The 3rd Humboldt Kolleg in Indonesia
International Collaboration of ASEAN Researchers

The Rise of ASEAN and Strategic Partnership in Understanding the Complexity and Collective Phenomena in Emergent Societies

July 24 - 26th, 2017
Putri Duyung Cottage
Indonesia

Humboldt-Kolleg.upj.ac.id
# Contents

- **Foreword from the Director of Research and Community Services, Ministry of Research, Technology and Higher Education of Indonesia**
- **Message from the Alexander von Humboldt (AvH) Foundation**
- **Foreword from the Chairperson**
- **Patri Dayung Ancol Map**
- **Program**
- **Keynote Speakers**

## Urban Development: A Perspective
- Komara Djaia

## Eco-Cities and Green Building - Prospects For Developing Sustainable Cities of The Future
- Bernhard Mueller

## How Human Our Future Urban Living Will Be? The Infrastructure of Care in Urban Development
- Gunawan Tjahjono

## Teaching Urban Health at Global Level: Opportunities and Challenges
- Sonia Diaz Morsalane

## Vitamin A Deficiency and Excess in Urban Society: The Double Burden
- Sherry A. Tamumiharjo

## Urban Transformations: Sustainable Urban Development Towards Resource Efficiency, Quality of Life and Resilience
- Sigrun Kabisch

## The Dysfunctionality of Higher Education in the Post-Industrial World
- Ludwig Streit

## Urban Economics

- **Financial Prospect of the Waste to Energy Application in Solving the Most Problematic Solid Waste Management in Indonesia**
  - Mohajit
- **Impact of Urban Agriculture on Urban Economy in Bangladesh**
  - Masum Ahmad
- **Sustainable Development Approach to Residential Planning in the Rapid Growth Urban Area: A Case Study in Singosari District, Malang Region, East Java**
  - Arief Rachmansyah, Lusiana Hallin, and Soemarno
- **Persistence Analysis of Inflation in Indonesia**
  - Willy Jufiaswary
- **Business Development Strategies Using SWOT and QSPM: Case Study of Milk Cooperative in Bogor District, Indonesia**
  - Abel Gandhi and Shinta Dewi Kurniawati
- **The Impact of Urban Agriculture of Medicinal Plant on Improving Household Economics in Metropolitan Jakarta**
  - Darmawan L. Cahyn, Listyani Wijayanti, Radhi H. Koestoer, and Misri Gozam
Impact of Bus Rapid Transit as Public Transportation System in Surabaya and Surbug

Towship for Malaysia’s Urban Mobility

Deprizon Syamsurur, Mohd Muhaimin Ridwan Wong, Muhammad Nazri Borhan and Ali Sobhannamesh

4CAD in Project Planning and Budgeting of the New Urban Infrastructure for the Phitsanulok Central Park, Thailand

Kumpon Suthonboon, Boonsong Tantarsee, Suchayna Saratil and Panu Buranajarukorn

Predictions Economic Losses of Coastal Resources in Tuban District Due to Climate Change

Marita Ika Joesidawati, Sunoto and Wahyudi

Architectural Services Using Information Service Oriented Architecture in Emergent Societies

Jarot S. Sunoro and Denzy Apatra

Regional Planning for Aggregate Mining in Fast Growing Countries. The Case of Vietnam

Paulina Scheckenpaase

Opportunity to Operating City Prosperity Index for Indonesian Municipal Development Planning Process

I Nyoman Suluh Wijaya, Asifa Achmad and Icznie Sinukaban

Startups and the City: A Perspective of A Young Technology Business Incubator

Jindy B. Bormales, John Del Rosario, Mario Novino, and Julitta Bokingo

Creative Product and Social Media: The Role of Local Community and Institution Participation in Urban Economy

Johannes Hamonangan Siregar and Teddy Mohamad Darajat

The Importance of Sustainability Reporting to Business Sustainability

Irma Paramita Sofita

Beyond Artifacts: Switching from Conventional to Sharia Financial Product in Urban Context

Dion Dewa Barata

City Planning, Architecture and Infrastructure

People Participation in Developing Urban Dense Old City of Surabaya Case Study:

Kembang Jepun Area

Bambang Sempardono

Integration of Historical Places in New Urban Development: A Case Study of Phitsanulok, Thailand

Nuttika Navapan and Konchita Oonprap

Understanding the Existence of Historical Old Building in Post-Colonial Era as Historical Attachment. Case Study: Kota Old Town Area

Ari Widjati Purwansatining, Kemal Ridwan Kurniawan

Risk Assessment of Pilling Works for Mass Rapid Transit (MRT) Construction Project

Asmaul Chie Ahmad, Izatul Faritta Mohamed Kamal, Nik Nur Khatirunnisa

Nik Mohamed Ainul Azman, Muhammad Fazreen Niza Shah Ismail

Understanding the Activities of the Pedestrian in Bandar Lampung, Indonesia

Fritz Ahmad Nazir, Haris Murvadi

Translating Renewable Energy: Target into Urban Action Planning

Hasmina Tari Mokid

On Stochastic Modelling of Weather Phenomena Impacting Southeast Asian Countries

Christopher C. Bernido, Wilson I. Barredo, and M. Victoria Caprio-Bernido

Seismic Microzonation for Urban Planning and Vulnerability Assessment of Non-Engineered Structure in Earthquake Prone Area, Padang, Indonesia

Rusnardi Rahmat Putra

Geopolymer Concrete as A Green Material for Sustainable Urban Infrastructure - Research Findings and Future Prospects

Monita Obliva, Gunawan Wibisono, and Hamid Nikraz

Evaluating The Design Framework of Mosques and Mosques in Kuala Lumpur, Malaysia

Nangkula UtEmbota and Naveen Asif

Community Traffic Movements Analysis of Urban SMUN 11 and SMNP 2 Areas of Makassar

Qudratihi Dg Bau and Irsyad Dahri

Exploring the Occupational Safety and Health Conditions in Major Malaysian Urban Rail Infrastructure Projects

Izatul Farinah Mohd Kamal, Asmaul Chie Ahmad, Khatirunnisa Nik Mohd Ainul Azman

Towards A Development of An Engaging, Inclusive, Phitsanulok, Thailand

Suhat Yermawutana, Sasima Charoenkit

Compressive Strength, Porosity and Microstructure With Micro- and Nano-Metaaoil

Steve Wilben Macquearin Supit, Rily Rusli

Mapping Public Perception Towards the Implementation of Abul Manan

Expert Advisory System for Urban Green Mobility

Rediansyah, Riza Arif O.K Rahmat, and Arief Marzuki

Development of Web-Based Systems for Employed Johannes Hamonangan Siregar and Willy

Reading Political Insinuation in Urban Forms: Seki Wall Project

Eka Permanasari

Service Performance Analysis on Shuttle Bus System Case of Trans Bintaro, South Tangerang

Fredy Jhon Philip S. and Eka Permanasari

Using android Application as An Urban Lifestyle Section (Case Study Conbeam ST)

Agustinus Agus Setiawan and Sienna Satria

Configuring Educational Facilities Services Patte Yogakarta & Sunakarta City)

Deni Agus Setyono and Denny Dwipayana

Urban Health and Society

Promoting Urban Health Communities and Reducing Rainforest Fungal Endophytes for the Control of the Ceilery C. Puig and Christian Joseph R.

Improving Urban Nutritional and Health Status: Ignatius Radix A.P. Jati

Spatial Correlation of Landscape Contexture and Chairal Mauludi and Rett Nurfalli

Implementation Procedure of Clinical Pathway for Complications. Case Study of Puskesma Prawira Dwi Stay in Unda Hospital Central Sulawesi India Sitti Rhumawati, Ali Ghufron Muki, M.

Insights Into Urban Informal Workers in Indonesia and Access to Health Care

Budi Aji, Arin Dyusma Itiasari, Siti Marini
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluating The Design Framework of Mosques as Community Center in the Urban Fabric of Kuala Lumpur, Malaysia</td>
<td>58</td>
</tr>
<tr>
<td>Nangkula Utaberta and Nayeem Asif</td>
<td></td>
</tr>
<tr>
<td>Community Traffic Movement Analysis of Urban Areas (Study Cases of SMUN 11 and SMPN 3 Areas of Makassar)</td>
<td>59</td>
</tr>
<tr>
<td>Qudairah Dg Bau and Isyad Dahri</td>
<td></td>
</tr>
<tr>
<td>Exploring the Occupational Safety and Health Cost Typologies in the Construction of Malaysian Urban Rail Infrastructure Projects</td>
<td>60</td>
</tr>
<tr>
<td>Ienul Fitriat Mohd Kamdar, Asrul Hmadi Che Ahmad, Mohd Mohd Derus, Nik Nur Khiarunnisa Nik Mohd Ainul Azman</td>
<td></td>
</tr>
<tr>
<td>Towards A Development of An Engaging, Inclusive, and Meaningful Urban Park in Phitsanulok, Thailand</td>
<td>61</td>
</tr>
<tr>
<td>Suthat Yiemwatana, Sasiima Chaorenkit</td>
<td></td>
</tr>
<tr>
<td>Compressive Strength, Porosity and Microstructural Analysis of Cement Composites With Micro- and Nano-Meta-kolin</td>
<td>62</td>
</tr>
<tr>
<td>Steve Wilben Macquinie Supir, Rihy Ramlybin, and Adriana Ticoatul</td>
<td></td>
</tr>
<tr>
<td>Mapping Public Perception Towards the Implementation of Islamic Sharia Laws in Aceh Abdul Manan</td>
<td>63</td>
</tr>
<tr>
<td>Expert Advisory System for Urban Green Mobility Scheme: South East Asia Experiences Resiaisyah, Riz Aniq O.K. Rahmat, and Anisuddin Ismail</td>
<td>65</td>
</tr>
<tr>
<td>Development of Web-Based Systems for Employee Attendance in Urban Area Johannes Hamoraan Siregar and Willy Andika</td>
<td>66</td>
</tr>
<tr>
<td>Reading Political Insulation in Urban Forms: Saving the Sinking Jakarta through Giant Sea Wall Project Eka Permanasari</td>
<td>67</td>
</tr>
<tr>
<td>Service Performance Analysis on Shuttle Bus Stop Based on the Customers’ Perception. Case of Trans Bintaro, South Tangerang</td>
<td>68</td>
</tr>
<tr>
<td>Fredy Jhon Philip S. and Eka Permanasari</td>
<td></td>
</tr>
<tr>
<td>Using Android Application As An Urban Lifestyle in Designing Structural Reinforced Concrete Section (Case Study Conbeam ST) Agustinus Agus Setiawan and Sienna Stanley</td>
<td>69</td>
</tr>
<tr>
<td>Configuring Educational Facilities Services Pattern In Traditional Cities (Case Study: Yogyakarta &amp; Surakarta City)</td>
<td></td>
</tr>
<tr>
<td>Deni Agus Setyono and Denny Dwil Cahyono</td>
<td></td>
</tr>
<tr>
<td>Urban Health and Society</td>
<td>71</td>
</tr>
<tr>
<td>Promoting Urban Health Communities and Reducing Fungicide Use through the Use of Rainforest Fungal Endophytes for the Control of Fusarium Wilt of Banana Tropical Race 4 in the Philippines Cecily G. Puig and Christian Joseph R. Curagun</td>
<td>73</td>
</tr>
<tr>
<td>Improving Urban Nutritional and Health Status: Obstacles, Challenges, and Opportunities Ignatius Radix A.P. Jati</td>
<td>74</td>
</tr>
<tr>
<td>Spatial Correlation of Landscape Contexture and Dengue Cases in Sumenep District Chairal Maulida and Retti Nurlaili</td>
<td>75</td>
</tr>
<tr>
<td>Implementation Procedure of Clinical Pathway Elective Type Cesarean Surgery With Heavy Complications. Case Study of Plasenta Previa Discusses and Its Effect Towards the Length of Stay in Undata Hospital Central Sulawesi Indonesia Sitti Rahmunwali, Ali Ghuftron Muki, Mohammad Hakimi, Indra Bastian, Ronny Rivani</td>
<td>76</td>
</tr>
<tr>
<td>Insights Into Urban Informal Workers in Indonesia Health Insurance Coverage and Access to Health Care Budi Aji, Arif Dyaning Isumari, Siti Masfish, Julita Hendratini and Laksono Trisnantoro</td>
<td>77</td>
</tr>
</tbody>
</table>

The 3rd Humboldi Kolleg in Indonesia
July 24-26, 2017, Jakarta
Environmental Risks in Urban and Regional Development

Environmental Study on Heavy Metals Contamination in Roadside Soils and Plants Along Yangon-Bago and Bago-Mawlamyine Highways, Myanmar

Environmental Risk Management Method in Urban and Regional Development


The Ability of Theobroma cacao Peels As Biosorbest of Hg(II) and Ni(II) Ions

Mal Administration in Granting Environmental Permits and Its Impact on Environmental Risks in Indonesia

Teguti Kumalawan

Energy Harvesting of Environmental Vibration Using Piezoelectric Materials

Pham Minh Thang and N.D. Anh

Airport Distance From City Center and Its Influence To GHG Emission

Erwina Ahyudanari

Urban Micro-Climate and Quality of Urban Environment: A Precedent of Overcrowded Settlements in Bandung

Beta Paramita, Hafiz Nurrahman, and Fahmi Fauzan Devitama

The Design of Flood and Erosion Mitigation System as the Community Recreation Area

K. Nusti, S. Tantunnce, K. Subsomboon, and S. Leuangwichecharoen

Environmental History of Forests in Myanmar (1826 A.D. -1881 A.D.)

Khin Khin Si

Effects of Solid Waste Management Constituents on Greenhouse Gases Emission Using the Extreme Lattice Mixture Design. Case Study: Composting, Reuse and Recycle Plant in Mataram City, Indonesia

Christia Meidiana, Made Walyu A., and Ismu Rini Dwi Ari

Municipal Waste Management - Challenge of Urbanization: Lesson Learned from Phitsanulok, Thailand

Sarinji Tantunnce and Sutthi Hastrakul

The Cultural Ethnic Landscape Elements as Urban Greenery in Putrajaya, Malaysia

Ahmad Zamli Zakaria

Urbanizing Southwards: Planning Development Possibilities for Mindanao, the Philippines, in an Integrating Asian Region

Jose Edgardo A. Gomez, Jr.

Coastal Hazard Assessment in Northern Jakarta

Farrah Hanifah, Hanzah Latief, Mutlara Rahmat Putri, Muhammad Fadli, and Dominic Oki Ismayo

Asean: A Misconstrued Regionalism

Bob Sugeng Hadiwinata

Environmental Risk Because of Radioactive Effect from the Rare Earth Deposit in Namke Region of Lai Chau Province, Vietnam

Phan Quang Van

"I Want My Children to be Better than Me": A Case Study of Parental Aspiration of Urban Mothers

Gita Widya Laksmini Soerjoatmadjo, Supriyanto, and Adriatik Ivanti

Perception of Social Change and Subjective Well-Being in Urban Society

Claire Munikika

The Urban Fashion Style of Batavia Woman as Culture Hybridity Symbol End of the 19 Century

Reto Purwanti and Casande S.
Towards A Framework for Disaster Risk Reduction in Indonesia’s Urban Tourism Industry Based on Spatial Information

Agustin and Devi Roza Kusar

Urbanization Influences Heavy Metal Contaminations in Soils and Plants in An Urban Area, the Philippines

Ian A. Navarrete

Estimates of Life-Cycle Global Warming Emissions for Natural Gas Generated Electricity

Ravshanjon Khujanov, Uwe Gampe, Shokkat Nurmata

Meningo-Encephalitis in Animal Model Infected by Streptococcus Suis Isolated from Pigs and Human in Papua

Siti Irina Oktavia Salasia, M. Wisessa, A. Darsono, G. Annafik

Strategic Partnership in Urban Research

Quality Education for Quality Life: Challenges for A Developing Nation

M. Victoria Carpio-Bernido and Christopher C. Bernido

Asean Locality for Strategic Partnership

Welya Roza, Ineng Naini, Ermati

Building 21 Century Indonesian Teachers’ Capacity Through the Integration of Technology Into Classrooms

Daniel Ginting

Potential of Public-Private Partnership in the Development of Bus Rapid Transit (BRT) Project Based on The Development of Transit Oriented Development (TOD)

Adel Asmi

The Professional Identity of Indonesian Photojournalists: Balancing the Paradoxical Tension

Gita Widya Laksmini Soerjoatmodjo

---

Foreword from the Director of Research Services, Ministry of Research, Technology and Higher Education of Indonesia

The Excellency Ambassador of Germany to Indonesia
Distinguished Head of Division for Asia the Alex
Distinguished Rector of Universitas Pembangunan
Distinguished Humboldt Fellows,
Distinguished national and international scientists

The Directorate of Research and Community Service and Higher Education of the Republic of Indonesia Scientists for Indonesia and the Humboldt Fellows in cooperation with the Universitas Pembangunan Center for Urban Studies.

Sustainable development of cities and society requires strong support and activities from the government and society. The Ministry of Research, Technology and Higher Education wishes to encourage the development of the nation, especially in the development of research and science. Higher education institutions are the key to tackle the challenges of developing the country, not only in terms of infrastructure and human resources, but also in terms of the development of science and technology. The Directorate of Research and Community Service and Higher Education of the Republic of Indonesia Scientists for Indonesia and the Humboldt Fellows in cooperation with the Universitas Pembangunan Center for Urban Studies.

Therefore, I, as the Director of Research and Community Service and Higher Education of Indonesia, am fully supporting multidisciplinary conferences. The fellows of the Humboldt Foundation are very important in the selection of scientific research. The fellowships are the key to tackle the challenges of developing the nation, not only in terms of infrastructure and human resources, but also in terms of the development of science and technology. The Humboldt Foundation is one of the best foundations in the world, and I am very proud to be associated with it.

I believe that during the conference, the discussion will be held on topics related to sustainable development of cities and society. The conference will focus on the development of sustainable cities and society.

I wish you all the best in your discussions, and I look forward to seeing the results of your discussions.

Sincerely yours,

Prof. Dr. Ocky Karna Radjasa, M.Sc.
Director of Research and Community Services
Ministry of Research, Technology and Higher Education...
Foreword from the Director of Research and Community Services, Ministry of Research, Technology and Higher Education of Indonesia

The Excellency Ambassador of Germany to Indonesia, ASEAN and Timor-Leste,
Distinguished Head of Division for Asia the Alexander von Humboldt Foundation,
Distinguished Rector of Universitas Pembangunan Jaya,
Distinguished Humboldt Fellows,
Distinguished national and international scientists and academics, ladies and gentlemen

The Directorate of Research and Community Services of the Ministry of Research, Technology and Higher Education of the Republic of Indonesia congratulates the Humboldt Ambassador Scientist for Indonesia and the Humboldt Fellows Indonesia to hold the 3rd Humboldt Kolleg in cooperation with the Universitas Pembangunan Jaya (UPJ) and the Pembangunan Jaya Center for Urban Studies.

Sustainable development of cities and society has been the concern of the government of Republic of Indonesia. It is the duty of scientists and academicians to contribute to solve the problem for society through development of science and technology and to open the horizon for further development of frontier research. Now days, networking and collaboration in research are the keys to tackle the 21st century challenges which are multifaceted and required to multidisciplinary and even interdisciplinary approaches.

I, as the Director of Research and Community Services, the Ministry of Research, Technology and Higher Education of Indonesia, am fully support and encourage the idea to organize this multidisciplinary conference. The fellows of the Alexander von Humboldt Foundation are of high reputation both in scientific field and in the position at their institution in ASEAN that is strategic for development of academic atmosphere. The challenge is how to join our forces together to make strong regional and international network to develop science, technology and higher education system. I believe that during this three days’ conference, these challenges will be address and discussed by the Humboldt Fellows and other participants.

Once again, the Ministry of Research, Technology and Higher Education of Indonesia (KEMENRISTEKDIKTI) congratulates to Humboldt Fellows and all participants for the success of the 3rd Humboldt Kolleg. I wish you all the best and success in building network as well as in the discussion to give contribution to develop science and technology of ASEAN countries.

Sincerely yours,

Prof. Dr. Ocky Karna Radjasa, M.Sc.
Director of Research and Community Services
Ministry of Research, Technology and Higher Education
"I WANT MY CHILDREN TO BE BETTER THAN ME"
A CASE STUDY OF PARENTAL ASPIRATION OF URBAN MOTHERS

Gita Widya Laksmini Soerjoatmodjo1, Supriyanto2 and Adriatik Ivanti2

Department of Psychology Pembangunan Jaya University

1gita.soerjoatmodjo@upj.ac.id, 2supriyanto@upj.ac.id, 3adriatik.ivanti@upj.ac.id

Urban is one of many contexts, recognized in Bronfenbrenner’s ecological system theory, that influences parenting - the core task of parents to guide children along their developmental trajectories to become competent adults. Parental aspiration - an ideological, abstract best-case scenario ambition - is an important predictor of children’s development. Unlike parental expectation, parental aspiration is a variable that remains stable over time – hence any long-term strategies such as parenting skills training should always be canvassed upon it. The fundamental importance of parental aspiration becomes the rationale of this follow-up qualitative preliminary research. The objective of this writing is to uncover parental aspiration of mothers from different social economic status (SES) who regularly utilize urban public spaces in their childrearing activities. Unobtrusive methodology through coding analysis of transcripts from interview and focus group discussion is used to capture key themes expressed by purposively-sampled 40 mothers from South Jakarta and Tangerang. Main findings of this examination show that variance of parental aspiration and its articulation reflects contrasting views regarding the nature of parenthood, of what constitute a virtuous child, of it means to be good parents, and their efficacy to be ones. This study concludes that SES and critical reflection of past and common practices expressed by these mothers as key factors influencing their parental aspiration. Results of this research can further be used for future inquiries with multiple methods on larger, more representative samples in urban initiatives to support parent-child relationship to sustainably improve the quality of life of contemporary urban society.

Keywords: parental aspiration, social economic status, quality of life, urban society