

Award Recognition and Competition Winners

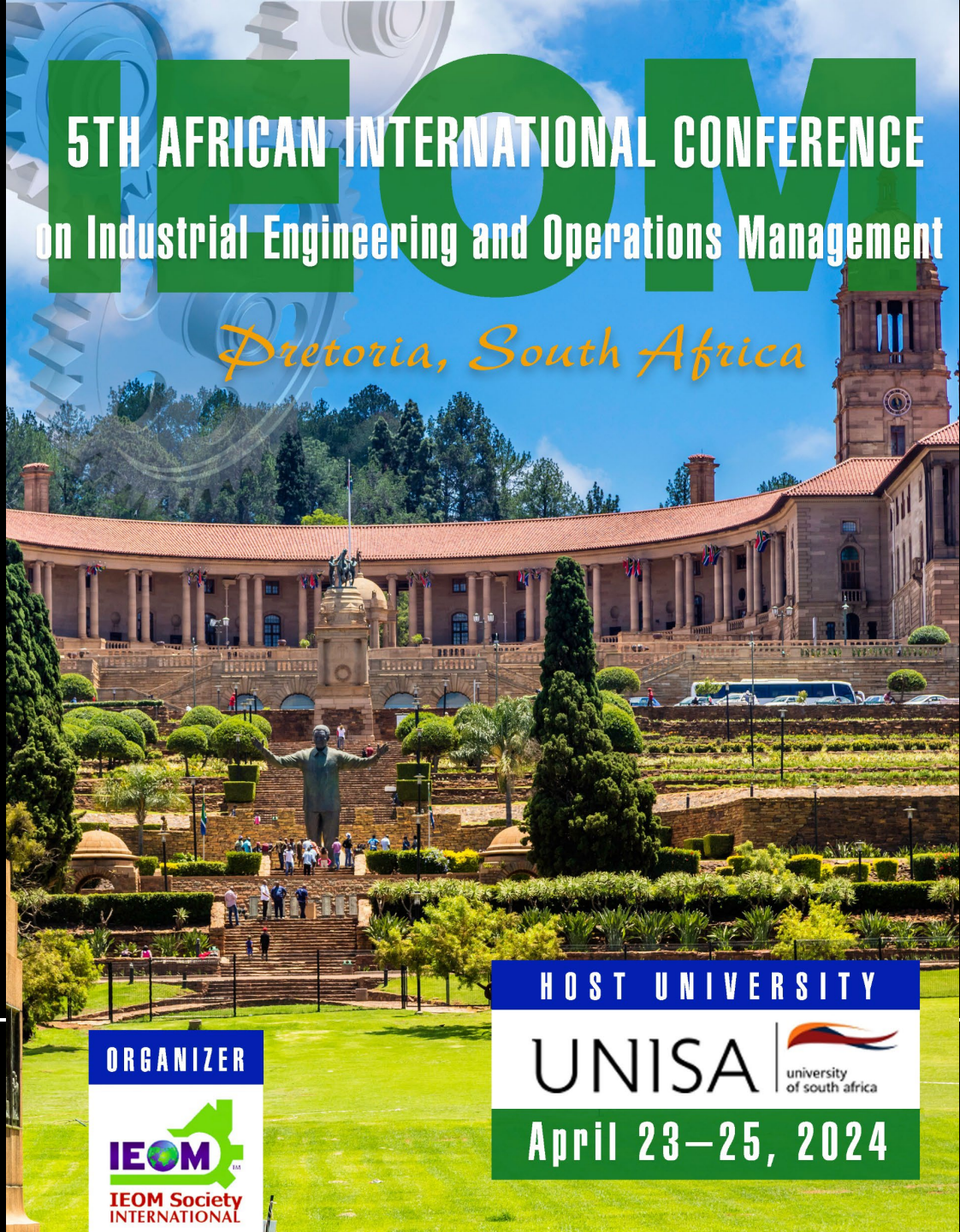
5th African IEOM Conference, Pretoria, April 23-25, 2024



Sponsors and Partners



2024 IEOM
South Africa
Awards



IEOM

5TH AFRICAN INTERNATIONAL CONFERENCE
on Industrial Engineering and Operations Management
Johannesburg, South Africa

ORGANIZER



HOST UNIVERSITY



April 23–25, 2024

Conference Highlights

- 275 submissions
- 8 keynote speakers
- 3 panels
- 4 workshops
- 9 student competitions
- International participations
- Networking



IEOM President



Prof. Eldon G. Caldwell Marin,
Ph.D., Sc.D, Dr.Ed.
Professor, Industrial Engineering
Department
Engineering School
University of Costa Rica
San Jose, Costa Rica



IEOM Chief Operating Officer



Professor Don Reimer
Chief Operating officer
IEOM Society International
Adjunct Professor at Lawrence
Technological University, Southfield,
Michigan, USA



Conference Chair



Dr. Anthea Amadi-Echendu
Senior Lecturer
Operations Management
University of South Africa (UNISA)
Florida, South Africa



IEOM Global Council Member



Professor Charles Mbohwa, Ph.D.
Distinguished Professor
University of South Africa (UNISA)
Past Pro-Vice Chancellor Strategic
Partnerships and Industrialisation
University of Zimbabwe
Harare, Zimbabwe



UNISA



Thanks

Sponsors and Partners



Tshwane University of Technology



EASTERN MICHIGAN UNIVERSITY



UNIVERSITY OF DERBY



UNIVERSIDAD DE MONTERREY



5th African International Conference on
**Industrial Engineering &
Operations Management**
Johannesburg/Pretoria, South Africa
April 23-25, 2024, Venue: CSIR ICC



UNISA



Thanks



- Speakers
- Presenters
- Competition participants
- Authors
- Reviewers
- Track chairs
- Student volunteers
- and more



IEOM Vision

The IEOM Society International strives to be the premier global organization dedicated to the advancement of industrial engineering and operations management discipline for the betterment of humanity.



IEOM Mission

IEOM Society's mission is to foster critical thinking, innovation, and knowledge dissemination of Industrial Engineering (IE) and Operations Management (OM) among diversified people globally, especially in emerging countries.



Values:

- **Globalization, Diversity, and Inclusion**
- **Innovative and Entrepreneurial Thinking**
- **Student Empowerment and Mentoring**
- **Professional Development and Lifelong Learning**
- **Building Partnerships among Industry, Academia, and Government**
- **Sustainability and Community Development**



IEOM – Professional Organization



- Membership
- IEOM Professional and Student Chapters
- Conferences - USA, EU, Asia, Africa and South America
- IEOM Journal - IJIEOM
- Forums:
 - Global Engineering Education Forum
 - Global Supply Chain and Logistics Forum
 - Industry Solutions Forum
 - Women in Industry and Academia Forum
- Certification – LSS, FMEA, GD&T, FTA
- Awards and Fellows
- Newsletters

 **5th African International Conference on Industrial Engineering & Operations Management**
Johannesburg/Pretoria, South Africa
April 23-25, 2024, Venue: CSIR ICC



UNISA



IEOM Global Council



Professor Charles Mbohwa
Past Pro-Vice Chancellor Strategic Partnerships and Industrialisation University of Zimbabwe
Mt Pleasant, Harare, Zimbabwe



Aaron Rubel
University Research & Technology Partnerships Manager
Airbus Americas
Mobile, Alabama, United States



Prof. Vitor Mendes Caldana
Federal Institute of Sao Paulo (IFSP)
Sorocaba Campus
Sorocaba, Sao Paulo
Brazil



Eldon Caldwell, Ph.D., Sc.D., Ed.D.
President, 2023 - 2025
Full Professor/Cathedricus
Industrial Engineering Department
University of Costa Rica
San Jose, Costa Rica



Prof. Jose Arturo Garza-Reyes
Prof. of Operations Management
Head of the Centre for Supply Chain Improvement
College of Business, Law and Social Sciences
Derby Management School
University of Derby, UK



Dr. Ali Elkamel
Professor
Department of Chemical Engineering
University of Waterloo
Canada



Adedeji B. Badiru, Ph.D., PE, FIIIE
Dean, Graduate School of Engineering and Management
Professor of Systems Engineering
Air Force Institute of Technology
Wright-Patterson Air Force Base
Dayton, Ohio, USA



Dr. Abdelaziz Berrado
Chair and Professor
Dept. of Industrial Engineering
The Ecole Mohammadia d'Ingénieurs (EMI), Mohammed V University,
Rabat, Morocco



Professor Linda Zhang
Full Professor of Operations Management
Department of Management
IESEG School of Management
Paris, France



Dr. Ir. Wahyudi Sutopo, ST.
Professor, Department of Industrial Engineering
Vice Dean, Faculty of Engineering, Universitas Sebelas Maret (UNS),
Surakarta, Indonesia



Prof. Hamid Parsaei, Ph.D., PE
President, 2021-2023
Professor, Industrial and Systems Engineering and Director, College of Engineering Accreditation and Assessment, Texas A&M University,
College Station, USA



Luz María Valdez de la Rosa, Ph. D.
Professor
School of Engineering and Technology
Universidad de Monterrey
Nuevo León, Mexico

Conferences

Annual Conference

2010 – Dhaka
2011 – Kuala Lumpur
2012 – Istanbul
2014 – Bali
2015 – Dubai
2016 – Kuala Lumpur
2017 – Rabat
2018 – Bandung
2019 – Bangkok
2020 – Dubai
2021 – Singapore
2022 – Istanbul
2023 – Manila
2024 – Dubai
2025 - Singapore

North American

2015 – Orlando
2016 – Detroit
2018 – Washington, DC
2019 – Toronto
2020 - Detroit
2021 – Monterrey
2022 – Orlando
2023 – Houston
2024 – Washington DC

European

2017 – UK
2018 – Paris
2019 – Czech Republic
2021 – Rome, Italy
2022 – Rome, Italy
2023 – Lisbon
2024 – Munich, Germany

Asian Conference

2021 – Harbin, China
2021 – Surakarta, Indonesia
2022 – Jahor Baru, Malaysia
2023 – Vietnam
2024 - Tokyo

South American

2017 – Bogota
2019 – Costa Rica
2021 – Sao Paulo, Brazil
2022 – Paraguay
2023 – Peru
2024 - Bogota

African Conference

2019 - Pretoria
2020 – Harare
2022 – Nigeria
2023 - Zambia
2024 – Pretoria
2025 - Rabat

Australian Conf.

2022 – Sydney
2023 – Melbourne
2024 - Sydney



5th African International Conference on
**Industrial Engineering &
Operations Management**
Johannesburg/Pretoria, South Africa
April 23-25, 2024, Venue: CSIR ICC



UNISA



IEOM Publication Database



IEOM Index

Forefront of Scholarly Publications

index.ieomsociety.org

DOI



NOW PUBLIC



5th African International Conference on
**Industrial Engineering &
Operations Management**
Johannesburg/Pretoria, South Africa
April 23-25, 2024, Venue: CSIR ICC



UNISA



IEOM Student Chapters



IEOM Society International



**5th African International Conference on
Industrial Engineering &
Operations Management**
Johannesburg/Pretoria, South Africa
April 23-25, 2024, Venue: CSIR ICC



UNISA



2024 IEOM South Africa Awards

IEOM Student Chapters around World

Algeria	1. Adrar University	84. Ramaiah University of Applied Sciences	164. Pontificia Universidad Católica del Perú (PUCP)
Australia	2. Queensland University of Tech., Brisbane	85. Nawab Shah Alam Khan College Eng & Tech (NSAKCET)	165. Universidad Privada del Norte (UPN)
3. UNSW-Canberra	4. University of Melbourne	86. Global Institute Of Eng and Technology, Hyderabad	166. Universidad Continental (UCContinental)
5. University of Wollongong	6. University of Adelaide	87. VNR Vignana Jyothi Institute of Eng and Technology	167. Universidad de Ingeniería y Tecnología (UTEC)
Bahrain	7. University of Bahrain	88. Siddhartha Institute of Engineering & Technology	168. Universidad Nacional de Ingeniería (UNI)
Bangladesh	8. Ansanullah University of Sci & Tech (AUST)	89. Osmana University – The University College of Eng	169. University of San Martín de Porres (USMP)
9. Bangladesh Institute of Management (BIM)	10. Bangladesh University of Textiles (BUTEK)	90. YTI Mumbai – Vardhaman Jibab Technologic Institute	Philippines
11. BUET	12. CUET	91. BML Munjal University, Gurugram, India	170. Bulacan State University, Malolos City, Bulacan
13. Daifodil International University (DIU)	14. DUET, Gazipur	92. AKTU University, Kanpur, India	171. LPU Laguna
15. European University of Bangladesh	16. International Islamic University of Chittagong	93. Mufakkhamjah College of Eng. and Tech, Hyderabad	172. Mapua University
17. IUBAT	18. Jessore University of Science and Technology	94. Methodist College of Engineering and Technology	173. De La Salle University (DLSU) Manila
19. Khulna University (KU)	20. Khulna University of Eng and Tech (KUET)	95. Vardhaman College of Engineering	174. Adams University
21. Military Institute of Science and Technology	22. National Institute of Textile Eng & Res (NITER)	Indonesia	175. CEBU Technological University
23. Rajshahi University (RU)	24. SUST	96. Atma Jaya Catholic University	176. University of San Jose-Recoletos
25. University of Chittagong	26. World University Bangladesh (WUB)	97. Bina Nusantara University (Binus), Indonesia	Portugal
27. BAUST	28. American International University-Bangladesh (AIUB)	98. Institut Teknologi Bandung	177. ISEL – Instituto Superior De Engenharia de Lisboa
Botswana	29. University of Botswana	99. Institut Teknologi Sepuluh Nopember (ITS)	Qatar
Brazil	30. Federal University of Sao Carlos (UFSCar)	100. Sampoerna University, Jakarta	178. Qatar University
31. Federal University of Santa Catarina (UFSC)	32. University of Sao Paulo (USP) – Sao Carlos	101. Shipbuilding Institute of Polytechnic Surabaya	Saudi Arabia
33. Federal Institute of Sao Paulo, Sorocaba	34. FACENS University, Sorocaba	102. Tarumanagara University	179. Alfaisal University
Canada	35. Concordia University	103. UIN Sultan Saent Kasim, Riau	180. Effat University
36. Humber Institute of Tech and Adv Learning	37. Polytechnic Montreal	104. Universitas Diponegoro (Undp)	181. King Abdulaziz University (KAU)
38. University of New Brunswick at Fredericton	39. University of Waterloo	105. Universitas Gadjah Mada (UGM)	182. King Abdulaziz University, Rabigh
40. University of Windsor	Colombia	106. Universitas Iqra Buru	183. King Fahd Univ of Petroleum and Minerals (KFUPM)
41. Fundación Univ. Tecn. Comfenalco, Cartagena, Bolivar	42. University of Rosario, Bogota	107. UIN Sunan Kalijaga, Yogyakarta	184. King Khalid University, Abha
43. University of Quindío	44. Universidad de San Buenaventura, Cali, Valle	108. Universitas Islam Negeri Alauddin Makassar	185. King Saud University (KSU)
45. Institución Universitaria Colegios de Colombia	46. Escuela Colombiana de Ingeniería Julio Garavito	109. Universitas Sebelas Maret (UNS), Surakarta	186. Umm Al-Qura University (UQU)
47. Universidad Católica de Colombia	48. Universidad Santo Tomás de Aquino	110. University of Indonesia	187. Princes Nourah University (PNU)
49. Fundación Universitaria Internacional de La Rioja	50. Universidad América	111. Universitas Sumatera, Utara Medan	188. Prince Sattam Bin Abdulaziz University
51. Universidad Militar Nueva Granada (UMNG)	52. Universidad Cooperativa de Colombia (UCC)	112. Nardama University, Surabaya	189. Prince Sultan University (PSU)
Costa Rica	53. University of Costa Rica	113. Universitas Pakuan, Bogor	190. Taibah University
Czech Republic	54. University of West Bohemia, Pilsen	114. Trilogi University	191. University of Tabuk
Ecuador	55. Technical University of Ambato	Iran	192. Taibah University
Egypt	56. Zagazig University	115. MehrAcademy University, Guilan	193. University of Business and Technology
57. Fayoum University	58. British University in Egypt	116. University of Eyaanakey	194. King Khalid University, Abha
Ethiopia	59. Bahir Dar Institute of Technology	117. Technical and Vocational University (TVU)	195. University of Bisha
Finland	60. University of Vaasa	Iraq	196. Taif University
France	61. IESEG School of Management	118. Babilon University	South Africa
62. Lorraine University, Metz	Ghana	Israel	197. Durban University of Technology (DUT)
63. Technological Education Institute (TEI), Larissa	Greece	119. Sapir Academic College	198. Tshwane University of Technology (TUT)
64. Accra Technical University	Haiti	120. Shamoon College of Engineering (SCE), Ashdod	199. University of Johannesburg (UJ)
65. Université Quisqueya	India	Italy	200. University of South Africa (UNISA)
66. College of Eng and Tech, Bhubaneswar, Odisha, India	67. College of Engineering Guindy, Chennai	121. University of Bologna	201. Vaal University of Technology (VUT)
68. Guru Nanak Dev Engineering College	69. Pandit Dendayal Petroleum Univ., Gujrat	122. University of Salerno	Sn Lanka
70. P. D. A. College of Engineering, Gulbarga	71. Velore Institute of Technology	123. Ashikaga University	202. University of Kelaniya
72. Veda Jyothi Institute of Technology, Hyderabad	73. Universal College of Eng & Tech (UCET), Guntur	Jordan	203. University of Peradeniya
74. National Institute of Technology (NIT), Warangal	75. Jawaharlal Nehru Technological University Hyderabad	124. Hashemite University	Sudan
76. IITS, India	77. Birla Institute of Tech & Sciences (BITS Pilani)	Kenya	204. Sudan University of Science and Tech Khartoum
78. Amrita School of Business – Bangalore	79. Amrita School of Arts and Sciences, Mysuru	125. Kenyatta University, Nairobi	Thailand
80. Amrita School of Business, Coimbatore	81. Aligarh Muslim University, Aligarh	Libya	205. Chulalongkorn University, Bangkok
82. Mohan Bashtant Singh College Eng & Tech., Jammu	83. Baba Banda Singh Bahadur Eng College	126. Libyan Academy	206. Chiang Mai University
		Malaysia	Turkey
		127. Universiti Malaysia Sabah (UMS)	207. Turkish-German University
		128. Universiti Putra Malaysia (UPM)	UAE
		129. Universiti Teknologi Malaysia (UTM)	208. University of Science & Technology of Fujairah
		130. Universiti Tun Hussein Onn Malaysia (UTHM)	UK
		131. Universiti Utara Malaysia (UUM)	209. University of Derby
		Mexico	210. University of the West of England, Bristol
		132. Instituto Politécnico Nacional (IPN), Mexico	USA
		133. Universidad del Caribe, Cancun	211. Central Connecticut State University
		Morocco	212. Eastern Michigan University
		134. Alkhawayn University	213. Lawrence Technological University, Michigan
		135. Ecole Mohammedia d'Ingénieurs (EMI)	214. University of the District of Columbia
		136. Sidi Mohamed Ben Abdellah University of Fez	Indiana State University
		137. N. School of Appl Sci. Kenitra, Ibn Tofail Univ	216. Florida Polytechnic University
		138. Ecole Supérieure De Technologie, Fez	217. Buffalo State College
		Mozambique	218. Southern Arkansas University
		139. Eduardo Mondlane University	219. Western Michigan University
		Namibia	220. Loyola University Chicago
		140. National Univ. of Sci. and Tech. in Windhoek	221. Minnesota State University, Mankato
		141. Kathmandu University	222. Central State University
		142. Tribhuvan University	223. University of Central Florida
		Nigeria	Venezuela
		143. Covenant University	224. Catholic University Andrés Bello, Caracas
		144. University of Ibadan	Vietnam
		145. University of Nigeria, Nsukka	225. CFVG, Ho Chi Minh City, Vietnam
		146. University of Benin	Zambia
		147. Olabisi Onabanjo University	226. University of Zambia
		Oman	227. Copperbelt University
		148. Sultan Qaboos University	228. Evelyn Hone College
		149. Middle East College	Zimbabwe
		Pakistan	229. University of Zimbabwe, Harare
		150. Dawood University of Eng and Technology, Karachi	230. National University of Science and Technology
		151. Government College University Faisalabad	231. Harare Institute of Technology (HIT)
		152. Mehran University of Eng and Tech., Jamshoro, Sindh	232. Women's University in Africa (WUA)
		153. Riphah International University, Lahore Campus	233. Chirhoyi University of Technology (CUT)
		154. University of Engineering and Technology, Lahore	High School Chapters
		155. UOT – Nawshera	234. Bay Area of San Francisco & San Jose, CA
		156. Information Technology Univ. of the Punjab, Lahore	235. Arongghata, Khulna, Bangladesh
		Papua New Guinea	
		157. Papua New Guinea University of Technology	
		Pargway	
		158. National University of Asundon	
		159. Universidad del Cono Sur de las Américas	
		Peru	
		160. National Univ. of San Antonio Abad, Cusco	
		161. Universidad de Lima (ULIMA)	
		162. Universidad Peruana de Ciencias Aplicadas (UPC)	
		163. Universidad Ricardo Palma (URP)	



IEOM Student Chapters



5th African I
Industri
Operati
Johannesb
April 23-25!



2024 IEOM
South Africa
Awards

IEOM Student Chapter



Chinhoyi University of Technology (CUT), Zimbabwe



5th African International Conference on
**Industrial Engineering &
Operations Management**
Johannesburg/Pretoria, South Africa
April 23-25, 2024, Venue: CSIR ICC



UNISA | 
university
of south africa

SOMA
Society of
Operations Management
in Africa



2024 IEOM
South Africa
Awards

IEOM Student Chapter



University of Johannesburg, South Africa 2023-2024 Committee



5th African International Conference on
**Industrial Engineering &
Operations Management**
Johannesburg/Pretoria, South Africa
April 23-25, 2024, Venue: CSIR ICC



UNISA



2024 IEOM
South Africa
Awards

IEOM Student Chapter

University of South Africa (UNISA)



5th African International Conference on
**Industrial Engineering &
Operations Management**
Johannesburg/Pretoria, South Africa
April 23-25, 2024, Venue: CSIR ICC



UNISA



2024 IEOM
South Africa
Awards

IEOM Student Chapter

Vaal University of Technology (VUT)



5th African International Conference on
**Industrial Engineering &
Operations Management**
Johannesburg/Pretoria, South Africa
April 23-25, 2024, Venue: CSIR ICC



UNISA



Tshwane University of Technology (TUT)



2024 IEOM
South Africa
Awards

IEOM Student Chapter at KFUPM



5th African International Conference on
**Industrial Engineering &
Operations Management**
Johannesburg/Pretoria, South Africa
April 23-25, 2024, Venue: CSIR ICC



UNISA



2024 IEOM
South Africa
Awards

IEOM Student Chapter at AIUB



5th African International Conference on
**Industrial Engineering &
Operations Management**
Johannesburg/Pretoria, South Africa
April 23-25, 2024, Venue: CSIR ICC



UNISA





**IEOM Student Chapter at JNTUH University College of Engineering
Hyderabad, Kukatpally, Hyderabad, Telangana, India**



2024 IEOM
South Africa
Awards

IEOM Student Chapter

University of Indonesia



5th African International Conference on
**Industrial Engineering &
Operations Management**
Johannesburg/Pretoria, South Africa
April 23-25, 2024, Venue: CSIR ICC



UNISA



2024 IEOM
South Africa
Awards

IEOM Student Chapter

University of Costa Rica



5th African International Conference on
**Industrial Engineering &
Operations Management**
Johannesburg/Pretoria, South Africa
April 23-25, 2024, Venue: CSIR ICC



UNISA



2024 IEOM
South Africa
Awards

IEOM Student Chapter

Université Quisqueya, Haiti



5th African International Conference on
**Industrial Engineering &
Operations Management**
Johannesburg/Pretoria, South Africa
April 23-25, 2024, Venue: CSIR ICC



UNISA



2024 IEOM
South Africa
Awards

IEOM Student Chapter

FACENS University, Sorocaba, SP, Brazil



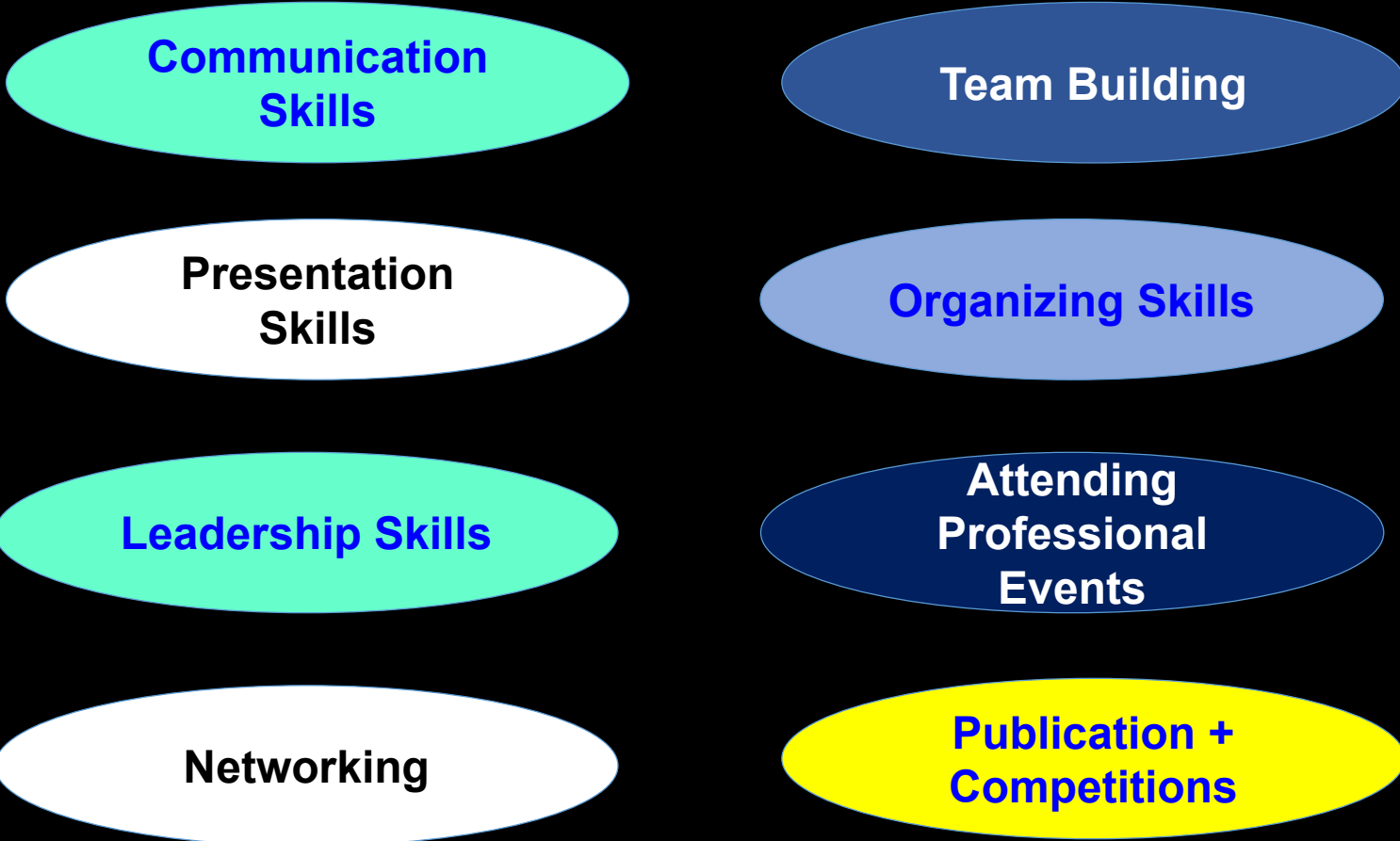
5th African International Conference on
**Industrial Engineering &
Operations Management**
Johannesburg/Pretoria, South Africa
April 23-25, 2024, Venue: CSIR ICC



UNISA



IEOM Student Chapter Student Portfolio Development



2024 IEOM
South Africa
Awards



IEOM Awards



5th African International Conference on
**Industrial Engineering &
Operations Management**
Johannesburg/Pretoria, South Africa
April 23-25, 2024, Venue: CSIR ICC



UNISA



IEOM Fellow



**5th African International Conference on
Industrial Engineering &
Operations Management**
Johannesburg/Pretoria, South Africa
April 23-25, 2024, Venue: CSIR ICC



UNISA | 
university
of south africa

SOMA
Society of
Operations Management
in Africa



IEOM Fellow

Dr. Grace Mukondeleli Kanakana-Katumba
Executive Dean

Faculty of Engineering and the Built Environment
Tshwane University of Technology
Montana, Pretoria, South Africa



Distinguished Academic Leadership Award



Professor Puleng LenkaBula
Principal and Vice-Chancellor
University of South Africa



5th African International Conference on
**Industrial Engineering &
Operations Management**
Johannesburg/Pretoria, South Africa
April 23-25, 2024, Venue: CSIR ICC



UNISA



Distinguished Industry Leadership Award



Portia Nkuna
Managing Director
Fazi Rail
Pretoria, South Africa



5th African International Conference on
**Industrial Engineering &
Operations Management**
Johannesburg/Pretoria, South Africa
April 23-25, 2024, Venue: CSIR ICC



UNISA



Outstanding Academic Award

Prof. Daniel Mashao
Executive Dean

Faculty of Engineering and the Built Environment
University of Johannesburg
Johannesburg, Gauteng, South Africa



Distinguished Educator Award

Prof Ayodejii Emmanuel Oluleye
Former Dean, Faculty of Technology
University of Ibadan
Nigeria



Distinguished Educator Award

Dr. Fidelis Abam

Full Professor

Department of Mechanical Engineering

University of Calabar

Calabar, Cross River, Nigeria



Outstanding Researcher Award

Prof Jan Harm Christiaan Pretorius
Professor

Postgraduate School of Engineering Management
Faculty of Engineering and the Built Environment
University of Johannesburg
Bunting Road Campus, South Africa



Distinguished Professor Award in Nanotechnology for Water Treatment

Professor Bhekie Mamba
Executive Dean

College of Science, Engineering and Technology
University of South Africa



Distinguished Professor Award in Climate Change Adaptation

Dr. Obert Jiri

Professor, University of Zimbabwe

**Permanent Secretary, Ministry of Lands,
Agriculture, Fisheries, Water and Rural
Development**

Harare, Zimbabwe



Distinguished Educator Award in Knowledge Management Systems

Dr Tafadzwa Mudondo
Principal
Harare Polytechnic
Zimbabwe



UNISA



Distinguished Professor Award in Manufacturing Engineering

Professor Akii Ibhádode

**Vice Chancellor and Shell Professor of Lightweight
Automobile Engine Development**

Federal University of Petroleum Resources

Effurun, Delta State, Nigeria



Outstanding Conference Leadership Award



Dr Anthea Amadi-Echendu
Senior Lecturer of Operations Management
University of South Africa



UNISA



Outstanding Professor in Supply Chain and Logistics

Dr. Ertunga C. Ozelkan

Professor of Industrial and Systems Engineering
Department of Systems Engineering & Engineering
Management

Associate Director of the Center for Lean Logistics and
Engineered Systems

University of North Carolina at Charlotte, USA



Innovation Award

Professor Marcia Mkansi

**College Head: Research, Post-graduate Studies,
Innovation and Commercialisation**

**Professor Operations and Supply Chain
Management**

University of South Africa



Innovation Award

Talifhani Banks
Founder of Spaza Eats
City of Cape Town
Western Cape, South Africa



Outstanding Education Award

Dr. Nelson Madonsela
Head of Department
Quality and Operations Management
University of Johannesburg
South Africa



Keynote Contributor Award

Dr. James J. Cochran

**Professor of Applied Statistics and the Mike and
Kathy Mouron Chair**

Culverhouse College of Business

The University of Alabama

Tuscaloosa, AL, USA



Keynote Contributor Award

Dr. Ahmed Deif

**Associate Professor of Operation and Supply
Chain Management**

Orfalea College of Business

California Polytechnic State University

San Luis Obispo, CA 93407, USA



Outstanding Teaching Award

Prof Lagouge Tartibu
Professor in Mechanical Engineering
Department of Mechanical and Industrial
Engineering Technology, FEBE
University of Johannesburg
South Africa



Emerging Researcher Award

Prof. Sugandren Naidoo
Associate Professor
Department of Development Studies
University of South Africa
South Africa



Outstanding Conference Contributor Award

Prof Olufemi Adetunji
Professor and Head

Department of Industrial and Systems Engineering
Engineering, Built Environment and Information Technology
University of Pretoria, South Africa



Outstanding Conference Contributor Award



Prof Pule Kholopane
Vaal University of Technology
South Africa



5th African International Conference on
**Industrial Engineering &
Operations Management**
Johannesburg/Pretoria, South Africa
April 23-25, 2024, Venue: CSIR ICC



UNISA



Outstanding Conference Contributor Award



Prof Nita Sukdeo

Associate Professor

Department of Quality and Operations Management

Engineering and the Built Environment

University of Johannesburg

South Africa



Outstanding Conference Contributor Award

Dr. Kemlall Ramdass
Director (Acting)

School of Engineering and Built Environment
University of South Africa
South Africa



Outstanding Conference Contributor Award

Dr. Oludolapo Akanni Olanrewaju
Head and Associate Professor
Department of Industrial Engineering
Durban University of Technology (DUT)
Durban, South Africa



Outstanding Conference Contributor Award

Prof Manduth Ramchander
Head of Department & Associate Professor:
Department of Operations and Quality Management
Durban University of Technology
Durban, South Africa



Outstanding Society Regional Chapter Growth Leadership Award



Ms. Sebonkile Thaba

Lecturer, Transport and Supply Chain Management

University of Johannesburg

Johannesburg, Gauteng, South Africa

Director of IEOM SADC-Regional Operations



IEOM Appreciation Award



Dr. Benhur Satir
Department of Industrial Engineering
Çankaya University
Turkey



IEOM Appreciation Award

Prof. Joe Amadi-Echendu
Professor (Retired)

Graduate School of Engineering and Technology Management
University of Pretoria
South-Africa



IEOM Appreciation Award

E Shirl Donaldson
Assistant Professor of Engineering
College of Innovation and Technology
The University of Michigan-Flint
USA



IEOM Appreciation Award

Dr. Tamer Adel Mohamed
Professor of Industrial Engineering
The British University in Egypt
Cairo, Egypt



Outstanding Student Leadership Award



Tabitha Lavonne Pillay
Bachelor's Degree, Marketing
University of South Africa



Outstanding Student Award

Siphosakhe Dladla

Thato Lelaka

Gugu Morape

Romeo Matshipa

Lerato Mooketsi

Tlangelani Mongwe

Rinah Kgoale

University of Johannesburg, South Africa



Competition Winners



UNISA



Undergraduate Student Paper Competition Sponsored by Siemens

SIEMENS

First Place

ID 212 Analysis of Filipino Consumer Perception on Shopping Using Credit Cards in the Philippines: A Multi Regression Approach

Yoshiki B. Kurata, Department of Industrial Engineering, Research for Social
Sciences and Education, University of Santo Tomas (UST), Manila, Philippines

Trisha Maye C. Almendares, Ma. Camille Beatrice M. Concepcion, Andrea Marie A.
Nolido, and Wayne Nicole T. Salvador, Department of Industrial Engineering,
University of Santo Tomas (UST), Manila, Philippines



Undergraduate Student Paper Competition Sponsored by Siemens

SIEMENS

Second Place

ID 203 Lean Warehousing, 7S and SLP tools to improve productivity in the inspection and storage process in a Spare Parts Warehouse of an Automotive Retail Company

Ysrael Arturo Añazco-Alavedra, Universidad de Lima, Perú

Juan Carlos Quiroz-Flores, Research Professor, Facultad de Ingeniería y Arquitectura, Universidad de Lima, Perú



Undergraduate Student Paper Competition Sponsored by Siemens

SIEMENS

Second Place

**ID 189 Improvement in a Flexible Packaging Company
Through Standardization and Preventive Maintenance
Arenas Mayerli and Murillo Esthefani, Department of
Industrial Engineering, University of Lima, Peru**



UNISA



Undergraduate Student Paper Competition Sponsored by Siemens

SIEMENS

Third Place

ID 256 A Brewing Solution: Utilizing Spent Coffee Grounds as an Alternative Biomass Fuel

Gerald M. Araco, Francis Miguel C. Flores, Andre Louis C. Ollica,
Ralph Daniel C. Paglinawan, and Damirson A. Co, MSIE, PIE,
Department of Industrial Engineering, University of Santo Tomas,
España Blvd., Sampaloc, Manila, Philippines



Undergraduate Research Competition Sponsored by Daikin Applied



First Place

**ID167 Willingness to pay for second generation bioethanol: a
contingent valuation approach**

Vanessa Fiorella Alvarado Núñez, Juan Andrés Santa Cruz Mogollón,
Jose Antonio Taquíá Gutiérrez, and Juan Manuel Machuca De Pina,
Facultad de Ingeniería y Arquitectura, Universidad de Lima, Perú



Undergraduate Research Competition Sponsored by Daikin Applied



Second Place

ID 257 Determining Environmental Factors Affecting Academic Performance of 4th Year Industrial Engineering Students: An Experimental Student

Lloyd D. Atienza, Scheneil Mae A. Belmonte, Carl Joaquin Campos, and Jose Jhudiel M. Canlas, Department of Industrial Engineering, University of Santo Tomas, España Boulevard, Sampaloc, Manila, 1008, Philippines

Jesselyn B. Alcain, MS, Faculty, Industrial Engineering Department, University of Santo Tomas, Sampaloc, Manila, 1008, Philippines



Undergraduate Research Competition Sponsored by Daikin Applied



Third Place

Paper ID: 044 Talent acquisition – A lean recruitment process design

Njabulo NkosiS'phile Mhlungu, School of Industrial Engineering, North-west University, Potchefstroom, South Africa

Rojanette Coetzee, School of Industrial Engineering, North-west University, Potchefstroom, South Africa



Graduate Student Paper Competition sponsored by Eaton



First Place

ID 222 Enhancement Study on Lumen Depreciation & Thermal Management System in Commercial LEDs Bulb from a Product Lifecycle Perspective

Fakir Sheik Zihad, Graduate Student, MSIE, Lamar University, Beaumont, Texas, USA

Mrinmoy Sen, Rajshahi University of Engineering and Technology, Rajshahi, Bangladesh

Fardin Sabahat Khan, University of Delaware, Newark, Delaware, USA

Md Siam Taluckder, Engineer, Lamar University, Beaumont, Texas, USA

Fozlur Rayhan, Engineer, Master's in Electrical Engineering, Lamar University, Texas, USA

Sohel Rana, Engineer, Master's in Electrical Engineering, Lamar University, Beaumont, Texas, USA

Nur Mohammad Ali, Master's in Industrial Engineering, Lamar University, Beaumont, Texas, USA



Graduate Student Paper Competition sponsored by Eaton



Second Place

ID 101 The Impact of Failed Infrastructure Projects in Municipalities

Owen Molaudzi, Bheki Makhanya and Jan Harm C Pretorius,
Postgraduate School of Engineering Management, Faculty of Engineering
and the Built Environment, University of Johannesburg, South Africa



Graduate Student Paper Competition sponsored by Eaton



Third Place

ID 19 A Decision Support Tool for The Improved Processing of Yellowfin Sole Fillets At A Namibian Seafood Production Company

Marthinus Marais, Industrial Engineer Graduate, School of Industrial Engineering, Faculty of Engineering, North-West University (NWU), Potchefstroom Campus, South Africa
Maria van Zyl-Cillié, Lecturer, School of Industrial Engineering, Faculty of Engineering, North-West University (NWU), Potchefstroom Campus, South Africa



Graduate Student Paper Competition sponsored by Eaton



Fourth Place

ID 158 Assessing Drill Rig Availability Through Maintenance and Mean Time to Repair

Kemlall Ramdass and Simon Phuluwa, College of Science,
Engineering and Technology, Department of Industrial Engineering,
University of South Africa, Johannesburg, Florida, South Africa



Masters Thesis Competition

First Place

ID 99 Assessing strategies to mitigate cable theft in the South African Railway Sector

Muhle Mthombeni, Bheki Makhanya and Jan Harm C Pretorius,
Postgraduate School of Engineering Management, University of
Johannesburg, Johannesburg, South Africa



Masters Thesis Competition

Second Place

ID 63 Performance management at Air Force Base Ysterplaat

Bronwyn Swartz and Clint Lester Ah Shene, Faculty of

Engineering and the Built Environment, Cape Peninsula University

of Technology, Cape Town, South Africa



Masters Thesis Competition

Third Place

ID 32 Review of Risks Associated with Six Sigma Deployment in South Africa: A Laboratory Perspective

T. Mbita, Department of Engineering and the Built Environment,
Cape Peninsula University of Technology, South Africa

Dr. B. Swartz, Department of Engineering and the Built Environment,
Cape Peninsula University of Technology, South Africa



Masters Thesis Competition

Fourth Place

ID 150 Design of a Machine to Convert Municipal Solid Waste to Gas

Reabetswe. K.L Seisho, Daramy Vandi Von Kallon, Department of Mechanical and Industrial Engineering Technology, Faculty of Engineering and The Built Environment, University of Johannesburg (UJ), RSA

Kepia Boima Conteh, and Kelleh Gbawuru Mansaray, Department of Mechanical Engineering, Faculty of Engineering and Architecture, University of Sierra Leone (USL), Freetown, Sierra Leone



Doctoral Dissertation Competition sponsored by Airbus



First Place

ID 232 Experts' Consensus on Critical Success Factors for Contract Manufacturing Companies

Trust Taziva Mahove and Stephen Matope, Industrial Engineering
Department, Stellenbosch University, Stellenbosch, South Africa



UNISA



Doctoral Dissertation Competition sponsored by Airbus



Second Place

**ID 181 Implications of Informality on Acquisition of 4IR Technological Innovations
in the Metal Fabrication Industry: A Literature Review**

Onias Sanangura, Ph.D. Student, Graduate School of Business Univ of Zambia, Zambia
Bupe Getrude Mwanza, Graduate School of Business, University of Zambia, Zambia



Doctoral Dissertation Competition sponsored by Airbus



Third Place

ID 17 Understanding Value Creation in the Public Sector Through the Application of Lean

Unathi Thango, Department of Operations Management, University of South Africa

Anthea Amadi-Echendu, Senior lecturer, Dept. of Operations Management, University of South Africa

Marcia Mkansi, Professor of Operations Management, College of Economic and Management Sciences,
University of South Africa, South Africa



Senior Design Project Competition sponsored by Tooling Tech Group



First Place

**ID 248 Techno-economic assessment of hydrogen production from
waste plastics in the context of Japan**

Bishwash Paneru, Department of Applied Sciences and Chemical
Engineering, Institute of Engineering, Pulchowk Campus, Tribhuvan
University, Lalitpur, Nepal



Human Factors and Ergonomics Competition sponsored by CINTAS



First Place

ID 266 Perceived Adoption Behavior of Filipinos to the Utilization of Online Banking and E-Wallet Payment Transactions

Jesselyn B. Alcain, Department of Industrial Engineering, University of Santo Tomas (UST), Manila, Philippines

Mary Angela P. Aquino, Gillian Hailey E. Dave, Eloiza Jane C. Fadri and Avienne A. Halabaso, 4th Year Industrial Engineering Students, Department of Industrial Engineering, University of Santo Tomas (UST), Manila, Philippines



Human Factors and Ergonomics Competition sponsored by CINTAS



Second Place

ID 131 Effects of Exposure to Vibration on the Worker

Abdulelah Ali, Department of Industrial Engineering, Jazan

University, Jazan 45142, Saudi Arabia



Human Factors and Ergonomics Competition sponsored by CINTAS



Third Place

ID 278 The Transformative Role of Non-Governmental Organizations (NGOs) in Enhancing Youth Technical Skill Development in Alexandra, Johannesburg

George O Nkere, Jeffery Mhachi & George O Onatu, University
of Johannesburg, South Africa



UNISA



Lean Six Sigma Competition Sponsored by Tooling Tech Group



First Place

ID 10 Applying Lean to The Supply Chain in The Railway Industry

Kemlall Ramdass, Ndivhuho Ndou and Simon Phuluwa, College of Science,
Engineering and Technology, Department of Industrial Engineering,
University of South Africa, Johannesburg, Florida, South Africa



Lean Six Sigma Competition sponsored by Tooling Tech Group



Second Place

ID 176 Achieving Excellence in SMEs: A Deep Dive into Six Sigma Methodologies for Process Improvement

Hossein Soltani and Kuldeep Agarwal, Department of Manufacturing Engineering Technology, Minnesota State University, Mankato, MN, USA



Lean Six Sigma Competition Sponsored by Tooling Tech Group



Third Place

ID 106 The Use of Innovative Mechanical Solutions to Implement Lean Methodologies in a Meat Manufacturing Factory in Egypt

Mustafa Oday, SAP PP Consultant, TechnoVal Information Systems, Cairo, Egypt

Prof. Tamer A. Mohamed, Prof. of Industrial Engineering and Management,
Mechanical Engineering Department, Faculty of Engineering, The British University
in Egypt, Cairo, Egypt



Simulation Competition

First Place

ID 216 Techno-economic Analysis of Methanol and Power Generation from Waste Tyres

Athi-enkosi Mavukwana, Senior Lecturer, Department of Chemical Engineering, School of Engineering, College of Science, Engineering, and Technology, University of South Africa
Nhlanhla Nkosi, NGap Lecturer, Department of Chemical Engineering, Faculty of Engineering and Built Environment, Durban University of Technology (DUT), South Africa

Celestin Sempuga, Associate Professor, Institute for Catalysis and Energy Solutions, College of Science, Engineering, and Technology, University of South Africa (UNISA), South Africa



Simulation Competition

Second Place

ID 87 A Sensor-Aided Pneumatic Bumper Activation System to Reduce the Impact Force During a Vehicle Crash

Boitumelo Gloria Khuthama, Department of Industrial Engineering, Operations Management and Mechanical Engineering, Vaal University of Technology, Vanderbijl park, South Africa
Taiwo Lolade Ladipo, Department of Industrial Engineering, Operations Management and Mechanical Engineering, Vaal University of Technology, Vanderbijl park South Africa
Gbeminiyi John Oyewole, School of Mechanical, Industrial, and Aeronautical Engineering, University of the Witwatersrand, Johannesburg, South Africa



Simulation Competition

Third Place

ID 130 Experimental Modeling and Simulation of Zero-Surface Temperature of Controlled Water Jet Impingement Cooling System for Hot-Rolled Steel Plates

Thomas Okechukwu Onah, Associate Professor, Dept. of Mechanical and Production Engineering, Enugu State University of Science and Technology, Enugu Nigeria
Onyekachi Marcel Egwuagu, Senior lecturer, Dept. of Mechanical and Production Engineering, Enugu State University of Science and Technology, Enugu Nigeria



Simulation Competition

Fourth Place

ID 30 A Literature Review on Process Modelling Tools That are Usable Within A Tertiary Educational Setting

Matthew Baldwin and Marne de Vries, Department of
Industrial and Systems Engineering, University of Pretoria,
South Africa



Supply Chain and Logistics Competition

First Place

ID 234 Supply Chain Resilience Strategies for Managing Disruptions in the Food Supply Chains: A Literature Review Approach

Chisungo Chisungo, Lecturer, Department of Supply Chain Management, School of Entrepreneurship and Business Sciences, Chinhoyi University of Technology (CUT), Chinhoyi, Zimbabwe

Bupe Getrude Mwanza, Senior Lecturer, Graduate Business School, University of Zambia (UNZA), Lusaka, Zambia



Supply Chain and Logistics Competition

Second Place

ID 240 Autonomous Transportation Systems in Manufacturing Enterprises: A Comprehensive Analysis of the State of the Art in Driverless Transport Systems

Franz Ferdinand Anders, Alexander Mewes, Serkan Özmen, Julia Teppan and Manuel Woschank, Research Group SAFdL, Chair of Industrial Logistics, Montanuniversität Leoben, Leoben, Austria



Supply Chain and Logistics Competition

Third Place

ID 112 Assembling to Order and Customer Satisfaction Correlation in The South African Automobile Supply Chain Industry

Dr. Polycarpe Feussi and Prof Charles Mbowha, Faculty Regulations for Engineering and the Built Environment, University of Johannesburg, South Africa, Kingsway Rd and, University Rd, Auckland Park, Johannesburg, South Africa



2024 IEOM
South Africa
Awards



See you at the

6th African IEOM Conference in Rabat, Morocco, April 8-10, 2025



 **5th African International Conference on
Industrial Engineering &
Operations Management**
Johannesburg/Pretoria, South Africa
April 23-25, 2024, Venue: CSIR ICC

