# **PROGRAM BOOK**

## THE 3<sup>RD</sup> 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 - 26<sup>th</sup>, 2017 Putri Duyung Cottage Indonesia







### Contents

Foreword from the Director of Research and Community Services, Ministry of Research Technology and Higher Education of Indonesia	7
Message from the Alexander von Humboldt (AvH) Foundation	8
Foreword from the Chairperson	10
Putri Duyung Ancol Map	12
Program	13
Keynote Speakers	19
Urban Development: A Perspective Komara Djaja	21
Eco-Cities and Green Building - Prospects For Developing Sustainable Cities of The Future Bernhard Mueller	22
How Human Our Future Urban Living Will Be? The Infrastructure of Care in Urban Development Gunawan Tjahjono	23
Teaching Urban Health at Global Level: Opportunities and Challenges Sonia Diaz Monsalve	24
Vitamin A Deficiency and Excess in Urban Society: The Double Burden Sherry A. Tanumihardjo	25
Urban Transformations: Sustainable Urban Development Towards Resource Efficiency, Quality of Life and Resilience Sigrun Kabisch	26
The Dysfunctionality of Higher Education in the Post-Industrial World Ludwig Streit	27
Urban Economics	29
Financial Prospect of the Waste to Energy Application in Solving the Most Problematic Solid Waste Management in Indonesia Mohajit	31
Impact of Urban Agriculture on Urban Economy in Bangladesh Masum Ahmad	32
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 Halim, and Soemarno	33
Persistence Analysis of Inflation in Indonesia Wily Julitawaty	34
Business Development Strategies Using SWOT and QSPM: Case Study of Milk Cooperative in Bogor District, Indonesia  Abel Gandhy and Shinta Dewi Kurniawati	35
The Impact of Urban Agriculture of Medicinal Plant on Improving Household Economies in Metropolitan Jakarta  Darmawan L. Cahya, Listyani Wijayanti, Raldi H. Koestoer, and Misri Gozan	36

Impact of Bus Rapid Transit as Public Transportation System in Sunway and Subang Townships for Malaysia's Urban Mobility Deprizon Syamsunur, Mohd Muhaimin Ridwan Wong, Muhammad Nazri Borhan and Ali Sobhanmanesh	37
4DCAD in Project Planning and Budgeting of the New Urban Infrastructure for the Phitsanulok	38
Kumpon Subsomboon, Boonsong Tantanee, Suchanya Saratai and Panu Buranajarukorn Predictions Economic Losses of Coastal Resources in Tuban District Due to Climate Change	39
Marita Ika Joesidawati, Suntoyo and Wahyudi Architectural Services Using Information Service Oriented Architecture in Emergent Societies Jarot S. Suroso and Denny Aputra	40
Regional Planning for Aggregate Mining in Fast Growing Countries. The Case of Vietnam	41
Opportunity to Operating City Prosperity Index for Indonesian Municipal Development Planning Process	42
I Nyoman Suluh Wijaya, Ashfa Achmad and Desianna Sinukaban Startups and the City: A Perspective of A Young Technology Business Incubator Jinky B. Bornales, John Del Rosario, Marlo Novino, and Julieta Bokingo	43
Creative Product and Social Media: The Role of Local Community and Institution Participation in Urban Economy	44
Johannes Hamonangan Siregar and Teddy Mohamad Darajat The Importance of Sustainability Reporting to Business Sustainability	45
Irma Paramita Sofia Beyond Artifacts: Switching from Conventional to Sharia Financial Product in Urban Context Dion Dewa Barata	46
City Planning, Architecture and Infrastructure	47
People Participation in Developing Urban Dense Old City of Surabaya Case Study: Kembang Jepun Area	49
Bambang Soemardiono Integration of Historical Places in New Urban Development: A Case Study of Phitsanulok, Thailand	50
Nattika Navapan and Kornticha Oonprai Understanding the Existence of Historical Old Building in Post-Colonial Era as Historical Attachment. Case Study: Jakarta Old Town Area	51
Ari Widyati Purwantiasning, Kemas Ridwan Kurniawan Risk Assessment of Piling Works for Mass Rapid Transit (MRT) Construction Project Asmalia Che Ahmad, Izatul Faritta Mohd Kamal, Nik Nur Khairunnisa	52
Nik Mohamed Ainul Azman, Muhamad Fazreen Niza Shah Ismail Understanding the Activities of the Pedestrian in Bandar Lampung, Indonesia	53
Fritz Akhmad Nuzir, Haris Murwadi Translating Renewable Energy Target Into Urban Action Planning	54
Hasmina Tari Mokui  On Stochastic Modelling of Weather Phenomena Impacting Southeast Asian Countries Christopher C. Bernido, Wilson I. Barredo, and M. Victoria Carpio-Bernido	55
Seismic Microzonation for Urban Planning and Vulnerability Assessment of Non-Engineered Structure in Earthquake Prone Area, Padang, Indonesia Rusnardi Rahmat Putra	56
Geopolymer Concrete as A Green Material for Sustainable Urban Infrastructure -	
Research Findings and Future Prospects  Monita Olivia, Gunawan Wibisono, and Hamid Nikraz	57

Evaluating The Design Framework of Mosques as Community Center in the Urban Fabric of Kuala Lumpur, Malaysia  Nangkula Utaberta and Nayeem Asif	58
Community Traffic Movements Analysis of Urban Areas (Study Cases of	59
Exploring the Occupational Safety and Health Cost Typologies in the Construction of Malaysian Urban Rail Infrastructure Projects Izatul Farrita Mohd Kamar, Asmalia Che Ahmad, Mohmad Mohd Derus, Nik Nur Khairunnisa Nik Mohd Ainul Azman	60
Towards A Development of An Engaging, Inclusive, and Meaningful Urban Park in	61
Compressive Strength, Porosity and Microstructural Analysis of Cement Composites	62
	63
	65
	66
Reading Political Insinuation in Urban Forms: Saving the Sinking Jakarta through Giant	67
Service Performance Analysis on Shuttle Bus Stop Based on the Customers' Perception.  Case of Trans Bintaro, South Tangerang Fredy Jhon Philip S. and Eka Permanasari	68
Using android Application as An Urban Lifestyle in Designing Structural Reinforced Concrete	69
Configuring Educational Facilities Services Pattern in Traditional Cities (Case Study:	70
Urban Health and Society	71
	112
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	73
Cecirly G. Puig and Christian Joseph R. Cumagun Improving Urban Nutritional and Health Status: Obstacles, Challenges, and Opportunities	74
Ignasius Radix A.P. Jati Spatial Correlation of Landscape Contexture and Dengue Cases in Sumenep District	75
Chairul Maulidi and Retti Nurlaili Implementation Procedure of Clinical Pathway Elective Type Cesarean Surgery With Heavy Complications. Case Study of Plasenta Previa Diseases and Its Effect Towards the Length of Stay in Undata Hospital Central Sulawesi Indonesia	76
Sitti Rahmawati, Ali Ghufron Mukti, Mohammad Hakimi, Indra Bastian, Ronny Rivani Insights Into Urban Informal Workers in Indonesia: Health Insurance Coverage and Access to Health Care Budi Aji, Arih Diyaning Itiasari, Siti Masfiah, Julita Hendrartini and Laksono Trisnantoro	77

Food, Space, and Urban Communities in Urban Spatial Context Olga Nauli Komala and Evawani Ellisa	78
Examples of Development and Application of Bioprocess Technology for Soil Remediation and Waste/Wastewater Treatment in Indonesia	79
Muhammad Abdul Kholiq	
Unemployment, Lack of Bridging Social Capital and HIV-Risk Behaviours among Male	90
Injecting Drug Users in Makassar, Indonesia	80
Sudirman Nasir	0.1
Anti-Aging Cosmetics With Curcumin Analogs as Active Substance in Asean Urban Society Ritmaleni and Mimiek Murrukmihadi	81
	82
Detecting Visus Based on Computer Vision Process Teady Matius Surya Mulyana and Henny Hartono	02
Biologically Active Compounds from Vietnamese Medicinal Plants and Their Application	83
Dang Ngoc Quang, Le Thi Khanh Linh, Le Thi Phuong Hoa, Tran Cong So,	05
Nguyen Thi Phuong Thanh, Hoang Thi Nhung, Phong Thi Thanh Huyen,	
Pham Thi Thu Thuy, Pham Huu Dien	
Review: Investigation Outbreak of Avian Influenza in Flores Island, East Nusa Tenggara	84
Annytha Detha	0.
Immunogenicity Test of Recombinant FIM-C S. Typhi Protein As Typhoid Vaccine Candidate	
on Wistar Rat to Increase the Quality of Urban Health in Indonesia	85
Muktiningsih Nurjayadi, Irma Ratna Kartika, Nurasiah, Kurnia Agustini	
Removal of Some Metals by Using the Prepared Alumina and Boron Doped Alumina	
Nanofibers for Waste Water Treatment	86
Myat Myat Thaw	
Nuclear Science and Technology for Urban Communities: Cyclotron Produced Radionuclides	
for Cancer Studies	87
Imam Kambali, Kardinah, Hari Suryanto	
Development of Triaxial Test Apparatus for Soil Testing Purpose in Soil Mechanics	
Laboratory – Institut Teknologi Bandung	88
Hasbullah Nawir, Dayu Apoji and Bagus Eko Prasetyo	
Evaluation of Liquid Biofertilizer Using Organic Market Waste as Substrate	89
Tarzan Sembiring and Lies Sriwuryandari	12021
A Study of Density and Land Use in Urban Area	90
Ida Bagus Ilham Malik and Bart J. Dewancker	
Screening and Potential Analysis of Eastern Sumatra Seashore Mangrove Plants as	0.1
Antimalarial Agent	91
Muhaimin, andita Utami, Riski Dwimalida Putri, and Josephine Elizabeth Siregar	
Phylogenetic Framework of Philippine Herbal Plants Inferred From MATK and TRNH-PSBA	92
Barcode Sequence Jay Edneil C. Olivar and Grecebio Jonathan D. Alejandro	92
A Toxicological Analysis of Phthalates from Dust Samples Obtained in Selected Philippine	
Light Rail Transit Stations	93
Arnold V. Hallare1, Jan Luis Anton C. Chan, Bea Maria Sarah P. Tan, and	75
Allan Patrick G. Macabeo	
Analysis on Water Quality Assessment on Spirulina Growth in Natural Lakes At Sagaing	
Region in Myanmar	94
Myat Myat Thaw, San Tun Aung, and May Yu Khine	S04.
Malaria Eradication in Bintan Resorts: Implications from 20 Years of Integrated Strategy	95
Ranan Samanya, Raymond Yeow Hock Lai, Surateman Bin Wasim, Catharine Kartika	
Winata, Baiq Rahmawati Febriana, Herna Rizki Wahyuni, Sulfian Sulfikar, Kian Siong,	
Resti Rahayu, Ray Manaek Sebastian L. Tobing, and Pie	
Why Should We Change? (Study Case of Organizational Change in Indonesian National	
Mass Media Company)	96
Yulius Fransisco Angkawijaya and Bertina Sjabadhyni	

"I Want My Children to be Better than Me" A Case Study of Parental Aspiration of Urban Mother	rs 97
Gita Widya Laksmini Soerjoatmodjo, Supriyanto, and Adriatik Ivanti Perception of Social Change and Subjective Well-Being in Urban Society	98
Clara Moningka	,0
The Urban Fashion Style of Batavia Woman as Culture Hybridity Symbol End of the 19 Century	99
Retno Purwanti and Casande S.	
Environmental Risks in Urban and Regional Development	101
Environmental Study on Heavy Metals Contamination in Roadside Soils and Plants	
Along Yangon-Bago and Bago-Mawlamyine Highways, Myanmar	103
Kyaw Naing, Moe Thu Zar Lwin, San San Kyu, San San Myint, Win Ma Ma	
Environmental Risk Management Method in Urban and Regional Development	104
Maryono, Sudarno Utomo, and Hadiyanto Method Development and Surface Utilization: Monitoring Environment in Urban Society	
Through Analytical Chemistry	105
Surjani Wonorahardjo	105
The Ability of <i>Theobroma cacao</i> Peels As Biosorbent of Hg(II) and Ni(II) Ions Yuli Yetri and Rahmi Hidayati	106
Mal Administration in Granting Environmental Permits and Its Impact on Environmental Risks	
in Indonesia	107
Teguh Kurniawan	
Energy Harvesting of Environment Vibration Using Piezoelectric Materials Pham Manh Thang and N.D. Anh	108
Airport Distance From City Center and Its Influence To GHG Emission	109
Ervina Ahyudanari	
Urban Micro-Climate and Quality of Urban Environment: A Precedent of Overcrowded	
Settlements in Bandung	110
Beta Paramita, Hafiz Nurrahman, and Fahmi Fauzan Devitama	
The Design of Flood and Erosion Mitigation System as the Community Recreation Area	111
K. Nusit, S. Tantanee, K. Subsomboon, and S. Leungvichcharoen Environmental History of Forests in Myanmar (1826 A.D1881 A.D.)	112
Khin Khin Si	112
Effects of Solid Waste Management Constituents on Greenhouse Gases Emission Using the	
Extreme Lattice Mixture Design. Case Study: Composting, Reuse and Recycle Plant in	112
Mataram City, Indonesia Christia Meidiana, Made Wahyu A., and Ismu Rini Dwi Ari	113
Municipal Waste Management - Challenge of Urbanization: Lesson Learned from Phitsanulok,	
Thailand	114
Sarintip Tantanee and Suthi Hantrakul	17,070
The Cultural Ethnic Landscape Elements as Urban Greenery in Putrajaya, Malaysia Ahmad Zamil Zakaria	115
Urbanizing Southwards: Planning Development Possibilities for Mindanao,	
the Philippines, in an Integrating Asean Region	116
Jose Edgardo A. Gomez, Jr.	
Coastal Hazard Assessment in Northern Jakarta	117
Farrah Hanifah, Hamzah Latief, Mutiara Rahmat Putri, Muhammad Fadli, and	
Dominic Oki Ismoyo Asean: A Misconstrued Regionalism	118
Bob Sugeng Hadiwinata	. 10
Environmental Risk Because of Radioactive Effect from the Rare Earth Deposit in	
Namxe Region of Laichau Province, Vietnam	119
Phan Quang Van	

Towards A Framework for Disaster Risk Reduction in Indonesia's Urban Tourism Industry Based on Spatial Information Agustan and Devi Roza Kausar	120
Urbanization Influences Heavy Metal Contaminations in Soils and Plants in An Urban Area,	
the Philippines	121
Ian A. Navarrete Estimates of Life-Cycle Global Warming Emissions for Natural Gas Generated Electricity	122
Rayshanjon Khujanov, Uwe Gampe, Shavkat Nurmatov	
Meningo-Encephalitis in Animal Model Infected by Streptococcus Suis Isolated from Pigs	72,12712
and Human in Papua	123
Siti Isrina Oktavia Salasia, M. Wisessa, A. Darsono, G. Annafik	
Strategic Partnership in Urban Research	125
O. M. Edwarfer for Quality Life: Challenges for A Davaloning Nation	127
Quality Education for Quality Life: Challenges for A Developing Nation M. Victoria Carpio-Bernido and Christopher C. Bernido	127
Asean Locality for Strategic Partnership	128
Welya Roza, Ineng Naini, Ernati	
Building 21 Century Indonesian Teachers' Capacity Through the Integration of Technology	100
Into Classrooms	129
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)	130
Ade Asmi	.01573695
The Professional Identity of Indonesian Photojournalists: Balancing the Paradoxical Tension Gita Widya Laksmini Soerjoatmodjo	131

#### 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 3<sup>rd</sup> 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 academician 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 21<sup>st</sup> 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 3<sup>rd</sup> 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

### THE IMPORTANCE OF SUSTAINABILITY REPORTING TO BUSINESS SUSTAINABILITY

#### Irma Paramita Sofia

Department of Accounting
Universitas Pembangunan Jaya, Tangerang Selatan, Indonesia
Irma.paramita@upj.ac.id

At present, global society has been able to discern the deteriorating condition of the World's Environmental damage caused by the rapidly increasing development of the industrial sector. Environmental issues are a highly important cause to consider in this era, since ignorance and lack of understanding of this very issues are effecting the society, which caused by the lackluster effort of the responsible parties in maintaining environmental management system. Environmental concerns initially appeared from the encouragement of company's outside parties, such as the government, consumers, and stakeholders. The increasing support regarding Environmental issues that came from social and environmental organizations, be it national and international organizations, is proof that these issues are an integral part of the economy and environment sectors.

Encouragement from outside parties is slowly making companies recognizing Environmental issues thus conducting Sustainability Report, which consists of the application of Triple Bottom Line Accounting. Triple Bottom Line Accounting has become an integral issue that is currently being discussed in every opportunity and realized in three pillars of the world, which consists of people, planet, and profit.

The objective of this research is to compare the activities and the operation of the company before and after the Sustainability Report were applied to that company. The result of this research showed that the publication of the Sustainability Report did not in fact gave any impact towards the progress of the company.

The method of this study is performed using the Altman Z-Score formula whether data is obtained from the company's financial statements. The result of this study shows that there is no significance effect on company's profit regarding Sustainability Report publishing.

**Keywords**: Sustainability Reporting, Going Concern, Triple Bottom Line Accounting, Corporate Social Responsibility, and Environmental Accounting, Z-Score