

Mexico Speakers

Ph. D. Salvador Landeros Ayala.

obtained the degree of Mechanical-Electrical Engineer at the Faculty of Engineering from UNAM (National Autonomous University of Mexico), the Master of Science from the University of Pennsylvania, United States, and the PhD in Telecommunications, also from UNAM. He has held important management positions in the public and private telecommunications and space sectors, participating in more than 20 projects of importance for the country, some of them in the international environment.

He is a member of the Mexican Academy of Engineering and the Panamerican Academy of Engineering. He has received important national and international awards. Since November 2019 he has been the General Director of the Mexican Space Agency.

M. Sc. Carlos Duarte Muñoz.

Electro-Mechanical Engineer from UNAM and Master in Scientific Instrumentation from the University of California, Santa Barbara.

Recognized track record in developing and managing innovation projects in the academic, private and government sectors.

Mentor of the space missions AztechSat-1, AtlaCom1, Misión Colibrí, and the AztechSat Constellation

Head of the Latinoamerican Nanosatellite Project.

Full member of the Mexican Academy of Informatics, A.C.

Collaborator of "Hacia el Espacio", the Mexican Space Agency outreach magazine and writer of the column "Era Espacial" at A21, a leading aerospace news website

Presently, Mr. Duarte is the Deputy Director General for Human Capital Development at the Mexican Space Agency.

Ph.D. Jose Alberto Ramirez Aguilar:

1996 - He received his Bachelor diploma from the UNAM in Electrical Mechanical Engineer (In the field of Electronics). 2000- Received his master's degree in Electronics and Telecommunications with specialty in high frequency electronics from the Center for

Scientific Research and Higher Education – CICESE- CONACyT. 2007 - He completed his (Ph.D.) studies in Technical Sciences at the Moscow Aviation Institute - "MAI" in the Russian Federation obtaining the degree in Technical Sciences under the line of research of flight apparatus receivers.

He is currently Head of the Aerospace engineering Department at UAT/FI/UNAM.

Dr. Ramirez is a full-time professor at the High Technology Unit, in the Aerospace engineering department. He is Head of the Project: "Earth Station of Mission Control

TT&C S" design and implementation of the first Mexican earth station to command

Mexican Microsatellites, Tracking, telemetry and Command.

He is Head of the Project: "Mexican Nano satellite KuauhtliSat". The scientific mission is remote sensing in low resolution as well as the formation of human resources in the development of space systems in Mexico.

Dr. Ramirez is the technical contact with the European commission of the Galileo Information Center for Mexico, Central America and the Caribbean (GIC).

Ph.D José Francisco Valdés

Obtained his Bachelor degree from the Science Faculty, National Autonomous University of Mexico (UNAM), and his PhD from Imperial College, University of London. He was director of the Geophysics Institute, UNAM, from 2005 to 2013. Director General of Innovation at the Science Ministry of Mexico City Government, from 2014 to 2015. Since 2017 he is Head of the University Space Program at UNAM.



He has published 117 scientific articles in high-impact peer-reviewed journals, that have received more than 5000 citations according to the Science Citation Index. He has given conferences in Mexican and international congresses, outstanding among which are 20 invited conferences. Editor-in-chief of the Geofísica Internacional peer-reviewed Journal from 2014 to 2017.

He is Principal investigator of the cosmic ray detectors at the UNAM Main Campus in Mexico City and at the summit of the Sierra Negra volcano, in the state of Puebla.

Professor at the Faculties of Science and Engineering at UNAM. He has supervised doctoral, master and bachelor thesis.

He received the Manuel Maldonado Koerdell medal (Unión Geofísica Mexicana, 2013) and the Mario H. Acuña award (Asociación Latinoamericana de Geofísica Espacial, ALAGE), 2018).

Eng. Juan Carlos Mariscal

Has a background in Computer Engineering focused on Artificial Intelligence and robotics. For four years, he combined his work in the automotive industry as Systems Engineer with his passion for space. During this time he contested in three NASA's robotics competitions with a student team from his alma mater, the National Autonomous University of Mexico (UNAM), obtaining various recognitions, starting his career in space afterwards. He was recognized with the Hans von Muldau Team Award by the IAF in 2016 and as a New Generation Space Leader by the Space Foundation in 2017 and 2018. He is ISU alumni and has held different roles in four analogue simulations. He served as National Point of Contact in Mexico for the Space Generation Advisory Council from 2017 to 2020.



He is co-founder and CEO of Dereum Labs, Mexico-based startup that aims to provide any industry with the knowledge and tools they need to become a space industry. Dereum Labs is currently working on Jaguar-1, the company's first lunar mission which will land two small rovers on the moon. Dereum Labs has achieved a great impact among the Latin-American region and has subscribed collaboration agreements with organisations such as Airbus Defence and Space and the Mexican Space Agency to develop technology for space exploration.

Ph.D. Andres Cornejo.

Received a B.S. degree in Electronic Engineering from Universidad Politecnica Salesiana of Cuenca, Ecuador, in 2008 and an M. Eng. degree, (Hons.), in Electrical Engineering from the National Autonomous University of Mexico (UNAM), in 2015. He is Ph.D. from UNAM (2021). His current research at AEM are HTS next-generation systems, Data Science applied to satellite systems, Satellite Networks and Architectures, Satellite Backhaul, Optimization Algorithms and Methods, Machine Learning, and Deep Learning Applied to Satellite Systems.





M. Eng. Erika Del Carmen Sevilla García

•MASTER'S DEGREE IN INTEGRATED MANUFACTURING SYSTEMS AND QUALITY STRATEGIES

Universidad Popular Autónoma del Estado de Puebla (UPAEP)

•INDUSTRIAL ENGINEERING

Universidad Popular Autónoma del Estado de Puebla (UPAEP)

•CERTIFICATION IN PROJECT MANAGEMENT SKILLS

Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM)

•Professor at the Faculty of Industrial Engineering at UPAEP

•Project Manager of AztechSat-1, the first Mexican nanosatellite deployed from the International Space Station.

•She has participated in several conferences to awaken young people's interest in STEM areas.

•TEDx Speaker

•Member of the Project Management Institute (PMI)

Puebla, Mexico Chapter

M.Eng. Alberto Lepe Zuñiga

He is an engineer graduated from the Faculty of Engineering of the UNAM where he graduated as an Electrical Mechanical Engineer and later as an Industrial Engineer.

During his professional life he has worked for more than 40 years in the Federal Public Service, in various Ministries, in managerial functions of planning, programming, resource allocation models, design and implementation of computerized systems, geographic and cartographic systems, market analysis and physical security

He has also been Director of consulting companies dedicated to engineering projects; in Geographic Information Systems; in physical security and civil protection projects; and in computer systems in entities such as Pemex; Attorney General of the Republic; in airports and ports; in the metro public transportation system; in federal roads and bridges, and others in federal entities.

Alberto Lepe is currently vice president of the Mexican Academy of Engineering.



Dr. Adán Salazar-Garibay

Dr. Salazar is the Head of the Scientific Research and Space Technological Development in the Mexican Space Agency.

He holds a doctorate in Real Time Computing, Robotics and Automation from the Center for Applied Mathematics of the École des Mines de Paris and the INRIA of Sophia Antipolis, France.

He has experience conducting research and developing technology in computer vision. This includes camera calibration, 3D reconstruction, visual tracking, augmented reality, and image processing.

He has some published papers in the area of Remote Sensing using satellite images from the Copernicus project of the European Space Agency (ESA), SPOT and Landsat. Among his most relevant works we can mention his participation with a multidisciplinary group from CINVESTAV-Mérida in detecting the arrival of floating Sargassum on the coast of Quintana Roo using multispectral satellite images and machine learning techniques. As well as, works to detect the subsidence induced in the terrestrial surface after an earthquake using Synthetic Aperture Radar (SAR) images.





Lic. Benjamin Najjar Jr.

More than 20 years in Aerospace industry in multiple disciplines, including private aviation, pax airlines, cargo and military special programs.

Also specializes in parts and components, motors, among others.

In the last eight years has incursion in the study, development and investing in space programs.

Collaborates with international foundations to promote the STEM studies among the youth and environmental protection for the earth natural resources thru earth observation.

Lastly in collaboration with his organization and other institutions promoting the space industry on the Mexican region to the world.

Currently holds the following positions:

- VP of FEMIA ´S Space Commission.
- President at Thrusters Unlimited Space
- CEO at Aeroespacio Net

The active space programs are:

- Earth Observation Satellites services an operation.
- Satellite design and integration program.
- Launch technology development.

Korea Speakers

Dr. Hwan Seok CHOI was appointed Vice President of Korea Aerospace Research Institute (KARI) in March 2021.

He was previously Director of Rocket Engine Development Division between 2020 and 2021, and Head of Combustion Chamber Team from 2005 to 2020. In this position, he was responsible for the development of Korea Space Launch Vehicle (KSLV)-II.

Hwan Seok CHOI joined KARI in 1994, and has been involved in various development projects from KOMPSAT-1 to Korea Sounding Rocket-III and Korea Space Launch Vehicle (KSLV)-I.

Hwan-Seok CHOI studied aeronautical engineering at Seoul National University and received doctoral degree in mechanical engineering at POSTECH.

He was awarded Order of Science and Technology Merit (Doyak, Leap) for the successful launch of KSLV-1 in 2013 and Commendation from Minister in 2003 and 2000 for the development of KSR-III and KOMPSAT-1.

Position: Head of R&D Strategy Office, KARI

Education: M.S. in Engineering and Computer Engineering, Yonsei University

Work Experience:

- April 2022 ~ Head of R&D Strategy Office, KARI
- 2021- 2022 Head of Research Strategy Team, KARI
- 2019 – 2021 Head of Policy Coordination Team, KARI
- 2015 – 2019 Senior Researcher of Space Policy Team, KARI
- 2013 – 2015 Senior Researcher of External Relations and Cooperation Team, KARI
- 2012 – 2013 Researcher of Policy Analysis Team, KARI

2001 – 2008 Senior Researcher of R&D Center, Medison Co., Ltd.

Position: Head of Technology Commercialization Office, KARI

Education

2001 – 2003 Master's Degree of Electronic Engineering, Korea Univ.

1996 – 2001 Bachelor's Degree of Electronic Engineering, Korea Univ.

Work Experience

May 2021 ~ Head of Technology Commercialization Office, KARI

2005 – 2021 Senior Researcher of Mission Operation and Infrastructure Service Division, KARI

2003 – 2004 Researcher of Information Technology Center, Samsung Electronics

Position: Senior Researcher of Technology Commercialization Office, KARI

Education:

Doctor of Philosophy in the field of School of Electrical Engineering, Korea Advanced Institute of Science and Technology(KAIST)

Work Experience

Dec. 2021 ~ Senior Researcher of Technology Commercialization Section, KARI

2020 – 2021 Examiner of Measurement Technology Team, KIPO

2017 – 2021 Senior Researcher of Smart Vehicle Research Section, ETRI

**Mr. Hang-Seok CHOI,
Head of International
Cooperation Office,
KARI**

**Mr. Jung Ho Park, Head
of R&D Strategy Office,
KARI**

**Ms. Hee Jin Bae, Head
of Technology
Commercialization
Office, KARI**

**Ms. Yousun Won,
Senior Researcher of
Technology
Commercialization
Office, KARI**

Dr. Hwan Seok CHOI was appointed Vice President of Korea Aerospace Research Institute (KARI) in March 2021.

He was previously Director of Rocket Engine Development Division between 2020 and 2021, and Head of Combustion Chamber Team from 2005 to 2020. In this position, he was responsible for the development of Korea Space Launch Vehicle (KSLV)- II.

Hwan Seok CHOI joined KARI in 1994, and has been involved in various development projects from KOMPSAT-1 to Korea Sounding Rocket- III and Korea Space Launch Vehicle (KSLV)- I .

Hwan-Seok CHOI studied aeronautical engineering at Seoul National University and received doctoral degree in mechanical engineering at POSTECH.

He was awarded Order of Science and Technology Merit (Doyak, Leap) for the successful launch of KSLV-1 in 2013 and Commendation from Minister in 2003 and 2000 for the development of KSR-III and KOMPSAT-1

**Dr. Hwan-Seok Choi,
Vice President, KARI**

Position:

Director of Satellite and Space Exploration Systems Engineering and Architecture R&D Division, KARI

Professor, Aerospace Systems Engineering Major, University of Science and Technology

Education:

Doctor of Philosophy in Electrical Engineering, Korea Advanced Institute of Science and Technology

Work Experience:

March 1995 ~ Principal Researcher, KARI

Active Participation in Satellite Programs: KOMPSAT-1(1999), KOMPSAT-2(2006), KOMPSAT-5(2013), GEO-KOMPSAT2A/2B(2018, 2020), KPLO(Korea Pathfinder Lunar Orbiter)(2022), Korea Lunar Lander(Projection Formulation On-going)

**Dr. Yee-Jin Cheon,
Director of Satellite
and Space Exploration
Systems Engineering
and Architecture R&D
Division, KARI**

Position: Senior researcher of Satellite Integration and Test Center (SITC), Satellite Research Directorate, KARI

Education: Doctor of Philosophy in Aerospace Engineering, Korea Advanced Institute of Science and Technology(KAIST)

Work Experience

Jan. 2007 ~ Senior researcher of Satellite Integration and Test Center (SITC), KARI

**Mr. Hee Kwang EUN,
Senior Researcher of
Satellite Integration
and Test Center,
KARI**

Position: Head of Aeronautics Research Coordination Office, KARI

Education: Doctor of Philosophy in Aerospace Engineering, Seoul National University

Work Experience

2019 ~ Present Head, Aeronautics Research Coordination Office, KARI

2002 ~ Present Principal Research Engineer, Aeronautics Research Directorate,

2015 ~ 2016 Research Fellow, Presidential Advisory Council on Science and Technology

2006 ~ 2008 Project Manager, Whirl Tower Construction in Korean Utility Helicopter Program

2003 ~ 2006 System Development Planning, Korean Helicopter Development Program office, Ministry of National Defense(MND)

**Dr. Danbi Hong,
Aeronautics
Research
Coordination Office,
KARI**

**Dr. Danbi Hong,
Aeronautics
Research
Coordination Office,
KARI**

Position: Head of SSA Research Office, KARI

Education: Doctor of Philosophy in Aerospace Engineering, Korea Advanced Institute of Science and Technology(KAIST)

Work Experience

May 2021 ~ Head of SSA Research Office, KARI

2018 – 2021 Project Manager of Satellite Mission Operations, KARI

2006 – 2017 Researcher of Satellite Mission Operations Department, KARI