

- UN. (2019). *Sustainable Development Goals*. www.un.org/sustainabledevelopment/infrastructure-industrialization/
- Van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, 84(2), 523–538. <https://doi.org/10.1007/s11192-009-0146-3>
- Virapongse, A., Brooks, S., Covelli, E., Zedalis, M., Gosz, J., Kliskey, A., & Alessa, L. (2016). A social-ecological systems approach for environmental management. *Journal of Environmental Management*, 178, 83–91. <https://doi.org/10.1016/j.jenvman.2016.02.028>
- The World Bank. (15 de May de 2019). *The World Bank data*. Obtenido de External balance on goods and services (current US\$): https://data.worldbank.org/indicator/NE.RSB.GNFS.CD?contextual=region&locations=MX-US&most_recent_value_desc=true
- Yu, S., Kim, Y., & Kim, M. (2007). Do we know what really drives KM performance? *Journal of Knowledge Management*, 11(6), 39–53. <https://doi.org/10.1108/13673270710832154>

Biographies

Luis A. Mendoza del Villar is a Ph.D. Student, and researcher assistant in the National Polytechnic Institute (IPN) in Mexico He earned B.S. in Industrial Engineering from IPN-UPIICSA, Mexico, Masters in Industrial Engineering from Postgrad & Research Section (SEPI) in the same academic unit, candidate of PhD program of Systems Engineering from Superior School of Mechanical and Electrical Engineering (ESIME z), Mexico. Research state visiting in University of Derby in 2019, UK. Master Luis's work experience in engineering consultancy of material handling for bulk material and unit products with Johnson Controls, Nestle, All tube, the Coca Cola company, Bayer, among others. His research interests include sustainability, industrial development, Productivity, Innovation, manufacturing, and I 4.0. He is a member of the Latin America Systemic Association (ALAS).

Jose Arturo Garza-Reyes is a Professor of Operations Management and Head of the Centre for Supply Chain Improvement at the College of Business, Law and Social Sciences, University of Derby, UK. He is actively involved in industrial projects where he combines his knowledge, expertise and industrial experience in operations management to help organisations achieve excellence in their internal functions and supply chains. He has also led and managed international research projects funded by the British Academy, British Council and Mexico's National Council of Science and Technology (CONACYT). He has published over 100 articles in leading scientific journals, international conferences and four books in the areas of operations management and innovation, manufacturing performance measurement and quality management systems. Areas of expertise and interest for Professor Garza-Reyes include general aspects of operations and manufacturing management, business excellence, quality improvement, and performance measurement. He is a Chartered Engineer (CEng), a certified Six Sigma-Green Belt, and has over eight years of industrial experience working as Production Manager, Production Engineer and Operations Manager for several international and local companies in both the UK and Mexico. He is also a fellow member of the Higher Education Academy (FHEA) and a member of the Institution of Engineering Technology (MIET).

Eduardo Oliva López educator, consultant. Conacyt-Mexico scholar, 1975-1979; Fulbright grantee, 1995. Founding director Ergonomics Research Institute, Mexico City, 1996. He earned his B.S. in Superior School of Mechanical and Electrical Engineering (ESIME z), National Polytechnic Institute, Mexico, 1967. His Master of Science in the same institution in 1975. Ph.D. in Industrial and Systems Engineering, Birmingham University, England, 1976. Founding director Ergonomics Research Institute, Mexico City, 1996. Member Human Factors and Ergonomics Society, International Society Systems Science. Eduardo's research interest is the development of a practical method for evaluation of risk factors causing musculoskeletal problems at work. Two books produced in Spanish: Man-Machine-Work Environment Systems. Ergonomics for Medium and Small Companies.

Octavio Luis Pineda Former Fulbright Scholar and AID Scholar by the US State Department, since 1991 to the date, official member of Mexico's National Researcher System (SNI). (Branch of the National Council of Science and Technology of Mexico, CONACYT, gathering excellence academicians and to foster high-level research activities in the various fields or branches of the human knowledge in the country, relevant to its scientific and socioeconomic development. Visiting professor at several Universities, featuring, Pace University, N.Y.- campus Pleasantville, Department of History and Economics (1986); Center for Research and Studies on Environment and Development, CIIEMAD-IPN (2003), and since 2005, visiting professor and external collaborator, at UPC, Polytechnical University of Cataluña Doctorate Program in Projects Engineering on Environment, Job Risks Assessment and Communication, Barcelona, Spain.