

# **IEOM Society**

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# IEOM Awards – 3<sup>rd</sup> African IEOM Nigeria Conference, April 7, 2022

# **Distinguished Academic Leadership Award**

Prof. Charles Arizechukwu Igwe, Vice-Chancellor, University of Nigeria Nsukka

Professor Charles Mbohwa, Pro-Vice Chancellor Strategic Partnerships and Industrialisation, University of Zimbabwe, Harare, Zimbabwe Prof Abiodun Adebayo, Vice-Chancellor, Covenant University Ota, Ogun State Nigeria

# **Distinguished Industry Leadership Award**

Engr. Prof. Edmund C. Okoroigwe Chairman, Nigeria Society of Engineers, Nsukka Branch

Prof. Toyin Ashiru, CEO, Tricontinental Oil, Ikeja, Lagos Nigeria

Engr. Dr. Patricia N. Opene-Odili Nil, 8th APWEN President (Association of Professional Women Engineers of Nigeria)

Engr Tasiu Saad Gidari-wudil FNSE, D., President, Nigeria Society of Engineers

# **Distinguished Educator Award**

Prof. Elizabeth S. Bosire Abenga, Director Pan African University Institute for Governance, Humanities and Social Sciences (PAUGHSS), Yaounde, Cameroon

# **Distinguished Professor Award**

Engr. Prof Salami Olasunkanmi Salami, Professor, Federal University of Agriculture, Abeokuta

Professor Emeka Simon Obe, Ergonomist and Professor of Mechanical Engineering (Ergonomics). Immediate past Dean, College of Engineering Federal University of Agriculture Abeokuta Ogun State Nigeria

Prof. Nana Sarfo Agyemang Derkyi, PhD, Dean, School of Engineering Department of Energy and Petroleum Engineering, University of Energy and Natural Resources, Sunyani, Ghana

# **Outstanding Professor Award in Engineering Management**

Engr. Prof Adeniyi Olayanju, immediate past Vice Chancellor of Landmark University, Omu Aran Kwara State and presently The Pioneer Vice Chancellor, Philomath University Abuja Nigeria

# **Outstanding Professor in Healthcare Systems**

Prof Oluwatoyin Agboola, Deputy Vice Chancellor (Academics) of Olabisi Onabanjo University Ago Iwoye Ogun State.

# **Outstanding Professor in Logistics and Supply Chain**

Ms Sebonkile Thaba, Lecturer, Department of Transport and Supply Chain Management, University of Johannesburg, South Africa

# **Outstanding Professor Award**

Prof Keith Carter, Honorary Professor, University of Leicester, United Kingdom

# **Outstanding Professor in HF**

Prof O.E Charles-Owaba (Rtd) Professor of Industrial and Production Engineering, University of Ibadan

#### **Outstanding Researcher Award**

Engr Prof. Ojo S.I. Fayomi, Dean, College of Engineering, Bells University of Technology, Ota, Ogun State, Nigeria

# **Innovation and Entrepreneurship Award**

Engr Prof. Emenike. C. Ejiogu, Director, Africa Centre of Execellence for Sustainable Power and Energy Development, University of Nigeria Nsukka

# **Woman in Industry and Academia Award**

Engr Felicia N. Aguabata, PhD, Nigeria Airspace Management Agency, Murtala Muhammed International Airport, Ikeja, Lagos, Nigeria Engr Dr Mrs. Edith Y. Ishidi, Director of Research, Business Development, Consultancy and Collaboration, Sheda Science and Technology Complex, Federal Ministry of Science, Technology and Innovation, Abuja Nigeria

Engr. Dr (Mrs) Funmilade Akingbagbohun, Mechanical Engineer, STEM advocate, innovation & Creativity Advocate, National Chairman of Nigerian Institution of Mechanical Engineers

# **Global Engineering Education Award**

Engr. Dr Adekunle Ibrahim Musa-Olokuta, Olabisi Onabanjo University Ago Iwoye Ibogun Campus Ogun State Nigeria

# **Global Business Management Education Award**

Prof. Vincent Onodugo, PhD, Professor of Management, Dean, Faculty of Business Administration University of Nigeria, Enugu Campus, Nigeria

# IEOM Society Awards – 3<sup>rd</sup> African IEOM Nigeria Conference, April 5-7, 2022

#### **IEOM Industry 4.0 Award**

Dr. Stanley Chinedum Nwoji, Professor of EBusiness and Entrepreneurship at the Harrisburg University of Science and Technology at Harrisburg, PA, United States of America

Dr. T. Mushiri, Department of Industrial and Mechatronics Engineering Faculty of Engineering & the Built Environment (FEBE) University of Zimbabwe, Mt Pleasant, Harare, ZIMBABWE

Engr Prof. Ogechukwu N. Iloanusi, Head, Department of Electronics Engineering, UNN, Nigeria

#### **Industry Solutions Award**

Dr. Lemma Lessa, Assistant Professor of Information Systems School of Information Science, Addis Ababa University (AAU) Ethiopia Engr Dr. Izuchukwu F. Okafor, Director, National Centre for Energy Research and Development, University of Nigeria Nsukka Alpha Robinson, Managing Director at Africa Consulting & Trading (ACT), Former Managing Director Gambia National Water and Electricity Company (NAWEC), Africa Consulting & Trading (ACT), Dakar, Senegal

#### **Teaching Excellence Award in HF**

Engr. Prof Adekunle Adebiyi, Ergonomist and Rector, Ibadan Polytechnic Ibadan Oyo State

# **Teaching Excellence Award in OM**

Prof Nita I Sukdeo, Head, Department of Quality and Operations Management, University of Johannesburg, South Africa

# Teaching Excellence Award in IE

Engr. Prof Rapheal Edokpia, University of Benin

Engr Prof. Emmanuel Ayodeji Oluleye, University of Ibadan

# **Teaching and Learning Award**

Prof. Esther T. Akinlabi, Director, Pan African University for Life and Earth Sciences Institute (PAULESI) Ibadan, Nigeria African Union Commission Prof Umar Adamu Alhaji, Ibb University Lapai, Nigeria

# **Outstanding Contribution Award**

Tebila Nakelse, PhD, Agriculture Advisor, Ouagadougou, Burkina Faso

Anthony Andrews, Associate Professor, Department of Materials Engineering, KNUST, Kwame Nkrumah' University of Science and Technology, Kumasi, Ghana

Alpha Mamadou Traoré, Environmental Management, Conakry, Conakry Region, Guinea

Mamadou Alouma DIALLO, Mechanical Engineer, Mathematician, Physicist, M.Eng, M.Sc, D.Sc., Carmels Research Institute, Université Cheikh Anta Diop de Dakar (UCAD), Bamako, Mali

Professor Mohd Sanusi Magaji FMESRI, PhD, President at African Association of Entrepreneurship Teachers and Lecturers, Niger Unisa Conteh, Chief Executive Officer, Hope for African, Freetown, Sierra Leone

Dr.-Ing. Agossou GADEDJISSO-TOSSOU, Agricultural Water Management, Agricultural Economics, Crop modelling, Technische Universität Dresden, Togo

# **IEOM Outstanding Service Award**

Engr. Dr. Paul Amaechi Ozor, UNN, Nigeria

# **IEOM Society Student Chapter Faculty Advisor Award**

Engr Celestine Nnaemeka Achebe

# **Conference Service Awards**

Engr Dr E. C. Okoroigwe
Engr Prof. Gloria I. Ezenne
Dr Adeolu Adeniran
Engr Dr Patrick Akpan
Engr Dr Mrs. Okokpujie Imhade Princess
Engr. Dr Samson N. Ugwu
Engr Noble O. Nweze
Engr Benedict Ugwu
Dr Mariam Kassim Ali
Engr Dr Omolayo Ikumakpai

Dr Japhet Obiko Dr Ikechukwu lieoma Francisca

# **Completion Awards**

# **Undergraduate Student Paper Competition Sponsored by SIEMENS**

First Place Winner

ID 13A Proposed Decision Matrix on Student Engagement for Engineering Online Learning using Factor Analysis and Analytical Hierarchy Process

Lou H. Palacio, Daniella B. Santos, Jeremy V. Santos and Marshal R. Tan Department of Industrial Engineering University of Santo Tomas, EspañaBoulevard, Sampaloc, Manila, 1008, Philippines

JoehannaK. Ngo Department of Industrial Engineering University of Santo Tomas, EspañaBoulevard, Sampaloc, Manila, 1008, Philippines. Gabriel C. BucuDepartment of Industrial Engineering University of Santo Tomas, EspañaBoulevard, Sampaloc, Manila, 1008, Philippines Department of Industrial and Systems Engineering, De La Salle University, Taft Avenue, Manila, 1002, Philippines

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ID 171 Analysis of Perception and Acceptance on Telemedicine in a Third World Country: A Case Study in the Philippines Ardvin Kester S. Ong, Yoshiki B. Kurata, Sophia Alessandra D.G. Castro, Jeanne Paulene B. De Leon, Hazel V. Dela Rosa, Alex Patricia J. Tomines, Department of Industrial Engineering, Faculty of Engineering, University of Santo Tomas, Philippines, Manila, Philippines Ardvin Kester S. Ong, Yoshiki B. Kurata, School of Industrial Engineering and Engineering Management Mapúa University, Manila, Philippines 658 Muralla St., Intramuros, Manila 1002, Philippines

#### 2<sup>nd</sup> Place Winner

ID 16An E-Commerce Marketing Decision Matrix Tool using Consumer-Behavior Analysis during Pandemic Jonas M. De Leon, Cliff Van Kristiene B. Laoang, Carl Rovick S. Martinez, Kristian, M. Mañibo, and Gabriel C. BucuDepartment of Industrial Engineering University of Santo Tomas Manila, Philippines.

# 3<sup>rd</sup> Place Winner

ID 167 The Effect of Service Quality and Brand Image on Repurchase Decision (Case Study International Students in Bandung, Indonesia) Husny Gibreel Musa Saleh, Mahir Pradana, School of Communication and Business, Telkom University, Indonesia

# **Undergraduate Research Competition**

#### First Place Winner

ID 399Legal Analysis on Indonesia Food Import Policy Review through TPRM WTO to Prevent an International Trade Dispute. Putu George Matthew Simbolon, Most Outstanding Student, Faculty of Law, Center for International Law and Human Rights, UniversitasKristen Indonesia, JlMayjen Sutoyo, Jakarta 13630, Indonesia

Hulman Panjaitan, Dean of Faculty of Law, Associate Proffesor, Faculty of Law, Universitas Kristen Indonesia, Indonesia Edward ML Panjaitan, Lecturer, Faculty of Law, Center for International Law and Human Rights Universitas Kristen Indonesia, Indonesia Wilson Rajagukguk, Lecturer, Vice Chancelorfor Academics, Faculty of Economics and Business Universitas Kristen Indonesia, Indonesia

ID 247 A study on the assessment of a Proposed Website Application the Block using SWOT Analysis

Kenneth AJ G. Quilantang, Alphonsus Joseph Nicollo R. Magpantay Gabriel Angelo B. Dela Cruz, Grace Lorraine Intal, School of Information Technology, MapúaUniversity, Makati City, Philippines

#### 2<sup>nd</sup> Place Winner

ID 378Application of Analytical Hierarchy Process (AHP) Method in the Comparison of Voice/Speech Recognition and Manual Typing Lorenzo Caday, Jerome Liwanag, Wajid Mariño, and Rianina D. Borres, School of Industrial Engineering and Engineering Management, Mapua University, Intramuros, Manila, Philippines

ID 174Predicting Factors influencing Management Leadership among Filipinos in the Service Industry through Multiple Regression Analysis YoshikiB. Kurata, ChristienneJoie C. Andrada, Mariela Nicole S. Manalo, Errol John AldrieU. Sunga, Alvin Racks Martin A. Uy, ArdvinKester S. Ong, Department of Industrial Engineering, University of Santo Tomas, EspañaBlvd, 1015, Manila, Philippines

#### 3rd Place Winner

ID 148Low-cost Dietary Plan for COVID-19 Immunity Response Using Mixed-Integer Linear Programming

Allia Coleen S. De Leon, Camille T. Ninobla, Naomi Joyce S. Sibal, KriziaMile Joy B. Yu, and Engr. Gabriel C. Bucu, CIE, AAE Department of Industrial Engineering, University of Santo Tomas, Manila, Philippines

ID 42 Comparative Analysis and Evaluation between Traditional and Online Learning in Engineering Education, Focused on Introduction to Engineering

Mary S. Dedel, Daryl N. Magdurulan, Kristian Q. Malaluan and Bea M. Santos, Department of Industrial Engineering, University of Santo Tomas, España Boulevard, Sampaloc, Manila, 1008, Philippines

Asst. Prof. Charmina Lou C. Bautista, MES, Department of Industrial Engineering, University of Santo Tomas, EspañaBoulevard, Sampaloc, Manila, 1008, Philippines

#### **Graduate Student Paper Competition Sponsored by EATON Corporation**

## First Place Winner

ID 184 Prototyping for an In-month Seed Forecasting System

Eric De Vera Reynoso, Grace Lorraine Intal, School of Information Technology, School of Industrial Engineering and Engineering Management Mapua University Manila, Philippines

# 2<sup>nd</sup> Place Winner

ID 188Proposed Utilities Billing Information Management System using Google Workspace Platform for a Property Management Services Company

Francis Lourdan M. Miña, Grace Lorraine D. Intal, School of Industrial Engineering and Engineering Management, School of Information Technology, MapúaUniversity, Manila, Philippines.

# 3<sup>rd</sup> Place Winner

ID 492 Capital Structure in Indonesian Banking Industry

Dewi Tamara, Executive Master Program, Binus Business School, University of Bina Nusantara, Jakarta Indonesia

Nadia Heraini and Dimas Ivaldi, Young Professional Master Program, Binus Business School, University of Bina Nusantara Jakarta Indonesia

# **Master Thesis Competition**

# First Place Winner

ID 362Analysis of OEE improvements in Blow Molding Machines in the Plastic Packaging Manufacturing Industry using Six Big Losses and FMEA methods

Nanang Sunandar Hadisaputra, Universitas Mercu Buana, Jakarta, Indonesia

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Sawarni Hasibuan, Corresponding author, Universitas Mercu Buana, Jakarta, Indonesia

#### 2<sup>nd</sup> Place Winne

ID 124Urban Resilience and Sustainability Through Regenerative Urban Agriculture

Dr Jackson Sebola-Samanyanga, Lecturer, Department of Town and Regional Planning, University of Johannesburg, South Africa Miss SegakwengKhutlapye, Masters Candidate, Department of Town and Regional Planning, University of Johannesburg, South Africa

#### 3rd Place Winner

ID 181Waste Minimization Through Sustainable Manufacturing

AnelisaKanyisaNokele, Masters Student, University of Johannesburg, Johannesburg, South Africa

Jackson Sebola-Samanyanga, Lecturer-Department of urban and regional planning, University of Johannesburg, Johannesburg, South Africa

#### **Doctoral Dissertation Competition**

# First Place Winner

ID 349 Evaluation of Elements Affecting the Effectiveness of Maintenance Policies Following the ASME Code and Delay Time Model Christian IghohorOkontaand Professor Raphael OlumeseEdokpia, Ph.D., Department of Industrial and Production Engineering, University of Benin, Edo State, Nigeria

#### 2<sup>nd</sup> Place Winner

ID 415 Emperical survey of post-harvest operations constraining Bambara nut utilization

Ikechukwul JEOMA. F. Department of Mechanical Engineering, Michael Okpara University of Agriculture, Umudike, Abia state Nigeria

#### 3rd Place Winner

ID 364 Inherent Factors Affecting the Effectiveness of Maintenance Using Root Cause Analysis. A Case Study

Christian IghohorOkontaand Professor Raphael OlumeseEdokpia, Ph.D., Department of Industrial and Production Engineering, University of Benin, Edo State, Nigeria

#### **Human Factors and Ergonomics Competition**

#### First Place Winner

ID 174Work-related Factors Influencing Organizational Leadership among Filipinos in the Service Sector through Multiple Regression Analysis Yoshiki B. Kurata, ChristienneJoie C. Andrada, Mariela Nicole S. Manalo, Errol John Aldrie U. Sunga, Alvin Racks Martin A. Uy, ArdvinKester S. Ong, Department of Industrial Engineering, University of Santo Tomas, España Blvd, 1015, Manila, Philippines

# 2nd Place Winner

ID 140 Ergonomic Intervention Studies for Productivity Improvement in Small Scale Utensils Manufacturing Industry

Veeresh, Student, Industrial & Production Engineering Department, P.D.A. College of Engineering, Kalaburagi, Karnataka, India.

Qutubuddin S.M., Associate Professor, Industrial & Production Engineering Department, P.D.A. College of Engineering, Kalaburagi, Karnataka, India

Kajal, Aishwarya K., Sampati Bai, Students, Industrial & Production Engineering Department, P.D.A. College of Engineering, Kalaburagi, Karnataka, India

#### 3rd Place Winner

ID 206 Inter-rater Reliability of Manual Anthropometric Measurement of Students of Tertiary Institution in North-West Nigeria Ademola James Adeyemi, Department of Mechanical Engineering, School of Industrial Engineering, Waziri Umaru Federal Polytechnic Birnin Kebbi, Kebbi State Nigeria, Department of Mechanical Engineering, Usmanu Danfodiyo University, Sokoto, Sokoto State Nigeria Olusegun Isa Lasisi, Muyideen Abdulkadir, Department of Mechanical Engineering, Waziri Umaru Federal Polytechnic Birnin Kebbi, Kebbi State Nigeria

Paul Ojile, Department of Architectural Technology, Waziri Umaru Federal Polytechnic Birnin Kebbi, Kebbi State Nigeria.

#### **Simulation Competition**

## 1st Place Winner

ID 366 System-Based Optimization of Pumping Capacity of Centrifugal Pumps

A Stulumani, A Mpoko, O Khumalo, M. E. Matlakala, D. V. V. Kallon, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, South Africa

# 2<sup>nd</sup> Place Winner

ID 367 FEA of the Fire Fighting High-Pressure Centrifugal Pump via the Naiver-Stokes Equations

T. Zwane, P. Zikalala, M. E. Matlakala, D. V. V. Kallon, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, South Africa

#### 3rd Place Winner

ID 24 System Dynamics Modeling and Simulation for Reduction of Scrap and Rework in an Automotive Manufacturing Company Shelly Mona, Department of Industrial Engineering, Tshwane University of Technology, Pretoria, South Africa

# **Supply Chain and Logistics Competition**

#### First Place Winner

ID 443 The digital twin model of vehicle containers to provide an ergonomic handling mechanism

Ahmed M. Abed, Associate prof. at Industrial Engineering Department, Zagazig University, Egypt

SamiaElattar, Associate prof. at Department of Industrial & Systems Engineering, College of Engineering, Princess NourahbintAbdulrahman University, Riyadh, Saudi Arabia

Tamer S. Gaafar, Assistant prof. at Computer and Systems Department, Zagazig University, Egypt