th Anniversary of Japan - Thailand diplomatic relations. I hope that KIT will continue to educate many more Thai students, and that the knowledge and culture of both countries can interconnect through this exceptional institution.

Setting up a Key Station in Taiwan



Erick Lo

(1992 Graduate)

Key Station Chair in Taiwan
Manager of the Formosa Black Tea Co., Ltd.

Allow me to introduce myself. My Japanese friends know me as Kippeï Ra.

I went to Japan in 1983, entering a Japanese language school to study Japanese. In April 1985, I entered the Department of Architecture at KIT. After completing my studies there, I studied more deeply in the fields of architecture, design, building and engineering. That was about a decade ago, and it reminds me that time flies so fast. Now my child is preparing for high school.

School management is now more fast-paced and complex than it used to be some years ago because of the influence of the internet, and also because of the recent legislation known as the National University Corporation Law by the Japanese Ministry of Education, Culture, Sports, Science and

Technology. When I was a student, things were kept simple compared to the complexity of questions asked by students today, who flock to the Japan Education Fair. Their comprehension of Japanese isn't adequate, yet they will have to cope with numerous abstruse research subjects. I can imagine they will struggle during their time in Japan. Watching those students pursuing academic study in such a fast-moving environment, I have wondered how former graduates like ourselves can contribute to this situation. As a former graduate and an advisor myself, I would like to do everything I can to bridge the gap between the Japanese and Taiwanese sides.

Thank you in advance for your support.

The KIT Exhibit in the 2007 Japan Education Fair

In order to recruit excellent international students to KIT, we have actively exhibited at the Japan Education Fair organized every year by Japan Student Services Organization (JASSO) at various venues in Asia.

This year, we exhibited in Taiwan (Taipei, Kaohsiung) Korea (Soul, Pusan) and China (Shanghai) sending our Vice-President and some staff. Every venue was filled with many senior high school students and college students and their families. They visited our booth and collected information about research and entrance examination at KIT, and life in Japan. Our former international students took an active role as translators, and were able to provide clear experience-based advice to potential international students. The Fair was an opportunity for young students hoping to study in Japan to understand the advantages of a KIT education, as well as for former graduates to keep in touch with KIT.

This year at our booth, we used posters and pamphlets designed by our international students.

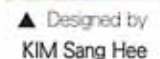
The following is our schedule for the remainder of this year. We cordially invite our former graduates to our booth at the Fair. Please come and see us at your convenience.

- ◆ Thailand Chiang Mai : November 15th, Bangkok : November 17th and 18th
- ◆ Vietnam Hanoi : November 24th, Ho Chi Minh : November 25th

For further information, please visit JASSO homepage : http://www.jasso.go.jp/study_j/2007fair_e.html



▲ Designed by
TEOH Kiat Thiam



▲ Designed by
KIM Sang Hee

An International Student Study Tour

A group of international students participated in a field trip on 22nd and 23rd of September 2007. Thirty international students, three foreign researchers, and three Japanese students participated. Three staff of the International Planning Division joined the party as well. In all, a group of 39 people traveled by bus to the Harima region in the west of Hyogo Prefecture and to Awaji Island.

On the first day of the trip, they visited Ibono-ito Regional Museum of Somen (thin wheat noodles), SPring-8 (a large synchrotron radiation facility), and Nishi-Harima Astronomical Observatory Park. On the second day, they saw the impressive World Heritage Site of Himeji Castle and crossed Akashi Bridge, the world's largest suspension bridge, on their way to Kunju Do Incense Works.

It was an excellent opportunity for participants to observe SPring-8, which is one of the three largest radiation facilities in the world. Having witnessed some of the latest technology there, they became very motivated to study and research in Japan. At Nishi-Harima Astronomical Observatory Park, they were awed by Nayuta, the world's largest open telescope, and by the well-equipped facilities. At the final destination, Kunju Do, they had the chance to experience incense-making. When students shook off conservative images of incense to produce some creative colors and shapes, and some cooperated as a group to produce their own distinctive incense, we felt they were typical representative of KIT students.

This field trip was a successful opportunity for participants to build deeper friendships. Additionally, they have become more willing to apply themselves to their studies. In conclusion, the trip was extremely fruitful.



International Doctoral Student Receives Society of Fiber Science and Technology, Japan Award

Research theme: Mechanical Properties and Higher Order Structure of the Bacterial Polyester Highly Oriented Films

In the field of macromolecules, biodegradable plastics have drawn interest as a solution to environmental problems. Bacterial polyester, produced by various microorganisms, is thought to be an especially promising example. This polymer is enzymatically degradable, biocompatible and able to be synthesized at a lower energy cost than is required in conventional synthesis. It also has polypropylene-like properties. However, it is well known that the processing of this polymer into fibers, films, and other products occurs only with great difficulty. This polymer has a glass transition point below room temperature, and the crystallization rate is quite low. In attempting to find a solution to production problems, our team sought first to improve ductility. The next hurdle was to analyze the higher-order structure of the films obtained.

We never expected to receive such an honor, so this news came as a huge surprise. This award motivates me both to continue with this work and to enter the running for other awards. I will strive to acquire and develop further skills through our research. I hope to be a professor and pass my knowledge and skills on to younger students in the future. On a more personal level, as most men, I wish to be a good husband and a good father to my family.



LEE Jae Chang

3rd year of doctoral course,
majoring in Advanced Fibro-
Science



表紙提供
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Feedback Welcome

Please send comments, questions and/or suggestions to:

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Thank you for reading the KIT International Journal.

International Planning Division

This division deals with all the administrative aspects of the International Exchange Center. Please feel free to contact us.

Join the KIT International Academic Exchange Club!

This club is a global network for international academic exchange. Its members include current and alumni international students, researchers, and members of KIT academic exchange partner institutions. The club was founded to allow KIT to contribute to academic development and promote science and technology internationally. For detailed membership information, please visit the KIT website:

http://www.kit.ac.jp/english/01/01_080000.html