



XXVIII CONGRESO PANAMERICANO
COPIMERA
PERÚ 2021



DEL 14 AL 16 DE OCTUBRE

CONFERENCIAS MAGISTRALES



JULIO GUERRERO, Ph.D.



EDWIN QUINTANILLA, Ph.D.



CARLOS BUSTAMANTE, Ph.D.



ZETTI GAVELAN, M. Sc.



CARLOS ALARCO, M. Sc.



LUCAS BRITO, Ph.D.



ALEX FLORES, Ph.D.



SMAÏNE ZEORUG, Ph.D.



**DEL 14 AL 16
DE OCTUBRE**



8:00 AM A 7:00 PM



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1 Briefs:

1.1 Julio C. Guerrero Ph.D.



Dr. Guerrero assists and guides corporations worldwide with their technological development needs. Dr. Guerrero is the CEO and founder of Cambridge Research and Technology LLC, a leading science and engineering consulting firm that provides research and development (R&D), business development (BD), and strategy services to corporations, governments, individuals, and law firms. He has also been serving on the University Grants Committee in Hong Kong, which is a multinational group of global experts responsible for evaluating and making recommendations on funding Hong Kong's leading research and innovation proposals.

Dr. Guerrero has worked in research and development (R&D) and business development for several years at various companies such as Exponent and Draper Laboratory in Cambridge, MA; Schlumberger Research (SLB) in Houston, TX and Cambridge, MA; and FIAT-IVECO in Torino Italy. Dr. Guerrero's technical experience includes the analysis, design, and development of mechanical systems, including those for extreme and harsh conditions. Among others, he has extensive experience in the energy and oil and gas industries and is the owner of more than 25 patents for mechanical systems worldwide. Dr. Guerrero obtained his master's and doctorate degrees from the University of Texas at Austin and received the Doctorate Honoris Causa from the National University of Engineering in Lima-Peru in 2015. In 2014, he became a member of the Pan American Academy of Engineering (32 countries). He was president of the American Society of Mechanical Engineers (ASME) 2015-2016, an organization of nearly 140,000 engineers in 150 countries. www.linkedin.com/in/julioguerrero

1.2 Adam Paxson, USA



Cf co "Rczuqp"j cu'qxgt"34"{ gctuø'gzzr gtlkpeg'y kj "cf xcpegf " materials and technology development with a focus on engineered surfaces. After receiving a Ph.D. in Mechanical Engineering from MIT, Dr. Paxson led DropWise Technologies Corp., a company developing vapor-deposited coatings for industrial process plants. Adam joined Giner ELX in 2020 before being acquired by Plug Power and now leads a number of electrolyzer technology development programs.

1.3 José Estela Ramírez, MBA.



Mechanical Engineer from National University of Engineering - Lima, Master in Business Administration from ESAN University with a Postgraduate Degree in International Management of Electricity and Renewable Energy from Swed Power - Sweden.

Professor at ESAN in Renewable Energies for the Diploma in Renewables and Master in Energy. He has been operations manager, general manager and energy manager developing renewable energy projects in the Peruvian electricity and mining sector. In 2002 he represented the country at the annual meeting of the UNFCCC in Paris, exposing Peru's solar and hydroelectric

potential. He is currently Director of Peru of the International Observatory of Renewables for Mining and Industry (REMIO), Superintendent of Energy Projects in Compañía Minera Poderosa, International Consultant in Renewable Energy and founder and Director of Sami Energy Consulting, a consulting company that develops and promotes renewable energy projects.

1.4 William Worek Ph.D.



Dr. Worek has been involved, over the last 35 years, in the development of desiccant materials for cooling systems applications, modeling of sorption processes, experimental testing of desiccant material performance and the use of desiccant processes in the design of cooling and dehumidification systems. He holds three patents on sorption system design improvements and has published extensively in archival journals and has given numerous lectures on the subject. Also, he has investigated heat transfer enhancements to when nanofluids are boiled. Dr. Worek is a member of the ASME, Life Fellow of the American Society of Heating Refrigerating and Air-Conditioning Engineers (ASHRAE). He has received Edwin F. Church Medal from ASME recognizing his accomplishments in engineering education and the Frank Kreith Energy Award. In addition, Professor Worek is a past President of the American Nuclear Society, a past President of the American Society of Mechanical Engineers, Executive Editor of Applied Thermal Engineering, Editor-in-Chief of The International Communications in Heat and Mass Transfer and Heat Transfer in Asian Research. Dr. Worek has consulted worldwide. He was Chair, Mechanical and Systems Engineering Board of the Research Grants Council (RGC) of the University Grants Committee (UGC) of Hong Kong and currently serves the University Grants Committee (UGC), Panel Member and Project Monitor of the Collaborative Research Fund (CRF), the Theme-based Research Scheme (TRS) and the Areas of Excellence (AoE) Funding Schemes Projects.

Energy Resources Group and served as a Member of the ASME, Life Fellow of the American Society of Heating Refrigerating and Air-Conditioning Engineers (ASHRAE). He has received Edwin F. Church Medal from ASME recognizing his accomplishments in engineering education and the Frank Kreith Energy Award. In addition, Professor Worek is a past President of the American Nuclear Society, a past President of the American Society of Mechanical Engineers, Executive Editor of Applied Thermal Engineering, Editor-in-Chief of The International Communications in Heat and Mass Transfer and Heat Transfer in Asian Research. Dr. Worek has consulted worldwide. He was Chair, Mechanical and Systems Engineering Board of the Research Grants Council (RGC) of the University Grants Committee (UGC) of Hong Kong and currently serves the University Grants Committee (UGC), Panel Member and Project Monitor of the Collaborative Research Fund (CRF), the Theme-based Research Scheme (TRS) and the Areas of Excellence (AoE) Funding Schemes Projects.

<https://www.linkedin.com/in/william-worek-44661854/>

1.5 César Butrón M.Sc.



Mechanical Electrical Engineer, graduated from the National University of Engineering-Peru in 1984, Masters about Regulation of Public Services at the Pontifical Catholic University of Peru.

Professional with extensive experience in the Peruvian electricity sector, having carried out activities in the three business segments: generation, transmission, and distribution from operational functions to managerial and senior management functions. He has been general manager of distribution companies and participated as a board member in generation, transmission, and distribution companies, serving as chairman of the board of directors in several of them.

He was advisor to the Vice Minister of Energy in the Ministry of Energy and Mines from 2001 to 2006. From 2008 to date, he has held the position of Chairman of the Board of the Committee for the Economic Operation of the System - COES, operator of the National Interconnected System, a body made up of all the agents of the Peruvian electricity market: generators, transmitters, free customers and distributors.

1.6 Jaime F. Sotomayor M.Sc., MBA.



Eng. Mechanic by the Pontifical Catholic University of Peru
MS from Columbia University MBA from ESAN University

40 years of experience in Industry, Banking, Construction and Electricity Generation

General Manager of ARPL Tecnología Industrial S.A. engineering company specialized in the design, construction and permanent consultancy of cement plants and electric power generation.

Director of Unión Andina de Cemento S.A. Largest cement manufacturer in Peru with cement, grinding and concrete factories in Peru, Ecuador, Chile and the United States and Hydroelectric Plants (25 MW) and thermal plants in Peru (42MW)

Director of Compañía Eléctrica El Platanal. 220 and 20 MW hydroelectric plants in Peru
25 years as a volunteer for The American Society of Mechanical Engineers (ASME), currently Leader of the Latin American and Caribbean Region

1.7 Carlos Bustamante, Ph.D.



Our laboratory is involved in the development of novel methods of single-molecule manipulation and detection, such as optical tweezers and single-molecule fluorescence microscopy, and their application to study the behavior of DNA-binding molecular motors and the mechanical unfolding of globular proteins and RNAs. We collaborate with the Tinoco Lab, Marqusee Lab, Dr. Shelley Grimes & Dr. Paul Jardine, Kashlev Lab, Martin Lab, Pogliano Lab, Noller Lab and Liphardt Lab.

Current research areas include: The structural basis of protein-DNA interactions and their relevance in the processes of control of gene expression using direct visualization methods such as the SFM to image various protein-DNA complexes involved in transcription initiation and elongation and various processes of recombination in prokaryotes.

The development of methods of single-molecule manipulation, including the use of SFM cantilevers, optical tweezers, and magnetic tweezers to investigate the mechanical properties of macromolecules. Recently, for example, we used force-measuring optical tweezers to induce complete mechanical unfolding and refolding of individual *Escherichia coli* ribonuclease H (RNase H) molecules.

DNA-binding molecular motors (nucleic acid translocases such as RNA polymerase, DNA polymerase, etc.) using optical tweezers to investigate the dynamics of these molecules and their mechanochemical conversion during translocation, as well as the effect of external force load and nucleotide tri-phosphate concentration on their power and force generation.

Characterizing the mechanism of translocation of FtsK, an *E. coli* translocase using optical tweezers, magnetic tweezers, and direct visualization methods. FtsK is a membrane-bound and septum-localized *E. coli* translocase that coordinates cell division with chromosome segregation. We directly observed the movement of purified FtsK, an *Escherichia coli* translocase, on single DNA molecules.

1.8 Arturo Ledesma, Mech. Eng.



Ingeniero Mecánico graduado en la Pontificia Universidad Católica del Perú con Especialización en Gestión de Hidrocarburos.

Instructor ASME para la región con 30 años de experiencia en la industria de gases (medicinales, industriales y combustibles) y operaciones criogénicas.

Consultor y Perito del Colegio de Ingenieros en asuntos vinculados a gases y líquidos criogénicos.

Miembro del Comité de Normas Técnicas y Conferencista en diversos foros de la especialidad.

Gerente Comercial de CONTUGAS SAC, Concesionaria de Gas

Natural de Ica del Grupo Energía Bogotá-GEB.

Gerente de Proyectos en Peruana de Combustibles.

Gerente de Operaciones en Repsol (División GLP).

Ingeniero de Operaciones en el Terminal de Gas de Amberes-AGT, Bélgica.

Gerente Técnico en Praxair y Linde (ex AGA).

1.9 Gloria Henriquez Díaz Ph.D.



Doctor in Engineering Sciences Automatic Mention (Universidad de Santiago de Chile, 2018)

Master of Engineering Sciences Mention in Electrical Engineering (Universidad de Santiago de Chile, 2015)

Master in Clinical Epidemiology (Universidad de La Frontera, 2020)

Electrical Engineer (University of Santiago de Chile, 2015)

Surgeon (University of Santiago de Chile, 2002).

Innovation Manager at ITMS (2019-2020)

Innovation Manager at Atrys Health (2020-2021)

In union activity

President of the Research, Development and Innovation

Commission of the Chilean College of Engineers (2020-2021)

Member of the Research Commission of CAL Matilda and Women in Engineering (2021)

Advisor in Territorial NGO (2019-2021).

1.10 John Falcioni, M.Sc.



John Falcioni is a multifaceted strategist and business and communications executive recognized as a thought leader in engineering and technology trends, media, and the nonprofit association space. He has led industry-focused business development, high-visibility international projects, and headed award-winning content and sales operations for the past 30 years. He is President and CEO of ThinkLab Alley LLC, a boutique content studio focused on engineering and technology that delivers thought leadership, multidisciplinary content and marketing direction to companies, nonprofits, and governments. Prior, Falcioni was the Chief Development and Communications Officer at Engineers Without Borders USA. Before that, he was Senior Director of Media, Content and Strategic Relationships at ASME (the American Society of Mechanical Engineers). He was also

Editor-in-Chief and Publisher of *Mechanical Engineering* magazine and ASME.org. A recipient of the ASME Distinguished Achievement Award, Falcioni's career spans management-level positions at companies including CMP Media, the CBS Weekend News, Crain Communications, and Times Mirror. He has worked at several national and New York media outlets covering business, government, and politics, and he was a reporter at *The Hartford Courant* in Connecticut. He is a past president of the Association Media & Publishing board of directors. Falcioni has earned a graduate degree in journalism from Columbia University, undergraduate degrees in psychology and communications from Adelphi University, and a certification in digital marketing from the Yale School of Management.

1.11 Zetti Gavelan, M.Sc.

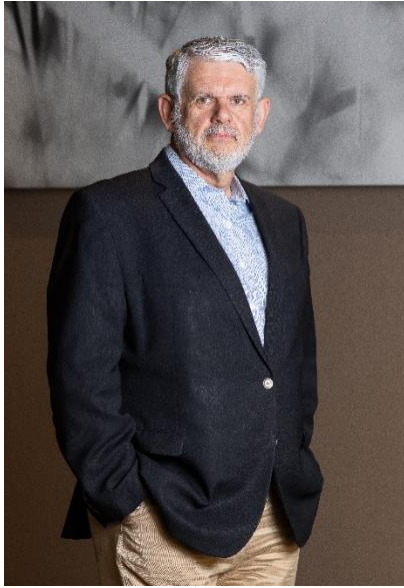


Bachelor of Mining Engineering and CIP Engineer graduated from the Universidad Nacional Mayor de San Marcos. His professional experience is of more than 25 years both in operations and world-class mining projects in Argentina, Brazil, Chile, USA, Mexico and Peru. His most recent positions include the General Manager of Operations with Barrick Gold Corp. at the Veladero mines in Argentina and Lagunas Norte in Peru. He has been regional director of Technical Services for Yamana Gold Inc. for Argentina and Brazil, as well as General Manager of the Cerro Lindo mine of Compañía Minera Milpo in Peru. From 2018 to 2021 he served as Vice President of

Operations at MMG Minera Las Bambas and since April 2021 he has served as Vice President of Operations for Appian Capital Advisory LLP based in London, England.

He is a Master of Science (MSc) in Mining Engineering, Geology and Geophysics from the University of Arizona, Tucson-USA, Executive Master of Business Administration (EMBA) from the Francisco de Vitoria University, Madrid-Spain and is a graduate of the Master's in Development and National Defense of the Center for Higher National Studies CAEN-EPG in Lima-Peru. Likewise, he is a graduate of the specialization programs in Maintenance Management and Mining Development Management at the Faculty of Engineering of the Austral University in Buenos Aires-Argentina.

1.12 Mario Javier Marchese Mecklenburg, Che. Eng.



Diploma in Business Management, School of Industrial Engineering, University of Chile, 1994
Master of Engineering, McGill University, Montreal, Canada.
Mineral Processing Mention, distinguished in the Dean's Honor List as one of the best graduates of his class, 1990 - 1992
Chemical Civil Engineer, Federico Santa María Valparaíso Technical University, Chile. Awarded by the College of Engineers of Chile as the best graduate of the Chemical Civil Engineering specialty at its University, 1982-1988

Since 2020 he has been the leader of the business area at Golder Associates, a member of WSP, for Latin America and the Caribbean, having responsibility for the development of new businesses in the different areas within which the company operates. Along with this, he is part of the board of directors of COSAPI S.A., one of the largest construction companies in

Peru, having served as Global Manager in the copper area at Bechtel; General Manager of Codelco Tech, a subsidiary of Codelco Chile, in the area of innovation and technological development projects.

Member of the network of UDD Ventures Mentors, from which support is provided to entrepreneurs and start-ups in different industries and applications of new technologies.

Until 2017, he served as Vice President of Business Development and Growth for Latin America at Ausenco, after having served between 2014 and 2016 as Country Manager of the Hatch office in Peru.

Global Director of Hatch's renewable energy area from December 2013 to February 2016, in the areas of solar, wind and hydroelectric energy worldwide, being responsible for global operations in this area, promoting its incorporation into industrial operations and mining.

During his career he has worked professionally in different roles, having fulfilled tasks as Project Manager; General Manager in electricity generation companies; and in business development areas for the mining, energy and infrastructure industries.

He has simultaneously worked as a professor in the MBA program of Entrepreneurship and Innovation at the Graduate School; and in the Industrial Engineering career at the Universidad del Desarrollo.

1.13 Miguel Canz, EE. Eng.



Electronic Engineer, certified in Information Security, with more than 18 years leading Technology teams in leading transnational companies in the mining sector, working in Argentina, Chile and Peru. Since 2014 he has worked at MMG - Las Bambas as Regional Manager of Technology - Americas. Previously, I worked as Infrastructure and Communications Manager for Glencore and IT Superintendent for Xstrata Peru, among others.

1.14 Carlos Alarco Proaño M.Sc.



Mechanical Engineer graduated at the PUCP with 29 years of experience in Peru, Germany and France, focused on design, engineering, project management, and business development applied to industrial, mining and aeronautical projects (Airbus Industrie).

Current position: Country Manager (Perú) and President of Latin America at Bechtel Corporation

Others:

Chair of the Peruvian Section of ASME.

Professor of Project Management at *Intercontinental* postgraduate school,

in Lima, Peru.

Vice President of the Board at the American Chamber of Commerce of Peru (AmCham Peru).

Municipal General Manager (2006) and Counselor / Deputy Mayor (2011-2014), in the Municipality of Miraflores, Lima.

1.15 Carlos Cruz Lorenzen, Civ. Eng.



Commercial Engineer, U de Chile, with a major in Economics MBA in Project Management, IESA, Caracas, Venezuela

Occupation: Executive Director Infrastructure Policy Council (CPI) (www.infraestructurapublica.cl) (2013 onwards)

Former Minister of Public Works, Transport and Telecommunications (2000-2002)

Former general coordinator of concessions Ministry of Public Works (1995-2000)

Partner of Imaginación Diseño de Negocios S.A. (2004-2018)

Partner of Bogado Ingenieros Consultores (2005 onwards)

INFRATEK Partner (2021 onwards)

Experience in business consulting, strategic communication,

business design

1.16 Miguel Ropert Dokmanovic, Civ. Eng.



Civil Engineer, University of Chile
Master in Seismic Engineering (E), University of Chile.
PADE course, Senior Business Management program,
Universidad de Los Andes Business School.
Diploma in General Astronomy, Andrés Bello University.
40 years of experience as an executive in companies in the
construction sector,
Corporate General Manager of the Conpax group of companies,
working in the areas of civil works, mining, concessions,
machinery, real estate and investments.
Director and business advisor.

In union activity
President for 12 years of CERH-CHILE (Executive Circle of

Human Resources of Chile
Vice President of FIDAGH (Inter-American Federation of Human Management).
President of the ACCT (Chilean Association of Roads and Transportation).
President of the Disciplinary Court of the Construction Institute.
President of the Public Infrastructure Commission Colegio de Ingenieros de Chile
Counselor of the Civil Engineering Specialty, Colegio de Ingenieros de Chile
National Counselor at the College of Engineers of Chile,
Member of the Institute of Engineers of Chile.

1.17 Raquel Machicao, Ph.D.



UNIVERSITY STUDIES CARRIED OUT Pontificia Universidad
Católica del Perú. Lima, Peru Faculty of Sciences and Engineering.
Civil engineering
POSTGRADUATE Autonomous University of Mexico Division of
Graduate Studies of the Faculty of Engineering. Master in
Structures
DOCTORATE National Autonomous University of Mexico
Division of Graduate Studies of the Faculty of Engineering.
Doctorate in Structures (credits completed)
RESEARCH EXPERIENCE Engineering Institute of the UNAM.
February 1997 to July 2003

RECENT WORK EXPERIENCE AEDIX S.A. DE C.V. Engineering Consulting. Co-founding
partner. November 2010 to the present.

1.18 Eduardo Escobal Mc Evoy Civ. Eng., MBA.



Civil Engineer from the Pontificia Universidad Católica del Perú and MBA with a degree in Finance from ESAN.

He is an international consultant in Investment Projects and Public-Private Partnerships (PPPs) and a lecturer in Peru, Colombia, Argentina, Mexico, Guatemala, Honduras, El Salvador, Panama, the Dominican Republic and Bolivia.

Extensive managerial and board experience of construction, financial and concession companies and in business and infrastructure consultancies in Peru and abroad.

He is currently Business Manager of the Development Bank of Peru-

Cofide

He directed and participated in the structuring of more than 50 Public Private Associations (PPPs) in Peru and Latin America, with investments of more than 6 billion dollars.

He has participated in the preparation of proposals for improvements to the PPP regulatory frameworks in Peru, Honduras and the Dominican Republic.

He is a professor of Management and Structuring of APPs at ESAN. He has been a professor of PPPs and Tax Works at the School of the Comptroller General of Peru and of Real Estate Project Management at the Graduate School of the National University of Engineering.

He has been hired by the U.S. government's Millennium Challenge Corporation. to train officials from the governments of Guatemala, Honduras and El Salvador in PPPs

He has more than 30 published articles and interviews and a wide network of contacts in the countries in which he has developed activities, both at the governmental and business levels.

Acknowledgments

Team Leader for Structuring and Promotion of APPs with international recognition:

WWTP Taboada Treatment Plant (UNCTAD 2010 Award for the promotion of Investments in Sanitation),

Trasvase Huascacocha (Latin American Water Deal of The Year 2010 Award - Mayer & Brown),

Atlantic Tourism Corridor (17th IJGlobal Americas Awards -2015)

Finalist in the 13th Latin American Infrastructure Leadership Forum 2015 for the Financial Project of the Year award

He participated 4 times in the National Contest "Business Creativity": Twice First Prize (one with company and own product) and twice Finalist.

1.19 Lucas Brito, Ph.D.

Consultant and Instructor at DYNAMIC Services Consultoria Ltda. Doctoral candidate at UFU (Federal University of Uberlândia), BRAZIL, and UniPD (Università degli Studi di Padova), ITALY. Master (M.SC.) by UFU (Federal University of Uberlândia). Mechanical Engineer from UFSJ (Federal University of São João del-Rei). Professor of the MBA course, "Specialization in Maintenance Engineering and Industrial Operations Management".

Green Belt in Six Sigma. Specialist in fault detection in industrial equipment through Predictive Techniques and Artificial Intelligence. Deputy Technical Director of FENEMI (National Federation of Mechanical and Industrial Engineering). Participant in the CwF Program (Science Without Borders) at Lakehead University, Thunder Bay, CANADA, from DEC|2013 to APR|2015. Member of the LAV (Acoustic and Vibration Laboratory) at UFU. Collaborator of Gep_LASID (Study and Research Group of the Laboratory of Dynamical Systems) at UFSJ under the coordination of Prof. D.Sc. Jorge Nei Brito. Author of several technical articles presented and published in national and international congresses. Guest speaker at national and international congresses.

1.20 Gian Antonio Susto, Ph.D.

Associate Professor in Machine Learning and Control Systems at University of Padova in Italy. He received the M.S. degree (cum laude) in control systems engineering and the Ph.D. degree in information engineering from the University of Padova, Padova, Italy. He was a visiting researcher at University of California at San Diego, San Diego, CA, USA, and the National University of Ireland Maynooth (NUIM), Maynooth, Ireland, in 2012. He also held research positions at Infineon Technologies Austria AG, Villach, Austria, and at NUIM in 2013. During his career he was awarded with 6 prizes from IEEE and IFAC conferences and for contributions in scientific journals. He is part of the Editorial Board as Associate Editor for the IEEE Transactions on Semiconductor Manufacturing, Engineering Applications of Artificial Intelligence, and Informatics. He is co-author of more than 100 papers in peer-reviewed journals and conference proceedings and of 3 international/national patents. He is also co-founder of Statwolf Ltd., a company developing Artificial Intelligence solutions for Industry 4.0.

1.21 Marcus Antonio Viana Duarte Ph.D.

Mechanical Engineer graduated from the Federal University of Uberlândia(1982). Master (M.Sc.) in Mechanical Engineering from the Federal University of Santa Catarina (1985). Doctor in Mechanical Engineering from the State University of Campinas (1994). FULL Professor at the Faculty of Mechanical Engineering, Federal University of Uberlândia. Reviewer of several periodicals, with emphasis on "Applied Acoustics and Signal Processing". He has experience in the field of Mechanical Engineering, with an emphasis on Solid Mechanics. He works mainly with the themes: Noise Control; Vibration Control; Experimental Procedures and Artificial Intelligence. He is currently working on three large industrial research projects involving "Signal Analysis" and "Artificial Intelligence", in partnership with Petrobras. As a consultant, he has extensive experience in industrial noise control, working on modeling and proposing solutions for the mitigation of noise levels in two FIAT- Betim warehouses, in the Petrobras-REGAP industrial area, four BALL operating units, two units of BRF - Uberlândia, three units of JBS, manufacturing unit of Black&Decker - Uberaba and the steam generation unit of GERDAU - Ouro Branco, among others.

1.22 Carlos Lahura Suarez Ph.D.

Studies: Universidad Adolfo Ibañez - Executive Mba Peru / Chile / USA - December 2017. MBA in Business Administration University Of Piura - Senior Management Program, Lima, Peru - May 2007. Commercial Management Program (PDC). University Of Lima, Lima, Peru - 2000-2004. industrial engineering

CAREER: Senior executive with 20 years of experience in the Latin American industrial market, responsible for the industrial services business with a focus on Asset Management, Predictive Maintenance and Reliability Engineering. He began his career at SKF del Peru in 2003 as a sales executive and for the last 4 years serving as Director of Technology and Business development for the Latin American region based in São Paulo, Brazil. He is currently responsible for the development and implementation of different technologies such as IoT devices, and advanced analytics (Artificial Intelligence and Machine Learning) for the automation of the collection and analysis of data from more than 150 service contracts that SKF has in industrial segments such as Mining, Energy, Oil, Pulp and Paper, Food and Beverages, among others. He also serves as Product Manager of the SKF REP Center digital cloud platform that houses the different software tools used in service operations throughout the Americas region.

1.23 Jorge Nei Brito, Ph.D.



Senior Advisor. FULL Professor at the Department of Mechanical Engineering at the Federal University of São João del Rei (UFSJ). Post-Doctor in Mechanical Engineering, Machine Monitoring Area, at the State University of Campinas (2011). Doctor in Mechanical Engineering, Project Area, by the State University of Campinas (2002). Master (M.Sc.) in Mechanical Engineering, Project Area, by the Federal University of Uberlândia (1994). Mechanical Engineer from the Pontifical Catholic University of Minas Gerais (1985). Coordinator of the Mechanical Engineering Course at UFSJ. Evaluator of the National Higher Education Assessment System (Sinaes). Advisor Professor and Content Professor at NEAD|UFSJ. Specialist in fault detection in rotating machines through Predictive Techniques and Intelligence Artificial. One of the authors of patent PI0303047-4 (Magnetic flux coil for predictive monitoring of three-phase induction motors). First Vice-President of COPIMERA (Confederación Panamericana de Ingeniería Mecánica, Eléctrica, Industrial y Ramas Afines). Secretary Inspector of the São João del-Rei Province of Crea-MG. Member of the Advisory Board of FENEMI (National Federation of Mechanical and Industrial Engineering). Coordinator of the V Region of the CIE (College of Educational Institutions) of Crea-MG. Executive Vice-President of APEA-DELREI (Association of Professionals in Engineering and Agronomy of Jurisprudence of CREA-MG of São João del-Rei - MG).

1.24 Alex Giovanni Flores Maradiaga Ph.D.



He obtained his degrees of Industrial Engineer (2005), Mechanical Engineer (2006) and Master in Economics (2008) in the National Autonomous University of Honduras (Tegucigalpa, Honduras). He then received a postgraduate scholarship from the Organization of American States (OAS) and, in 2010, he received a Master's degree in Mechanical Engineering Sciences from the Federico Santa María Technical University (Valparaíso, Chile). He was subsequently awarded a doctoral fellowship from the Canadian Council for Research in Natural Sciences and Engineering (NSERC), and in 2015 he obtained a Doctorate in Mechanical Engineering Sciences from the Université du Québec (Montréal, Canada). Likewise, it has a Diploma in University Pedagogy, a Diploma in Technological Innovation, a Diploma in Training Strategies for Innovation and Entrepreneurship and a Diploma in Green Hydrogen Technologies; all awarded by the Federico Santa María Technical University (Chile).

He specializes in wind energy, marine energy, computational fluid dynamics, atmospheric flows, and biometeorology. He has more than 13 years of professional experience developing energy engineering projects with multiple Chilean companies, and has directed 7 R & D & I projects, leveraging more than US \$ 300,000- for the development of applied research and new wind and marine technology. He has more than 8 years as a university professor, teaching courses and directing multiple undergraduate and postgraduate theses for Mechanical Engineering, Electrical Engineering, Chemical-Environmental Engineering, Industrial Engineering and other related careers at the Federico Santa María Technical University and the Université du Québec.

He is a member of the Institute of Engineers of Chile, CIMEQH (Honduras) and the Order of Engineers of Québec (Montréal chapter).

He is a member of the Institute of Engineers of Chile, CIMEQH (Honduras) and the Order of Engineers of Québec (Montréal chapter).

1.25 Fernando José Zorto Aguilera, Mec. Eng., MBA.



Professor of the Faculty of Engineering, Passionate Researcher in educational and technological innovation. CEO of CEINZA S. de R.L: Cofounder of Infinity Education, motivated by the passion for education, we generate a change of thought in young university students and people in society.

AESA - Agriconsulting Europe SA Technical assistance October 2019 - Present (1 year 11 months).

Technical Assistance Consulting on Engineering and Project Management issues. National Autonomous University of Honduras Professor October 2009 - Present (11 years 11 months).

1.26 René Antonio León Quant, Mec. Eng., M.Sc.



EXPERIENCE

July 2001 to date

Central American Technological University, UNITEC.

Academic Head of Mechatronics Engineering

Coordination of administrative and academic activities.

Professor.

January to August 2001

SERTRAZA S.A. de C.V.

Chief of Operations

In charge of supervision and maintenance of student transport units from the San José del Carmen Institute.

July 1998 to July 2000

Design and Automated Manufacturing DMA

Industrial Mechanical Center division.

Head of Design Department

Design and manufacture of mechanical parts.

CNC Milling Programmer.

March 1995 to July 1998

Industrial Mechanical Center

Purchasing manager

Imports of supplies for workshops.

Imports of automotive parts.

TRAINING

Master in Mechanical Engineering

August 2004 to December 2007

Florida International University, Miami, Florida. USES.

Industrial Mechanical Engineer

January 1991 to December 1994

National Autonomous University of Honduras, Tegucigalpa, Honduras.

Bachelor of Science and Letters

January 1986 to November 1990

Instituto Salesiano San Miguel, Tegucigalpa, Honduras.

1.27 Anael Espinal, Ind. Eng. M.Sc.



Professional in the area of Industrial Engineering and Systems & Logistics Management with a Master's Degree in Business Management with an emphasis on Logistics and currently a PhD student in Economics and Business. Director of Educational Innovation and Teaching Development of UNITEC-CEUTEC. Experience in the academic area and teaching at the Faculty of Engineering of the Central American Technological University UNITEC. Participation in accreditation projects and study plan reform. Internal auditor at UNITEC of the quality management standard ISO 9001: 2015. Specialization studies carried out on innovation systems, product development, higher education, quality and accreditation. Experience with international student associations of Industrial Engineering as student leader, advisor and speaker on topics of creativity, innovation and Industrial Engineering. Certified facilitator in the LEGO® SERIOUS PLAY®, WakeUpBrain, InnovaEmpresa and RealLEDGE methodology.

1.28 Jairo Lascarro Leal, Ph.D.



Dr. Ing. Jairo Francisco Lascarro Leal. He obtained a degree in Mechanical Engineering from the University of Puerto Rico, RUM Mayagüez. Master's degree in energy and thermo fluids, Drexel University, Philadelphia. Doctoral degree (Ph.D) in Engineering Mechanics at the University of Miami, Coral Gables Fla. Certificate in distance course management from Indiana State University. FEMA Egtwhecv"öVtclp"j g"Vtclpgtu"lp"Go gti gpe{ "O cpci go gpv"ht"P cwtcr" F kucutgö0Kpf qqt"Ck"S wcrk\ "Eqpuwncpv"NC'Egtwhecv"0Rtqhgukpcr" engineer, licensed and registered in Puerto Rico USA, Lic. 8156. Expert in forensic engineering for local and federal industrial litigation cases in P.R. Founder and President of the firm J.F.L International Inc. Through the firm, he offers the following services: consulting in engineering education for undergraduate and doctorate degrees; technical support using the energy code and ASHRAE standards for the thermal design of buildings to improve energy performance with less greenhouse gases; scientific consultant of hospitals, for the prevention of infections by the water and air route to mitigate sick buildings; conducts studies and evaluates problems of diseased buildings to mitigate them; provides advice for the use of biofuels in thermal systems and farms in the prevention of global warming and climate change. He is an Energy Auditor, certified and registered in the Energy Administration office of P.R. Also experience in university education and in the industry.

1.29 Smaine Zeroug Ph.D.



Smaine is a research director and scientific advisor with Schlumberger, the leading oil and gas services company. Located in the technology innovation hub of Cambridge, MA, USA, he manages a multi-program department focusing on the development of computational science and machine learning based solutions for the interpretation of multi-physics and multi-scale geophysical measurement data. His scientific interests lie in the domain of acoustical measurements for applications in the O&G industry and non-destructive evaluation sector. He has authored more than 100 academic and professional papers and holds 40 patent applications (with 25 granted so far). In his early career, he developed the technical

basis for a downhole measurement tool that has brought north of ½ billion USD to his company. As part of his managerial duties, he engages in partnerships with academia to leverage innovation and with Schlumberger clients to ensure its applicability to their needs.

Smaine has been with Schlumberger for 28 years in various positions mostly in R&E in the USA but with stints in marketing and operations in north Africa, France, and England. He holds a BS in Physics from the university of Algiers, Algeria, an M.S. and a Ph.D. in Electrophysics from New York University, NY, USA and an MBA from University of Rotterdam, The Netherlands. J gø'ugt xgf 'lp'xctkqu'ecr cekies in journal editorials and conference organizations and is presently serving as the associate editor for IEEE Geoscience and Remote Sensing Transactions. More details in [LinkedIn](#), [ResearchGate](#) and [Google Scholar](#).

1.30 Carlos Fosca Ph.D., MBA.



Mechanical Engineer from PUCP. Specialization studies in the field of Corrosion in the Federal Republic of Germany, International Welding Engineer from the International Institute of Welding (IIW), Master of Business Administration (MBA) from Tulane University, A.B. Freeman School of Business, USA, Doctor in Chemical Sciences at the Complutense University of Madrid, Spain.

University professor, with more than 25 years of experience, in the field of teaching at the level of undergraduate, postgraduate and continuing education programs and in face-to-face, semi-face-to-face and virtual modalities.

Senior Industry Consultant with more than 20 years of experience in the field of corrosion, weldability of stainless steels and in the analysis of mechanical component failures.

Higher Education Management Consultant.

1.31 Ing. Nathan Wicks Ph.D., USA



Dr. Wicks has worked for Schlumberger for 16 years, and in that time he has developed surface control algorithms aiming at smooth efficient drilling as well as downhole systems for extended reach oilfield operations.

Dr. Wicks has extensive experience in the mechanics and dynamics of mechanical systems employed in the upstream oil and gas services industry. He is an inventor on more than 15 patents related to this work. Dr. Wicks received bachelor's and master's degrees in Mechanical Engineering from Yale University and a master's in Applied Mathematics and doctorate in Solid Mechanics from Harvard University.

Dr. Wicks' technical work focuses on understanding the relationship between surface equipment control and downhole tool behavior in oil and gas wells.

El trabajo técnico del Dr. Wicks se centra en comprender la relación entre el control del equipo de superficie y el comportamiento de las herramientas de fondo de pozo en pozos de petróleo y gas.

1.32 María Isabel Barrios



ASTM Representative for Latin America

Business Administrator from the University of Lima with postgraduate studies in International Trade and professional development courses in the United States.

She currently serves as Executive Director of EnginZone, an organization dedicated to continuing education for professionals who develop in engineering and technical areas, which has alliances with ASTM, ASME, NFPA, National Safety Council, IEEE, National Board and SME.

He is the representative of ASTM International for Global Cooperation in Latin America and a board member of the Peru

section of ASME.

She has been secretary of the Latin American section of NFPA and is currently secretary of the Peru chapter of NFPA.

2 Invitees

2.1 Decarbonization, energy and climate change

2.1.1 Keynote: Julio Guerrero Ph.D., USA

Decarbonization, energy and climate change: The energy transition and the use of safe and sustainable energy. Innovations, Global Trends in Renewable Energies and decarbonization processes.

Linkedin: www.linkedin.com/in/julioguerrero

Brief: [Julio C. Guerrero](#)

2.1.2 Panellists

2.1.2.1 Arnoldus Van Der Hurk, PhD., España

Brief: Arnoldus Van Der Hurk

2.1.2.2 Juan F. Alicea Flores, M.Sc. Puerto Rico

Brief: Juan F. Alicea Flores

2.1.2.3 Adam Paxson, USA

Linkedin: <https://www.linkedin.com/in/adampaxson/>

Brief: [Adam Paxson](#)

2.1.3 Moderator: José Estela Ramírez, MBA., Perú

Brief: [José Estela](#)

2.2 Global Access to energy for sustainable development

2.2.1 Keynote: Edwin Quintanilla Ph.D., Perú

Global Access to energy for sustainable development

2.2.2 Panellists

2.2.2.1 Rafael Ugaz, MBA., Perú

Linkedin: <https://www.linkedin.com/in/rafael-ugaz-a807a5/>

2.2.2.2 William Worek, Ph.D., USA

Linkedin: <https://www.linkedin.com/in/william-worek-44661854/>

Brief: [William Worek](#)

2.2.2.3 César Butrón, M.Sc., Perú

Linkedin: <https://www.linkedin.com/in/cesar-butron-4b32271b5/>

Brief: [César Butrón](#)

2.2.3 Moderator: Jaime F. Sotomayor M.Sc., MBA, Perú

LinkedIn: <https://www.linkedin.com/in/jaime-f-sotomayor-bernos-41511423/>

Brief: [Jaime Sotomayor](#)

2.3 Medical innovation: Power at the nano-scale: Speed, Strength and Efficiency in Biological Motors

2.3.1 Keynote: Carlos Bustamante, Ph.D. Berkeley, USA

Medical innovation: State-of-the-art studies of molecular motors through the use of single molecule force spectroscopy methods. Power at the nano-scale: Speed, Strength and Efficiency in Biological Motors

LinkedIn: <https://www.linkedin.com/in/carlos-bustamante-81900bba/>

Brief: [Carlos Bustamante](#)

2.3.2 Panellists:

2.3.2.1 Arturo Ledesma, Mech. Eng. Perú

LinkedIn: <https://www.linkedin.com/in/arturo-ledesma-ledesma-19b81637/>

Brief: [Arturo Ledesma](#)

2.3.2.2 Alex Slocum, Ph.D., MD. USA

LinkedIn: <https://www.linkedin.com/in/alexander-h-slocum-jr-md-phd-92306821/>

2.3.2.3 Gloria Henriquez Díaz PhD, Chile

LinkedIn: <https://www.linkedin.com/in/gloriahenriquez>

Brief: [Gloria Henriquez](#)

1.3.3 Moderator: John Falcioni, M.S. USA

LinkedIn: <https://www.linkedin.com/in/johnfalcioni/>

Brief: [John Falcioni](#)

2.4 Digital Transformation and Industry 4.0

2.4.1 Keynote: Zetti Gavelan, M.Sc., London

Digital Transformation and Industry 4.0

LinkedIn: <https://www.linkedin.com/in/zetti-gavelan-633b2225/>

Brief: [Zetti Gavelan](#)

2.4.2 Panellists:

2.4.2.1 Iván Vera, EE. Eng., Chile

2.4.2.2 Mario Javier Marchese Mecklenburg, Che. Eng., Chile

Linkedin:

Brief: [Mario Marchese](#)

2.4.2.3 Miguel Canz, EE. Eng.

Linkedin: <https://www.linkedin.com/in/miguel-caniz-4260a334/>

Brief: Miguel Canz

2.4.3 Moderator: Julio Guerrero Ph.D., USA

Linkedin: www.linkedin.com/in/julioguerrero

Brief: [Julio C. Guerrero](#)

2.5 Solutions in transport infrastructure, supply chain and asset management

2.5.1 Keynote: Carlos Alarco Proaño M.Sc., Perú

Solutions in transport infrastructure, supply chain and asset management: port, rail and airport

Linkedin: <https://www.linkedin.com/in/carlos-alarco-711541a/>

Brief: [Carlos Alarco](#)

2.5.2 Panellists

2.5.2.1 Carlos Cruz Lorenzen, Civ. Eng., Chile

Linkedin: <https://www.linkedin.com/in/carloscruzlorenzen/>

Brief: [Carlos Cruz](#)

2.5.2.2 Miguel Ropert Dokmanovic, Civ. Eng., Chile

LinkedIn: <https://www.linkedin.com/in/miguel-ropert-693680214>

Brief: [Miguel Ropert](#)

2.5.2.3 Raquel Machicao, Ph.D., México

LinkedIn: <https://www.linkedin.com/in/raquel-diana-machicao-barrionuevo-760ba815/>

Brief: [Raquel Machicao](#)

2.5.3 Moderator: Eduardo Escobal Mc Evoy Civ. Eng., MBA,

LinkedIn: <https://www.linkedin.com/in/eduardo-escobal-mc-evoy-109b9a32/>

Brief: [Eduardo Escobal](#)

2.6 Industry 4.0: Artificial Intelligence and Prescriptive Maintenance

2.6.1 Keynote: Lucas Brito, Ph.D., Brasil

Industry 4.0: Artificial Intelligence and Prescriptive Maintenance.

Brief: [Lucas Brito](#)

2.6.2 Panellists:

2.6.2.1 Gian Antonio Susto, Ph.D., Italia

Linkedin: [linkedin.com/in/gianantonio](https://www.linkedin.com/in/gianantonio)

Brief: [Gian Antonio Susto](#)

2.6.2.2 Marcus Antonio Viana Duarte Ph.D., Brasil

Brief: [Marcus Antonio Viana Duarte](#)

2.6.2.3 Carlos Lahura Suarez M.Sc., USA., USA

Linkedin: [linkedin.com/in/carlos-lahura-36149627](https://www.linkedin.com/in/carlos-lahura-36149627)

Brief: [Carlos Lahura Suarez](#)

2.6.3 Moderador: Jorge Nei Brito, Ph.D., Brasil

Linkedin: [linkedin.com/in/jorge-nei-58b0a21a2](https://www.linkedin.com/in/jorge-nei-58b0a21a2)

Brief: [Jorge Nei Brito](#)

2.7 Strategies and competencies for the training of engineers by the year 2040

2.7.1 Keynote: Alex Giovanni Flores Maradiaga Ph.D., Chile

Strategies and competencies for the training of engineers by the year 2040: The new role of universities and professional associations of Engineers.

Linkedin: www.linkedin.com/in/alex-flores-maradiaga

Brief: [Alex Flores](#)

2.7.2 Panellists:

2.7.2.1 Fernando José Zorto Aguilera, Mec. Eng., MBA., Honduras

Linkedin: <https://www.linkedin.com/in/fernando-zorto-8b536429/?jobid=1234>

Brief: [Fernando Zorto](#)

2.7.2.2 René Antonio León Quant, Mec. Eng., M.Sc., Honduras

Linkedin:

Brief: René León

2.7.2.3 Anael Espinal, Ind. Eng. M.Sc., Honduras

Linkedin: <https://www.linkedin.com/in/anaelespinal/>

Brief: Anael Espinal

2.7.3 Moderator: Jairo Lascarro Leal, Ph.D., Puerto Rico

Brief: Jairo Lascarro Leal

2.8 Mechanisms to increase the professional opportunities for engineers: Professional competitiveness

2.8.1 Keynote: Smaine Zeroug Ph.D., USA

Mechanisms to increase the professional opportunities for engineers: Professional competitiveness.

Linkedin: <https://www.linkedin.com/in/smaine-zeroug-91214b73/>

Brief: [Smaine Zeroug](#)

2.8.2 Panellists:

2.8.2.1 Alfredo Dammert Lira Ph.D., Perú

2.8.2.2 Carlos Fosca Ph.D., MBA. Perú

Linkedin: <https://www.linkedin.com/in/cfosca/>

Brief: [Carlos Fosca](#)

2.8.2.3 Nathan Wicks Ph.D., USA

Linkedin: <https://www.linkedin.com/in/nathan-wicks-4789112/>

Brief: [Nathan Wicks](#)

2.8.2.4 María Isabel Barrios

LinkedIn: <https://www.linkedin.com/in/maria-isabel-barrios-03544717/>

Brief: [María Isabel Barrios](#)

2.8.3 Moderator: Julio Guerrero Ph.D., USA

Linkedin: www.linkedin.com/in/julioguerrero

Brief: [Julio C. Guerrero](#)



XXVIII CONGRESO PANAMERICANO

COPIMERA

PERÚ 2021

DEL 14 AL 16 DE OCTUBRE



CONFERENCIA MAGISTRAL

**JUEVES 14
OCTUBRE
2021**

10:00 - 11:00 HRS.

DESCARBONIZACIÓN, ENERGÍA Y CAMBIO CLIMÁTICO:

La Transición Energética y el Aprovechamiento de la Energía Segura y Sostenible, Innovaciones, Tendencia Globales de las Energías Renovables y los Procesos de Descarbonización.



EXPOSITOR:

JULIO GUERRERO, Ph.D.



MESA REDONDA

PANELISTAS:



ARNOLDUS VAN DER HURK, Ph.D.



JUAN ALICEA, M. Sc.



ADAM PAXSON

MODERADOR:



JOSÉ ESTELA RAMÍREZ, MBA.

ORGANIZA:



COLEGIO DE INGENIEROS DEL PERÚ

**JUEVES 14
OCTUBRE
2021**

11:00 - 12:00 HRS.

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COPIMERA

PERÚ 2021

DEL 14 AL 16 DE OCTUBRE



CONFERENCIA MAGISTRAL

**JUEVES 14
OCTUBRE
2021**

17:00 - 18:00 HRS.

ACCESO GLOBAL A LA ENERGÍA

Para el Desarrollo Sostenible, Buscando la Eficiencia Energética y la Tendencia a la Electrificación de las Cosas.



EXPOSITOR:

EDWIN QUINTANILLA, Ph.D.



MESA REDONDA

PANELISTAS:



RAFAEL UGAZ, MBA.



WILLIAM WOREK, Ph.D.



CÉSAR BUTRÓN, M. Sc.

MODERADOR:



JAIME SOTOMAYOR, M. Sc., MBA.

ORGANIZA:



COLEGIO DE INGENIEROS DEL PERÚ

**JUEVES 14
OCTUBRE
2021**

18:00 - 19:00 HRS.

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PERÚ 2021

DEL 14 AL 16 DE OCTUBRE



CONFERENCIA MAGISTRAL

**VIERNES 15
OCTUBRE
2021**

08:00 - 09:00 HRS.

RETOS Y OPORTUNIDADES PARA INNOVACIÓN BIOMÉDICA:

Mejoramiento de la Infraestructura
Sanitaria en el Contexto de la
Pandemia Covid-19.



EXPOSITOR:

CARLOS BUSTAMANTE, Ph.D.

Berkeley, USA



MESA REDONDA

PANELISTAS:



ARTURO LEDESMA, Mech. Eng.



ALEX SLOCUM, Ph. D., MD.



GLORIA HENRIQUEZ, Ph.D.

MODERADOR:



JOHN FALCIONI, M.S.

ORGANIZA:



COLEGIO DE INGENIEROS DEL PERÚ

**VIERNES 15
OCTUBRE
2021**

10:00 - 11:00 HRS.

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XXVIII CONGRESO PANAMERICANO

COPIMERA

PERÚ 2021

DEL 14 AL 16 DE OCTUBRE



CONFERENCIA MAGISTRAL

**VIERNES 15
OCTUBRE
2021**

10:00 - 11:00 HRS.

**TRANSFORMACIÓN DIGITAL E
INDUSTRIA 4.0:**

Minería, Energía, Agricultura y Turismo.



EXPOSITOR:
ZETTI GAVELAN, M. Sc.

Londres

MESA REDONDA

PANELISTAS:



IVÁN VERA, EE. Eng.



MIGUEL CANZ



MARIO MARCHESE, Che. Eng.

MODERADOR:



JULIO GUERRERO, Ph.D.

ORGANIZA:



COLEGIO DE INGENIEROS DEL PERÚ

**VIERNES 15
OCTUBRE
2021**

11:00 - 12:00 HRS.

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COPIMERA

PERÚ 2021

DEL 14 AL 16 DE OCTUBRE



CONFERENCIA MAGISTRAL

**VIERNES 15
OCTUBRE
2021**

17:00 - 18:00 HRS.

**SOLUCIONES EN INFRAESTRUCTURA DE
TRANSPORTE CADENA DE SUMINISTRO Y
GESTIÓN DE ACTIVOS:**

Portuaria, Ferroviaria y Aeroportuaria.



EXPOSITOR:

CARLOS ALARCO, M. Sc.



MESA REDONDA

PANELISTAS:



CARLOS CRUZ, Civ. Eng.



MIGUEL ROPERT, Civ. Eng.



RAQUEL MACHICAO, Ph.D.

MODERADOR:



EDUARDO ESCOBAL, Civ. Eng., MBA

ORGANIZA:



COLEGIO DE INGENIEROS DEL PERÚ

**VIERNES 15
OCTUBRE
2021**

18:00 - 19:00 HRS.

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COPIMERA

PERÚ 2021

DEL 14 AL 16 DE OCTUBRE



CONFERENCIA MAGISTRAL

**SÁBADO 16
OCTUBRE
2021**

08:00 - 09:00 HRS.

INDUSTRIA 4.0:

Inteligencia Artificial y Mantenimiento
Prescriptivo.



EXPOSITOR:
LUCAS BRITO, Ph.D.



MESA REDONDA

PANELISTAS:



GIAN SUSTO, Ph.D.



MARCUS VIANA, Ph.D.



CARLOS LAHURA, M. Sc.

MODERADOR:



JORGE NEI BRITO, Ph.D.

ORGANIZA:



COLEGIO DE INGENIEROS DEL PERÚ

**SÁBADO 16
OCTUBRE
2021**

09:00 - 10:00 HRS.

✉ informes@copimera2021.com

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PERÚ 2021

DEL 14 AL 16 DE OCTUBRE



CONFERENCIA MAGISTRAL

**SÁBADO 16
OCTUBRE
2021**

10:00 - 11:00 HRS.

**ESTRATEGIAS Y COMPETENCIAS PARA LA FORMACIÓN
DEL INGENIERO AL AÑO 2040:**

El Nuevo Rol de las Universidades y las
Asociaciones de Profesionales de
Ingenieros.



EXPOSITOR:

ALEX FLORES, Ph.D.



MESA REDONDA

PANELISTAS:



FERNANDO ZORTO, Mec. Eng., MBA.



RENÉ LEÓN, Mec. Eng., M. Sc.



ANAEL ESPINAL, Ind. Eng., M. Sc.

MODERADOR:



JAIRO LASCARRO, Ph.D.

ORGANIZA:



COLEGIO DE INGENIEROS DEL PERÚ

**SÁBADO 16
OCTUBRE
2021**

11:00 - 12:00 HRS.

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DEL 14 AL 16 DE OCTUBRE



CONFERENCIA MAGISTRAL

**SÁBADO 16
OCTUBRE
2021**

17:00 - 18:00 HRS.

**MECANISMOS PARA INCREMENTAR LAS OPORTUNIDADES
PROFESIONALES DE LOS INGENIEROS:**

Competitividad Profesional, Políticas de
Transparencia de Operaciones, Valores
en la Profesión de Ingeniería.



EXPOSITOR:
SMAÏNE ZEORUG, Ph.D.



MESA REDONDA

PANELISTAS:



ALFREDO DAMMERT LIRA, Ph.D.



NATHAN WICKS, Ph.D.



CARLOS FOSCA Ph.D., MBA

MARÍA ISABEL BARRIOS

MODERADOR:



JULIO GUERRERO, Ph.D.

ORGANIZA:



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**SÁBADO 16
OCTUBRE
2021**

18:00 - 19:00 HRS.

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