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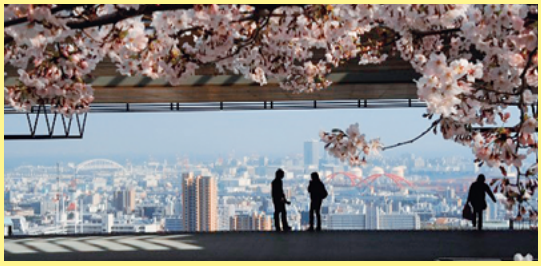
Kobe University
Academic Research and Education Forum in Indonesia

Language, law and technology: Research Frontiers between Kobe University and Universitas Indonesia

2016

December 23 in *Indonesia*



KOBE University Academic Research and Education Forum in Indonesia

December 23, 2016

In July 2013, we installed the Center for Asian Academic Collaboration under the Institute for Promoting International Partnerships, which was established to enhance our global competitiveness and develop further as an international hub for education and research. Through the Center, Kobe University is pursuing a strategic approach to international exchange, focusing on Asian countries currently experiencing rapid economic growth which are expected to play increasingly important global roles.

This year we will hold the first Kobe University Academic Research and Education Forum (KUAREF) in Jakarta, Indonesia. This forum, which focuses on research and education, originally started as the Kobe University Global-Link Forum (KUGL) in 2011 in Bangkok, Thailand. KUGL had two main goals: to promote the Kobe University Brand overseas, and to form stronger links with overseas academic associations and the International Alumni Association Network, which provides an invaluable repository of knowledge for the University. KUAREF will inherit the best parts of the KUGL event series and continue to build upon KUGL's achievements.

We believe that the forum will present unique and valuable opportunities for members of leading universities in Indonesia and Japan to gather together, build relationships, and enhance cooperation with each other.

(Institute for Promoting International Partnerships, Kobe University)

KOBE University
Academic Research and Education Forum in Indonesia

Language, law and technology:
Research Frontiers between
Kobe University and Universitas Indonesia

Organized by: Institute for Promoting International Partnerships, Kobe University
Co-hosted by: Universitas Indonesia

Forum

Date: Friday 23 December 2016 9:20-17:20
Venue: The Margo Hotel, Depok, Indonesia

9:20-10:00 Opening Ceremony

Moderator : Prof. Yasushi Ogata (Director, Center for Asian Academic Collaboration)

Opening Remarks
Prof. Hiroshi Takeda (President, Kobe University)

Complimentary Speech
Prof. Rosari Saleh (Vice Rector of Research and Innovation, Universitas Indonesia)
Honorable guest from Embassy of Japan in Jakarta
Mr. Norihisa Tsukamoto (Director General, The Japan Foundation, Jakarta)

10:00-12:40 Morning Session (Humanities, Social sciences session)

Comparative Studies of Social Sciences and Humanities from Indonesia and Japan

Moderator : Prof. Yasushi Ogata (Director, Center for Asian Academic Collaboration)

Commentator

Law Reforms in Asia: Outcomes of two decades of "legal transplant" after the Asian Crisis
Prof. Yuka Kaneko (Graduate School of International Cooperation Studies; Research Center for Urban Safety & Security, Kobe University)

Bringing Human Security Back into the Responsibility to Protect
Dr. Daisuke Madokoro (Assistant Professor, Graduate School of Law, Kobe University)

Geopolitics Changes in Asia: -- Indonesia's Global Maritime Fulcrum Doctrine --
Dr. Julian Aldrin Pasha (Head, The Indonesian Association for Japanese Studies
Lecturer, Faculty of Social and Political Sciences, Department of Political Science, Universitas Indonesia)

< Break time: 30 min >

Distribution and origins of the indigenous languages of Indonesia
Prof. Multamia RMT Lauder (Faculty of the Humanities, Universitas Indonesia)

Phonological structure and loanword adaptation: a case study from Japanese
Dr. Shinichi Tanaka (Associate Professor, Graduate School of Humanities, Kobe University)

< Discussion: 30 min >

12:40-14:00 Lunch Break

14:00-16:45 Afternoon Session (Engineering session)

Innovative Membrane Technology for Resolving Energy and Environmental Issues

Moderator: Prof. Heri Hermansyah, (Director, Research and Community Engagement, Universitas Indonesia)

Commentator

Membrane Technology for Water Treatment in Kobe University

Prof. Hideto Matsuyama (Director, Center for Membrane and Film Technology; Graduate School of Engineering, Kobe University)

Production of Biodegradable Polymers (Polyhydroxyalkanoate - PHA) through Biological Processes: Opportunities and Challenges

Prof. Tjandra Setiadi (Faculty of Industrial Technology, Institut Teknologi Bandung; Director, Center for Environmental Studies; Center of Resource Efficient and Cleaner Production Indonesia)

CdS Sensitized Highly Orderred Titania Nanotubes Assemblied in a Modified Dye Sensitized Solar Cell for Hydrogen Generation

Dr. Jamuzi Gunlazuardi (Senior Lecturer, Faculty of Mathematic and Natural Sciences, Universitas Indonesia)

＜ Break time: 25 min ＞

Membrane Technology for CO_2 Separation in Kobe University

Prof. Tomohisa Yoshioka (Graduate School of Science, Technology and Innovation, Kobe University)

Using Propolis from Indonesian Honey Bees to Develop Products that Promote Human Health

Dr. Muhamad Sahlan (Lecturer and Researcher, Faculty of Engineering, Universitas Indonesia)

＜ Discussion: 15 min ＞

＜ Break time: 15 min ＞

17:00-17:10 Preconference Report Session（Medicine and Healthcare）

Prof. Sunartini (Pediatric Department, Faculty of Medicine, Universitas Gadjah Mada)

17:10-17:20 Closing Ceremony

Moderator : Prof. Yasushi Ogata (Director, Center for Asian Academic Collaboration)

Round up and Closing Remarks

Prof. Heri Hermansyah (Director, Research and Community Engagement, Universitas Indonesia)
Prof. Noriyuki Inoue (Executive Vice President in charge of International Exchange and Internal Control, Kobe University)

Kobe University
Graduate School of International
Cooperation Studies
Research Center for
Urban Safety & Security

Prof. Yuka Kaneko

Law Reforms in Asia: Outcomes of two decades of "legal transplant" after the Asian Crisis

Since the occurrence of the 1997 Asian Currency Crisis, ASEAN core countries have been put under a rigorous pressure of law reforms led by the conditionalities of the IMF and the World Bank. The law model applied for such reforms was, interestingly, a duplicate from the Japanese law reform as the result of the US Strategic Impediments Initiative (SSI) talks during the trade conflict in the 1980s. The same models were then applied to the socialist market reform countries in the name of "convergence" to the global standard. Two decades passed since the Asian Crisis, and the recipients' side should take the initiative in evaluating the outcomes of such donor-led law reforms colored by neo-liberalism. Reference should also be made to various endeavors inside Asia, including the ASEAN communities, toward an "alternative" law reform guided by environmental and social consideration, which is so far difficult to achieve through multilateral fora such as the WTO.

Academic Background:
LL.B. Tokyo Univ.; LL.M. Georgetown Law School; LL.D. Kyushu Univ.
Academic Degree:
LL.D. (Doctor of Law)
Career:
-2005-Present: Professor, Kobe University
-2003-2005: Associate Professor, Kobe University
-1997-2003: Associate Professor, Hiroshima University
Publications:
Asian Law in Disaster (Routledge, 2016); Law Reforms and the Development of Law in Asia (Daigaku-Kyoiku Shuppan, 2010); Theories on Legal Assistance (Minerva Shobo, 2007); Asian Financial Crisis and Law Reform (Sinzansha, 2007); The Future of Asian Law (Daigaku-Kyoiku Shuppan, 1998)

Kobe University
Graduate School of Law
Assistant Professor

Dr. Daisuke Madokoro

Bringing Human Security Back into the Responsibility to Protect

Normative concepts of the responsibility to protect and human security have been deliberately separated in a political forum of the United Nations, though both have the same origin as the United Nations Development Programme first advocated the idea of human security in 1994. While both concepts can be distinguished in terms of measures to be applied, especially the use of force, for human protection purpose, I argue instead that when states and the international community are engaged in fulfilling their responsibility to protect populations, a human-centered and bottom-up approach based on human security would be needed to adjust the more state-centric and top-down quality of the responsibility to protect. This is important and feasible, given that lots of state governments have now come to express their commitment to implementing the responsibility to protect, including those who used to be skeptical of it.

Daisuke Madokoro is an Assistant Professor of International Relations at the Graduate School of Law, Kobe University. He was previously a Research Fellow with the Japan Society for the Promotion of Science. He earned his Ph.D. in Political Science from Kobe University in 2015, his MA in International Relations from Sussex University in 2011, and his MA in International Public Policy from Osaka University in 2009. He has published in journals including *Global Responsibility to Protect*, *Kokusaiseiji* (*International Relations*), and *Kokurenkenkyu* (*The United Nations Studies*). His research interests are in International Relations theory, responsibility to protect, humanitarian intervention, human security, and the United Nations.

Universitas Indonesia
Department of Political Science
Faculty of Social and Political Sciences
Lecturer
Head of The Indonesian Association for Japanese Studies

Dr. Julian Aldrin Pasha

Geopolitics Changes in Asia: --Indonesia's Global Maritime Fulcrum Doctrine --

Globalization brings a change in geopolitics. In the era of globalization with a free market economy and information technology as pillars, non-physical boundaries between nation states have become uncertain. However, globalization cannot completely eliminate nationalism and the national identity of each nation, which can be seen from any tendency of market protection by some countries. Whatever the reason for market protections of a country, it is closely related to a country's national interests, particularly in the fields of economics and politics.

The role of the maritime domain is very significant because over 90 percent of the world trade across the seas and oceans. It is reasonable to assert that globalization starts from the sea. Due to the very strategic importance of the sea, it has become one of the sites for pivotal issues such as maritime security globally and the related concerns of interested parties, both state and non-state actors. Non-state actors include the shipping industry, the insurance industry, the banking industry and various other industries that are directly or indirectly related to maritime security in the distribution of their products.

Contemporary geopolitics is characterized simultaneously by competition and cooperation among nations in the fields of politics, economy, technology and military. The maritime domain is a locus of competition as well as cooperation among nations. Maritime security issues are part of the national interest.

Disputes on maritime domain issues in the South China Sea arose, for instance between China and Japan, or Korea and some Southeast Asian countries over the issues of borders, maritime security and energy. With increasing scarcity of energy resources on the mainland, this presses many countries to explore and exploit energy in the ocean and sea. As for Indonesia's political stance, looking at geopolitical changes in Asia and the Southeast Asian region in particular, President Joko Widodo named his doctrine Indonesia's Global Maritime Fulcrum.

The enquiry is, when will Indonesia realize its role as a Global Maritime Fulcrum?

Keywords: geopolitics, national interest, state and non-state actors, maritime fulcrum, maritime domain

Academic Degree
Ph.D., summa cum laude (Doctorate in Political Science), Hosei University Graduate School, Tokyo, Japan, 2005
M.A., summa cum laude (Master of Arts in Political Science), Hosei University Graduate School, Tokyo, Japan, 2000
Bachelor degree in Political Science, Faculty of Social and Political Sciences, Universitas Indonesia, 1994

Career
VICE DEAN, Faculty of Social and Political Sciences Universitas Indonesia (2008 to 2009 end)
HEAD, Graduate Program of Political Science, Faculty of Social and Political Sciences Universitas Indonesia (2005-2008)
Lecturer (Lector) Faculty of Social and Political Sciences Universitas Indonesia (2005 to present)
Visiting Lecturer, Kanda University of International Studies, Japan (2003-2005)
Visiting Researcher (Kenkyuuin), Hosei University Graduate School Tokyo, Japan (2001-2002)
Chairman, Southeast Asian Studies (SEAS), Tokyo, Japan (2003-2005)
Teaching Staff, Department of Political Science, FISIP Universitas Indonesia (1994-1996)

Publications
The Role of State, Political Role of MITI and Its Compromise, Hosei University, Japan, 2004
IMF: Objective and Impacts on Indonesian Future Development. Chiba: OVTA, 2003
Indonesian Political Economy: Strategy and Its Deficiency, SEAS, Japan, 2001
The 1970s Administrative Guidance of MITI, Hosei University, Japan, 2000
The Politics of Deregulation Policy In Indonesia (1983-1993) Objective and Impact of Its Policies, 1994

Universitas Indonesia
Faculty of the Humanities
Professor in Linguistics

Prof. Multamia RMT Lauder

Distribution and origins of the indigenous languages of Indonesia

Language is a marker of identity. In Indonesia, apart from the national language, Indonesian, there is great linguistic diversity. There are about 700 indigenous, regional languages in Indonesia. Linguistic data can tell us a good deal about them. The empirical methods of dialectology can help us to define the number of existing languages and where the boundaries of these language areas are. In addition, comparative historical linguistics can help us produce language trees, showing the groupings of families and sub-families of languages. The present day language data can thus be used to build a picture of a time before there were written language records. According to over a hundred years of research, we now consider that the languages of Indonesia belong to two major language families, Austronesian and Papuan.

Apart from linguistic data and methods, it is also possible to use data from other fields such as archaeology and genetics to investigate language issues. Each of these has its own data, methods, inferential processes, scope and limitations. By comparing data across disciplines, we can build a clearer picture of the present distribution of languages and their origins resulting from ancient migrations of ancestral peoples. An important issue concerning these indigenous languages today is that many of them are endangered because the populations that speak many of them are very small and decreasing. Eventually, many of them could disappear. Approaches to address this phenomenon include scientific research and language policy. Indonesia has attempted to produce progressive language policies to protect its linguistic heritage.

Keywords: linguistics, dialectology, historical linguistics, indigenous languages, endangered languages, language policy

Academic Background
Historical linguistics, Geographical linguistics, Dialectology, Endangered languages, Language policy

Academic Degree
1979 Graduated Bachelor of Arts (*Sarjana Sastra*) majoring in Linguistics from the Faculty of Letters, Universitas Indonesia in Rawamangun, Jakarta.
1980 Graduated Masters in Linguistics and Phonetics (Mse.) (*Maîtrise de Linguistique et Phonétique*) from L'Institut de Phonétique de Grenoble in France.
1981 Graduated with a Diploma in Advanced Studies (DEA) in Geographical Linguistics (*Diplôme d'Études Approfondies de Géo-Linguistique*) from Faculté des Lettres l'Université de Grenoble III, in France.
1983 Research Scholar at Centre de Dialectologie, in France.
1986 Research Scholar at the South-East Asian Ministers of Education Organisation: Regional Language Centre (RELC) in Singapore.
1990 Graduated Doctor of Linguistics (*Cum Laude*) specializing in Dialectology, from the Literature and Linguistics Study Program, Postgraduate Faculty, Universitas Indonesia (Semester I/1985-86 till Semester II/1988-89) in Jakarta, Indonesia.

Career
Head of the Faculty's Diploma Program FSUI (1990).
Head of the Faculty's Computer Support Unit FSUI (1990–1992).
Head of the Department of Indonesian Language Studies FSUI (1995–1998).
Vice Dean II for Administrative and Financial Affairs FIB UI (December 1999–November 2003).
Deputy Director for Research and Community Outreach Universitas Indonesia (February 2006—October 2007).
Director of Education, Universitas Indonesia (October 2007—December 2014)

Recent Publications
Choo, Sungjae, Lauder, Multamia R.M.T., and Kang, Peter eds. 2017 (forthcoming). Asian Onomastics. vol. 52, Special Edition. Onoma: Journal of the International Council of Onomastic Sciences. Leuven, Belgium: Peeters Publishers. ISSN: 0078-463X; E-ISSN : 1783-1644.
Lauder, Multamia R.M.T. ed. 2017 (forthcoming). Jurnal Tekstualita. Padang, Indonesia: Program Pascasarjana, Universitas Bung Hatta.
Lauder, Multamia R.M.T. 2016. Menjelajahi Ruang Lingkup Kajian Toponimi. Paper read at Seminar Nasional Toponimi: Toponimi dalam Perspektif Ilmu Budaya. Fakultas Ilmu Pengetahuan Budaya, Universitas Indonesia. 3 November 2016. FIB, UI.
Lauder, Multamia R.M.T. 2016. Status Kebahasaan di Indonesia serta Strategi Pelestariannya. Paper read at Simposium IMBASADI 2016, "Menggali Kearifan Lokal dalam Bahasa Daerah sebagai Upaya Membangun Kesatuan dan Keutuhan Budaya Bangsa". Fakultas Ilmu Pengetahuan Budaya, Universitas Indonesia. 27 Oktober 2016. FIB, UI.
Lauder, Multamia R.M.T., and Lauder, Allan F. 2016. Language Diversity and Endangerment in the Melanesian Cultural Area. In The Melanesian Diaspora in Indonesia: From Prehistory to the Present. eds. Allan F. Lauder and Multamia R.M.T. Lauder, 126-171. Jakarta: Directorate of History and Cultural Values, Directorate General of Culture, Ministry of Education and Culture, Republic of Indonesia. ISBN: 978-602-1289-19-8.

Kobe University
Graduate School of Humanities
Associate Professor

Dr. Shinichi Tanaka

Phonological structure and loanword adaptation: a case study from Japanese

In recent studies, serious attention has been attracted by the loanword phonology, namely, the study of the adaptation patterns of words borrowed from one language to another. This paper mainly discusses how Japanese behaves as a host language (recipient language) as well as a donor language (source language) in the loanword phonology by analyzing the adaptation patterns of the stress/accent/tone and the syllable structure between languages such as English, Italian, Taiwanese and Indonesian.

The first half of the paper reports through a corpus study that phonological structure of the host language and phonetic properties of the donor language play important roles in determining the adaptation patterns. The latter half of the paper discusses the implications of the analysis for linguistic theory.

Academic Background:
Linguistics, Phonology, Phonetics
Academic Degree:
Ph.D. (2006; Literature), Kobe University, Japan.
Career:
Associate Professor, Graduate School of Humanities, Kobe University.
Publications:
Tanaka, Shin'ichi (2017) "The Relation between L2 Perception and L1 Phonology in Japanese Loanwords: An Analysis of Geminates in Loanwords from Italian", The Phonetics and Phonology of geminate consonants, Oxford: Oxford University Press.
Tanaka, Shin'ichi et al. (eds.) (2017) A New Development of the Phonological Studies: A Festschrift for Professor Haruo Kubozono on the Occasion of His Sixtieth Birthday, Tokyo: Kaitakusha.
Tanaka, Shin'ichi and Haruo Kunozono (1999) An Introduction to Japanese Pronunciation: Theory and Practice, Tokyo: Kurosio Publishing.

Kobe University
Director of Center for
Membrane and Film Technology
Professor of
Graduate School of Engineering

Prof. Hideto Matsuyama

Membrane Technology for Water Treatment in Kobe University

With the aim of tackling the global water shortage, my research focuses on membrane-utilizing water treatment. The research has 4 main aspects: 1) membrane for water reuse and desalination with considerable low energy consumption, 2) strong anti-fouling membrane based on new materials, 3) energy production by membrane process, 4) innovative separation system by using our newly developed membrane.

In order to further advance such research, we established the Center for Membrane and Film Technology (MAFTech Center) in 2007, which is the first and only single university-driven membrane research center in Japan. Currently we are collaborating with more than 60 industrial companies, as well as partnering with 13 academic membrane research centers overseas.

In 2015, the integrated membrane research building (6000m2) construction finished and it started its operation. It is the most diverse research unit, integrating all aspects from basic to applied research. Research projects based on many different backgrounds are intensively and synergistically carried out in this facility. Our goal is making contributions in order to achieve a sustainable society in the future via membrane and membrane process innovations.

Educational Qualifications:

B.Eng.	(1983) Kyoto University
M.Eng.	(1985) Kyoto University
Dr.Eng	(1990) Kyoto University.

Professional Experience:

1985-1994	Assistant Professor, Kyoto Institute of Technology.
1994-1998	Lecturer, Okayama University.
1996-1997	Visiting Researcher, The University of Texas at Austin
1998-1999	Associate Professor, Okayama University.
1999-2004	Associate Professor, Kyoto Institute of Technology.
2004-present	Professor, Kobe University
2007-present	Director of Center for Membrane and Film Technology
Present	President of Aseanian Membrane Society
	Vice President of Membrane Society of Japan

Institut Teknologi Bandung
Faculty of Industrial Technology
Professor in Bioprocess Engineering
Director of Center for Environmental Studies;
Center of Resource Efficient and Cleaner Production Indonesia

Prof. Tjandra Setiadi

Production of Biodegradable Polymers (Polyhydroxyalkanoate - PHA) through Biological Processes: Opportunities and Challenges

Polyhydroxyalkanoate (PHA) belongs to the polyester group with physicochemical properties similar to various plastics made from petroleum. However, it is biodegradable and can be produced biologically using various substrates including organic wastewater. This makes PHA an alternative to petroleum-based plastics used today. However, the drawback is that PHA production cost is still much higher than that of petroleum plastics, due to the cost of the substrate.

In this presentation, an example of PHA production from tapioca industrial wastewater using mixed culture from an activated sludge done in our laboratory is discussed. The aims of our study were treating tapioca-processing wastewater to produce PHA and remove COD. And other example of PHA production from VFA (volatile fatty acids) using a pure culture is also presented. This study is focused on the production of PHA by Ralstonia eutropha JMP 134 in bioreactors with different operation modes by utilizing volatile fatty acids (VFAs) from palm oil mill effluent (POME) as precursors.

Although there has been increased research on this topic in the last twenty years, the industrialization of this product is still a challenge. The sustainability of PHA production in the near future will depend on several factors, such as strain selection, feedstock selection, bioreactor cultivation mode, downstream processing and product processing development. These challenges and opportunities will be discussed in this presentation.

Academic Background:
Professor in Bioprocess Engineering, Department of Chemical Engineering, Institut Teknologi Bandung, Bandung, Indonesia
Academic Degree:
Ph.D., Department of Chemical and Process Engineering, University of Strathclyde, UK.
Publications:
Taro Miyoshi, Tjandra Setiadi, Agus Jatnika Effendi, Hiroyuki Maeda, Takashi Tsukaraha, Hosang Yi, Hyoyong Jun, Masao Saito, Hideto Matsuyama (2016), 'Low-cost water treatment system using submerged membrane filtration in developing countries', Desalination and Water Treatment, 57 (39), 18101-18108.
Udin Hasanudin and Tjandra Setiadi (2016), 'Sustainable Wastewater Management in Palm Oil Mills'. Chapter 27 in Green Technologies for Sustainable Water Management, Editors: Ngo et al., ASCE Publisher, Virginia.
Tjandra Setiadi, Martha Aznury, Azis Trianto, and Adi Pancoro (2015), 'Production of polyhdroxialkanoate (PHA) by Ralstonia eutropha JMP 134 with VFAs from palm oil mill effluent as precursors', Water Science and Technology, 72(11), 1889-1895.
U. Hasanudin, R. Sugiharto, A. Haryanto, T. Setiadi, K. Fujie (2015), 'Palm oil mill effluent treatment and utilization to ensure the sustainability of palm oil industries', Water Science and Technology, 72(7), 1089-1095.
Efri Mardawati, Dwi Wahyudha Wira, MTAP Kresnowati, Ronny Purwadi, Tjandra Setiadi (2015), 'Microbial Production of Xylitol from Oil Palm Empty Fruit Bunches Hydrolysate: The Effect of Glucose Concentration', Journal of the Japan Institute of Energy, 94(8), 769-774.
E. Mardawati, A.Werner, T. Bley, MTAP. Kresnowati, T. Setiadi, (2014), 'The Enzymatic Hydrolysis of Palm Oil Empty Fruit Bunches to Xylose', Journal of The Japan Institute of Energy 93, 973-978.
Rety Setyawati, Tjandra Setiadi, Keiko Katayama-Hirayama, Hidehiro Kaneko, and Kimiaki Hirayama (2012), Polyhydroxyalkanoate (PHA) 'Production from Tapioca Industrial Wastewater Treatment: Influence of Operating Conditions on PHA', International Journal of Sustainable Environment Research, 22 (2), 123-127.
Hendro Risdianto, Ellis Sofianti, Sri Harjati Suhardi and Tjandra Setiadi (2012), 'Optimisation of Laccase Production using White Rot Fungi and Agriculture Wastes in Solid State Fermentation', ITB Journal Engineering Sci., Vol. 44, No. 2, 2012, 93-105.
Hossain, M.A., Ngo, H.H., Guo, W.S., Setiadi, T (2012). 'Adsorption and desorption of copper(II) ions onto garden grass', Bioresource Technology, Vol 121, 386-395.

Universitas Indonesia
Faculty of Mathematics and Natural Sciences
Senior Lecturer

Dr. Jarnuzi Gunlazuardi

CdS Sensitized Highly Ordered Titania Nanotubes Assembled in a Modified Dye Sensitized Solar Cell for Hydrogen Generation

Water splitting induced by visible light is one of the interesting methods to produce fuel (hydrogen), since water and solar rays are abundant on earth. However, to split the water into hydrogen and molecular oxygen by visible light is a difficult task. Titania (TiO_2 crystal) was reported being able to split the water, but needs light with a wavelength less than 410 nm (not often present in solar rays that reached the earth surface). Fortunately, Titania can be composited with other small band gap semiconductors (e.g. CdS), in which the visible light can excite electrons of CdS to its conduction band level, then flow down to the Titania's conduction band. Hence the CdS/Titania system may responds toward visible light. Having this system, along with the ability to morphologically control Titania film to obtain highly ordered Titania nanotubes (HOTN) array, we develop a system that can produce hydrogen from water under visible light exposure. The proposed system, called a modified Dye Sensitized Solar Cell (DSSC), which employs CdS/HOTN, absorbs visible light and converts it to energy which induces a chemical reaction in the catalysis zone to produce hydrogen from water (Fig. 1 & Fig. 2). In our typical modified DSSC, when the active counter electrode (a semiconductor) is being employed, the system can split water into hydrogen and molecular oxygen, by solely visible light, thus a kind of artificial photosynthesis.

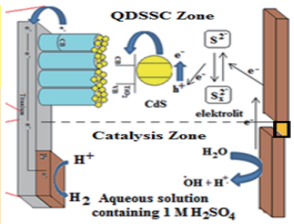


Figure 1: Schematic Diagram of The Modified QDSSC

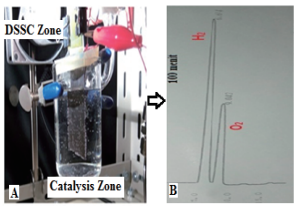


Figure 2: Picture of The Modified QDDSC for H_2 Production (A) Chromatogram shows H_2 and O_2 peaks from evolved gasses (B)

Academic Background
BSc, Chemistry, Universitas Indonesia (1979);
Drs., Chemistry, Universitas Indonesia (1984)
MSc, Environmental Chemistry, Ehime University, Japan (1990)
PhD, Environmental Chemistry, Ehime University, Japan (1993)

Career:
Visiting Scientist, Dept. of Adv. Mate, Sci. University of Newcastle, UK, (1995; 1997; 1999; 2003)
Senior Lecturer at The Dept. of Chem. Universitas Indonesia (present)
Head of Titania Photo Electro Catalysis (TiPEC) Research Group (present)

Selected Publications:

1. Supriyono, Krisnandi,Y.K., Gunlazuardi,J.: "Band gap energy modification of TiO_2 photoelectrode by PbS/CdS quantum dot to enhance visible region photocurrent", *International Journal of ChemTech Research*, Volume 9, Issue 7, (2016), pages 191-198.
2. Ratnawati, Gunlazuardi,J., Slamet: "Development of titania nanotube arrays: The roles of water content and annealing atmosphere" *Materials Chemistry and Physics*, 160, (2015), pages 111-118.
3. Ratnawati; Gunlazuardi, J. Dewi, E.L., and Slamet: "Effect of NaBF4 addition on the anodic synthesis of TiO_2 nanotube arrays photocatalyst for production of hydrogen from glycerol-water solution", *International Journal of Hydrogen Energy*, 39, (2014), pages 16927-16935.

Kobe University
Graduate School of Science,
Technology and Innovation

Prof. Tomohisa Yoshioka

Membrane Technology for CO_2 Separation in Kobe University

With significant concern over global warming and energy problems, there is a need for enhanced membranes with improved functions for CO_2 separation. Membrane technology is attracting considerable attention as a key technology for solving such environmental issues. Membrane separation technologies based on facilitated transport or surface diffusion mechanisms utilizing attractive interaction with CO_2 molecules are promising for CO_2 capture and storage from a flue gas due to its energy saving and low cost features.

A novel tough gel membrane containing amino acid ionic liquids (AAILs) with superior CO_2 permeation and separation performance was developed. The gel membrane with a large amount of AAILs showed excellent mechanical strength that originated from a specific double-network (DN) gel matrix, which enabled fabrication of a thin membrane with high CO_2 permeance.

On the other hand, ceramic-based microporous membranes with chemical and thermal stability are another candidate that can be applied to gas separation operations. A combination of TiO_2 and ZrO_2 materials with amino-functionalized chelating ligands gave amorphous structure and affinity to CO_2. The remaining organic matters could close pin-holes and also effectively loosened the TiO_2 - ZrO_2 amorphous structures to increase permeance of small gas molecules such as He and CO_2.

Academic Degree
Ph.D., Chemical Engineering, Kyoto University, 1997
M.A., Chemical Engineering, Kyoto University, 1993
B.A., Chemical Engineering, Kyoto University, 1991
Career
Kobe University, Professor (2016-)
Hiroshima University, Associate Professor (2007-2016)
Hiroshima University, Assistant Professor (1996-2007)
Publications
G. Li, H. Lee, H. Nagasawa, M. Kanezashi, T. Yoshioka, T. Tsuru, Pore-size evaluation and gas transport behaviors of microporous membranes: An experimental and theoretical study, AIChE J., 61, 2268-2279 (2015).
T. Fukumoto, T. Yoshioka, H. Nagasawa, M. Kanezashi, T. Tsuru, Development and gas permeation properties of microporous amorphous TiO_2-ZrO_2-organic composite membranes using chelating ligands, J. Membr. Sci., 461, 96-105 (2014).
T. Yoshioka, M. Kanezashi, T. Tsuru, Micropore size estimation on gas separation membranes: A study in experimental and molecular dynamics, AIChE J., 59, 2179-2194 (2013).

Universitas Indonesia
Faculty of Engineering
Lecturer and Researcher

Dr. Muhamad Sahlan

Using Propolis from Indonesian Honey Bees to Develop Products that Promote Human Health

Indonesia has several kinds of honey bees such as *Apis dorsata, A. cerana, A. melifera* and the stingless bee *Trigona*. There are 30 species of *Trigona* in Indonesia that have been identified. Apart from honey, the stingless bee *Trigona* produces much propolis. Propolis is a complex material containing resins, and it is mixed with wax to create a sealing material in their hives, smooth out the internal walls, and protect the entrance against intruders. Propolis color varies depending on its sources: mostly it seems yellowish green to dark brown and has an aromatic odor. Our research focus is on exploring the novel concept of the separation process and developing products of Indonesian Propolis for advanced applications, especially for promoting human health. Our technology can separate resinous extract and wax. We applied the extract and the wax for several health care products such as liquid propolis extract for food supplements, hard candy, the propolis fluoride, the CPP-ACP propolis gel, mouthwash containing propolis extract, and chewing gum containing wax propolis for oral health care. The wax propolis is also applied for medicated soap, especially to treat Leucorrhea disease.

Keywords: Indonesian propolis, separation, products, health care.

Academic Degree
Bachelor of Science, Institute of Technology Bandung (1998-2003)
Master of Engineering, Tokyo University of Agriculture and Technology, (2005 –2007)
Doctor of Engineering, Tokyo University of Agriculture and Technology, (2007 – 2010)
Career
2004–2005 Development staff, SLH Biopharmaceutical Inc. at Surabaya, Indonesia.
2010–Now Lecturer and Researcher, Department of Chemical Engineering, Universitas Indonesia
Publications
Sahlan M., Supardi T. “Encapsulation of Indonesian propolis by casein micelle”, Int J Pharm Bio Sci, Jan; 4(1): (P) 297 – 305, 2013
Sahlan M., Ramadhan, Zahara P.J., Angki S, and Winiati E. ”The Hard Candy containing Indonesian Propolis For Oral Health Care” 3rd International Conference On Medicinal Use of Honey, 20 – 22 November 2013, Makassar, Indonesia
Sahlan M., Tristantini D., Dienayati D., Zahya S., “Nanoencapsulation of Indonesian Propolis to Improve Sun Protection Factor” 2nd International Conference on Nutraceutical and Cosmetic Science 2013, 23-24 October 2013, Jakarta, Indonesia

Pre Conference

Date: Wednesday 21 December 2016　8:30-16:45
Venue: Universitas Gadjah Mada

8:30-8:50　Opening Remarks

Prof. Noriyuki Inoue (Executive Vice President in charge of International Exchange and Internal Control, Kobe University)
Prof. Ova Emilia (Dean, Medical School, Universitas Gadjah Mada; Vice President, Universitas Gadjah Mada)

8:50-9:05　Seminar Overview

Prof. Satoshi Takada (Graduate School of Health Sciences, Kobe University)

9:05-10:45　Session Ⅰ: Genetic Analysis in the Field of Child Neurology

Commentator

Diagnosis of spinal muscular atrophy
Prof. Hisahide Nishio (Graduate School of Medicine, Kobe University)

Spinal muscular atrophy (SMA): Advances in therapeutic development
Dr. Nur Imma Fatimah Harahap (Assistant Professor, Graduate School of Medicine, Kobe University)

The role of SCN1A gene in genetic/generalized epilepsy with febrile seizure plus (GEFS+) in Indonesian population
Prof. Elisabeth S. Herini (Department of Child Health, Faculty of Medicine, Universitas Gadjah Mada)

＜ Break time: 15 min ＞

11:00-12:40　Session Ⅱ: Infectious Diseases and Treatments

Commentator

Anti-flavivirus compounds from natural resources
Prof. em. Hak Hotta (Project Professor, Graduate School of Health Sciences, Kobe University)

Molecular Mechanisms of Anti Tuberculosis Drugs Resistance
Dr. Tri Wibawa (Department of Microbiology, Faculty of Medicine, Universitas Gadjah Mada)

Self Expanding Resilience through Well-chained and Partnership-based Disaster Preparedness Program
Prof. Djoko Legono (Department of Civil and Environmental Engineering, Faculty of Engineering, Universitas Gadjah Mada)

12:40-13:40　Lunch Break

13:40-16:40　Session Ⅲ: Establishment of UNESCO Chair: Focusing on Gender Aspects of Disaster

Commentator

Drawing disaster and recovery: Five years of the Popoki Friendship Story Project
Prof. Ronni Alexander (Graduate School of International Cooperation Studies, Kobe University)

Disaster and gender;Inquiry in a stricken area
Dr. Tomoko Nakahara (Assistant Professor, Gender Equality Office, Kobe University)

'Kobe Style' how to share the gender aspects of disaster
Dr. Junko Okada (Associate Professor, Graduate School of Maritime Sciences, Kobe University)

Interprofessional Teamwork in Community Rehabilitation Affected by Earthquake on May 27th 2006 In Bantul Yogyakarta Indonesia
Prof. Sunartini (Pediatric Department, Faculty of Medicine, Universitas Gadjah Mada)

Maternal Health in Disaster Situation
Dr. Elsi Dwi Hapsari (Department of Pediatric and Maternity Nursing, Faculty of Medicine, Universitas Gadjah Mada)

16:40-16:45　Closing Remarks

Prof. Kazunori Uchida (Executive Vice President in charge of Public Relations and Community Cooperation, Kobe University)

Preconference : Seminar Overview

Speaker : Prof. Takada Satoshi

Graduate School of Health Sciences, Kobe University

Kobe University has been completing a number of educational collaboration projects in various academic fields in Indonesia. On the other hand, the research platform in medicine and health sciences in Indonesia in place since the 1960s is also continuing. Many graduates of Kobe University have become core researchers in both clinical and basic studies in Indonesian universities including Universitas Gadjah Mada. Currently a project called "Education of medical and health science leaders in the coming generation, in cooperation and collaboration with ASEAN countries" is in progress. Kobe University has played the leading role for this project in collaboration with Universitas Gadjah Mada, the Universitas Indonesia and Airlangga University. J-GRID stands for the Japan Initiative for Global Research Network on Infectious Disease. We have a proud history of collaboration with the Institute of Tropical Disease (ITD) at Airlangga University. Another important project is the Educational Disaster Management undertaken in collaboration with Universitas Gadjah Mada. Kobe University immediately responded after the Central Java Earthquake in 2006. In addition to this, an international seminar on disaster has been held annually for a period of ten years in Yogyakarta. During this pre-seminar we will focus on three topics: genetic analysis in the field of child neurology, infectious diseases and treatments, and gender aspects of disaster. I hope this seminar will provide young students with further stimulation to foster ongoing collaboration.

Preconference : Session I

Genetic Analysis in the Field of Child Neurology

Diagnosis of spinal muscular atrophy

Speaker : Prof. Hisahide Nishio, MD, PhD

Graduate School of Medicine, Kobe University

Spinal muscular atrophy (SMA) is a common neuromuscular disorder with an autosomal recessive inheritance trait. SMA is common in children in any region in the world (1: 10,000 live births), but remains an incurable disease.

In 1995, the survival motor neuron gene (*SMN*) was identified as a candidate gene for SMA. *SMN* exists in two nearly identical copies, *SMN1* and *SMN2*. *SMN1* is absent from more than 95% of SMA patients and deleteriously mutated in the remaining patients. Thus, *SMN1* has been recognized as an SMA-causing gene.

On the other hand, *SMN2* was previously considered to be dispensable because approximately 5% of normal individuals do not carry the gene. However, *SMN2* also expresses the same protein, SMN, as *SMN1* does, albeit at considerably lower levels than *SMN1*. A high copy number of *SMN2* can partially compensate for the lack of *SMN1*. Thus, *SMN2* is now considered to be an SMA-modifying gene.

To diagnose SMA and to predict the prognosis, it is necessary to identify the mutation in *SMN1* and determine the copy number of *SMN2*. I will explain the outline of methods for *SMN* gene analysis in my presentation, as well as molecular findings observed in our SMA patients.

Spinal muscular atrophy (SMA): Advances in therapeutic development

Speaker : Dr. Nur Imma Fatimah Harahap, MD, PhD.
Assistant Professor,
Graduate School of Medicine, Kobe University

Spinal muscular atrophy (SMA) is a neuromuscular disorder with autosomal recessive inheritance trait. It is characterized by the degeneration of lower motor neurons leading to muscle weakness. SMA is still an incurable disease.

SMN1 is an SMA-causing gene. *SMN2,* the homologue copy of *SMN1* which always retains in SMA patients, also expresses the same protein, SMN, as *SMN1* does, though with lower levels than *SMN1*. It was shown that a high copy number of *SMN2* can partially compensate for the lack of *SMN1*. Thus, *SMN2* is considered to be an SMA-modifying gene.

Current strategies can be classified into three groups. The first group, "*SMN1*-introduction strategies", involves strategies to introduce exogenous *SMN1* copies using vector-mediated gene delivery methods and stem cell transplantation methods.

The second group, "*SMN2*–targeting strategies", involves strategies to increase functional SMN protein using pharmacological compounds (valproic acid, salbutamol, etc.), correct the splicing of *SMN2* mRNA by antisense-oligos or stabilize the SMN protein.

The third group, "Non-SMN-targeting strategies," involves strategies to protect motor neurons or improve the pathological conditions of non-neuronal tissues including muscles.

In conclusion, we say with confidence that SMA will be able to be treated in the near future.

The role of SCN1A gene in genetic/generalized epilepsy with febrile seizure plus (GEFS+) in Indonesian population

Speaker : Prof. Elisabeth S. Herini

Sp.,A., (K), Department of Child Health,
Faculty of Medicine, Universitas Gadjah Mada

Genetic/Generalized epilepsy with febrile seizure plus (GEFS+) is the most important familial epileptic syndrome because it links febrile seizure with various other epileptic seizures/syndromes and documents genetic relations between (1) benign and severe and (2) focal and generalized epileptic disorders. GEFS+ was described by Scheffer and Berkofic in 1997 and is currently recognized as one of the epilepsy syndromes by ILAE. This terminology is newer in neurology than epilepsy, which has been known since it was identified in 400 BC by Hippocrates.

Clinical manifestation of GEFS+ spectrum varies from classic febrile seizure to the most severe type which is Dravet Syndrome/ severe myoclonic epilepsy in infancy (SMEI).
In our study we have 35 patients consisting of 18 boys (51.4%) and 17 girls (48.6%). The diagnosis of GEFS+ - SMEI spectrum comprised FS+ 9 (25.7%), GEFS+ 11 (31.4%), SMEB 8 (22.9%), and SMEI 7 (20%) cases. This study found four heterozygote mutations of the *SCN1A* gene: A966S, V1612I, C1756G, and G1762 in severe myoclonic epilepsy borderline (SMEB), Dravet Syndrome, SMEB and GEFS+ respectively (Herini et al., 2010a; 2010b; 2010c).

Tonekaboni *et al*. (2013) reported that their genetic testing showed 1 of 3 (33.3%) patients with clinical manifestation had Dravet syndrome and 3 of 20 (15%) patients that were diagnosed with GEFS+ had SCN1A mutation.

Nowadays, more than 60 heterozygous pattern *SCN1A* mutations, of which many are de novo mutations, have been detected in Dravet syndrome and GEFS+.

Finally, further research to find the *SCN1A* gene mutation and other genes is still broadly openly to GEFS+, which is useful for the development of science in the future.

Key Words: GEFS+; Dravet Syndrome; *SCN1A*; Clinical manifestation

References:

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5.Tonekaboni SH, Ebrahimi A, Bakhshandeh Bali MK *et al*. Sodium Channel Gene Mutation in Children with GEFS+ and Dravet Syndrome: A Cross Sectional Study. Iran J Child Neurol. 2013;7(2):31-6.

Anti-flavivirus compounds from natural resources

Speaker : Prof. em. Hak Hotta M.D., Ph.D.
Professor Emeritus, Kobe University
Endowed Chair and Professor,
Department of Vaccine and Drug Development,
Graduate School of Health Sciences, Kobe University

Dengue virus (DENV) and hepatitis C virus (HCV) belong to the same virus family *Flaviviridae* although the genera they belong to are different from each other. DENV infection causes global health problems, with reportedly more than 100 million patients being infected per year and 2.5 billion people being at risk of infection worldwide. Also, HCV infection is another major global health problem, with an estimated more than 170 million patients being chronically infected, who suffer from chronic hepatitis, liver cirrhosis and hepatocellular carcinoma. Therefore, effective drugs as well as effective vaccines against DENV and HCV are urgently needed to cope with the problems. Natural resources are a good candidate for drug screening. We have been aiming at identifying an antiviral compound(s) against DENV and/or HCV isolated from natural resources, such as medicinal plants, microbes, insects and other animal products. Through bioactivity-guided analysis using HPLC, NMR and LC-MS in combination with antiviral activity assays, we have identified a number of antiviral compounds against DENV and HCV from medicinal plants, microbes and animals. In this symposium, I will present some of the data and discuss the potential use of those substances as seed compounds to develop antiviral drugs against DENV and/or HCV.

Molecular Mechanisms of Anti Tuberculosis Drugs Resistance

Speaker : Dr. Tri Wibawa, PhD.
Department of Microbiology, Faculty of Medicine,
Universitas Gadjah Mada

Tuberculosis is a serious health problem in Indonesia. In recent decades, there was no significant invention of new anti-tuberculosis drugs reported. Tuberculosis therapy relies on conventional drugs such as Isoniazid, Rifampicin, Pyrazinamides, Ethambutol, and Streptomycin. These drugs are the first line drugs for tuberculosis nowadays. In the meantime, there are significant increases in records reporting a significant finding of drug resistance in isolated *M. tuberculosis*. The tuberculosis control is further hampered by the emergence of multidrug resistance (MDR), which is a strain that shows resistance to at least rifampicin and isoniazid, two important drugs in the multidrug treatment strategy for the disease. More recently, severe forms of drug resistant strains known as extensively drug-resistant (XDR) TB have been reported. The advantages of molecular biology techniques are available, mainly supported by the availability of the genome sequence and gene mapping of *M. tuberculosis*. Accumulated data have increased our knowledge of the mechanisms of resistance to the main anti-TB drugs. Better knowledge of the molecular mechanisms of drug resistance in TB will help us to improve current techniques for rapid detection and will also give direction to the exploration of new targets for drug activity and drug development. This mini review aims to describe the molecular mechanism of drug resistance against first line drugs in clinical isolates of *M. tuberculosis*.

Preconference : Session Ⅱ

Infectious Diseases and Treatments

Self Expanding Resilience through Well-chained and Partnership-based Disaster Preparedness Program

Speaker : Prof. Djoko Legono

Department of Civil and Environmental Engineering,
Faculty of Engineering, Universitas Gadjah Mada

There are many attempts that have been made to establish community resilience against possible disasters that might take place in a certain area. Among them, continuous education has become an important key for any attempts to meet their targets of effectiveness, efficiency as well as sustainability. Depending upon the nature of the disaster, such attempts should take into account the experience in the past, either the history of the disaster occurrence that took place in the local area or in the neighboring area. This paper shows previous experiences in developing community development for disaster risk preparedness using the particular case of the lahar flow disaster in the Mt. Merapi area. The well-chained process is applied to provide the concept of 'working with' rather than 'working for' as stated by previous workers (Salter, et al., 1987). Accordingly, a partnership-based program is underlined as a part of self-funding and initiative-based activities and preparedness, which become essential factors towards self-expanding activities and therefore also maintain further sustainability of the program.

Keywords: disaster preparedness, community resilience, well-chained, partnership, sustainability

Preconference : Session Ⅲ

Establishment of UNESCO Chair: Focusing on Gender Aspects of Disaster

Drawing disaster and recovery: Five years of the Popoki Friendship Story Project

Speaker : Prof. Ronni Alexander

Graduate School of International Cooperation Studies,
Kobe University

The Popoki Friendship Story Project was begun by Ronni Alexander in April 2011, just weeks after the 11 March 2011 triple disaster in northeastern Japan. This project, run by the Popoki Peace Project, began in Sendai, and has included many locations within and outside of Japan, with a particular emphasis on Otsuchi-cho, Iwate Prefecture. In the beginning, it involved stretching a long cloth with a picture of the Project's mascot, the cat Popoki, on one end on whatever space was available in evacuation centers and inviting people to draw freely. As time passed, the project has grown to include workshops, exhibitions and other activities. This presentation will discuss how the Popoki Friendship Story Project has evolved over the past five years. In particular, it will look at: (1) the importance of art-making in the expression of the experience of disaster and recovery; (2) the importance of emotion and feeling safe in narratives of disaster and recovery; and (3) what this project can tell us about gender and disaster. The presentation will conclude with lessons learned and issues for the future.

Preconference : Session Ⅲ

Establishment of UNESCO Chair: Focusing on Gender Aspects of Disaster

Disaster and gender ; Inquiry in a stricken area

Speaker : Dr. Tomoko Nakahara

Assistant Professor,
Gender Equality Office, Kobe University

This study aims to clarify the present situation in A area which is one of the areas stricken by The Great East Japan Earthquake. I especially pay attention to disaster effects based on gender.

In the previous studies, many have not investigated gender analysis using quantitative data. This study is based on the data from 'Survey for creating future of A area' from April to May 2016 by Professor Katsuro Inokuchi, Kobe University.

Survey questionnaires were distributed to inhabitants in A area aged 15 years or older. About 230 were returned, and the response rate was about 20%. This questionnaire involves questions about the disaster situation, living conditions, work conditions, individual income, household income, health conditions, family relations, hope for the future and so on.

In this study, I divide the data into four groups: women under 60 years old, over 60, men under 60, and over 60. Through this analysis, I would like to show you the difference in damage by gender and generation caused by the earthquake.

'Kobe Style' how to share the gender aspects of disaster

Speaker : Dr. Junko Okada

Associate Professor,
Graduate School of Maritime Sciences, Kobe University

The Great Hanshin Awaji Earthquake was the first one in which women advocated the need for consideration of the gender aspects of disaster in Japan. More than twenty years have passed since then but we cannot solve this problem. We were faced with it in the Great East Japan Earthquake and the Kumamoto Earthquake. The Gender Equality Office of Kobe University decided to establish the UNESCO Chair to focus on this issue in cooperation with researchers from Kobe University and foreign institutions. It is important that we open to the public the knowledge obtained from our research. For this purpose we held seminars to consider the gender aspects of disaster for Kobe citizens and the government officials of some countries in Africa in preparation for the UNESCO Chair. I would like to explain how the Gender Equality Office established the UNESCO Chair focusing on the gender aspects of disaster, especially how to share the concept with the public.

Interprofessional Teamwork in Community Rehabilitation Affected by Earthquake on May 27th 2006 In Bantul Yogyakarta Indonesia

Speaker : Prof. Sunartini
Sp.,A.,(K)., PhD, Pediatric Department,
Faculty of Medicine, Universitas Gadjah Mada

Keywords: *earthquake, Interprofessional Teamwork, Community Based Rehabilitation*

Background: An earthquake of magnitude 6.2 RC struck Yogyakarta and Central Java on May 27th 2006. It destroyed 5 districts in Yogyakarta: Bantul, Kulon Progo, Gunung Kidul, Sleman, and Yogyakarta city. Of the 79,210 population in Bantul District 4,280 people died; 8,973 people were severely injured; and 3,250 people were fairly injured.
More than 17,000 people have been suffering from fractures, head and spinal injuries, followed with neurological, defecation and urination defects.
Mental defects such as post traumatic stress disorder (PTSD) were found in children, adults, and elderly people. Community Based Rehabilitation using Mobile Rehabilitation Empowerment of local people was chosen for special reasons such as: 1) the damage to the areas was severe without suitable access 2) no water resources 3) no adequate transportation 4) external aid would not be available for a long period.
Purposes: Conducting Mobile Rehabilitation and Trauma Healing provided by Integrated Rehabilitation Teams (nurses, physiotherapists, medical rehabilitation doctors, psychologists, and pediatricians) at sub-district or village level in damaged areas, empowerment of local community for rehabilitating health and social problems and environmental improvement.
Methods: Mobile Rehabilitation with interprofessional teamwork empowering the local community to support the victims to improve their own capacity and quality of life.
Results: About 3,750 victims received medication, wound care and rehabilitation, physiotherapy, occupational therapy, psychological therapy, trauma healing and training so they can return to daily work.
125 people received handicraft training and special materials or food production training.
387 cadres were trained for daily rehabilitation and 1,000 volunteers were trained with joint simulation of disaster victims.
The establishment of Children House Griya Lare Utami in Sewon Bantul as a Center for Integrated Rehabilitation where 50 children joined the trauma healing program.
Conclusion: Interprofessional Teamwork was very helpful in carrying out quality activities and prioritizing patient safety.

Maternal Health in Disaster Situation

Speaker : Dr. Elsi Dwi Hapsari

SKp., M.S., D.S, Department of Pediatric and Maternity Nursing, Faculty of Medicine, Universitas Gadjah Mada

The health of women during pregnancy, childbirth and the postpartum period in Indonesia is still a priority for improvement. In disaster situations, pregnant women are one of the vulnerable groups in the population because they are at risk from poor physical, psychological, or social health after the disaster. In addition, they may experience impact sensitivity because of disaster. This presentation will cover the overview of maternal health in Indonesia. After this, maternal health in disaster situations and the use of contraception, especially after the Yogyakarta Earthquake 2006 and the eruption of Mt. Merapi in 2010, will be discussed. Contraceptive methods are a unique aspect in the reproductive health of a woman that needs involvement of her partner/husband. At the end of the presentation, several efforts are proposed to improve maternal health in Indonesia, especially in disaster situations.

Keywords: maternal health, reproductive health, disaster

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Co-hosted by: Universitas Indonesia

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