

Keynote Speakers



9:30 am, Tuesday, March 5, 2019 – Welcome Addresses

Dr. Nat Vorayos

Dean, Faculty of Engineering
Chiang Mai University, Thailand

Nat Vorayos has been working for Chiang Mai University since 1992 in the department of Mechanical Engineering right after his graduation. Supported by Royal Thai Government's Scholarships, he continued his graduate degrees in Aeronautics and Mechanical Engineering at California Institute of Technology and Oregon State University, respectively. He previously served Chiang Mai University as a head of department of Mechanical Engineering and the deputy to the president in Research and Student Affairs. In 2010, he became the Vice President of Chiang Mai University and was responsible for research and academic services where he co-established Chiang Mai University's Sciences and Technology Park to support innovation and new businesses in the northern region of Thailand. He continued his administrative career as the Vice President in Physical Facilities and Environment during 2012-2016 when the fleet of electric shuttle-bus was deployed throughout the campus as a part of campus of sustainable planning fulfilling part of CMU's and his goals in sustainability.

Nat Vorayos is currently the Dean of Engineering at Chiang Mai University. He is responsible for the operation and management of 32 degree programs in 7 departments ranging from undergraduate to doctorate degrees. With the research and academic strengths in Renewable

Energy, Energy Management, Thermal Sciences, Logistics, Supplies Chain and Transportation, Life Cycle Assessment of Product and Management, Power Engineering, and Disaster Management, the faculty has engaged and served the industries and the communities throughout the regions. Over 3800 engineering students is under his supervision daily. He has engaged in the sustainable energy systems and led research and academic service projects including dendro power systems and community-based, combined heat, power, and cooling systems. He also established the strong collaboration with the alumni association whose eight thousands registered members have currently embedded into engineering communities. He has also served the Engineering Dean Council of Thailand as the Vice President and worked closely with Engineering Institute of Thailand under the H.M. The King's patronage where he was the chair of northern office during 2013-2016 and the Council of Engineers. Nat Vorayos has been awarded the distinguished administrative decoration from Chiang Mai University in 2019.



9:40 am, Tuesday, March 5, 2019 – Opening Keynote

Dr. Adedeji Badiru

Dean, Graduate School of Engineering and Management
Air Force Institute of Technology, Wright-Patterson AFB, Ohio, USA

Achieving and Sustaining GLOBAL Operational Excellence through Systems Engineering

Dr. Deji Badiru is the Dean and senior academic officer for the Graduate School of Engineering and Management at the Air Force Institute of Technology (AFIT). Dr. Badiru was previously Professor and Head of Systems Engineering and Management at AFIT, Professor and Department Head of Industrial & Information Engineering at the University of Tennessee in Knoxville, and Professor of Industrial Engineering and Dean of University College at the University of Oklahoma, Norman. He is a registered professional engineer (PE), a certified Project Management Professional (PMP), a Fellow of the Institute of Industrial Engineers, and a Fellow of the Nigerian Academy of Engineering. He holds BS in Industrial Engineering, MS in Mathematics, and MS in Industrial Engineering from Tennessee Technological University, and Ph.D. in Industrial Engineering from the University of Central Florida. His areas of interest include mathematical modeling, systems efficiency analysis, and high-tech product development. He is the author of over 30 books, 35 book chapters, 75 journal articles, 115 conference proceedings and presentations. He also has published 30 magazine articles and 20 editorials and periodicals. He is a member of several professional associations and scholastic honor societies. Deji Badiru has won several awards for his teaching, research, and professional accomplishments. He is the recipient of the 2009 Dayton Affiliate Society Council Award for Outstanding Scientists and Engineers in the Education category with a commendation from the 128th Senate of Ohio. He also won 2010 IIE Joint Publishers Book-of-the-Year Award from the Institute of Industrial Engineers. He also won 2010 ASEE John Imhoff Award for his global contributions to Industrial Engineering Education, the 2011 Federal Employee of the Year Award in the Managerial Category from the International Public Management Association, Wright Patterson Air Force Base, the 2012 Distinguished Engineering Alum Award from the University of Central Florida, and the 2012 Medallion Award from the Institute of Industrial Engineers for his global contributions in the advancement of the profession. In February 2013, he was selected as a finalist for the Jefferson Science Fellows (JSF) program by the US National Academy of Sciences and the US Department of State. Dr. Deji was the leader of the AFIT team that won the 2013 Air Force Organizational Excellence Award for Air University C3 (Cost Conscious Culture). His most recent award is the 2015 National Public Service Award at the overall US Air Force level.

Deji Badiru has served as a consultant to several organizations around the world including Russia, Mexico, Taiwan, Nigeria, Ghana, and Canada. He has conducted customized training workshops for numerous organizations including Sony, AT&T, Seagate Technology, U.S. Air Force, Oklahoma Gas & Electric, Oklahoma Asphalt Pavement Association, Hitachi, Nigeria National Petroleum Corporation, and ExxonMobil. He holds a leadership certificate from the University Tennessee Leadership Institute. He has served as a Technical Project Reviewer, curriculum reviewer, and proposal reviewer for several organizations including The Third-World Network of Scientific Organizations, Italy, National Science Foundation, National Research Council, and the American Council on Education. He is on the editorial and review boards of several technical journals and book publishers. He is also a program evaluator for ABET, the international engineering and technology accreditation body. In 2011, Prof. Badiru led a research team to develop analytical models for Systems Engineering Research Efficiency (SEER) for the Air Force acquisitions integration office at the Pentagon. He has led a multi-year composite manufacturing collaborative research between the Air Force Institute of Technology and Wyle Aerospace Group. He is the founder of the Association of Military Industrial Engineers (AMIE).



10:20 am, Tuesday, March 5, 2019 – Opening Keynote II

Devdas Shetty Ph.D, PE

Dean, School of Engineering and Applied Sciences
University of the District of Columbia
Washington, DC, USA

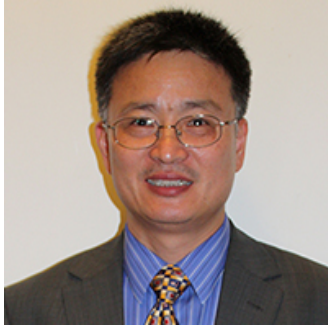
Dean Shetty joined University of the District of Columbia in 2012, having previously served as Dean of Engineering at Lawrence Technological University and Dean of Research at the University of Hartford. While with the University of Hartford, Dr. Shetty was first Chair of the Vernon D. Roosa Endowed Professorship. In addition, he was the Director of the Engineering Applications Center, through which he established partnerships with more than 50 Connecticut industries. During 2008 and 2009, Dr. Shetty served as Dean of the College of Engineering for Lawrence Technological University in Michigan. During that time, he initiated several new academic programs, established partnerships and contributed to curricular innovation. Prior to coming to Hartford, Dr. Shetty held academic positions at the Albert Nerkin School of Engineering at the Cooper Union for the Advancement of Science and Art in New York City. Dr. Shetty is the author of three books and more than 200 scientific articles and six patents.

His books on Mechatronics and Product Design are widely used as a textbooks in many universities around the world. Dr. Shetty's research work has been cited for

original contribution to the understanding of engineering surface measurement, for significant intellectual achievements in mechatronics and for contributions to product design. He is especially well-known for his contributions in establishing partnerships between the University and industries. He is the recipient of academic and research grants from organizations like National Science Foundation, Society of Manufacturing Engineers, US Army, Air force etc.

Dr. Shetty had been leading research efforts in a U.S. Army research project on Unmanned Aerial Vehicles. In partnership with Albert Einstein College of Medicine in New York, he invented the patented mechatronics process for supporting patients. Dr. Shetty has chaired several international conferences and presented keynote lectures. Major honors received by Prof. Shetty include James Frances Bent award for Creativity, the Edward S. Roth National Award for Manufacturing from the Society of Manufacturing Engineers, American Society of Mechanical Engineer Faculty Award, and Society of Manufacturing Engineers Honor award. He is an elected member of the Connecticut Academy of Science and Engineering.

1:30 pm – 2:00 pm, March 5, 2019 – Tuesday Lunch Keynote



Prof. George G.Q. Huang

Chair Professor and Head of Department
Department of Industrial and Manufacturing Systems Engineering
The University of Hong Kong

Collaborative Manufacturing with Blockchain

Prof. George G.Q. Huang is Chair Professor and Head of Department in Department of Industrial and Manufacturing Systems Engineering, The University of Hong Kong. He gained his BEng and PhD in Mechanical Engineering from Southeast University (China) and Cardiff University (UK) respectively. He has conducted research projects in the field of Physical Internet (Internet of Things) for Manufacturing and Logistics with substantial government and industrial grants. He has published extensively including over two hundred refereed journal papers in addition to over 200 conference papers and ten monographs, edited reference books and conference proceedings. His research works have been widely cited in the relevant field. He serves as associate editors and editorial members for several international journals. He is a Chartered Engineer (CEng), a fellow of

ASME, HKIE, IET and CLIT, and member of IIE. Prof. George G.Q. Huang has been serving on editorial boards of a number of international journals. He is Editor for Asia Pacific for International Journal of Computer Integrated Manufacturing, Associate Editor of International Journal of Production Research, Area Editor for Business & Management for International Journal of Research in Engineering Design, and Associate Editor for Journal of Intelligent Manufacturing. Prof. George G.Q. Huang received 2014 First-Class Guangdong Province (Department of Science and Technology) on "Mass-Customized Design and Production System", 2007 First-Class Natural Science Award from Chinese Ministry of Education on "Service-oriented manufacturing execution in extended enterprises", 2007 Outstanding Young Researcher Award (Overseas) from Natural Science Foundation of China and 2001 The University of Hong Kong Outstanding Young Researcher Award.



Dr. Zhi Li (Piers)

Associate Professor in School of Electromechanical Engineering
Guangdong University of Technology (China)
Deputy Director of National Local Joint Engineering Laboratory for Manufacturing Internet-of-Things Technology

Dr. Zhi Li (Piers) is Associate Professor in School of Electromechanical Engineering, Guangdong University of Technology (China), and Deputy Director of National Local Joint Engineering Laboratory for Manufacturing Internet-of-Things Technology. He gained his BEng in Mechanical Engineering from Huazhong University of Science and Technology (China) and PhD in Industrial and Manufacturing Systems Engineering from University of Hong Kong respectively. Dr. Li has led research projects in the fields of Blockchain, Artificial Intelligence, Internet of Things for Manufacturing and has been awarded around 15 million RMB governmental and industrial grants. His research outputs have been implemented in more than 30 enterprises. Dr. Li has published more than 20 journal articles indexed by SCI. He is also the pioneer researcher who provide theoretical and practical

approaches for blockchain technology to be implemented in the manufacturing industry. He serves as guest editor of two special issues: "Blockchain Technology in Industry" in Robotics and Computer Integrated Manufacturing and "Recent Advances in Design Analytics" in International Journal of Computer Integrated Manufacturing.

9:40 am – 10:20 am, March 6, 2019 – Wednesday Morning Keynote I



Mr. Anurat Suthamniurn

Executive Vice President
Corporate Food Processing & Engineering
CPF (Thailand) Public Company Limited
313 C.P.Tower, Silom Road
Silom, Bangkok, Thailand

Innovation for Sustainability

Education:

1984 Master of Industrial Engineering, University of Texas at Arlington, USA.
1981 BS in Industrial Engineering, King Mongkut's University of Technology Thonburi, Thailand.

Work Experience

Present Executive Vice President Corporate Food Processing & Engineering CPF (Thailand) Public Company Limited.
2010 – 2015 Senior Vice President Corporate Food Processing & Engineering CPF (Thailand) Public Company Limited.
2003 – 2010 Vice President Corporate Equipment & Processing CPF (Thailand) Public Company Limited.
2000 – 2003 Assistant Vice President Oversea Marketing & Fast Food Chain CP Merchandising Co.Ltd.
1995 – 2000 General Manager Oversea Marketing: CP Merchandising Co.Ltd.
1994 – 1995 General Manager Saraburi Further Processing Plant Bangkok Produce Merchandising Public Co.,Ltd.
1992 – 1994 Factory Manager Saraburi Further Processing Plant Bangkok Produce Merchandising Public Co.,Ltd.
1991 – 1992 Deputy Factory Manager Saraburi Further Processing Plant
1989 – 1991 Production Planning Saraburi Chicken Integrated at Slaughthouse Plant Department Manager Bangkok Produce Merchandising Public Co.,Ltd. Bangkok Produce Merchandising Public Co.,Ltd.
1987 – 1989 Project Engineer Saraburi Chicken Integrated at Slaughthouse Plant Bangkok Produce Merchandising Public Co., Ltd.
1984 – 1987 Project Analyst Officer The Industrial Finance Corporation of Thailand.
1980 – 1982 Engineer Siam Nissan Automobile Co., Ltd.

10:20 am – 11:00 am, March 6, 2019 – Wednesday Morning Keynote II



Prof. Dr. Thumrongrut MUNGCHAROEN (RUTT)
 Chairperson of Energy and Environment Cluster
 National Science and Technology Development Agency (NSTDA)
 Ministry of Science and Technology, THAILAND
 Kasetsart University, Bangkok, Thailand

Dr. Thumrongrut Mungcharoen, born in Thailand in 1955, is an Associate Professor of Chemical Engineering Department at Kasetsart University. He obtained his Bachelor of Engineering with honors from Chulalongkorn University and PhD from the University of Texas at Austin, USA. He had 2 years experience as a technical engineer at Toray Nylon Thai Co., Ltd. and 2 more years as a lecturer at Chemical Technology Department, Bangkok Technical College. After that, he has been teaching at Kasetsart University.

He has been involved extensively, during the past 25 years, as a consultant/ expert in several projects on cleaner production, 3Rs (reduce, reuse, recycle), life cycle assessment, and eco-design for Thailand Environment Institute (TEI), Federation of Thai Industries (FTI), United Nations Industrial Development Organization (UNIDO), United Nations Environment Programme (UNEP), Asian Productivity Organization (APO), Asia-Pacific Economic Cooperation (APEC), Economic Research Institute for ASEAN and East Asia (ERIA), and other organizations. He used to be an executive board member and a chairperson of education and research sub-committee of the Thailand Network of Eco-efficiency and Cleaner Production (TNEC). He sits in an advisory board of the Industrial Environment Institute under the FTI. His teaching and research interests are focused on

Cleaner Technology, Recycling, Life Cycle Assessment, Eco-Design and Risk Analysis. He has more than 220 technical publications. Representative awards he received are Fellow Award from Petroleum Institute of Thailand in 1999, Outstanding Person- Academic Award from Kasetsart University in 2000, Best Presentation Award from Thai Institute of Chemical Engineering and Applied Chemistry in 2007, Outstanding Person- Academic Service Award from Kasetsart University in 2010, and Excellent Research Award on Alternative Energy from Ministry of Energy in 2015.

He is one of the key persons who initiated the "Thai National Life Cycle Inventory Database" in 2007, "National Scheme of Thai Carbon Footprint Label" in 2009, "Pilot Project on Carbon Footprint for Organizations" in 2010, "Thai Upcycle Carbon Footprint Scheme" in 2015 and "Science Technology & Innovation for SDGs in Thailand" in 2016. He is currently also the Board of Trustees of the Asia Pacific Roundtable for Sustainable Consumption and Production (APRSCP) and the Chairperson of Energy and Environment Cluster under the National Science and Technology Development Agency (NSTDA), Ministry of Science and Technology, Thailand.

1:30 pm – 2:00 pm, March 6, 2019 – Wednesday Lunch Keynote



Mr. Dieter Broeckl
 Senior Vice President and
 Head of Digital Factory (DF) / Process Industry and Drive (PD) Division
 Siemens Limited Thailand

Dieter Broeckl, obtained an Electronic and Electric degree from a Technical College in Nuremberg, Germany. He has 30 years professional experience in Automation Business, Sales and Engineering. The last 15 years he focused on Asia's industrial automation markets and developed business directly with End Customers as well as has build-up a professional partner network to reach and serve the local customer needs.

Today, he is leading a team of more than 200 employees located in Thailand, Myanmar and Cambodia and is coordinating the companies Process Automation business in the ASEAN region.

Assignments relevant to ASIA

- March 2015: Thailand, Head of Divisions, Divisions: Digital Factory & Process Industries and Drives
- 2011 – 2015: Germany, Regional Manager Asia-Pacific region, Divisions: Industrial Automation, Process Industries & Drives
- 2006 – 2011: Singapore, Head of Division, Divisions: Industry Automation
- 2002 – 2006: Germany, Regional Manager ASEAN region, Business Unit: Automation Systems
- 1985 – 2002: Various assignments

7:30 pm – 7:45 pm, Wednesday, March 6, 2019 – Conference Awards Dinner Keynote



Dr. Robert De Souza
 Executive Director
 The Logistics Institute - Asia Pacific
 National University of Singapore (NUS)
 Singapore

Dr. Robert de Souza is the Executive Director of the The Logistics Institute - Asia Pacific (TLI - Asia Pacific). Robert is a Chartered Engineer and a distinguished writer, speaker, consultant and advisor in the area of supply chain management. Prior to this appointment, effective May 1st 2004, Dr Robert de Souza served as Deputy Executive Director (Industry) and IT Director at TLI - Asia Pacific. Previously, Dr de Souza was Executive Vice President (Asia Pacific) for V3 Systems. His extensive tenure in the industry also includes serving as the Corporate Senior Vice President and Global Chief Knowledge Officer at Viewlocity Inc. and co-founder, Vice Chairman and CEO of SC21 Pte, Ltd., a Singapore-based supply chain software firm. As an educator, Dr de Souza is an Adjunct Professor in the School of Industrial and Systems Engineering at Georgia Institute of Technology in Atlanta and also a Senior Fellow in the Department of Industrial and Systems Engineering at the National University of Singapore and has previously served as a professor and in several senior positions in the School of Mechanical and Production Engineering at Nanyang Technological University in Singapore. Dr. de Souza is a member of the Editorial Boards of the International Journal of Computer Integrated Manufacturing and the International Journal of Logistics Research and Applications. Dr. de Souza also serves on the Advisory Panel of The Chartered Institute of Logistics and Transport, Singapore (CILTS), as a Council Member of the Singapore eSupply Chain Management (eSCM) Council and on the Boards of Directors/Advisors of several IT- based corporations.

9:40 am – 10:20 am, March 7, 2019 – Thursday Morning Keynote I

**Dr. Chen-Fu Chien**

Tsinghua Chair Professor

Department of Industrial Engineering & Engineering Management

National Tsing Hua University

Convener, Industrial Engineering and Management Program, Ministry of Sci. & Tech.

Director, Artificial Intelligence for Intelligent Manufacturing Systems (AIMS) Research Center, Ministry of Science & Technology, Hsinchu, Taiwan

Industry 3.5 as Hybrid Strategy to Empower Disruptive Innovations for Smart Production for Emergent Countries

Dr. Chen-Fu Chien is Tsinghua Chair Professor, in the Department of Industrial Engineering & Engineering Management, National Tsing Hua University (NTHU) in Taiwan. Professor Chien is the Convener for Industrial Engineering and Management Program, Ministry of Science & Technology (MOST), Taiwan. He is the Director of Artificial Intelligence for Intelligent Manufacturing Systems (AIMS) Research Center that is one of four national AI centers sponsored by MOST, Taiwan. He has been Principal Investigator for the Semiconductor Technologies Empowerment Partners (STEP) Consortium and the Director for the NTHU-TSMC Center for Manufacturing Excellence in NTHU. He received B.S. with double majors in Industrial Engineering and Electrical Engineering with the Phi Tau Phi Honor from NTHU in 1990. He received M.S. and Ph.D. of Decision Sciences and Operations Research with two minors in Statistics and Business at the University of Wisconsin-Madison, in 1994 and 1996, respectively. He was a Fulbright Scholar in the Department of Industrial Engineering and Operations Research, UC Berkeley, from 2002 to 2003. He also received the Executive Training of PCMPCL from Harvard Business School in 2007. He was a Visiting Professor in Institute for Manufacturing, Cambridge University (sponsored by Royal Society, UK), Visiting Professor in Beijing Tsinghua University (sponsored by Chinese Development Foundation), Visiting Professor in Waseda University (sponsored by Japan Interchange Association Young Scholar Fellowship).

His research mainly concerns the development of digital decision, big data analytics, and optimization methodologies and better analytical solutions for high-tech companies confronting with multi-objective decision problems involved in strategy, manufacturing, and technology that are characterized by uncertainty with massive data and a need for tradeoff among various objectives and justification for the decisions. Dr. Chien and his Decision Analysis Lab Associates have conducted many university-industry collaborative research projects with domain experts. From 2005 to 2008, he had been on-leave to serve as the Deputy Director of Industrial Engineering Division in Taiwan Semiconductor Manufacturing Company (TSMC) that is the world leading wafer foundry. Dr. Chien has 23 invention patents for intelligent manufacturing and published more than 170 journal papers. Dr. Chien has received many awards including the Executive Yuan Award for Outstanding Science & Technology Contribution (2016), the National Quality Award from the Executive Yuan (2012), Distinguished Research Awards (2007, 2011, 2016), Tier-One Principal Investigator (2005-2008), and Best Research Awards from the Ministry of Science & Technology, University Industrial Contribution Award from Ministry of Economic Affairs for Individual Contribution (2009), Distinguished University-Industry Collaborative Research Award from the Ministry of Education (2001), the TECO Award (2018), Distinguished Young Faculty Research Award (2001) and Distinguished University-Industry Collaborative Research Award (2007) by NTHU, Best Paper Award (2001), Distinguished Young Industrial Engineer Award (2001), IE Medal (2010) from Chinese Institute of Industrial Engineers, Best Engineering Paper Award (2002) and Distinguished Engineering Professor (2010) by Chinese Institute of Engineers, TSMC-NTHU Faculty Semiconductor Research Grant (2004), and the Lu, Feng-Chang Award from Chinese Management Association (2007). He received the 2011 IEEE Trans. on Automation Sciences and Engineering Best Paper Award and the 2015 IEEE Trans. on Semiconductor Manufacturing Best Paper Award. Dr. Chien is a fellow of APIEMS, CIIE, and CSMOT. He is Area Editor for Flexible Services and Manufacturing Journal, Associate Editor for IEEE Transactions on Automation Science and Engineering and Journal Intelligent Manufacturing. He is on the Advisory Board of OR Spectrum and editorial board for Computers and Industrial Engineering.



10:20 am – 11:00 am, March 7, 2019 – Thursday, Morning Keynote II

Dr. Josu Takala

Professor, Industrial Management and Materials Management

University of Vaasa, Vaasa, Finland

Prof. Dr. Josu Takala has a vast experience in both industry and academia. He worked for ABB (Strömberg): belongs to ABB (Asea Brown Boveri) Group. ABB Strömberg consists of about 30 independent Ltds in the wide business area of electr. techn., R&D is 8 % of the turnover(3000 Million USD/1995) in the divisions of R&D, Quality Assurance related tasks to automation as researcher and manager in 1979-1992. Educational background: Tampere University of Technology M.Sc (El.Eng) 1980 and Dr.Tech. (El. Eng. and business studies in the University of Vaasa) 1988 as well as Dr. HC in 2009 from the Technical University of Košice. And Dr.HC (Technology Management and Business) in Universiti Tun Hussein Onn Malaysia 2015. Currently he is Professor in Industrial Management at the University of Vaasa 1988-, Finland besides other multiple universities in Finland and abroad such as Thailand, Malaysia, China, Slovakia, Slovenia etc. His field of interest is mainly technology management in the sustainable competitive strategies of private and public organizations in manufacturing networks by utilizing the generic fields of quality management, (technology) strategy, new product development, production management, logistics and environmental management. Over 500 scientific published articles. Co-Editor, Special Issue Editor, Member of Scientific Board in Journals (like MPER, MNG), and invited or key note speaker and Chairman or Honored Chairman in international conferences.

1:30 pm – 2:00 pm, November 1, 2019 – Thursday Lunch Keynote

Submissions Received from Countries and Territories

- | | | | | |
|--------------------|---------------|-----------------|----------------------|-----------------------|
| 1. Algeria | 16. Egypt | 31. Jordan | 46. Papua New Guinea | 61. Trinidad & Tobago |
| 2. Australia | 17. Ethiopia | 32. Kenya | 47. Philippines | 62. Turkey |
| 3. Austria | 18. Finland | 33. Kuwait | 48. Portugal | 63. UAE |
| 4. Bangladesh | 19. France | 34. Malaysia | 49. Qatar | 64. United Kingdom |
| 5. Belgium | 20. Germany | 35. Mauritius | 50. Saudi Arabia | 65. United States |
| 6. Botswana | 21. Ghana | 36. Mexico | 51. Senegal | 66. Vietnam |
| 7. Brazil | 22. Hungary | 37. Morocco | 52. Singapore | 67. Zimbabwe |
| 8. Canada | 23. India | 38. Myanmar | 53. Slovakia | |
| 9. Chile | 24. Indonesia | 39. Namibia | 54. South Africa | |
| 10. China | 25. Iran | 40. Netherlands | 55. South Korea | |
| 11. Colombia | 26. Iraq | 41. New Zealand | 56. Spain | |
| 12. Costa Rica | 27. Ireland | 42. Nigeria | 57. Sri Lanka | |
| 13. Cuba | 28. Israel | 43. Norway | 58. Sudan | |
| 14. Czech Republic | 29. Italy | 44. Oman | 59. Taiwan | |
| 15. Ecuador | 30. Japan | 45. Pakistan | 60. Thailand | |