ACTIVITIES

OF

THE EXCHANGE PROGRAM

BETWEEN

THE UNIVERSITY OF WATERLOO IN CANADA

AND

TOTTORI UNIVERSITY IN JAPAN

SUMMARY

On November 16, 1987, a formal student exchange program was officially instituted between Tottori University in Japan and the University of Waterloo in Canada. Under the auspices of this agreement these two relatively young and dynamic universities entered into a meaningful relationship that has matured and expanded over the years in a way that has significantly benefited students, academic staff and local communities in both countries. In early April 1988, the first group of enthusiastic Waterloo engineering students arrived at Tottori University and to date more than 80 undergraduate students in engineering have spent nine months in Japan in order to complete one academic term at Tottori University and obtain subsequent work experience in Japanese industry. They also traveled to many exciting locations in Japan and often to other parts of Asia, learned to speak Japanese, and became completely immersed in the fascinating Japanese culture.

The first group of eager Master's students who came from Tottori University to participate in the exchange program at the University of Waterloo arrived in Waterloo in early September, 1989. At the present time, close to 30 Japanese Master's students have come to the University of Waterloo to study for two academic terms consisting of the fall term from September to December and the subsequent winter term from January to April. During the Christmas holidays and also at the end of the exchange program period, many of the Japanese students take the opportunity to visit tourist sites in Canada, the United States and Europe.

Overviews of the University of Waterloo and Tottori University are presented in the next two subsections followed by a brief description of the components of the exchange program in Section 2 for the Waterloo and Tottori exchange students. In Section 3, the Canadian and Japanese faculty and staff who kindly contributed of their valuable time to success of the exchange program are listed. Their sincere dedication in educating, advising and guiding our fine students as well as effectively running the exchange program is greatly appreciated by everyone concerned. Section 4 lists all of the Waterloo and Tottori exchange students who have participated in the program over the years while Section 5 describes other related academic and cultural activities.

1. PARTICIPATING UNIVERSITIES

1.1   University of Waterloo

In its annual assessment of universities across Canada, Maclean's, Canada's national weekly news magazine, has consistently ranked the University of Waterloo first in the country according to the three criteria of most innovative, leaders of tomorrow, and best overall. At its founding in 1957, the University of Waterloo became a pioneer in university education by launching the co-operative education or ``co-op" system whereby all undergraduate students in engineering combine formal classroom education with learning on the job. Hence, co-op students are required to study for one semester followed by a semester working in industry, government, or in the service sector, and to continue this alternating process until the completion of their undergraduate program in engineering which takes one semester less than five years. This type of revolutionary education attracts the brightest students in the country, as well as gifted professors from around the world who want to teach and carry out leading edge research within this stimulating academic environment.

At the present time, the University of Waterloo has more than 11,000 students in 80 co-op programs in partnership with 2500 employees which makes its co-op educational program the largest in the world. The university offers academic programs in over fifty disciplines across six faculties consisting of Engineering, Mathematics, Science, Arts, Environmental Studies and Applied Health Sciences, and has a total student population of over 20,000 full-time and 7,000 part-time students. The Engineering Faculty is the most prestigious and largest in Canada and has over 4,000 undergraduate and graduate students.   The Faculty of Mathematics is the only one of its kind anywhere in the world and has more than 3,000 undergraduate and graduate students studying wide areas of mathematics ranging from pure mathematics to computer science.

Because of its close contacts with industry through its co-op programs and its prowess in ``high tech" research, the University of Waterloo presently executes more research contracts with industry than any other Canadian university.   In fact, the University of Waterloo was originally started by a group of enterprising local businessmen who recognized the need for co-op education. The university is situated within the bustling community of Waterloo located in Canada's industrial heartland in southern Ontario.   Much of the Waterloo Region was first settled at the turn of the 19th century by industrious German people who came from Pennsylvania in the United States and later from Germany and Alsace-Lorraine in Europe.   The descendants of these settlers and immigrants from many other countries provided the group dynamics and cultural heritage within which the University of Waterloo could mature and prosper.

The current population of Waterloo is about 100,000 while the combined population of Waterloo and its two neighbouring cities, Kitchener and Cambridge, is approximately 400,000. Waterloo is located about 100km west of Canada's largest city, Toronto, where the Ontario Legislature is located. People who arrive at Lester B. Pearson International Airport situated on the western site of Toronto can drive to the University of Waterloo via Highway 401 in about one hour's time.

1.2 Tottori University

Tottori University has purposefully chartered a challenging voyage which will successfully lead it into the 21st century. In his message given at the beginning of the 1996 Tottori University Catalogue, President Kazuro Takahashi states the following:

The international dimension of academic research and education at Tottori University has taken on great importance in recent years. This is due to the commitment of our university to promote international understanding and co-operation through an active program of international exchanges including overseas study, the acceptance of foreign students, faculty research trips abroad, visits by overseas scholars and the establishment of formal academic relations with sister universities around the world. As we move forward in the 21st century, the need for improved quality and quantity of international exchange and cooperation programs has become even greater. Tottori University intends to continue its efforts to achieve these goals in order to respond more effectively to the expectations of its staff, its students and the wider community.

Tottori University was established on May 31, 1949 and is one of ninety-seven national universities in Japan. At present, the university encompasses the faculties of Engineering, Medicine, Education and Agriculture, and has graduate schools in all of these faculties. The College of Medical Care Technology and the Arid Land Research Center are affiliated with the university. Tottori University has two campuses. The Koyama Campus is located in Tottori City, the capital of Tottori Prefecture, and houses all of the faculties except Medicine, which is situated at the sister campus in the city of Yonago. There are about 625 full-time teaching staff, 865 administrative staff and 6,000 students at Tottori University.

Tottori Prefecture is situated on the western side of Honshu Island adjacent to the Sea of Japan. The prefecture's capital, Tottori City, was built on the delta of the Sendai River, and faces the Sea of Japan to the north and beautiful mountain ranges to the south. Tottori City has a population of about 150,000 and the downtown area lies 5km to the east of the Koyama Campus of Tottori University. Even though Tottori University is located in a prefecture with a relatively small population of about 600,000 people, it has worked diligently to create high quality academic programs which attract gifted students from many parts of Japan, including applicants from the heavily populated Kansai and Kanto areas. People who arrive at Kansai International Airport, situated on an artificial island in the southern part of Osaka, can take a Haruka JR train from Kansai Airport Station to New Osaka Station and then change to a Super Hakuto train from New Osaka to Tottori. The entire trip requires three and half hours of travel.

Since it was first established in 1965, the Faculty of Engineering at Tottori University has steadily progressed and matured in an enlightened and outward-looking fashion. In 1974, the faculty launched a Master's degree program, followed in 1994 by an ambitious Doctoral degree program. In 1995, there was a comprehensive reorganization of the faculty into the eight Departments of Mechanical Engineering, Information and Knowledge Engineering, Materials Science, Biotechnology, Social Systems Engineering, and Applied Mathematics and Physics. The Department of Social Systems Engineering, which heads the Waterloo/Tottori Exchange Program, was started in 1985 and was the first of its kind in Japan. Presently, the faculty has more than 2,000 undergraduate students, including 30 foreign students, and about 400 graduate students, of whom 100 are foreign students. Foreign graduate students are allowed to write their theses in English if they so desire and printed information describing all academic programs at Tottori University are available in English.

2.   COMPONENTS OF THE EXCHANGE PROGRAM

2.1   Description of Program for Waterloo Students who go to Japan

Disciplines: Systems Design, Civil, Electrical and Computer, and Mechanical Engineering
Selection Criteria: – Previous academic performance (minimum average of 70%)
                     – Enrollment in Japanese language classes
                     – Attitude, enthusiasm, and maturity
Term Type: One academic term and one working term.
        Schedule of 3A Academic Term in Japan:
        – Arrive in Tottori in early April
        – Take classes from mid-April to the end of July
        – Write final examinations in English in July
        – One month summer vacation in August
        Work Term:
        – From September until December
Tuition: Pay tuition fees at the University of Waterloo (called the home fee system).

2.2   Description of Program for Tottori Students who come to Waterloo

Disciplines: Graduate students in Social Systems, Civil, and other Engineering departments.
Term Type: Two academic terms
        Schedule of Academic Terms in Waterloo:
        – Arrive in Waterloo in late August
        – Take classes during the Fall and Winter Terms
        – Return to Japan in late April
Tuition: Pay tuition fees at Tottori University.

3.   FACULTY CONTRIBUTORS

Name   **Affiliation**

3.1   Waterloo Directors

Prof. Keith W. Hipel	(1987 – present)	Department of Systems Design Engineering, Canadian Co-founder and Director
Prof. T. E. Unny	(1987 – until 1991)	Department of Systems Design Engineering
Prof. K. Ponnambalam	(1994 – present)	Department of Systems Design Engineering
Ms. Carol Kendrick	(1995 – 1999)	Department of Systems Design Engineering
Ms. Cathy Seitz	(1998 – present)	Department of Systems Design Engineering

Tottori Directors

Prof. Hajime Kawai	(1991 – present)	Department of Social Systems Engineering
Prof. Masanori Michiue	(1987 – 2005)	Vice President Academic, Tottori University
Prof. Hideaki Noda	(1987 – until 1990)	Department of Civil Engineering
Prof. Norio Okada	(1987 – until 1990)	Now with Integrated Management for Disaster Risk, Disaster Prevention Research Institute, Kyoto University, Japanese Co-founder of the exchange program

3.2   Tottori Annual Coordinators

Prof. Yoshihiko Hosai	(2006)	Department of Social Systems Engineering
Prof. Hideyuki Kita	(2005)	Department of Social Systems Engineering
Prof. Ryoko Hosoya	(2004)	Department of Social Systems Engineering
Prof. Akira Kimura	(2003)	Department of Social Systems Engineering
Prof. Shigeru Yamada	(2002)	Department of Social Systems Engineering
Prof. Hajime Kawai	(2001)	Department of Social Systems Engineering
Prof. Yoshihiko Hosoi	(2000)	Department of Social Systems Engineering
Prof. Hideyuki Kita	(1999)	Department of Social Systems Engineering
Prof. Shigeru Yamada	(1996)	Department of Social Systems Engineering
Prof. Hajime Kawai	(1995)	Department of Social Systems Engineering
Prof. Yoshihiko Hosoi	(1994)	Department of Social Systems Engineering
Prof. Yasuhide Okuyama	(1993, 1998)	Department of Social Systems Engineering
Prof. Akira Kimura	(1990, 1997)	Department of Social Systems Engineering
Prof. Kiyoshi Kobayashi	(1992)	Department of Civil Engineering, Kyoto University
Prof. Kazuhiro Sugata	(1991)	Department of Information and Knowledge Engineering

Special Assistant

Dr. Kei Fukuyama	(1995 – August 2000)	Department of Social Systems Engineering

Since October 1, 2000, Dr. Fukuyama has been with the Graduate School of Information Sciences, Tohoku University, Sendai.

3.3   Other Waterloo Contributors

President David Johnston
University of Waterloo

Professor James Downey
Former President, University of Waterloo
Professor Douglas Wright
Former President
Department of Systems Design Engineering, University of Waterloo

Professor Adel Sedra
Dean of Engineering
University of Waterloo

Professor Sujeet Chaudhuri
Former Dean of Engineering
University of Waterloo

Professor David Burns
Former Dean of Engineering
University of Waterloo

Professor Peter Roe
Director of Exchange Programs in Engineering
University of Waterloo

Professor Herb Ratz
Former Director of Exchange Programs in Engineering
University of Waterloo

Ms. Cindy Howe
Secretary for Exchange Programs in Engineering, University of Waterloo

Dr. John Crossley
Principal of Renison College, University of Waterloo

Professor Gail Cuthbert Brandt
Former Principal of Renison College, University of Waterloo

Professor Akiko Maruoka
Instructor of Japanese language courses
Renison College, University of Waterloo

Professor Bruce Mitchell
Associate Vice President Academic
University of Waterloo

Mr. Drew Knight
International Programs Manager

Office of Research, University of Waterloo
Ms. Maria V. Lango
International Programs Assistant
Office of Research, University of Waterloo

Ms. Laurie Peloquin
Manager of Columbia Lake Townhouse
Housing Office, Student Village 2

3.4 Other Tottori Contributors

President Masanori Michiue
Tottori University

Former President Kazuro Takahashi
Tottori University

Professor Shinji Hayashi
Former President of Tottori University

Professor Atsushi Takagi
Former President of Tottori University

Professor Yoshihiro Shigemasa
Dean of Engineering

Professor Hiroshi Kobayashi
Former Dean of Engineering

Professor Muneo Oka
Former Dean of Engineering
Department of Mechanical Engineering, Tottori University

Dr. Keishi Tanimoto
Department of Social Systems Engineering, Tottori University

Professor Yoshiharu Matsumi
Department of Social Systems Engineering, Tottori University

Professor Shigeru Noda
Department of Social Systems Engineering, Tottori University

Professor Hirokazu Tatano
Disaster Prevention Research Institute
Kyoto University, Uji, Japan

Professor Hiroshi Taniguchi
Department of Information Engineering
Kumamoto Denpa Kougyou Senmon Gakkou
Kumamoto, Japan

Dr. Sadatsugu Nishiura
Department of Social Systems Engineering, Tottori University

Mr. Junji Koyanagi
Department of Social Systems Engineering, Tottori University

Mr. Takao Ohta
Department of Social Systems Engineering, Tottori University

Mr. Tadaaki Shimizu
Department of Information and Knowledge Engineering, Tottori University

Professor Toyohiko Suzuki
Department of Mechanical Engineering, Tottori University

Professor Yoshifumi Okuyama
Department of Information and Knowledge Engineering, Tottori University

Professor Alexander Kippen Cates
Faculty of Education, Tottori University

Professor Hideo Kirikae
Formerly in Faculty of General Education, Tottori University

Professor Kazama
Formerly in Faculty of General Education, Tottori University

Mr. Yukio Fukuda
Head of International Office
Tottori University

Mr. Shinji Shimoyama
International Student Office
Tottori University

Ms. Kagei
International House
Tottori University

4.   STUDENT PARTICIPANTS

4.1   Waterloo Students who Studied and Worked in Japan

Name	Department	Graduation Year
– Waterloo Students in Japan during 1988 –		
Jim Kilpatrick	Systems Design Engineering (SDE)	1990
Nimish Patel	SDE	1990
Peter Tu	SDE	1990
Brian Wong	SDE	1990

(Prof. Kawai's lab.)
Work Term: Teijin Systems Technology, Osaka
　　　Employment (April, 2002) – General Electric in Schenectady, New York.
Travel: China, Hong Kong

James Wei	SDE	1991
Darrin Wolter	SDE	1990

(Prof. Okada's lab.)
Work Term: Hitachi, Kanagawa
Employment (April, 2002) – Associate Director of New Product Introduction, Bell Canada,
　　　Toronto, Ontario
Travel: China (Beijing, Inner Mongolia, Hong Kong, Canton)

Barry Chow	Electrical Engineering (EE)	1990
– 1989 –		
Tracey Mark Bernath	SDE	1991
Betty Mah	SDE	1992
Garry Peterson	SDE	1991
Lawrence Pilch	SDE	1991
Christopher Hugh Pratley	SDE	1991

Work Term: Teijin Systems Technology, Osaka
Travel: Thailand, Malaysia, Singapore, Hong Kong, Taiwan

Mark Aaron Verheyden	SDE	1991

Name	Department	Graduation Year
Linda Marie	SDE	1991
Phil Willow	SDE	1991
Stu Lowe	Mechanical Engineering (ME)	1991
Jean-Marc G. Patenaude	EE	1991

– 1990 –

Randall S. Armstrong	EE	1992
Millind Ghanekar	SDE	1992
Bryan J. Miller	SDE	1992
Todd R. Ruthman	SDE	1992

    (Prof. Okuyama's lab.)
    Work Term: N/A
    Travel: Bicycle trip from Hokkaido to Tottori via Tokyo
    Club: Aikido

Trevor Michael Garret	SDE	1992

    (Prof. Okada's lab.)
    Club: Aikido

Michael H. Adams	SDE	1992
Jonathan Lee	SDE	1992
Mable Wu	SDE	1992

– 1991 –

Cindy Ann Warwick	Civil Engineering (CIVE)	1993
Teresa Fung	SDE	1993
Jasba Simpson	SDE	1993
John A. Knegt	SDE	1993
Brian J. Steffler	SDE	1993

Name	Department	Graduation Year

– 1992 –

Name	Department	Graduation Year
Andrew E. Pape	SDE	1994
Michael Possmayer	SDE	1994
Kevin M. Hefferman	Computer Engineering (CE)	1994
Ken K. P. Lo	EE	1994
Amy Y. Y. Wong	EE	1994

    (Prof. Kimura's lab.)
    Work Term: Sumitomo Metal Industries, Osaka
    Travel: China, Hong Kong
    Club: Magic

Name	Department	Graduation Year
Angela S. Y. Yau	EE	1994

– 1993 –

Name	Department	Graduation Year
Sara Anne Ross	SDE	1995

    (Prof. Yoshihiko Hosoi's lab.); Sado and Ikebana Club
    Work Term: Mikuniya, Tokyo

Name	Department	Graduation Year
Marian Spiteri	SDE	1995

    (Prof. Kimura's lab.); Cycling Club
    Work Term: Nihon Kensetsu Consulting, Tokyo

Name	Department	Graduation Year
Ian A. Clarke	SDE	1995

    (Prof. Hajime Kawai's lab.); Orchestra Club, Explorer's Club; Toured Hong Kong
    Work Term: Nikken Sekkei, Iidabashi, Tokyo

Name	Department	Graduation Year
Kenny Chow	SDE	1995

    (Prof. Okuyama's lab.); Phil Chor Club; Travelled to Hong Kong
    Work Term: Mitsubishi Research Institute, Megro, Tokyo

Name	Department	Graduation Year
Jeffrey Andrew Wood	CIVE	1995

    (Dean Michiue's lab); Phil Chor Club; Travelled to Hong¥ Kong
    Work Term: Nippon Tetrapod, Tsukuba

Name	Department	Graduation Year
Ryan Ferguson	EE	1995

    (Prof. Kobayashi's lab.); Cycling Club
    Work Term: Mitsubishi Soken, Tokyo

Name	Department	Graduation Year

– 1994 –

Matthew Bryan Mark — EE — 1996
(Prof. Yoshihiko Hosoi's lab.); Traveled by Motorcycle
Work Term: Nissin Systems, Kyoto

Kris Jubandhu — SDE — 1996
(Prof. Okuyama's lab.); Badminton Club; Visited Thailand
Work Term: Nihon Suido Consultants, Tokyo

Daniel S. Kenny — SDE — 1996
(Prof. Yamada's lab.); Judo Club (got black belt while in Tottori);
Work Term: Tsuyakin Kogyo, Sumitomo Sogo Kenkyujo, Bisai (near Nagoya)
Travel: Australia

Thomas Ao-Hua Lee — SDE — 1996
(Prof. Kobayashi's lab.); Karate Club and International Friendship Association
Work Term: Asahikasei Joho (information) Systems, Tokyo
Travel: Hong Kong

Ian Wong — SDE — 1996
(Prof. Kimura's lab.); Karate Club
Work Term: Nippon Tetrapod, Tsuchiura

Khouanla Pangnathip — SDE — 1996
(Prof. Kawai's lab.); Toured to Thailand
Work Term: Mitsubishi Research Institute Inc., Tokyo

– 1995 –

Kenneth Hui — EE — 1997
(Prof. Hosoi's lab.)
Work Term: Nohon Jyougesuido System, Tokyo (Supervising Control and Data Acquisition)

Afzal Jessa — SDE — 1997
(Prof. Kobayashi's lab.); Karate Club
Work Term: Nomura Sougou Kenkyujyo, Osaka (Dept. of Regional Development)

Derek Lee — EE — 1997

Michael J. Mannion — ME — 1996
(Prof. Kimura's lab.); Kyodo (Japanese Archery) Club
Work Term: Sumitomo Metals, Wakayama Factory, Wakayama (Dept. of Information and Systems)

Name	Department	Graduation Year

Victoria Wai-Chi Young   SDE   1997

>(Prof. Kawai's lab.); joined Kado (Japanese Flower Arrangement) and other activities of the local house wives
>
>Work Term: Nisshin Systems, Tokyo (Work Breakdown Structure Project)

– 1996 –

Tai-Jing Moyung   SDE   1998

>(Prof. Kawai's lab.)
>
>Work Term: Sumitomo Metals, Wakayama Factory, Wakayama (Dept. of Information and Systems)

Cam Robert Walters   ME   1997

>(Prof. Yoshihiko Hosoi's lab.)
>
>Work Term: Nisshin Systems, Kyoto (Building the Off-Line Module by ACCESS)

Wesley Wong   ME   1998

>(Prof. Kimura's lab.)
>
>Work Term: Nissuikon, Tokyo

Ka-Ping Yee   CE   1998

>(Prof. Yamada's lab.)
>
>Work Term: Arias-Wayfront, Tokyo (Plug-in of Power Animator ver. 8)

– 1997 –

Christine Cheng   SDE   1999

>(Prof. Kita's lab.)
>
>Work Term: Hitachi, Head of Software Development, Yokohama
>
>Travel: Thailand, Australia, Vietnam
>
>Club: Choir

Sarah Hoicka   SDE   1999

>(Prof. Okuyama's lab.)
>
>Work Term: Dept. of Systems, Sumi Research Center, Tsuyakin Kogyo Co., Bisai (near Nagoya)

Sarah Mee   ME   1999

>(Prof. Kimura's lab.)
>
>Work Term: Dept. of Systems Management, Sumitomo Metals, Osaka

Anna Zyzniewski   CIVE   1999

>(Prof. Yoshihiko Hosoi's lab.)
>
>Work Term: Dept. of Sewerage Systems (Section of Technological Advances), Nissuikon, Tokyo

Name	Department	Graduation Year

– 1998 –

Srinivas Artham   SDE   2000
> (Prof. Yamada's lab.)
> Work Term: Social Systems Division, Mitsubishi Research Institute, Chiyoda-ku, Tokyo

Nathan Doidge   SDE   2000
> (Prof. Okuyama's lab.)
> Work Term: Arc Information Systems, Chiyoda-ku, Tokyo

Adrienne Law   SDE   2000
> (Prof. Hajime Kawai's lab.)
> Work Term: Nissuicon, Shinjuku-ku, Tokyo
> Club: Volleyball, International Friends Association

Subhash Ramanathan   SDE   2000
> (Prof. Kimura's lab.)
> Work Term: Nisshin Systems, Shimogyo-ku, Kyoto

Jonathan Secord   SDE   2000
> (Prof. Yoshihiko Hosoi's lab.)
> Work Term: Software Business Division, Hitachi Corperation, Totsuka-ku, Yokohama

David Tunnah   SDE   2000
> (Prof. Kita's lab.)
> Work Term: Coastal Environmental Development Resource Utilization Center, Minato-ku, Tokyo

– 1999 –

Bettina Hans   SDE   2001
> (Prof. H. Kita's lab.)
> Work Term: Nisshin Systems, Kyoto
> Travel: Hiking in Kyushu and Shikoku. Went to Korea.

Clara Tang   SDE   2001
> (Prof. Yamada's lab.)
> Work Term: Mitsubishi Research Institute, Tokyo
> Travel: Kyushu and Hokkaido

– 2000 –

Edward Cheung   SDE   2002
> (Prof. Yoshihiko Hosoi's lab.)
> Work Term: Research assistant at Mitsubishi Research,
>   Tokyo

Name	Department	Graduation Year

Jean-Francois Cote　　　　　　SDE　　　　　　　　　　　　　　2002
　　　(Prof. Yoshihiko Hosoi's lab.)
　　　Work Term: Civil engineering work at Nihon Suido,
　　　　　Tokyo

Karim Essabhai　　　　　　　SDE　　　　　　　　　　　　　　2002
　　　(Prof. Yoshihiko Hosoi's lab.)
　　　Work Term: Quality assurance at Nishin Systems,
　　　　　Kyoto

Mustafa Al-Mosawi　　　　Electrical & Comp. Engineering (E & CE)　2002
　　　(Prof. Yoshihiko Hosoi's lab.)
　　　Work Term: Akikabara Software Development,
　　　　　Tokyo

– 2001 –

Jason Chau　　　　　　　　SDE　　　　　　　　　　　　　　　2003
　　　(Prof. Koike in Prof. Okuyama's lab.)
　　　Work Term: Software programmer with Ark Joho Systems
　　　　　　Chiyodaku, Tokyo

Jimmy Gao　　　　　　　　SDE　　　　　　　　　　2003
　　　(Prof. Yoshihiko Hosoi's lab.)
　　　Work Term: Web software programmer with Nissin Systems,
　　　　　Kyoto

Robert Tu　　　　　　　　E & CE　　　　　　　　　　2003
　　　(Prof. Yamada's lab.)
　　　Work Term: Software programmer with Lexer Research,
　　　　　Akihabara, Tokyo

Sunny Wong　　　　　　　E & CE　　　　　　　　　　2003
　　　(Prof. Koyonagi in Prof. Hajime Kawaii's lab.)
　　　Work Term: Engineering assistant, Construction Technology
　　　　　Institute of Engineering, Tokyo

Travel: All four students traveled to China. Mr. Gao and Mr. Tu also went to Korea while Mr. Chau and Mr. Tu traveled to Taiwan.

– 2002 –

Anderson Kwan   SDE   2004
    (Prof. Akira Kimura's lab.)
    Work Term: Programmer, Kensetsu Gijyutsu Kenkyusho (Research Institute for Construction
        Technology), Tokyo
Karmen Too   SDE   2004
    (Prof. Hideyuki Kita's lab.)
    Work Term: Webpage design, translator, English teacher, Nishin Systems, Kyoto

– 2003 –

David Ezaki   ME   2005
    (Prof. Akira Kimura's lab. in Ocean and Coastal Development)
    Work Term: Software Engineer, GOODHILL Corporation, Tottori
Jenny Yo-Eun Ko   E&CE   2005
    (Prof. Yasuhide Okuyama's lab. in Regional Planning and Development)
    Work Term: Project Management Software Engineer, Nissin System Co. Ltd. Kyoto

– 2004 –

Michele Heng   SDE   2006
    (Prof. Hideyuki Kita's lab.)
    Work Term: Information Systems Management, Ark Information Systems Inc., Tokyo
Perry Siu   E&CE   2006
    (Prof. Ito's lab.)
    Work Term: Software programmer for cost/benefit analyses, CTI Engineering Company Ltd., Tokyo
Patrick Tsai   E&CE   2006
    (Prof. Shigeru Yamada's lab.)
    Work Term: Time value analysis, Mitsubishi Research Institute, Systems Engineering Department,
        Tokyo

– 2005 –

Ana Ilic   SDE   2007
    (Prof. Sato in Prof. Hajime Kawai's lab.)
    Work Term: Cross-border trade and transportation analyst, Mitsubishi Research Institute, Tokyo
    Travel: Thailand
William Lam   SDE   2007
    (Prof. Atsushi Koike's lab.)
    Work Term: Shock absorber quality engineer, Showa Corporation, Gyoda-shi, Saitama-ken
    Travel: China (Beijing, Shanghai, Nanjin, Hanzhou, Hong Kong), Japan (Kyoto, Hiroshima, Nagoya
        (Expo 2005), Tokyo, Osaka)
Arthur C.-Y. Kong   SDE   2007
    (Prof. Akira Kimura's lab.)
    Work Term: Transportation engineering consultant, Nippon-Koei Company Ltd., Yokohama
    Travel: Taiwan, South Korea, Kanazawa ("Japan Tent" Conference for international students)
Richard Shum   SDE   2007
    (Prof. Shigeru Yamada's lab.)
    Work Term: Programming consultant, CTI Engineering Company Ltd., Tokyo, Japan

Travel: Kyoto, Osaka, Hiroshima, Nagoya and Tokyo

Teresa W. S. Tso   SDE   2007

      (Prof. Hideyuki Kita's lab.)

      Work Term: Purchasing associate, Showa Corporation, Gyoda-shi, Saitama-ken

      Travel: Hong Kong, Beijing, Malaysia (Sabah), Japan (Nagoya (Expo 2005), Osaka, Hiroshima, Tokyo, Nikko, Kyoto, Yokohama)

– 2006 –

Yanan (Anna) Bao   E&CE   2008

      (Prof. Akira Kimura's lab.)

      Work Term: Networking Engineer, Goodhill (suit company), Tottori

      Travel: Tokyo, Kyoto, Osaka, Hiroshima and Kobe in Japan; Beijing and Dalian in China; Korea

Lily Chai   E&CE   2008

      (Prof. Yasuhide Okuyama's lab.)

      Work Term: Programmer, Lexer Inc., Tottori

      Travel: Matsue, Nagoya, Tokyo, Shizuoka, Osaka, Kyoto, Hamamatsu, Nagasaki, Fukuoka, Kagawa, Naruto and Kobe in Japan

Ka Man Carmen Lai   SDE   2008

      (Prof. Hajime Kawaii's lab.)

      Work Term: Social Systems Researcher and Surveyor, Mitsubishi Research Institute, Tokyo

      Travel: Osaka, Kobe, Hiroshima, Kyoto, Tokyo, Nikko, Kanazawa, Yokohama, Sendai and Nagoya in Japan; Beijing, Hong Kong, and Macau in China; Seoul in Korea

Zhao Liu   SDE   2008

      (Prof. Hideyuki Kita's lab.)

      Work Term: Programmer in Visual Basic for GIS data processing, CTI Engineering Ltd., Tokyo

      Travel: Tokyo, Osaka, Hiroshima and Kobe in Japan; Beijing and Shanghai in China

4.2 Tottori Master's Students who Studied in Waterloo

Name	Department	Graduation Year

– Tottori Master's Students in Waterloo during 1989/1990 –

Mr. Masahiro Ogawa   Social Systems Engineering (SSE)   1991
    Graduate School of Engineering
    Employment: SECOM, AI lab., Tokyo

Mr. Koji Yoshida   SSE   1991
    Employment: Japan IBM

Dr. Kei Fukuyama*   SSE   1991
    Employment: Associate Professor, Tohoaku University (previously at Tottori University from 1995 to 2000) (* Dr. Fukuyama completed his Ph.D. degree in the Department of Systems Design Engineering at the University of Waterloo from May, 1991, to March, 1995.)

– 1991/1992 –

Mr. Tomoo Aoki   SSE   1993
    Employment: Nohon Kouei Consultants, Tokyo

Mr. Kazuo Uezumi   SSE   1993
    Employment: Central Consultants International, Tokyo

– 1993/1994 –

Mr. Hideki Takao   SSE   1995
    Employment: Chuo Fukken Consultants, Osaka

Mr. Yasuo Ujishima   SSE   1995
    Employment: Oriental Consultants, Shibuya, Tokyo

– 1994/1995 –

Mr. Satofumi Okita   SSE   1996
    Employment: Tetra Co., Osaka

Mr. Satoru Oniki   SSE   1996
    Employment: Nihon Jyougesuido Sekkei, Hiroshima

Mr. Hirofumi Yotsutsuji   SSE   1996
    Employment: Nohon Kensetsu Consultant, Osaka

– 1995/1996 –

Ms. Kaori Inagaki   SSE   1997
    Employment: Chiiki Mirai Kenkyujyo (Regional Future Research Co.), Kyoto

Name	Department	Graduation Year
Mr. Yutaka Yamauchi	SSE	1997

Employment: Nihon Jyougesuido Sekkei, Tokyo

– 1996/1997 –

Mr. Shinji Kukita	SSE	1998

Employment: Division of Civil Engineering, Shizuoka Prefectural Office, Shizuoka

Mr. Tatsuya Yoshikawa	SSE	1998

Employment: Division of Civil Engineering, Tottori Prefectural Office, Tottori

– 1997/1998 –

Mr. Hirose Takumi	SSE	1999

Employment: Fuji Facom, Nagoya

– 1998/1999 –

Mr. Takahiro Morioka	SSE	2000

– 1999/2000 –

Mr. Ryohei Takahashi	SSE	2001
Mr. Mitsuo Ueshima	SSE	2001

– 2000/2001 –

Mr. Keisuke Sato	SSE	2002
Mr. Hiroshi Kawaguchi	SSE	2002

– 2001/2002 –

Mr. Akira Haraguchi	SSE	2003

– 2002/2003 –

Mr. Shingo Itaya	SSE	2004

– 2003/2004 –

Koji Iwakura	SSE	2005
Daisaku Morioka	SSE	2005

– 2004/2005 –

Yoshikazu Ayaki	SSE	2006
Takehiro Moriwaki	SSE	2006
Tsubasa Ishimaru	SSE	2006
Yuichi Ito	SSE	2006

– 2005/2006 –

Yasuaki Sugimoto	SSE	2007

– 2006/2007 –

Tetsuya Ashida	SSE	2008
Yuta Fujimiya	SSE	2008
Shuhei Maki	SSE	2008
Takahiro Nahata	SSE	2008

5.   RELATED ACTIVITIES

Joint research projects between Japanese and Canadian professors.

Many *Faculty Members from the University of Waterloo* have visited Tottori University since 1982.

Professors from Tottori University have visited the University of Waterloo on many occasions since 1978.

Forum for Promoting International Exchange Programs took place in Tottori on January 12, 1995. Prof. K. W. Hipel presented the invited talk on ``The Exchange Program Between Tottori University and the University of Waterloo: A Living Example of International Friendship and Cooperation.'' Prof. N. Okada spoke about Cooperative Education at the University of Waterloo.

Prof. Norio Okada of Kyoto University received an Honourary Doctorate Degree in Engineering from the University of Waterloo at the May 27, 1995, Spring Convocation, for his work in starting and promoting the Tottori/Waterloo Exchange Program, helping to negotiate an exchange program between the University of Waterloo and Kyoto University, and carrying out excellent research in systems engineering.

The Japan Committee at the University of Waterloo, which is chaired by Prof. Gail Cuthbert Brandt, Principal of Renison College, promotes Japanese activities such as a Japanese Spring Festival held May 23 to 27, 1995, at the University of Waterloo, and the *East Asian Festival* which has been held yearly in the fall term since 1996. Starting in 2002, Dr. John Crossley, the current Principal of Renison College, chaired the *East Asian Festival Committee*.

Japanese language and cultural courses are taught at Renison College, University of Waterloo, within the *East Asian Studies* program. Waterloo students take Japanese language courses here before going to Japan while exchange students from Tottori and Kyoto Universities act as teaching assistants in the Renison Japanese language courses while they are in Waterloo.

On Tuesday February 7, 1995, Prof. Keith W. Hipel, Dr. Kei Fukuyama and Miss Sara A. Ross gave an invited presentation about the Waterloo/Tottori Exchange Program to the Board of Governors of the University of Waterloo.

In 1996, Prof. Hipel acted as the *External Examiner* for the Faculty of Engineering Program Evaluation Committee of Tottori University, the first extensive evaluation of the faculty. From November 27 to 28, 1996, Prof. Hipel was invited to Tottori to discuss about the engineering program with Dean Michiue, Committee Chair Prof. Obata, Dean of Student Affairs Prof. Noda, and others.

From November 16 to 19, 1998, *Prof. Masanori Michiue*, Vice President Academic of Tottori University and President since 2001, paid an official visit to the University of Waterloo as the guest of the President's office, the Facult of Engieering and the Department of Systems Design Engineering. Prof. Michiue held academic discussions with many administrative officers and professors, and met with Japanese and Canadian students who were participating in the Tottori/Waterloo Exchange Program.

Prof. Keith Hipel was the official representative of the University of Waterloo at the *Commemorative Events for the 50th Anniversary of the Founding of Tottori University*, which took place over two days in November, 1999:

- On the morning of Friday, November 5, 1999, President Kazuro Takahashi officially welcomed foreign representatives at the Tsuro-no-ma Hall, New Otani Hotel in Tottori City.   This was followed by a luncheon at the same hotel.   In the afternoon, Prof. K.W. Hipel delivered a short lecture entitled "The University of Waterloo Proud of It's Friendship and Academic Ties with Tottori University" and he also took part in discussions at the "International Symposium: The University in the 21st Century", at the main campus of Tottori University.   In the evening, Prof. Yoshihiro Shigemasa, Dean of Engineering, Tottori University, hosted a banquet at the Washington Hotel in Tottori city for representatives of universities having exchange programs with the Faculty of Engineering.

- On the morning of Saturday, November 6, 1999, foreign visitors were given a tour of the Arid Land Research Center of Tottori University.   Tottori University held a luncheon for the foreign guests at the Watanabe Ryokan.   In the afternoon, foreign guests to Tottori University were formally introduced at a Commemorative Ceremony held at Likka Hall, Tottori Prefectural Cultural Center (Bunka Kaikan).   This was followed by a Commemorative Speech by Mr. Yasushi Akashi, Ex-Under-Secretary-General of the United Nations.   In the evening, a Commemorative Celebration was held at the New Otani Hotel.

On many occasions, Prof. Keith Hipel has visited Tottori University to discuss the Tottori/Waterloo Exchange Program including:

- K.W. Hipel participated in meetings in Tottori with Prof. Hajime Kawai on March 28th and President Masanori Michiue of Tottori University on March 28th and 30th, 2001.

- President Masunori Michiue of Tottori University and K.W. Hipel met in Tottori on March 13th and in Kyoto on March 16th, 2003, to discuss the Tottori/Waterloo Exchange Program.

- On March 14th, 2003, K.W. Hipel met in Tottori with the current Japanese Director of the Tottori University, Professor Akira Kimura from the Department of Social Systems Engineering, about extending the Tottori Exchange Program to the university level and having exchange students pay home fees. Professor Hideyuki Kita introduced to Prof. Hipel the Tottori students who will be going to the University of Waterloo for two terms starting in September, 2003.

- K.W. Hipel discussed the exchange program between the University of Waterloo and Tottori University in Japan with President Masanori Michiue of Tottori University in Kyoto on Thursday, January 15th, 2004.

- During the late afternoon and evening of Friday, December 10th, 2004 K.W. Hipel attended a farewell party at Tottori University for the three University of Waterloo students who had just finished a nine month sojourn in Japan in which they completed their three 3A academic term at Tottori University and work terms in Japanese Industry. Each student delivered a 45 minute speech in Japanese about his

or her experiences in Japan. Ms. Michelle Heng, a Systems Design Engineering student, presented in Japanese the results of her software design project completed for ARK Information Systems in Tokyo as her project for the course SYDE 361, Introduction to Design. Subsequently, Tottori University hosted a three hour reception attended by more than 100 students and faculty members in honour of our three Waterloo engineering students.

- Over a dinner banquet hosted by Prof. Fukui, the Dean of Engineering, and President M. Michiue, K.W. Hipel discussed the past, present and future of the University of Waterloo/Tottori University Exchange program with Tottori faculty members. K.W. Hipel presented gifts to the dozen people in attendance at the traditional Japanese restaurant, called Hanna Noren, during the evening of December 11th, 2004.

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This report was last updated in May 2006 by:

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If you have information for updating or expanding this report, kindly contact Keith Hipel. For example, if you participated in the exchange program and the name of the company and location where you worked in Japan are not currently mentioned, please forward this information to Keith Hipel. Over the years, Prof. Norio Okada of Kyoto University and Dr. Kei Fukuyama of Tohoku University have kindly assisted Prof. Keith Hipel in keeping this report up-to-date.

5. PUBLISHED PAPERS

International exchange programs in engineering between the University of Waterloo in Canada and Tottori and Kyoto Universities in Japan are described in the two journal papers listed below. Those articles explain the significant benefits gained by the undergraduate and graduate students, as well as the academic staff who participate, and highlight key principles generally followed in the design and execution of exchange programs. Survey findings obtained from student participants and personal quotations from students indicate that the Japanese / Canadian exchange program constitutes a valuable and unique culture experience.

1. Hipel, K.W., Okada, N., and Fukuyama, K., "The Internationalization of Engineering Education: A Tale of Two Countries", IEEE Transactions on Systems, Man and Cybernetics, Part C, Vol. SMC-33, No. 1, pages 137-148, 2003.

2. Fukuyama, K., Okada, N., and Hipel, K. W., "Internationalization of Engineering Education through Exchange Programs", Journal of the Japanese Society for Engineering Education, in Japanese, Vol. 53, No. 2, pages 36-42, 2005.