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ACTIVITIES OF ICBiotech

ACTIVITIES OF INTERNATIONAL CENTER FOR BIOTECHNOLOGY FOR FY2010

The International Center for Biotechnology (ICBiotech) was founded in April 1995 as an independent institute in Osaka University with a mission to pursue academic advancement and collaborative research in biotechnology. ICBiotech has its origin from the “International Center of Cooperative Research Center in Microbial Engineering Japan (ICME)” which was established in the Faculty of Engineering, Osaka University in April 1978, through renovation into “International Center of Cooperative Research in Biotechnology (ICBiotech)” in April 1985 with the recognition of the wide acceptance and success of ICME’s activities and achievements.

ICBiotech is dedicated to promote international cooperation among Asian countries in the aspects of research and educational advancement in the field of Biotechnology by propelling academic interactions in Asian countries, and is committed to industrial biotechnology studies by means of microbial engineering and related sciences, focusing on the sustainable utilization of abundant natural resources in Southeast Asian countries. The research projects revolve mainly on the development and utilization of biological functions, the optimization of bioconversion processes, and the conservation of genetic resources.

ICBiotech serves as the seat of education and research in Asia, under the support of the Ministry of Education, Culture, Sports, Science and Technology (Monbu-kagaku-sho, MEXT) and the Japan Society for Promotion of Science (JSPS) and the auspices of the United Nations Educational, Scientific and Cultural Organization (UNESCO), with the cooperation of the Department of Biotechnology, Division of Advanced Science and Technology, Graduate School of Engineering, Osaka University, and researchers from prestigious universities nationwide and abroad.

The activities of the ICBiotech include:

1. Research and Education

Conducting researches focusing on the development and sustainable use of tropical bioresources, currently on three areas of biotechnology:

- 1) Discovery of new functions from biological resources.
- 2) Bio-conversion and process engineering for biological resources.
- 3) Conservation of biological resources.

For Post-Graduate Course, ICBiotech is involved in the education activities of Department of Biotechnology, Graduate School of Engineering as collaborating laboratories and currently covers several fields of biotechnology in education and research: Molecular microbiology laboratory chaired by Prof. Takuya Nihira and Applied Microbiology laboratory chaired by Prof. Kazuhito Fujiyama.

2. Educating undergraduate and graduate students with the aim of providing a pool of human resources who will contribute to international cooperative research and development in biotechnology, with participation in an international program of Osaka University, FrontierLab@OsakaU ‘Scientific Empowerment Program for International Students’.

3. Acting as collaborating laboratories for ‘International Program of Frontier Biotechnology’ by the Department of Biotechnology, Graduate School of Engineering, Osaka University, a five-year program for master’s and doctor’s degrees, fully supported by the Japanese Government (Monbukagakusho), and for ‘Global 30 – The Chemistry-Biology Combined Major Program (CBCMP)’ at the undergraduate level.
4. Having been administrating and implementing the “UNESCO Postgraduate Inter-University Course in Biotechnology” (2004-2007) at the Department of Biotechnology, Graduate School of Engineering, Osaka University, taking over the long-termed “International Post-Graduate University Course in Microbiology” (1972-2003) with total of 459 alumni spreading all over Asia.
5. Undertaking a JSPS Asian CORE Program entitled as ‘Next-Generation Bioproduction Platform Leveraging Subtropical Microbial Bioresources’. This project aims to develop next-generation bioproduction platform by interaction between excellent researchers from Japan, Thailand, Viet Nam, Laos and Cambodia, together with fostering young researchers from those countries for future in the field of industrial biotechnology. The program is based on the result from preceding MEXT/JST project carried out in FY2006-2008, which took over the termination in 2004 of the JSPS multilateral program in the field of Biotechnology.
6. Involving as a research group at Japan side for a JICA-JST Project in Thailand: Thailand-Japan Collaboration for the Research and Development of Therapeutic Products against Infectious Diseases. The Research Institute for Microbial Diseases (RIMD), Osaka University, acts as the Japanese host coordinator for the project. The Project is implemented under the “Science and Technology Research Partnership for Sustainable Development (SATREPS)” promoted by Japan International Cooperation Agency (JICA) and Japan Science and Technology Agency (JST) in collaboration.
7. Promoting on-site collaboration and research with Southeast Asian countries in the field of bioscience and biotechnology by opening the Mahidol University (MU)-Osaka University (OU) Collaborative Research Center (MU-OU CRC) for Bioscience and Biotechnology at Cooperative Research Station (CRS) in Southeast Asia at Faculty of Science, Mahidol University in Bangkok, Thailand, in 2002.
8. Serving as the secretariat for the UNESCO Regional Network for Microbiology and Biotechnology in Southeast Asia in accordance with a proposed memorandum resulted from a Consortium Meeting of the Project “Tropical Bio-Resources and Green Chemistry Strategy” (Osaka 2003).
9. Working as a member of the global network “Microbiological Resource Centers” (MIRCENs) operated by UNEP, UNESCO and ICRO; and as an original member of the “Regional Network for Microbiology in Southeast Asia” operated under the auspices of UNESCO through the Trust-in-fund of the Japanese Government.

10. Promoting international cooperative researches in biotechnology with the Southeast Asian countries related to Biotechnology, under the support of Monbu-kagaku-sho Grant-in-Aids for International Scientific Research. In addition, ICBiotech cooperates in developing international organization and conducting academic seminars related to biotechnology.
11. Publishing Annual Reports of ICBiotech periodically.

Steering Committee

Chairman	Prof. Satoshi Harashima (Director of ICBiotech)
Committee Members	Prof. Takuya Nihira (ICBiotech) Prof. Kazuhito Fujiyama (ICBiotech) Prof. Satoshi Harashima (Graduate School of Engineering) Prof. Shigeru Kanaya (Graduate School of Engineering) Prof. Eiichiro Fukusaki (Graduate School of Engineering) Prof. Tsuyoshi Inoue (Graduate School of Engineering) Prof. Kazumasa Hirata (Graduate School of Pharmaceutical Sciences) Prof. Masahito Taya (Graduate School of Engineering Science) Prof. Hiroshi Shimizu (Graduate School of Information Science) Prof. Toshihiro Horii (Research Institute for Microbial Diseases)

Staff

Director/Professor	Dr. Satoshi Harashima
Professor	Dr. Takuya Nihira
Professor	Dr. Kazuhito Fujiyama
Interlocking Professor	Dr. Michihiko Ike (Department of Environmental Engineering, Osaka University)
Collaborative Professor	Dr. Amaret Bhumiratana (Mahidol University, Thailand) Dr. Watanalai Panbangred (Mahidol University, Thailand) Dr. Skorn Mongkolsuk (Mahidol University, Thailand)
Visiting Professor	Dr. Mitsuyoshi Ueda (Kyoto University)
Visiting Associate Professor	Dr. Manabu Airoka (The University of Tokyo)
Assistant Professor	Dr. Hiroshi Kinoshita Dr. Shigeru Kitani Dr. Ryo Misaki Dr. Takao Ohashi
Administrative Official	Ms. Naoko Ose
Administrative Assistant	Ms. Fumiko Tomomatsu Ms. Yukiko Seto
Technical Assistant	Ms. Ayako Tomio

I. UNESCO-JAPAN Program for Development of Human Resources and Research Network in Natural Sciences and Technology – UNESCO Conferences on Capacity-Building in Life Science

Sponsored by Ministry of Education, Culture, Sports, Science and Technology (MEXT), Japan, the long-running successful human resource development (HRD) programs in the field of biotechnology, namely "UNESCO International Post-Graduate University Course in Microbiology" (1973-2003) and "UNESCO Postgraduate Inter-University Course in Biotechnology" (2004-2007), trained as many as 459 young researchers from Asian countries, who are now playing active and leading roles in current biotechnology research and education in the region.

After the operation for the past 33 years under the UNESCO-JAPAN Program for Development of Human Resources and Research Network in Natural Sciences and Technology, the biotechnology HRD program in the region has come to a turning point to be reviewed and re-designed, with a view to delivering a new program in response to evolving needs of regional standpoints where the biotechnology capacity should be greatly improved and the new global challenges have been emerging, such as food security, energy security, environmental conservation, infectious diseases and climate change.

Under the circumstance, sponsored by UNESCO through the Japanese Fund-In-Trust of MEXT, UNESCO Conference Series on Capacity-Building in Life Science was organized by holding conferences in Bangkok (Thailand, October 2009), then in Hanoi (Vietnam, October 2009), Manila (Philippines, February 2010) as per details in the Annual Report Vol. 31 (2009). As the final meeting of the Conference Series, Yogyakarta Conference was held in Indonesia in May 2010 and the Workshop of the UNESCO Regional Network in Microbiology and Biotechnology in Bangkok Thailand, September 2010, as a wrap-up meeting of the Conference Series.

The objectives of the Conference Series and the Workshop are to review and evaluate the previous two UNESCO training courses and to propose next-generation training course for human resource development in the field of biotechnology based on such evaluation together with opinions and advices of attendees. The special emphasis of the program will be put on the need for sustainable development in the biodiversity-rich Southeast Asian from a regional standpoint. Under this situation, organizing committee of the Conference Series intended to invite people concerned, especially such as alumni of the previous programs, science and technology policy maker, governmental officials, collaborators in the past program such as supervisors, lecturers and officials, faculty members of universities, and managers or administrators of universities/institutions, and industry representatives.

1. UNESCO Yogyakarta Conference on Capacity-Building in Life Science

May 24 2010, Melia Purosani Hotel Yogyakarta, Indonesia

Committee Member: Indonesia

Affiliation	Name
Center for Bioindustrial Technology, Agency for the	Dr. Koesnandar

Assessment and Application of Technology (BPPT), Indonesia; Chairman, Indonesian Society for Microbiology	
Universitas Gadjah Mada (UGM)	Prof. Dr. Kapti Rahayu Kuswanto Dr. Irfan D. Prijambada Dr. Donny Widiyanto
Lembaga Ilmu Pengetahuan Indonesia (LIPI)	Prof. Dr. Umar Anggara Jenie Prof. Dr. Endang Sukara
School of Life Sciences and Technology, Institut Teknologi Bandung (ITB)	Dean, Associate Prof. Dr. Intan Ahmad
Graduate Program of Biological Science, Faculty of Mathematics and Natural Sciences, Universitas Indonesia (UI)	Head, Dr. Luthfiralda Sjahfirdi

Japan

Affiliation	Name
International Center for Biotechnology, Osaka University	Director, Prof. Satoshi Harashima Prof. Takuya Nihira Prof. Kazuhito Fujiyama
Department of Biotechnology, Graduate School of Engineering, Osaka University	Prof. Hisao Ohtake Prof. Eiichiro Fukusaki
Department of Material & Life Sciences, Graduate School of Engineering, Osaka University	Prof. Shigenori Kanaya

Advisor:

Japan

Affiliation	Name
Bangkok Center for Education and Research, Osaka University	Director, Prof. Dr. Tatsuji Seki

Program

Date: 24th May 2010 (Mon)

Venue: Melia Purosani Hotel Yogyakarta (Rm: Amarta Ballroom, 1F)

From	To		
8:30	9:00		Registration
9:00	9:10	1	Brief Report PROF. KAPTI RAHAYU KUSWANTO (Universitas Gadjah Mada)
9:10	9:20	2	Opening Address PROF. SATOSHI HARASHIMA (Chairperson, Organizing Committee)
9:20	9:30	3	Address DR. LINDA S. POSADAS (on behalf of PROF. HUBERT J. GIJZEN, Director, UNESCO Jakarta Office)
9:30	9:50	4	Osaka University's Global Commitment and Strategies PROF. KIICHIRO TSUJI (Professor Emeritus, Trustee/Vice-President, Osaka University)
9:50	10:20	5	Human Resource Development Policy on Science and Technology Manpower in Indonesia PROF. NIZAM (on behalf of PROF. FASLI JALAL, Vice Minister, Ministry of National Education, The Republic of Indonesia)

10:20	10:35		Coffee Break
10:35	11:05	6	Building up Research Capacity in Life Sciences - A Pathway to Innovation Nation PROF. UMAR ANGGARA JENIE (Head, Lembaga Ilmu Pengetahuan Indonesia (LIPI))
11:05	11:35	7	Biotechnology as a Vehicle to Convey University Values for Humankind PROF. SUDJARWADI (Rector, Universitas Gadjah Mada)
11:35	11:50	8	The Dynamic Progress of UNESCO Postgraduate Training Course PROF. EIICHIRO FUKUSAKI (Graduate School of Engineering, Osaka University)
11:50	12:50		Lunch Break
12:50	13:35	9	Presentation and Discussion (Industrial representative) <i>Moderator:</i> PROF. ENDANG SUTARININGSIH SOETARTO (Faculty of Biology, Universitas Gadjah Mada) Human Resource Development on Life Science and Biotechnology DR. PURWATY LEE COUHAULT (Alumni, Gadjah Mada University)
13:35	15:00	10	Panel Discussion by Deans/ Director: Desirable Human Resource Development for Biotechnology in Indonesia <i>Moderator:</i> PROF. SEBASTIAN MARGINO (Faculty of Agriculture, Universitas Gadjah Mada) <i>Presenters:</i> 1. ITB's Experience in Human Resource Development in Biotechnology DR. INTAN AHMAD (Dean, School of Life Sciences and Technology, Institut Teknologi Bandung) 2. International Collaboration in HRD for Biotechnology PROF. WIDYA ASMARA (Director, Research Centre for Biotechnology, Universitas Gadjah Mada) <i>Discussants:</i> 1. PROF. CECE SUMANTRI (Head of Department of Animal Production and Technology, Faculty of Animal Science, Insitut Pertanian Bogor) 2. DRA. MAIZER SAID NAHDI, M.SI. (Dean, Faculty of Science and Technology, Universitas Islam Negeri Sunan Kalijaga) 3. DR. FATCHIYAH (Director, Central Laboratory of Life Sciences, Universitas Brawijaya) 4. PROF. SURANTO (Director, Post Graduate Program, Universitas Sebelas Maret Surakarta) 5. DR. SUGIYONO (Executive Director, I-MHERE Project, Universitas Jenderal Soedirman)
15:00	15:10		Coffee Break
15:10	16:25	11	Clustered Presentation and Discussion <i>Moderator:</i> Prof. ENDANG SUTRISWATI RAHAYU (Faculty of Agricultural Technology, Universitas Gadjah Mada) <i>Presenters:</i>

			1. The Development of Well-trained and Experienced Bio-scientist at Gadjah Mada University (UGM)PROF. JOEDORO SOEDARSONO (Emeritus Professor, Faculty of Agriculture, Universitas Gadjah Mada)
			2. Desirable Human Resource Development for Biotechnology in Indonesia: A Perspective of Research Institutions DR. KOESNANDAR (Center for Bioindustrial Technology, Agency for the Assessment and Application of Technology (BPPT), Indonesia, Chairman of Indonesian Society for Microbiology (PERMI))
			3. Proposal of New Program by Organizing Committee Japanese Committee: PROF. TAKUYA NIHIRA (International Center for Biotechnology, Osaka University) Indonesian Committee: DR. IRFAN D. PRIJAMBADA (Faculty of Agriculture, Universitas Gadjah Mada)
16:25	16:45	12	Questions/Suggestions from the Floor
16:45	17:00	13	Closing Remarks PROF. KAZUHITO FUJIYAMA (International Center for Biotechnology, Osaka University)
Reception Party (Rm: Parangsari Pool Terrace)			
From	To		
17:15	17:35	1	Welcome Address PROF. KAPTI RAHAYU KUSWANTO (Universitas Gadjah Mada) PROF. KAZUHITO FUJIYAMA (International Center for Biotechnology, Osaka University)
17:35	19:00	2	Dinner

**2. Concluding Workshop for Capacity-Building in Life Sciences:
UNESCO Regional Network for Microbiology and Biotechnology
September 3 2010, Imperial Queen's Park Hotel, Bangkok, Thailand**

The event brought together a wide variety of stakeholders related to human resource development in Life Science from Ministry of Education, Culture, Sports, Science and Technology, Japan (MEXT), UNESCO Jakarta Office, alumni of the previous UNESCO HRD training programs, delegates from Australia, China, Hong Kong S.A.R., Indonesia, Japan, Korea, Malaysia, Philippines, Thailand and Vietnam as well as the current leading figures in Thailand.

Aims of the Workshop were

1. To present and recognize the general overview of current situation and status of HRD in the field of biotechnology from educational, political and industrial standpoints in the region.
2. To review the previous biotechnology programs and the outputs of the conference series.
3. To develop a conceptual framework for a new HRD program in biotechnology for

sustainable development in the region, addressing the visibility of the program, increasing the attractiveness and usefulness from a regional standpoint, and its long-term sustainability.

Organizing Committee members and Advisers:
Japan

Affiliation	Committee Member
ICBiotech, Osaka University	Prof. Satoshi Harashima (Chairperson) Prof. Takuya Nihira Prof. Kazuhito Fujiyama
Graduate School of Engineering, Osaka University	Prof. Hisao Ohtake Prof. Eiichiro Fukusaki Prof. Shigeru Kanaya
Graduate School of Life Sciences, Tohoku University	Prof. Kiwamu Minamisawa
Graduate School of Agricultural and Life Sciences, The University of Tokyo	Prof. Yasuo Igarashi
Graduate School of Engineering, Kyoto University	Prof. Haruyuki Atomi
Graduate School of Agriculture, Kyushu University	Prof. Kenji Sonomoto
Affiliation	Adviser
Bangkok Center for Education and Research, Osaka University	Director, Tatsuji Seki

Thailand

Affiliation	Committee Member
Faculty of Science, Mahidol University	Prof. Watanalai Panbangred
Faculty of Science, Chulalongkorn University	Associate Prof. Songsri Kulpreecha Associate Prof. Sirirat Rengpipat
Faculty of Science, Kasetsart University	Prof. Savitree Limtong Associate Prof. Arunwon Wungkobkiat
School of Bioresources and Technology, King Mongkut's University of Technology Thonburi	Assistant Prof. Marasri Ruengjitchatchawalya Associate Prof. Khanok Ratanakhanokchai
Bioresources Technology Unit, National Center for Genetic Engineering and Biotechnology, NSTDA	Director, Lily Eurwilaichitr
Affiliation	Adviser
Office of International Affairs, National Research Council of Thailand (NRCT)	Director, Choosri Keedumrongkool
National Science and Technology Development Agency (NSTDA)	Vice President, Morakot Tanticharoen
Faculty of Science, Mahidol University	Dean, Skorn Mongkolsuk Prof. Amaret Bhumiratana
Faculty of Science, Chulalongkorn University	Dean, Supot Hannongbua
Faculty of Science, Kasetsart University	Dean, Surapol Patharakorn
School of Bioresources and Technology, King Mongkut's University of Technology Thonburi	Dean, Narumon Jeyashoke
Thai Society for Biotechnology	President, Pichet Itkor

Vietnam

Affiliation	Committee Member
Institute of Microbiology and Biotechnology, Vietnam National University, Hanoi	President of Vietnam Society for Biology, Prof. Nguyen Lan Dung
Institute of Microbiology and Biotechnology, Vietnam National University, Hanoi	Director, Duong Van Hop

Dept. of Biochemistry, Faculty of Biology, University of Sciences, Vietnam National University, Ho Chi Minh City	Head, Le Phi Nga
International Relations Department, Vietnam National University, Hanoi	Acting Director, Nguyen Thi Anh Thu
Institute of Biotechnology, Vietnam Academy of Science and Technology (VAST)	Director, Truong Nam Hai

Philippines

Affiliation	Committee Member
Philippine Council for Advanced Science and Technology, Department of Science and Technology	Executive Director, Reynaldo V. Eborá
BIOTECH, University of the Philippines Los Baños	Research Associate Professor/President, Philippine Society for Microbiology, Inc., Francisco B. Elegado; University Researcher, Jessica F. Simbahan
Microbial Culture Collection, Museum of Natural History, University of the Philippines Los Baños	University Researcher and Curator, Marian A. Pulido-De Leon
Biology Department, De La Salle University	Assistant Professor, Anthony C. Lee
Microbiological Services Division, Natural Science Research Institute, University of the Philippines-Diliman	University Researcher and Head, Ma. Auxilia T. Siringan
Ateneo de Manila University	Assistant Professor, Evelyn E. de Guzman
Microbiology Program, University of Santo Tomas	Assistant Professor and Coordinator, Jose Francis V. Abrantes
Affiliation	Adviser
BIOTECH, University of the Philippines Los Baños	Director and Professor, Ida F. Dalmacio
International Rice Research Institute	Deputy Director General for Operations, William G. Padolina
National Academy of Science and Technology	President, Emil Q. Javier
College of Public Health, University of the Philippines Manila	Dean and Professor, President, Biotechnology Coalition of the Philippines Nina G. Gloriani
Philippine Academy for Microbiology	President, Lourdes E. Resubal
Biology Department, De La Salle University	Professor and University Fellow, Esperanza C. Cabrera
Scientific Technical Review Panel, Department of Agriculture Biotechnology Program; Retired Professor, University of the Philippines Los Baños Former UNESCO point of Contact	Senior Research Fellow and Member, Priscilla C. Sanchez
BIOTECH, University of the Philippines Los Baños; Former UNESCO point of Contact	Retired Professor, Former Director, Reynaldo E. de la Cruz

Indonesia

Affiliation	Committee Member
Universitas Gadjah Mada (UGM)	Professor, Kapti Rahayu Kuswanto
Faculty of Agriculture, Universitas Gadjah Mada (UGM)	Senior Lecturer, Irfan D. Prijambada Lecturer, Donny Widiyanto
Lembaga Ilmu Pengetahuan Indonesia (LIPI)	Head, Umar Anggara Jenie Deputy Chairman, Endang Sukara
Center for Bioindustrial Technology, Agency for the Assessment and Application of Technology (BPPT); Chairman, Indonesian Society for Microbiology	Koesnandar

School of Life Sciences and Technology, Institut Teknologi Bandung (ITB)	Dean and Associate Professor, Intan Ahmad
Graduate Program of Biological Science, Faculty of Mathematic and Natural Sciences, Universitas Indonesia (UI)	Head, Luthfiralda Sjahfirdi

Board Member of UNESCO Regional Network for Microbiology and Biotechnology

Affiliation	Board Member
Director, Centre for Rhizobium Studies, Dean of Graduate Studies, Associate Professor, Division of Sciences, Murdoch University	Graham O'Hara (Australia)
Director and Professor, Institute of Microbiology, Chinese Academy of Sciences	George Fu Gao (China)
Professor, Department of Biology and Chemistry, City University of Hong Kong	Lilian L.P. Vrijmoed (Hong Kong S.A.R., China)
Vice Dean and Professor, Medical Faculty, University of Indonesia	Pratiwi Sudarmono (Indonesia)
Professor, International Center for Biotechnology, Osaka University	Takuya Nihira (Japan)
Professor, School of Biological Science, Seoul National University	Sa-Ouk Kang (Korea)
Undersecretary, National Biotechnology Division (BIOTEK), Ministry of Science, Technology and Innovation Malaysia (MOSTI)	Rofina Yasmin Othman (Malaysia)
CNH Consulting	Chris N. Hale (New Zealand)
Director and Professor, National Institute of Molecular Biology and Biotechnology (BIOTECH), University of the Philippines Los Baños	Ida F. Dalmacio (Philippines)
Director, National Center for Genetic Engineering and Biotechnology (BIOTEC), NSTDA	Kanyawim Kirtikara (Thailand)
Director, Food Industry Research Institute	Le Duc Manh (Vietnam)
UNESCO Jakarta	Name
Director, UNESCO Jakarta Office	Hubert J. Gijzen

PROGRAM

Date: 3rd September (Friday), 2010

Venue: Queen Park 3 (2nd floor), Imperial Queen's Park Hotel, Bangkok

- 9:00 - 9:30 Registration
- 9:30 - 9:40 Welcome Address
Prof. Satoshi Harashima, Chairperson of Organizing Committees, Director, International Center for Biotechnology, Osaka University
- 9:40 - 9:50 Address
Mr. Nobuo Fujishima, Director-General for International Affairs, Ministry of Education, Culture, Sports, Science and Technology - Japan (MEXT)
- 9:50 - 10:00 Address
Prof. Hubert J. Gijzen, Director, UNESCO Jakarta Office
- 10:00 - 10:25 Address/Talk: To Know to Be Content (Taru o Shiru)
Prof. Kiyokazu Washida, President, Osaka University
- 10:25 - 10:30 Introduction of the Representatives of Organizing Committees
Prof. Kenji Sonomoto, Kyushu University

	Prof. Yasuo Igarashi, The University of Tokyo
	Prof. Watanalai Panbangred, Mahidol University (Thai Organizing Committee)
	Dr. Le Phi Nga, Vietnam National University, Ho Chi Minh City (Vietnamese Organizing Committee)
	Dr. Francisco B. Elegado, University of the Philippines Los Baños (Philippine Organizing Committee)
	Dr. Irfan D. Prijambada, Gadjah Mada University (Indonesian Organizing Committee)
10:30 - 10:50	Coffee Break
10:50 - 11:10	Status of Human Resource Development (HRD) in Life Science in Thailand and Prospect for UNESCO HRD Program
	Prof. Watanalai Panbangred (Mahidol University, Thai Organizing Committee)
11:10 - 11:30	Status of Human Resource Development (HRD) in Life Science in Vietnam and Prospect for UNESCO HRD Program
	Dr. Le Phi Nga (Vietnam National University, Ho Chi Minh City, Vietnamese Organizing Committee)
11:30 - 13:00	Lunch
13:00 - 13:20	Status of Human Resource Development (HRD) in Life Science in the Philippines and Prospect for UNESCO HRD Program
	Dr. Francisco B. Elegado (University of the Philippines Los Baños, Philippine Organizing Committee)
13:20 - 13:40	Status of Human Capital Development in Life Sciences in Indonesia and Prospect for UNESCO Human Capital Development Program
	Dr. Irfan D. Prijambada (Gadjah Mada University, Indonesian Organizing Committee)
13:40 - 14:10	Survey on Biotechnology Capacity in Asia-Pacific: Opportunities for National Initiatives and Regional Cooperation
	Dr. Sachin Chaturvedi (Research and Information System for Developing Countries, India)
14:10 - 14:40	Coffee Break
14:40 - 16:30	Panel Discussion by Board Members of UNESCO Regional Network for Microbiology and Biotechnology
	Prof. Hubert J. Gijzen (Director, UNESCO Jakarta Office)
	Dr. Graham O'Hara (Australia)
	Prof. George Fu Gao (China)
	Prof. Lilian L.P. Vrijmoed (Hong Kong S.A.R., China)
	Prof. Pratiwi Sudarmono (Indonesia)
	Prof. Takuya Nihira (Japan)
	Prof. Sa-Ouk Kang (Korea)
	Prof. Rofina Yasmin Othman (Malaysia)
	Prof. Ida F. Dalmacio (Philippines)
	Ms. Duangkaew Chongkachornphong (on behalf of Dr. Kanyawim Kirtikara, Thailand)
	Dr. Vu Nguyen Thanh (on behalf of Dr. Le Duc Manh, Vietnam)
16:30 - 16:50	Sum-up of the Panel Discussion and Proposal of New frame of HRD
	Prof. Takuya Nihira, Osaka University
16:50 - 17:00	Closing Remark by Prof. Kazuhito Fujiyama, Osaka University

Reception Party

Venue: The Terrace (9th floor), Imperial Queen's Park Hotel, Bangkok

17:30 - 17:50 Welcome Addresses

- 1) Mr. Takashi Asai (on behalf of Mr. Nobuo Fujishima, Director-General for International Affairs, MEXT)
- 2) Prof. Hubert J. Gijzen (Director, UNESCO Jakarta Office)
- 3) President Kiyokazu Washida (Osaka University)
- 4) Prof. Savitree Limtong (Thai Organizing Committee)

17:50 - 19:00 Dinner

3. *Outputs from Conference series and scheme of new course – JFIT (Japanese Funds in Trust) Program*

Background considerations from previous two courses through the Conference series are:

1. High demand for postgraduate training from developing countries such as Laos, Cambodia, Myanmar, Mongolia.
2. Benefit from multi-country operation.
3. High demand as well as readiness of some countries as the host (Thailand, Philippines, Indonesia and Viet Nam).
4. Benefit from long-term training (≥ 1 year).
5. Serious request for degree by the participating countries.

Apart from the above Conference series, four representatives were invited from Thailand, Philippines, Indonesia and Viet Nam to ICBiotech, Osaka University, during July 20-21, for the discussion on the UNESCO projects.

II. “ASIA SCIENCE AND TECHNOLOGY COOPERATION PROMOTION STRATEGY: SOLUTION OF RESEARCH ISSUES SHARED BY ASIAN REGIONS” - MEXT/JST PROJECT (2006-2008)

Following the termination of the JSPS multilateral program in the field of Biotechnology under the framework of Core-University System conducted for the past 27 years since 1978, a scheme of collaboration of Japan Science and Technology Agency (JST) was carried out in FY2006-2008 as a program of "Solution of Research Issues Shares by Asian Region" under the framework of "Asian Science and Technology Cooperation Promotion Strategy" supported by the Special Coordination Funds for Promotion of Science and Technology (SCF) of MEXT.

The program focused on developing novel and efficient strategy to utilize abundant unexplored/unutilized bioresources in Southeast Asia, especially Thailand. The project was implemented by member researchers belonging to academic consortia formed in Japan and Thailand. Joint researches resulted in a lot of fruitful results by hard and sincere efforts of the participating researchers, but in addition to these scientific results, during this joint project, significant amount of data had been accumulated relating to bioresources of Thailand, such as survey data on the present status of Thai bioresources, Thai biotechnology companies, funding trend for biotechnological researches in Thailand, and inputs and insights on bioresources from

the participating researchers of both sides.

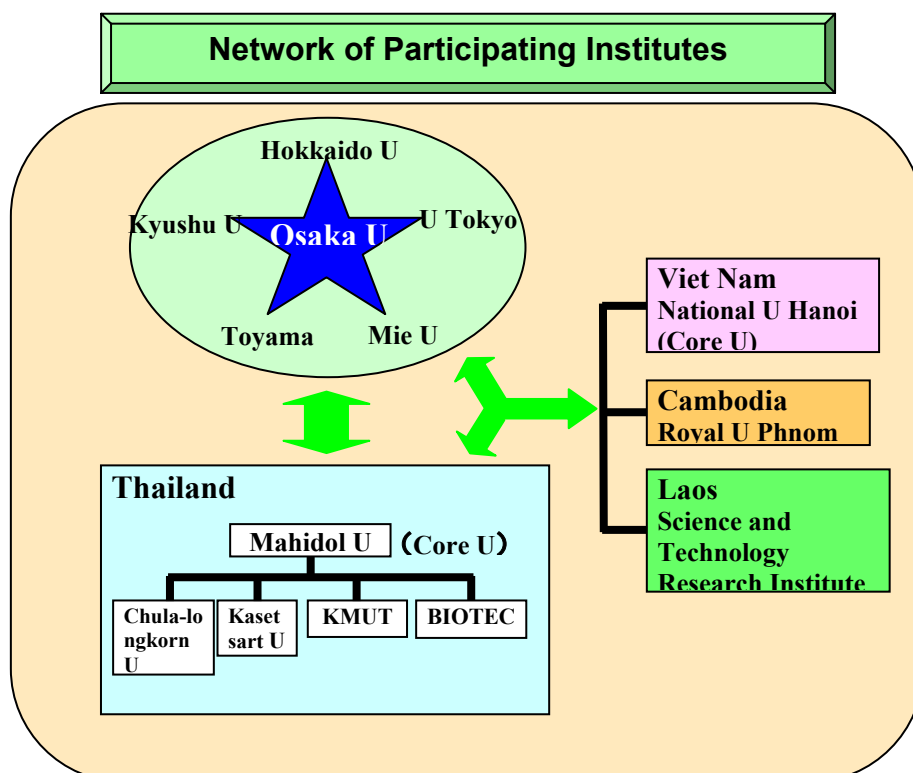
III. JSPS ASIAN CORE PROGRAM: NEXT-GENERATION BIOPRODUCTION PLATFORM LEVERAGING SUBTROPICAL MICROBIAL BIORESOURCES (2009-2013)

This project aims to develop next-generation bioproduction platform by interaction between excellent researchers from Japan, Thailand, Viet Nam, Laos and Cambodia, together with fostering young researchers from those countries for future in the field of industrial biotechnology.

1. Purpose

Based on the result from preceding MEXT/JST project carried out in FY2006-2008, the project area is expanded widely to Thai neighbouring countries (Viet Nam, Laos and Cambodia) in addition to Thailand, and research exchange will be carried out focusing on development of bioproduction platform using microbes.

Thailand, Viet Nam, Laos and Cambodia belong to countries having subtropical climate, and thus have abundant bioresources, such as agro/marine resources. Especially, microbial resources as invisible bioresources are highly abundant, possessing diverse array of unexplored microorganisms which are not present in Japan. These microorganisms should be regarded as having high potential to be producers of novel useful bioactive compounds (such as antibiotics and bacteriocins), producers of useful industrial enzymes (phytase or soft biomass degrading enzymes), whole-cell catalyst to



produce bioethanol or sugars through degradation of soft biomass or the biocatalyst replacing present toxic inorganic catalyst in industrial processes in converting hydrophobic compounds. On-site bioproduction platform using Southeast Asian bioresources is essential as the next-generation fundamental technology. This project aims to develop next-generation bioproduction platform by interaction between excellent researchers from Japan, Thailand, Viet Nam, Laos and Cambodia, fostering young researchers from those countries for future in the field of industrial biotechnology.

2. Outline of Implementation System

Japanese academic consortium will be formed from professional academic staffs belonging to top five Japanese universities (Osaka University, The University of Tokyo, Hokkaido University, Kyushu University and Toyama Prefectural University) who are excellent in several steps of industrial biotechnology. Similarly, Thai academic consortium will be formed from representative young researchers in the field of biotechnology from Thai top 4 universities (Mahidol University, Chulalongkorn University, Kasetsart University, and King Mongkut's University of Technology) and BIOTEC (National Center for Genetic Engineering and Biotechnology). The international collaboration will be performed between the Japanese consortium and the Thai consortium to design and establish efficient way in the utilization of bioresources.

Japanese core organization: Osaka University.

Japanese coordinator: Prof. Takuya Nihira, ICBiotech, Osaka University.

Counterpart country and core organization:

Prof. Watanalai Panbangred, Mahidol University, Thailand.

Dr. Duong Van Hop, The Institute of Microbiology and Biotechnology,
Viet Nam National University, Hanoi, Viet Nam.

Mr. Sokunthia Thao, Royal University of Phnom Penh, Cambodia.

Dr. Sundara Souriuodong, Science and Technology Research Institute,
National Authority for Science and Technology, Laos.

3. Research Topics and Participating Members (*Group leader)

Group 1. Production of novel bioactive compounds

Japan: Takuya Nihira (ICBiotech, Osaka University) *

Kazumasa Hirata (Osaka University)

Yasuhiro Igarashi (Toyama Prefectural University)

Kenji Sonomoto (Kyushu University)

Thailand: Watanalai Panbangred (Mahidol University)

Amaret Bhumiratana (Mahidol University)

Patoomratana Tuchinda (Mahidol University)

Amonlaya Tosukhowong (BIOTEC: National Center for Genetic Engineering
and Biotechnology)

Wonnop Visessanguan (BIOTEC: National Center for Genetic Engineering and
Biotechnology)

Ruud Valyasevi (BIOTEC: National Center for Genetic Engineering and

Biotechnology)

- Vietnam: Duong Van Hop (Institute of Microbiology and Biotechnology (IMBT), Vietnam National University Hanoi)
 Cambodia: Hang Chan Thon (Royal University of Phnom Penh)
 Thao Sokunthia (Royal University of Phnom Penh)
 Laos: Souriodong Sundara (Laos National Authority of Science and Technology)

Group 2. Production of novel useful enzymes

- Japan: Kazuo Sakka (Mie University) *
 Kouzo Asano (Hokkaido University)
 Thailand: Vithaya Meevootisom (Mahidol University)
 Suthep Wiyakrutta (Mahidol University)
 Khanok Ratanakhanokchai (King Mongkut's University of Technology Thonburi)
 Vietnam: Duong Van Hop (Institute of Microbiology and Biotechnology (IMBT), Vietnam National University Hanoi)

Group 3. Development of novel biocatalysts

- Japan: Satoshi Harashima (Osaka University) *
 Hisao Ohtake (Osaka University)
 Kazuhito Fujiyama (Osaka University)
 Eiichiro Fukusaki (Osaka University)
 Yasuo Igarashi (The University of Tokyo)
 Thailand: Savitree Limtong (Kasetsart University)
 Wichien Yongmanitchai (Kasetsart University)
 Chuenchit Boonchird (Mahidol University)
 Thipa Asvarak (Mahidol University)
 Thunyarat Pongtharangkul (Mahidol University)
 Alisa Vangnai (Chulalongkorn University)
 Verawat Champreda (BIOTEC: National Center for Genetic Engineering and Biotechnology)

4. Record of Scientist Exchange

From Japan to counterpart countries

Name	Affiliation	Visiting Period	Host Organization
Takuya Nihira	Professor, ICBiotech, Osaka Univ.	April 24-29, 2010	Mahidol Univ., Thailand
		May 20-25, 2010	Mahidol Univ., Thailand
		June 27-July 1, 2010	Mahidol Univ., Thailand
		July 27-31, 2010	Mahidol Univ., Thailand
		August 1-4, 2010	Mahidol Univ., Thailand
		October 9-15, 2010	Seminar in Hanoi, Viet Nam
		October 16, 2010	Vietnam National Univ. Hanoi, Vietnam
		October 17-20, 2010	Mahidol Univ., Thailand
		November 29- December 5, 2010	Mahidol Univ., Thailand

		December 6-9, 2010	Laos National Authority of Science and Technology, Laos
		December 10, 2010	Mahidol Univ., Thailand
		January 26-28, 2011	Laos National Authority of Science and Technology, Laos
		January 29-February 3, 2011	Mahidol Univ., Thailand
Satoshi Harashima	Professor, Graduate School of Engineering, Osaka Univ.	February 25-March 1, 2011	Mahidol Univ., Thailand
Kazuhito Fujiyama	Professor, ICBiotech, Osaka Univ.	December 7-14, 2010	Kasetsart Univ., Thailand
Gyozo Asano	Professor, Graduate School of Agriculture, Hokkaido Univ.	October 12-17, 2010	Seminar in Hanoi, Viet Nam
Kazuo Sakka	Professor, Faculty of Bioresources, Mie Univ.	October 12-17, 2010	Seminar in Hanoi, Viet Nam
Yasuhiro Igarashi	Professor, Biotechnology Research Center, Toyama Prefectural Univ.	October 12-16, 2010	Seminar in Hanoi, Viet Nam
Takeshi Zendo	Assoc. Prof., Graduate School of Bioscience and Bio-environmental Sciences, Kyushu Univ.	October 13-17, 2010	Seminar in Hanoi, Viet Nam
Naoki Ishibashi	Ph.D. student, Graduate School of Bioscience and Bio-environmental Sciences, Kyushu Univ.	October 13-17, 2010	Seminar in Hanoi, Viet Nam
Kazumasa Hirata	Prof., Graduate School of Pharmaceutical Sci., Osaka Univ.	October 13-17, 2010	Seminar in Hanoi, Viet Nam
Hisao Otake	Prof., Graduate School of Engineering, Osaka Univ.	October 13-17, 2010	Seminar in Hanoi, Viet Nam
Kohsuke Honda	Assistant Professor, Graduate School of Engineering, Osaka Univ.	October 13-17, 2010	Seminar in Hanoi, Viet Nam
Teruo Sone	Assoc. Professor, Graduate School of Agriculture, Hokkaido Univ.	November 4-11, 2010	Mahidol Univ., Thailand
Minetaka Sugiyama	Assoc. Professor, Graduate School of Engineering, Osaka Univ.	February 1-10, 2011	Mahidol Univ., Thailand
Shigeru Kitani	Assistant Professor, ICBiotech, Osaka Univ.	December 12-25, 2010 December 26-29, 2010	Royal Univ., Phnom Penh, Cambodia Laos National Authority of Science and Technology, Laos

Takashi Ohashi	Assistant Professor, ICBiotech, Osaka Univ.	December 6-18, 2010	Kasetsart Univ., Thailand
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From counterpart countries to Japan, and between counterpart countries:

Name	Affiliation	Visiting Period	Host Organization
Sokunthia Thao	Royal Univ. Phnom Penh, Cambodia	May 5-9, 2010	ICBiotech, Osaka Univ., Japan
		October 13-17, 2010	Seminar in Hanoi, Viet Nam
Sourioudong Sundra	Laos National Authority of Science and Technology, Laos	July 1-7, 2010	ICBiotech, Osaka Univ., Japan
Phommaxay Phetsamone	Laos National Authority of Science and Technology, Laos	July 1-August 31, 2010	Mahidol Univ., Thailand
		October 13-17, 2010	Seminar in Hanoi, Viet Nam
Pattra Charnchai	Mahidol Univ., Thailand	April 12-25, 2010	ICBiotech, Osaka Univ., Japan
Wichien Yongmanitchai	Kasetsart Univ., Thailand	April, 2010	ICBiotech, Osaka Univ., Japan
Chuenchit Boonchird	Mahidol Univ., Thailand	August 22-28, 2010	Graduate School of Engineering, Osaka Univ., Japan
Mayura Janhom	Mahidol Univ., Thailand	November 22-December 6, 2010	ICBiotech, Osaka Univ., Japan
Khanok Ratanakhanokchai	King Mongkut's Univ. Technol., Thailand	December 1-10, 2010	Faculty of Bioresources, Mie Univ. Japan
Theuambounmy Houmpheng	Laos National Authority of Science and Technology, Laos	October 13-17, 2010	Seminar in Hanoi, Viet Nam
Phauk Sophany	Royal Univ. Phnom Penh, Cambodia	October 13-17, 2010	Seminar in Hanoi, Viet Nam
Sor Ratha	Royal Univ. Phnom Penh, Cambodia	July 1-August 31, 2010	Mahidol Univ., Thailand
		October 13-17, 2010	Seminar in Hanoi, Viet Nam
Phothichitto Khampheng	Laos National Authority of Science and Technology, Laos	October 13-17, 2010	Seminar in Hanoi, Viet Nam
Nguyen Huynh Minh Quyen	Viet Nam National Univ., Viet Nam	March 15-30, 2011	ICBiotech, Osaka Univ., Japan

5. Seminar and Symposium

The Young Scientist Seminar (YSS) and a Joint Symposium (JS) were held in Hanoi in October 2010 as follows

JSPS Asian CORE Program (2009-2013)
Hanoi Meeting
On “Next-Generation Bioproduction Platform
Leveraging Subtropical Microbial Bioresources”

14-15 October 2010

Center for Women & Development

Conference room 4-5, 3rd Floor, 20 Thuy Khue-Tay Ho- Hanoi, Vietnam

Hosted by: Institute of Microbiology and Biotechnology (IMBT), Viet Nam
Vietnam National University Hanoi (VNUH), Viet Nam

In association with: Osaka University (OU), Japan
Mahidol University (MU), Thailand
Japan Society for the Promotion of Science (JSPS), Japan
National Research Council of Thailand (NRCT), Thailand
National Science and Technology Development Agency

Venue: CENTER FOR WOMEN & DEVELOPMENT
Conference room 4-5, 3rd floor, 20 Thuy Khue - Tay Ho - Ha Noi - Viet Nam

Schedule: Day 1 (October 14, 2010): The Young Scientist Seminar (YSS)
Day 2 (October 15, 2010): Joint Symposium (JS)

Advisory Committee

Dr. Nguyen Huynh Minh Quyen (IMBT, VNUH, Vietnam)
Prof. Dr. Hisao Ohtake (Graduate school of Engineering Osaka University, Japan)
Prof. Dr. Kazuo Sakkara (Graduate School of Bioresources, Mie University, Japan)
Mr. Khampheng Phothichitto (Science and Technology Research Institute, National Authority for Sciences and Technology, Laos)
Dr. Sokunthea Thao (Royal University of Phnom Penh, Cambodia)
Prof. Dr. Savitree Limtong (Kasetsart University, Thailand)

Organizing Committee

Dr. Duong Van Hop (IMBT, VNUH, Vietnam)
Prof. Dr. Takuya Nihira (ICBiotech, Osaka U, Japan)
Prof. Dr. Watanalai Panbangred (Mahidol University, Thailand)

Program

Day 1 (October 14, 2010): The Young Scientist Seminar 2010

From	To	
08:00	08:30	Registration
08:30	08:40	Welcome address Dr. Doung Van Hop (Director of IMBT, Viet Nam)
		Welcome address Prof. Takuya Nihira (Osaka U, Japan)

Morning Session (Chaired by Dr. Nguyen Huynh Minh Quyen and Prof. Kazuo Sakka

08:40	09:10	Keynote Lecture 1: Bio-based phosphorus recycling for forestalling the looming crisis of phosphorus
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- 09:10 09:25 1 Lipid accumulation of *Chlorella sorokiniana* 1019 under mixotrophic culture condition
Prof. Hisao Ohtake (Osaka U, Japan)
Ms. Siriwat Kucharoenphaibul (Kasetsart U, Thailand)
- 09:25 09:40 2 Bioconversion of xylan to xylooligosaccharide by xylanolytic enzyme from *Anoxybacillus* sp. strain JT-12
Ms. Jitladda Thitikorn-amorn (King Mongkut's U of Technology Thonburi, Thailand)
- 09:40 09:55 3 Characterization of predominant uncultured bacteria affiliated with the candidate phylum TM7 in an acidophilic nitrifying reactor
Mr. Nguyen Minh Giang (IMBT, Vietnam)
- 09:55 10:10 4 Study antimicrobial activity of actinomycetes isolated from Catba island-Vietnam
Mr. Le Phuong Chung (Nha Trang University, Vietnam)
- 10:00 10:30 Coffee Break
- 10:30 11:00 Key note Lecture 2: Recombinant enzymes-A tool for agricultural, industrial and medical applications
Assoc. Prof. Dr. Quyen Dinh Thi (Institute of Biotechnology, Vietnam Academy of Science and Technology, Vietnam)
- 11:00 11:15 5 Cloning of gene responsible for growth at high temperature in yeast
Ms. Vorrapan Buajamrat (Mahidol U, Thailand)
- 11:15 11:30 6 Isolation and functional analysis of *afsA* homologue from *Streptomyces* SBI034, a soil isolate with antifungal activity
Ms. Bungonsiri Intra (Mahidol U, Thailand)
- 11:30 11:45 7 Sensitive detection and quantification of *Burkholderia pseudomallei* in soil samples using culture-dependent and -independent approaches
Mr. Trinh Thanh Trung (IMBT-VNUH, Vietnam)
- 11:45 12:00 8 Construction of a phosphatase double knockout *E. coli* for improving efficiency of phytase screening
Ms. Jitsupang Rodbumrer (Mahidol U, Thailand)
- 12:00 14:00 Lunch & Poster Session

Afternoon Session (Chaired by Dr. Duong Van Hop and Prof. Hisao Ohtake)

- 14:00 14:30 Key note Lecture 3: Structure and function of "cellulosome," highly active cellulolytic multi-enzyme complex
Prof. Kazuo Sakka (Mie University, Japan)
- 14:30 14:45 9 Development of a whole-cell biocatalyst for valuable chemicals production
Mr. Akasit Siriphongphaew (Mahidol U, Thailand)
- 14:45 15:00 10 Enzymatic saccharification and fermentation technologies for ethanol production from lignocellulosic biomass
Mr. Houmpheng Theuambounmy (National Authority for Science and Technology, Laos)
- 15:00 15:05 11 Bacteriocins produced by newly isolated lactic acid bacteria from Thai fermented foods
Mr. Naoki Ishibashi (Kyushu U, Japan)
- 15:05 15:30 Coffee Break
- 15:30 15:45 12 Optimizing Co-Treatment process of septic Sludge and organic waste by thermophilic anaerobic digestion for the energy recovery
Mr. Thai Manh Hung (IMBT-VNUH, Vietnam)
- 15:45 16:00 13 Whole cell detection of pediocin PA-1/AcH producing lactic acid bacteria by MALDI-TOF/TOF mass spectrometry to be used as starter culture in Nham, a traditional fermented pork sausage
Mr. Yutthana Kingcha (National Center for Genetic Engineering and Biotechnology, Thailand)

16:00	16:15	14	Screening CoQ10 producing strains among yeast collection at the VTCC and study phylogeny of group with the highest CoQ10 content Ms. Tran Thi Le Quyen (IMBT-VNUH, Vietnam)
16:15	16:30	15	Molecular diversity and construction of a lignocellulose degrading microbial consortium for biotechnological conversion of local agricultural biomass Ms. Thanaporn Laothanachareon (National Center for Genetic Engineering and Biotechnology, Thailand)
16:30	17:00		Closing Ceremony Presentation Award Ceremony Closing Remark by Prof.Dr. Takuya Nihira (Osaka U)
19:00			Welcome Dinner

Joint Symposium 2010

Day 2, October 15, 2010

Chaired by Dr. Duong Van Hop (IMBT) and Prof. Takuya Nihira (Osaka U)

From To

08:00 08:10 Short summary about activities of the Asian CORE Program in 2009-2010
Prof. Takuya Nihira (Osaka U, Japan)

Reports by the working teams (20 min for each report)

08:10	08:50	Team 1	Bioactive compounds: Drug lead discovery from microorganisms in Thailand Prof. Yasuhiro Igarashi (Toyama Pref. U, Japan)
08:50	09:30	Team 2	Lactic acid bacteria: High throughput detection and validation of bacteriocin screening system by whole cell MALDI-TOF mass spectrometry Dr. Wonnop Visesanguan (National Center for Genetic Engineering and Biotechnology, Thailand) Isolating bacteriocin –producing lactic acid bacteria from Vietnamese sources Dr. Nguyen Quynh Uyen (IMBT, Vietnam)
09:30	09:50	Team 3	Phytase: Polysaccharide hydrolases from chicken gut metagenomes Assoc. Prof. Dr. Suthep Wiyakrutta (Mahidol U, Thailand) Establishment of screening system for novel phytase producing bacteria PP Prof. Kozo Asano (Hokkaido U, Japan)
09:50	10:20		Coffee Break
10:20	10:40	Team 4	Cellulase: High potential plant cell wall degrading enzymes from <i>Paenibacillus curdlanolyticus</i> B-6 Assoc. Prof. Dr. Khanok Ratanakhanokchai (King Mongkut's U of Technology Thonburi, Thailand)
10:40	11:00	Team 5	Yeast 1: Selection of oleaginous yeast and its lipid production Prof. Dr. Savitree Limtong (Kasetsart U, Thailand)
11:00	11:20	Team 6	Yeast 2: Expression pattern of selected stress-related genes in thermotolerant <i>Saccharomyces cerevisiae</i> strains in response to long-time exposure to heat Dr. Thipa Asvarak (Mahidol U, Thailand)
11:20	11:40	Team 7	Biocatalyst for hydrophobic process: Bioconversion of Water-immiscible chemicals Dr. Thunyarat Pongtharangkul (Mahidol U, Thailand) Dr. Kohsuke Honda (Osaka U, Japan)
12:20	12:40	Team 8	Bacterial consortium: Application of biomass- specific thermophilic microbial consortia for saccharification and production of biorefinery products from local agricultural biomass Dr. Niran Roongsawang (National Center for Genetic Engineering and

Biotechnology, Thailand)

- 12:40 12:50 General discussion and closing remarks (Chaired by Prof. Takuya Nihira)
12:50 14:00 Lunch
- 14:00 16:30 Excursion
Institute of Biotechnology Vietnam Academy of Science and Technology, 18 Hoang Quoc Viet Road-Hanoi
- 17:00 18:00 Summit meeting of representatives of country member of the JSPS Asian CORE Program 2009-2013
(Meeting room 603, Institute of Microbiology and Biotechnology, E2-144 Xuanthuy, Cau Giay – Hanoi, Viet Nam)

Poster Presentation

- P-1 Bioactive compound of endophytic actinomycetes from Laos medicinal plants and their anti-microbial activities
Ms. Phetsamone Phommaxay (National Authority for Science and Technology, Laos)
- P-2 Screening for *Streptomyces spp.* with activities against plant pathogens
Mr. Sor Ratha (Royal University of Phnom Penh, Cambodia)
- P-3 News about aquatic hyphomycetes isolated from fallen leaves in Vietnam
Mrs. Le Thi Hoang yen (IMBT-VNUH, Vietnam)
- P-4 Isolation of cDNA encoding for ARNT of aquatic animals collected in Ma Da and Cat Tien
Mr. Dinh Ba Tuan (University of Natural Sciences, VNUH, Vietnam)
- P-5 Investigation of inhibition capacity of *Amphiprora sp.*, on human epidermic carcinoma cells
Ms. Pham Thi Bich Dao (IMBT-VNUH, Vietnam)
- P-6 Controlling invasive knotweeds (*Polygonum spp.*) by stem injection of glyphosate-herbicide: case study in king county, WA USA
Mr. Sophany Phauk (Royal University of Phnom Penh, Cambodia)

6. Committee Meeting

April 27, 2010. Member meeting at Mahidol University, Thailand, attended by Thai and Japanese collaborative researchers.

October 15, 2010. Coordinating meeting in Hanoi Seminar place, Center for Women & Development, Hanoi, Viet Nam.

January 17, 2011. Domestic Member meeting in Japan at ICBiotech, Osaka University, attended by cooperative researchers in Japan.

IV. JST-JICA (SATREPS) (2008-2012)

SATREPS (Science and Technology Research Partnership for Sustainable Development) is a Japanese government program that promotes international joint research targeting global issues. SATREPS projects are expected to lead to outcomes with potential for practical utilization, and to enhance research capacity in the developing country. The program is conducted through collaboration between two Japanese government agencies: the Japan Science and Technology Agency (JST) and the Japan International Cooperation Agency (JICA).

ICBiotech works as a cooperative group to the following project
 Topic: Research and Development of Therapeutic Products against Infectious Diseases, especially Dengue Virus Infection.
 Principal Investigator: Prof. IKUTA Kazuyoshi/Research Institute for Microbial Diseases, Osaka University.
 Research Period: 4 years from 2008.
 Counterpart Research Institutions: Ministry of Public Health-National Institute of Health, Mahidol University (Thailand).

This project aims to develop effective therapeutic products against emerging and re-emerging infectious diseases that are of great priority in through the International alliance collaborative research between the Research Institute for Microbial Diseases, Osaka University and the Department of Medical Sciences (DMSc), Ministry of Public Health in Thailand. This project will concentrate in two lines: the first will mainly concern the development of human monoclonal antibodies and the second will cover the development of therapeutic candidates from microorganisms such as bacteria, which are prevalent in Thailand. These developed agents are expected to be candidates with great effectiveness against dengue hemorrhagic fever as well as several other viral and bacterial infections. The successful candidates would be practically applied thereafter to clinical usage in Thailand.

V. VISITORS

Japanese Visiting Professor and Visiting Associate Professor

Visiting Professor Dr. Mitsuyoshi Ueda, Kyoto University
 Visiting Associate Professor Dr. Manabu Arioka, The University of Tokyo

Visiting Research Scholar

Name	Affiliation	Staying Period
Sukathida Ubol	Mahidol University, Thailand	2010.4.13-2010.6.10
Irene Gabrido-Pajares	University of the Philippines, Los Baños, Philippines	2010.5.18-2010.7.13
Duenrut Chonudomkul	Kasetsart University, Thailand	2010.8.3-2010.10.4
Enkh-Amgalan Jigjiddorj	Mongolian Academy of Sciences (MAS), Mongolia	2010.9.28-2010.11.5
Arinthip Thamchaipenet	Kasetsart University, Thailand	2010.10.5-2010.12.27
Nguyen Huynh Minh Quyen	Vietnam National University, Viet Nam	2011.3.1-2011.4.1

Research Fellow

Name	Affiliation	Staying Period
Aiyada Aroonsri	Kasetsart University, Thailand	2009.10.1-2011.9.30
Dana Ulanova	Academy of Sciences of the Czech Republic	2009.11.26-2011.11.25

Sourioudong Sundara	National Authority for Science and Technology, Laos	2010.7.1-2010.7.6
Thao Sokunthia	Royal University of Phnom Penh, Cambodia	2010.5.5-2010.5.9
Chuenchit Boonchird	Mahidol University, Thailand	2010.8.21-2010.8.28
Wichien Yongmanitchai	Kasetsart University, Thailand	2010.4.20-2010.4.30
Pattra Charnchai	Mahidol University, Thailand	2010.4.13-2010.6.10
Rainer Breitling	University of Glasgow, Scotland, UK	2010.7.11-2010.7.20
Savitree Limtong	Kasetsart University, Thailand	2010.7.20-2010.7.21
Le Phi Nga	Vietnam National University, Ho Chi Minh City, Viet Nam	2010.7.20-2010.7.21
Francisco B. Elegado	University of the Philippines Los Baños, Philippines	2010.7.20-2010.7.21
Irfan D. Prijambada	Gadjah Mada University, Indonesia	2010.7.20-2010.7.22
Marcello Donini	ENEA - Casaccia Research Center, Italy	2010.10.19-2010.10.26
Eugenio Benvenuto	ENEA - Casaccia Research Center, Italy	2010.10.19-2010.10.26
Mayura Janhom	Mahidol University, Thailand	2010.11.22-2010.12.6
Apichai Prachasuphap	Ministry of Public Health, Thailand	2011.2.7-2011.3.7
Pannamthip Pitaksajakul	Mahidol University, Thailand	2011.2.7-2011.3.7
Panadda Dhepakson	Ministry of Public Health, Thailand	2011.2.7-2011.3.7
Nguyen Huynh Minh Quyen	Vietnam Academy of Science and Technology, Viet Nam	2011.3.1-2011.3.31
Busaba Yongsmith	Kasetsart University, Thailand	2011.3.14-2011.3.29

Other Guests/Visitors

Name	Affiliation	Staying Period
Ermie M. Bacarra	Philippine Council for Advanced Science and Technology Research and Development (PCASTRD), DOST, Philippines	2010.4.12-2010.4.13
Song Xue	Dalian Institute of Chemical Physics, Chinese Academy of Sciences, China	2010.4.7
Xupeng Cao	Dalian Institute of Chemical Physics, Chinese Academy of Sciences, China	2010.4.7
Supachai Samappito	Maharakham University, Thailand	2010.5.12
Preecha Prathepha	Maharakham University, Thailand	2010.5.12
Thiensak Mekkan-opas	Maharakham University, Thailand	2010.5.12
Sujin Butdisuwan	Maharakham University, Thailand	2010.5.12
Nathanon Trachoo	Maharakham University, Thailand	2010.5.12
Piyapun Santaveesuk	Maharakham University, Thailand	2010.5.12
Pradit Terdtoon	Maharakham University, Thailand	2010.5.12
Eriko Takano	University of Groningen, The Netherlands	2010.7.13
Sudjarwadi	Gadjah Mada University, Indonesia	2010.7.15
Tumiran	Gadjah Mada University, Indonesia	2010.7.15
Rachmat Sriwijaya	Gadjah Mada University, Indonesia	2010.7.15
Quyen Dinh Thi	Vietnam Academy of Science and Technology, Viet Nam	2010.11.18

Vu Ngoc Long	Vietnam Academy of Science and Technology, Viet Nam	2011.3.11
Phan Van Kiem	Vietnam Academy of Science and Technology, Viet Nam	2011.3.11
Nguyen Hoai Nam	Vietnam Academy of Science and Technology, Viet Nam	2011.3.11

Foreign students enrolled in ICBiotech

Japanese Government (Monbukagakusho) Scholarship:

Juthamard Limkul (Mahidol University, Thailand)

Suandi Pratama (Gadjah Mada University, Indonesia)

International Program of “Frontier Biotechnology” for short term:

Floris Jan Van Eerden (University of Groningen, Netherlands)

Jirawas Sornkom (Mahidol University, Thailand)

Privately financed:

LY, Hong Nhung (Vietnam National University, Ho Chi Minh City University of Technology)

VI. COMMITTEE MEETING

Steering Committee Meetings of ICBiotech were convened as follows:

May 25, 2010

Discussion on inviting a Visiting Research Scholar: Dr. Duenrut Chonudomkul, Kasetsart University, Thailand (August 3-October 4, 2010).

July 13, 2010

Report on:

UNESCO Yogyakarta Conference held on May 24, 2010.

Preparatory situation of UNESCO Concluding Workshop for Capacity-Building in Life Science to be held on September 3, 2010.

Discussion/Approval on:

Engaging Dr. Takao Ohashi as Assistant Professor of ICBiotech.

Inviting a Visiting Research Scholar: Dr. Enkh-Amgalan Jigjiddorj, Mongolian Academy of Sciences, Mongol (September 28-November 5, 2010).

December 22, 2010

Discussion/Approval on:

Inviting a Visiting Research Scholar:

Nguyen Huynh Minh Quyen, Viet Nam Academy of Science and Technology, Viet Nam (March 1-31, 2011).

Niran Roongsawang, National Center for Genetic Engineering and Biotechnology, Thailand (March 22-June 20, 2011).

Punchapat Sojikul, Mahidol University, Thailand (April 5-June 3, 2011).

February 15, 2011

Report on:

Budgetary demand for FY2011.

JSPS Program 'Next-generation Bioproduction Platform Leveraging Subtropical Microbial Bioresources'.

Involvement in JICA-JST Project.

Discussion/Approval on:

Nomination of Professor Takuya Nihira as the Director of ICBiotech.

Renewal of Steering Committee members.

Conferring a title on visiting professor from abroad.

Conferring a title on visiting professor assigned from Japanese university.

Setting Advisory Board for future international activities.

March 30, 2011

Report on:

Nomination of Prof. T. Nihira and Prof. K. Fujiyama as concurrent professors in Global Collaboration Center, Osaka University.

Discussion/Approval on:

Inviting a Visiting Research Scholar: Kanokwan Poomputsa, King Mongkut's University of Technology, Thailand (June 6-September 15, 2011).