



New Research Perspectives from Japan and Poland

-Joint Symposium Commemorating the Establishment of Kobe University Liaison office in Kraków-

Date: Tuesday 17 May 2016 9:00 - 18:10

Venue: Hall of Collegium Novum, Jagiellonian University

Kobe University Centre for EU Academic Collaboration

Joint symposium commemorating the establishment of Kobe University Liaison office in Kraków

“New Research Perspectives from Japan and Poland”

Date and Time : Tuesday 17 May 2016, 9:00-18:10

Place : Hall of Collegium Novum, Jagiellonian University

Opening 9:00-9:30

Moderator: Prof. YUI Kiyomitsu, Executive Assistant to the President in Charge of International Collaboration / Executive Director, Centre for EU Academic Collaboration, Kobe University

Opening Remarks:

1. Professor OGAWA Matsuto, Executive Vice President in Charge of Research and Industry-University Cooperation, Kobe University
2. Professor Maria-Jolanta Flis, Vice-Rector for University Development, Jagiellonian University
3. Ms. TADA Sanae, Director, Japan Foundation Budapest

Session 1 9:40-12:00

Interactive Chemical Strategies among Plants, Fungi and Animals

Session 2 13:00-15:20

Comparative Studies of Civilisations – Japan, Europe and Asia

Session 3 15:40-18:10

EU-Japan Relations in Contemporary World

Closing Remarks:

Professor INOUE Noriyuki, Executive Vice President in Charge of International Exchange and Internal Control, Kobe University

Session 1

Interactive Chemical Strategies among Plants, Fungi and Animals



Prof. OZAKI Mamiko **Chair**

Graduate School of Science, Kobe University, Japan

Professor in the Graduate School of Science, Kobe University, Japan. Awarded PhD from Kyushu University, Japan in 1985. After working for Kobe and Osaka universities as a research student, and at Purdue University, USA, as a research associate, and for Max Planck Institute for Behavioral Physiology in Germany on a scholarship, she joined the Kyoto Institute of Technology as an associate professor and then Kobe University as a full professor. Her research focuses on animal behaviour and its neural and molecular mechanisms, especially environmental chemical sensing and related behaviour; feeding preference formation and switching; social behaviour formation and switching via phenomenal communication within and between societies.

“Chemical Sensing for Feeding in Insects”

Abstract:

The chemical world surrounds animals under various and variable ecological conditions. Animals select necessary information from the chemical world and discriminate between positive and negative information. Using this information, they have to make decisions for every behavioural switching. Thus, they evolved particular sensory, processing and motor systems to exhibit proper responses to environmental chemicals; pheromones, food flavours or other natural odours. On the other hand, plants protect themselves by using chemicals, so-called secondary metabolites. Some of those chemicals kill or reject the herbivorous animals but others attract pollinators or grubs, properly targeting animal sensory systems of olfaction and taste.

Now, focusing on the feeding behaviour of a nectar feeder fly species, *Phormia regina*, I will talk about feeding preference or appetite regulation by various floral scents. We were able to systematically classify the effects of the floral scents of 50 plant species on the feeding behaviour of the fly, appetitive, neutral or non-appetitive, by a quantitative scaling method of feeding motivation (PER test). We further explained appetite modification by the dietary experiences with those scents. Based on these behavioural data, we will step into the neural mechanism underlying feeding preference formation and modification by food flavour.



Dr. MAEDA Toru

Graduate School of Science, Kobe University, Japan.

Researcher in the Graduate School of Science, Kobe University, Japan. Awarded PhD from Kobe University in 2014. After working for the Japan Society for the Promotion of Science under the Research Fellowship for Young Scientists, he joined Kobe University. He has presented at international conferences including the International Society of Olfaction and Taste, the European Society of Insect Taste, and the International Symposium on Molecular and Neural Mechanisms of Taste and Olfactory Perception. His research focuses on mechanisms of integration of multimodal information, especially between olfaction and taste, and identification of neuronal circuits involved in feeding behaviour in insects. Four original articles concerning this presentation were published from 2011 to 2015.

“Plant- or Fungi-derived Chemicals: Olfactory Input and Processing in the Fly Brain”

Abstract:

Flies have two types of olfactory sensory organs: antennae and maxillary palps. We found that the odour of D-limonene, which is included in citrus fruits, is received by antennae and exhibited a declining effect on feeding motivation. On the contrary, the odour of 1-octen-3-ol odour, which is included in fungi, is received by maxillary palps and exhibited a promotive effect.

There are many olfactory organs (sensilla) on antennae and those olfactory receptor neurons (ORNs) innervate into the primary olfactory centre in the brain, the so-called “antennal lobes (ALs)”. The maxillary palps of the fly possess fewer olfactory sensilla. On the other hand, the gustatory sensilla of the mouth part, labellum, house gustatory receptor neurons (GRNs), project to the primary gustatory centre, “subesophageal ganglion (SOG)”.

We investigated the axonal projections of receptor neurons from the maxillary palp and labellum to the SOG or other parts of brain in the blowfly, *Phormia regina*, and discovered that some maxillary ORNs project to the SOG. These ORNs and GRNs partially overlapped in the SOG, suggesting direct interactions between ORNs and GRNs, probably resulting in modification of the taste input-inducing feeding behaviour by olfactory inputs of 1-octen-3-ol odour, for example.



Prof. Katarzyna Turnau

Małopolska Center of Biotechnology, Jagiellonian University, Poland

Katarzyna Turnau is a group leader at the Małopolska Center of Biotechnology (MCB), Jagiellonian University, Poland. Awarded MSc and PhD from the same university. She is also a lecturer at the Institute of the Environmental Sciences of the Jagiellonian University and a leader of the Plant Microbial Interaction Group. She was awarded the Humboldt fellowship at the University of Tübingen. Her research focuses on diverse plant-microbial interactions and phytoremediation of heavy metal rich sites.



Prof. Piotr Rozpądek

Małopolska Center of Biotechnology, Jagiellonian University, Poland

Piotr Rozpądek is a member of the Bioremediation Group of the Małopolska Center for Biotechnology in the Jagiellonian University. He was awarded MSc from the Jagiellonian University and PhD from the Polish Academy of Sciences at the Physiology Department. Dr Rozpądek is the main investigator in the MAESTRO project carried out at the Jagiellonian University, focusing on the role of endophytes in plant tolerance for heavy metals.

“Plant-microbial and animal networks in degraded environment”

Abstract:

Multi-level interactions between plants and biotic factors determine many aspects of plant biology. Symbionts improve plant productivity, whereas animals serve as vectors for symbiotic bacteria, fungi plant expansion and are an important source of nutrients. In our studies we evaluated the functional and structural changes in the photosynthesis apparatus of plant models imposed upon inoculation with endophytic fungi. Symbiosis improves the efficiency of PSII and electron transfer and C assimilation. Functional changes were accompanied by alterations in the abundance of structural proteins and pigment composition. The concentration of photosynthetically active plant pigments was significantly improved, as well as the abundance of PSII and PSI proteins and Rubisco LSU. Transcriptomics revealed that the presence of the fungi significantly alters the expression profile of photosynthesis related genes. The results of our study shed a new light on mechanisms allowing plants to cope with the withdrawal of a significant fraction of its energy resources by the endophytic fungi, allowing it at the same time to sustain improved growth. The question of whether this mechanism is universal for plant-endophytic fungi interaction remains open. However, our studies indicate that fungi improved photosynthesis efficiency might be driven by a common mechanism, which is manifested in structural changes in the photosynthesis apparatus.



Prof. YAMADA Kenji

Plant Molecular Biology Group, Malopolska Center of Biotechnology,
Jagiellonian University, Poland

Group leader at Malpolska Center of Biothechnology (MCB), Jagiellonian University. Awarded MSc from Shinshu University, Japan in 1996 and PhD from The Graduate University of Advanced Studies, Japan in 1999. After working for the National Institute for Basic Biology, Japan and Kyoto University, Japan as a postdoctoral scientist, he joined the same institutions as assistant professor. From March 2016, he started a new laboratory in MCB as an academic member. His research focuses on analysis of plant endomembrane system responsible for the environmental stress tolerance against pathogen and herbivore attacks.

“ER Body: A Plant Organelle for the Protection of Defence Chemicals”

Abstract:

Sessile plants have no choice regarding the environment in which they are planted. Therefore, plants have developed sophisticated defence systems to cope with changes in the environment. The use of endoplasmic reticulum (ER) derived organelles, known as “ER bodies”, will be one mechanism employed in the protection against insect or pathogen attacks. The ER body is constitutively accumulated in root and seedling epidermis, and induced by wounding in rosette leaves in *Arabidopsis thaliana*. ER bodies highly accumulate β -glucosidase. Recently, we found that this β -glucosidase metabolizes glucosinolates (thioglucosides), which are accumulated in Brassicaceae including *Arabidopsis thaliana*. These findings indicate that the ER body is involved in the “mustard oil bomb” defence system in Brassicaceae plants. We found that the ER body-deficient mutant plants were more sensitive to detritivorous woodlice, indicating that ER body is responsible for the defence against insects. ER bodies are observed in Brassicaceae plants. NAI2, a Brassicaceae specific ER body protein, is responsible for the ER body formation, indicating that the evolution of NAI2 gene confers the ER body. Collectively, these findings revealed the sophisticated mechanisms of newly-acquired defence systems based on unique endomembrane structure.

Session 2

Comparative Studies of Civilisations – Japan, Europe and Asia



Prof. YUI Kiyomitsu **Chair**

Executive Assistant to the President in Charge of International Collaboration /
Executive Director, Centre for EU Academic Collaboration

Executive Assistant to the President in Charge of International Collaboration/ Executive Director, Center for EU Academic Collaboration/ Graduate School of Humanities, Kobe University, Japan

My special field of study is sociology. Because sociology is a newcomer compared with other traditional academic areas which are "long-established", it is self-conscious (consciousness of what sociology is). By enumerating the social phenomenon which can be solved only by sociology, a sociologist tries to show the *raison d'être* of sociology. However, sociology may sometimes extend the range of a subject of research too much, and it will be suspected what sociology after all is. Since I had studied sociological theory especially, I was not able to avoid the problem of "self-consciousness." This is not merely a problem of comparison with other academic areas. The subject of "Western" theory vs the "Japanese" reality (of course, neither is monolithic in fact) is also troublesome. I have tackled sociology of America, especially its doctrinal history as a "speciality." I have been concerned with the study on Talcott Parsons, who is one of the most important theorists in sociology in the second half of the 20th century. The method of understanding something through a "window" of one "great" scholar strikes me as not so bad. Although it changed with people or times, I lived in such a time and such a simple method suited my character. I myself thought that I was a researcher of the type which finishes a lifetime with such study. However, I came to notice that it is trying to earnestly address themes which were "stocks for overseas speech" (the content for overseas meeting and lecture) at first, such as globalization, comparative modernization, comics, and anime, in recent years (but the past ten years or more).



Prof. KAZASHI Nobuo

Graduate School of Humanities, Kobe University, Japan

Professor of philosophy. PhD in philosophy awarded from Yale University. He specializes in modern Japanese thought, comparative philosophy and peace studies. Involved in peace activities, he co-directed the World Nuclear Victims Forum held in Hiroshima in 2015. Publications in English include “The Passion for Philosophy in a Post-Hiroshima Age” and “The Musicality of the Other: Schutz, Merleau-Ponty, and Kimura,” and, in Japanese, *Nishida’s Philosophy of History* (ed.) and *The Unending Iraq War: Questioning Anew from Fukushima* (co-ed.). Recipient of The 6th William James Prize by American Philosophical Association (1991) and an award by Japanese Society for Science and Technology Studies (2012).

“Disaster and Human Resilience: On Literary Engagements in Fukushima”

Abstract:

Nature is ambiguous. Nature nurtures us; we are part of it, but nature can and does destroy us, quite easily. Only a few days after the 3.11 mega-earthquake in 2011, Fukushima-based poet Ryōichi Wagō started sending out a series of short poem-like messages by twitter, expressing what he was feeling and thinking in the midst of the unprecedented calamity. Going through these messages, we can witness the poet’s engagement with the sudden transfiguration of nature and the crisis of his whole life-world, which is manifested as the crisis of symbolic vision itself.

However, it is reinvigorated and amplified as well like the image of his long-cherished “walnut-tree” as the symbol of life and the universe. In a word, what was at stake in the transmigration of symbols, so to speak, is nothing less than our struggle to live on, affirm life, and maintain a human life-word. Furthermore, we can notice some explicit or implicit resonances his expressions bring about in relation to some well-known works in Japanese literature. Such intertextual resonance is a spontaneous gathering of imaginary forces sedimented in the form of common literary memories, and it would extend, in the ear of some readers, beyond the confines of Japanese tradition.



Prof. ICHIZAWA Tetsu

Graduate School of Humanities, Kobe University, Japan

Professor in the Graduate School of Humanities and Faculty of Letters, Kobe University, Japan. Awarded MSc from Kobe University and PhD from Kobe University in 1985 and 1994 respectively. After working for Joetsu University of Education as a research assistant, joined Kobe University as an academic member. His research focuses on the political and social history of Japanese medieval history mainly in the 14th century and how to use historical documents that remain in local places.

“Sharing historical documents with the public”

Abstract:

Nowadays, historical records such as old documents and texts from regions all over Japan are disappearing at a fast rate. In addition to the disappearance of historical materials due to disasters, the other cause is considered to be the decrease in the number of people who carry the role of preserving these historical records, due to aging, the rapidly declining population, or the restructuring of municipal employees. Nevertheless, the problem is much more complicated. For example, there is a discrepancy in the awareness of scholars on the one hand and citizens on the other hand regarding which documents should be preserved or not. In this way, the gap between scholars and citizens created over the historical records, and furthermore over the process of thinking about history, is making the preservation of historical materials even harder. In this lecture, I will consider the problem of how scholars and citizens should share the historical materials and thus I will shed some light on this process.



Prof. Cezary Galewicz

Centre for the Comparative Studies of Civilisations,
Jagiellonian University, Poland

Adjunct Professor at the Centre for Comparative Studies of Civilisations, Jagiellonian University, previously (2013-2015) Head of Department of Languages and Cultures of India & South Asia, Jagiellonian University, Guest Professor (2014) at École des hautes études en sciences sociales, Paris, member of Polish Academy of Sciences. His recent research focuses mainly on the history of traditional knowledge systems and history of scholarly communities, anthropology of knowledge and intellectual practices, memory transmission and manuscript cultures, history of book and reading practices, ancient scriptural traditions of India and South Asia, and recently the history of urbanity in South India, indigenous print cultures, and performing arts. His research combines close textual analysis with historical perspective, field studies and anthropological film documentation.

“Imperial Archives, Descriptive Catalogues and Modern Libraries: Perspectives on framing Asian Studies at the turn of centuries.”

Abstract:

Towards the end of the 19th century a group of intrepid scholars set off for the Indian interior in quest of manuscript sources of the indigenous knowledge that had been rumoured to remain with “native gentlemen” and traditional institutions. Their quest followed a new British Indian Government initiative to allocate funds for a project believed to promise “many ... untemplated practical uses.” [Gough 1878] The project, unprecedented and never repeated again, added substantially to a new frame for Asian Studies in general. It continued and aimed at confirming the then conceptualized role of Sanskrit philology as a major and dominating scholarly paradigm centred on written artefacts in the shape of manuscripts, conceived as representing the vast and mostly neglected treasure of the indigenous knowledge of the past. The findings and reports of the scholars involved in the project helped in developing new libraries, supplied ideas for descriptive catalogues and research institutes and framed an essential part of Asian studies in a way that must have seemed at the time to be applicable forever. The paradigm and its historiographical presumptions proved soon to be seriously challenged.



Prof. Leszek Sosnowski

Institute of Philosophy, Jagiellonian University, Poland

Professor at Jagiellonian University, Poland. Awarded PhD and habilitation from Jagiellonian University in 1993 and 2007 respectively, and became a full professor in 2014. After working for University of Rzeszów (Poland) and Cracow University of Technology as a research assistant, he joined Jagiellonian University as an academic member. His research focuses on the problems of art and culture in the context of modern changes.

“Globalized pop-art and glocalized national art.

On Japanese way of protection of the national heritage”

Abstract:

Transculturation is in some way connected with globalism as an idea of integration of the world as a whole. Scientists give different definitions of the term, but one feature shows up in almost every description, namely “the compression of the world” (Roland Robertson), “the worlds are incorporated into a single world society” (Elizabeth King), “the intensification of worldwide social relations” (Anthony Giddens), “globalisation refers to the widening, deepening and speeding up of global interconnection” (David Held).

The global interconnections lead to the decrease of uniqueness of isolated communities. So, globalisation implies transformation, which creates a fusion of tradition resulting in new cultural trends and practices. It leads to a basic question that I would like to address: how does Japan react to the processes of world unification considering the artists, art and works of art in a very broad sense? In other words, what is the Japanese cultural policy from the Meiji Restoration, which is recognised nowadays as the very first globalisation attempt? I will limit my speech to one point, due to the fact that I am especially interested in Living National Treasures (人間国宝 *Ningen Kokuhō*) as the Preservers of Important Intangible Cultural Properties.

Session 3

EU - Japan Relations in Contemporary World



Prof. SAKAI Kazunari **Chair**

Vice Director of the Center for International Education
/ Graduate School of Intercultural Studies, Kobe University, Japan

Professor in the Graduate School of Intercultural Studies and Vice Director of the Center for International Education, Kobe University, Japan. Awarded MA from the Tokyo University of Foreign Studies (1994) and PhD from Kobe University (2007). After working for the Ministry of Education of Japan, and the Tokyo Institute of Technology, he joined Kobe University as a faculty member. His research focuses on the EU's external relations with neighbouring countries, migration issues across the Mediterranean Sea, and global governance related to migration.



Prof. YOSHII Masahiko

Vice President in charge of Personnel Evaluation and Planning
/ Graduate School of Economics, Kobe University, Japan

YOSHII Masahiko is a professor in the Graduate School of Economics, Kobe University, and Vice President of Kobe University. He is also Vice President of the EU Institute in Japan, Kansai, and was appointed Jean Monnet Chair Professor last year. He has been a researcher in economics at Kobe University since 1987. His major research interests are comparative economic systems, and the economies of Russia and Central-Eastern European countries.

He has published many books and papers on these subjects, such as:

- "Japan and the European Union in the Global Economy" (co-editor), Bruegel Blueprint, No.22, 2014.
- *The EU in Turmoil: Series of Economics, Law and Politics, and Management* (chief editor), Keiso-shobo, 2013.
- *Contemporary Russian Economy* (co-editor), Minerva, 2011.

"EPA (FTA) between Japan and the EU"

Abstract:

The lecture focuses upon the “EPA (FTA) between Japan and the EU” as its negotiation is the most important bilateral economic issue between the two regions. From the 1970s until the beginning of the 1990s, Japan always ran big trade balance surpluses, and trade friction was always a hot topic to be dealt with. To solve the problem, Japan has reduced its tariff and non-tariff barriers, and a dialogue system among the political and business leaders on both ends of the Eurasian Continent was installed, which helped relationships improve in the last decade.

In order to further improve the relationship, Japan and the EU agreed to start the negotiation of the EPA (FTA) between the two regions in 2013. At the Japan-EU summit talk in May 2015, both sides agreed to increase their efforts to conclude the negotiation in 2015. While the TPP concluded its negotiation in the autumn of 2015, the negotiation of the Japan-EU EPA (and TTIP) could not be finalised.

This lecture will explain the main negotiation points, and why both sides could not obtain their consent. Finally, we hope the negotiation will successfully reach an agreement soon. If the FTA bridges of the Japan-EU EPA, TTP, and TTIP are built, this will lead to high reductions of the tariff and non-tariff barriers and the facilitation of economic cooperation, and the world trade framework will be renewed.



Prof. Joanna Guzik

Institute of Middle and Far East Studies, Jagiellonian University, Poland

Assistant Professor at the Institute of Middle and Far East Studies, Jagiellonian University in Krakow, Poland. Awarded MA and DPhil from Jagiellonian University in 2004 and 2010, respectively. Since 2006 she has been working at the Institute of Middle and Far East Studies, Jagiellonian University as a Lecturer and since 2011 as an Assistant Professor. Her research focuses on contemporary Japanese society, history of Japan, Korea – Japan relations, Japanese social policy, Japanese minority policy and Japan’s Middle East policy.

“Security Policy Issues Connected to Japan and EU”

Abstract:

The presentation aims to show aspects of Japan’s and the EU’s security policy that are threatened by recent events. Thus the main emphasis will be on energy policy, terrorism and the latest attacks on Japanese and European citizens. There will be particular focus on the nuclear power plants issue and usage of weapons of mass destruction by terrorist groups. Moreover, contemporary Japan and EU relations with the US and Russia will be shown. The paper will try to identify any similarities in actions by the EU and Japan and draw attention to discrepancies in policies.



Prof. SEKINE Yuki

Graduate School of Law, Kobe University, Japan

SEKINE Yuki holds a bachelor's degree in Law from the Université Libre de Bruxelles (Belgium) and a master's degree in Social Security Law from the University of Tokyo, Japan. She has worked for the ILO in the Department of NORMES (International Labour Standards) in Geneva, then in Japan (MHLW and the ILO Liaison Office in Tokyo), before joining Kobe University Graduate School of Law in 2004, becoming a full professor in April 2013. Her research interests include social security of foreign workers, minimum income protection and activation policies in the EU and Japan. She has been invited to teach in Belgium (Université de Louvain), France (Université de Bordeaux IV Montesquieu, Université Paris XIII), and Poland (Jagiellonian University).

“The European Social Model as an Inspiration for Japan's Welfare Policies”

Abstract:

Japan's welfare system remains probably one of the most unknown among the industrial countries, even though it has been experiencing many of the same social challenges and issues as its Western counterparts, adopting policy responses in many aspects similar to those in European countries. In fact, Japan has sought inspiration in European social policies since the very beginning of its development as a welfare state, exploring them since as early as the late nineteenth century. As a consequence, it originally adopted a Bismarckian-type social insurance system, around the beginning of the 20th century, naturally inspired by the German one. Subsequently, it went on following a very distinctive developing path, rooted in the strong collectivist solidarity that characterizes Japanese society, eventually becoming a complex and unique mixture of Bismarckian and widely universalist social insurance systems, impossible to categorise, for example, in any of the three worlds of welfare capitalisms defined by Esping-Andersen. However, as the world economy follows its path of globalisation, Japan has seen itself evolving towards more individualism, facing a rapidly ageing population and the dismantling of the traditional family, while consistently scrutinizing the “European Social model” as a source of inspiration, an example to follow sometimes, or, at other times, an example not to follow.



Prof. Marcin Grabowski

Institute of Political Science and International Relations,
Jagiellonian University, Poland

Marcin Grabowski, Ph.D. is an Assistant Professor at the Institute of Political Science and International Relations of the Jagiellonian University in Krakow. Marcin graduated in International Relations from the Jagiellonian University in Krakow. He studied at Columbia University in New York (School of International and Public Affairs), George Washington University in Washington (Sigur Center for Asian Studies), and University of California, San Diego, where he completed the Global Leadership Institute program. Marcin's research interests focus on the Asia-Pacific Rim, especially institutional arrangements of the region, U.S. and Chinese foreign policies, and international economics. He conducted his research i.a. at the Institute of Southeast Asian Studies in Singapore, the Korea Institute for International Economic Policy in Seoul, the Institute of Asia-Pacific Studies of Waseda University in Tokyo, the East Asian Bureau of Economic Research (EABER) in Canberra and the Nordic Institute of Asian Studies in Copenhagen. He served as an advisor to the Polish Minister of Higher Education and Science – in the framework of the Young Scholars' Council (2011-2013).

“Polish-German and Sino-Japanese Reconciliation Process: A Comparative Analysis”

Abstract:

The basic goal of the paper to be presented is an assessment of whether it's possible (and in what perspective) to apply the European pattern of Franco-German or Polish-German reconciliation and cooperation to the North-East Asian Region, namely to China and Japan.

Sino-Japanese links, especially economic links, have been constantly growing, whereas intergovernmental cooperation between those two regional powers is far from perfect, largely due to mutual suspicions and historical issues. In this respect, the situation between these two countries is similar to the situation in Europe with mistrust between France and Germany after World War II, or Germany and Poland until the end of the Cold War. Polish-German reconciliation and Sino-Japanese relations after World War II will be discussed during the presentation.

System analysis and comparative analysis will be applied in the research project and presented paper, accompanied by mixed-method research.