



Chapter IEEE ComSoc Latin America Region

Regional Chapter Chair Congress 2019

Salvador, Bahia, Brazil

Ignacio Enrique Zaldívar Huerta

Puebla, Chapter Chair

zaldivar@inaoep.mx

- I am a member of the Institute of Electrical and Electronics Engineers (IEEE) since December 2002.
- In October 2014, I was promoted to Senior Member IEEE.
- Currently, I am the chair of the IEEE Latin American Communications Society (ComSoc), Region 9, Puebla Chapter, Mexico.



Where is Puebla ?



Puebla, Chapter



Population in 2015 (City): 6'168,883

IEEE SECCIÓN PUEBLA



INICIO

IEEE PUEBLA ▾

EVENTOS ▾

COMUNIDADES ▾

MEMBRESIAS ▾

SITIOS IEEE

BUZON

MHTC



¿QUÉ ES EL IEEE?

El Instituto de Ingenieros Eléctricos y Electrónicos, IEEE por sus siglas en inglés; es una asociación internacional dedicada al avance en la innovación de tecnología para el beneficio de la sociedad. Las raíces del IEEE se remontan al año 1884, cuando la electricidad comenzó a convertirse en una gran influencia en el mundo. En la primavera de ese

IEEE PUEBLA

El 14 de Noviembre de 2003, la sección Puebla del IEEE fue constituida como Sección ante las autoridades del IEEE. Forma parte del Consejo México IEEE y de la Región 9 del IEEE. Está integrada por 9 sociedades técnicas, 2 sub unidades no técnicas y 7 ramas estudiantiles, sus miembros apoyan la misión del IEEE; fortaleciendo

Posgrados



Estudia un posgrado de calidad en el INAOE que cuenta con el reconocimiento de CONACYT*

CAPITULOS

Los capítulos de [Sociedades IEEE](#) brindan oportunidades técnicas a sus miembros a través de la organización de actividades a nivel local. Los capítulos IEEE sección Puebla:



Circuits and Systems

Society



Communications Society



Computational Intelligence

Society



Computer Society



Electronic Devices Society



Engineering in Medicine and

Biology Society



Industrial Electronics Society



Instrumentation and Measurement

Society



Robotics and Automation Society

Work Done

- Lectures
 - Conferences
-

2017-2019 Accomplishments

2017

We have participated in the organization of the “IEEE Mexican Humanitarian Technology Conference 2017 (MHTC)”, held from 29 to 31 march in the Universidad Autónoma de Puebla. Puebla, Mexico.



Puebla Section-Technical Chapters



Puebla Section-Affinity Groups



MHTC2017 - IEEE Mexican Humanitarian Technology Conference 2017 - is a cross-discipline conference for presenting, discussing, and developing technological solutions to social challenges. MHTC attracts presenters and attendees who work to satisfy the needs of populations affected by poverty, disaster, environmental change, and other impacts resulting in their needs being unmet or underserved.

In order to create and promote sustainable, holistic humanitarian solutions; this conference focuses on technological solutions complemented by an integrated understanding of broader contexts such as economics, policy, culture, and the environment. MHTC welcomes participation by individuals and organizations from technical and non-technical backgrounds, including engineers, scientists, academics, small-businesses, corporations, philanthropists, foundations, and government and non-government organizations.

Call for Papers

The Conference is presented in following tracks:

- **Energy**—infrastructure and off-grid power, renewable, transportation, energy harvesting, green technologies, smart grid lighting, cooking & heating.
- **Health**—medical technology, telemedicine, mobile care, primary care, Biomedical instrumentation, biotechnology, bioinformatics.
- **Disaster, connectivity, and communication**—disaster warning & avoidance, disaster response, disaster management, networks, remote communication, communication technologies
- **Humanitarian challenges and opportunities**—education, housing, supply chain & distribution, business development, vulnerable groups.
- **Environmental Monitoring**—clean water, pollution, sanitation, irrigation, farming practices & agricultural technologies, climate change.
- **E-Services for the masses**—eGovernance, mGovernance, mobile banking, mobile micro finance, e-education, electronic personal security.
- **Frugal innovation**—innovation in low cost applications of technology, low cost development, low cost manufacturing, open source hardware and software, crowd sourcing.
- **Emerging technologies for humanitarian applications**—ubiquitous computing, ubiquitous communication, Internet of things, wireless sensor networks, 3D printing, Big data, cloud computing, circuits and systems.

Submissions: Authors may submit content in the form of a technical paper. All submissions require full submission in English, Spanish or Portuguese.
More information <http://ieee-puebla.org/mhtc-2017/> or seccion.puebla@ieee.org

Key dates:

January 13	Full paper submission deadline
February 10	Notification of acceptance
February 24	Final submission



DLT, March 31, 2017



Professor Albert Banchs's tour in Mexico, in collaboration with Morelos, Puebla and Guadalajara chapters.

In Puebla, Professor Albert Banchs participated in the keynote conferences organized by IEEE Puebla Section. "Visión global de las prestaciones de las futuras redes 5G y las principales tecnologías "

Participation of others ComSoc nationals members, September, 2017



Araceli García Gómez received her B.Sc. degree in electronics and communications engineering from the University of Guadalajara and a Master degree in Applied Computer Science from the ITESO University. In the Secretaria de Comunicaciones y Transportes, an office of the Mexican Government, she worked in activities related to radioelectric spectrum administration, 1987-1989. She has been a professor at different universities in Guadalajara since 1993, and a professor in the Electronics, Systems & Informatics Department (DESI) at ITESO since 1996. Araceli was the academic coordinator of the Undergraduate Program of Electronics Engineering, 2001-2005 and a member of the Department Council of the DESI. She was also a member of the Consultative Council of the Cadena de la Industria Electronica (CADELEC) Guadalajara, 2007-2009. Currently, Araceli teaches courses on Computer Networks and participates in several academic and professional projects in different universities. IEEE ComSoc activities: Committees/Boards include—Chapter Chair of Guadalajara ComSoc, 2001-2004; Latin America Region Board coordinating the DLTs, 2003-2005; Guadalajara Section Vice Chair, 2004-2006; ComSoc Regional Director for Latin America, 2006-2007; Guadalajara Section Chair, 2007-2008; Student Branch Counselor ITESO, 2012, ComSoc Guadalajara Chapter Chair, 2016-2018. Conferences and Awards include—Co-Chair for several IEEE Conferences (CIEP 2002, IMWS 2009, PIMRC 2010, WCNC 2011). Her chapter received the Chapter Achievement Award in 2003; Araceli was named Engineer of the Year in 2004.

In Puebla, Araceli participated in the keynote conferences organized by the National Institute of Astrophysics, Optics and Electronics within the framework of the 9th Advanced Electronics and Design Seminar. Talk: “Guadalajara, ¿por qué es la primera Smart City mexicana? ”

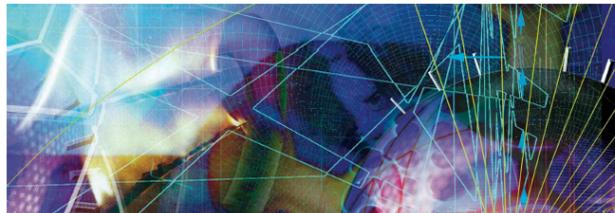
DLT, November 11, 2017



Professor Luiz DaSilva tour in Mexico, in collaboration with Morelos, Puebla and Monterrey chapters.

In Puebla, Professor Luiz DaSilva participated in the keynote conferences organized by the National Institute of Astrophysics, Optics and Electronics. “Sharing infrastructure and spectrum: a vision for the future of mobile networks”

2018



"QoS in Heterogeneous Wired and Wireless Networks" Prof. Ben-Othman, IEEE Comsoc distinguished lecturer

CONFERENCE HIGHLIGHT

Date:
24 Abril, 2018

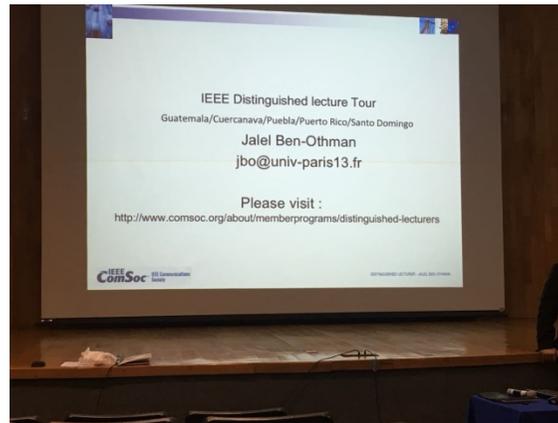
Time:
12 p.m.

Location:
INAOE, Centro de información

Event Organizers:
IEEE ComSoc
Puebla Chapter

Wireless and mobile networks have many advantages as easy deployment, user mobility and provides network access to users regardless to their locations. The most critical issues that arise in those networks are on the resource allocations as the bandwidth is limited, the propagation (multi-path, fading, distortion) and security since communications are transmitted over radio waves. In this seminar I will present several works done to model/Improve Quality of Service in Wireless networks. Three different methods will be presented in this lecture. In the first part a new model based on Markov chains is presented to model the different service classes defined in IEEE 802.16. The second part I will present a new AC that we have defined for IEEE 802.16 and we have evaluated using Stochastic Automata Networks. Finally I will present a stochastic model that for admission control in wireless networks using IEEE 802.11 standard.
More about Prof. Ben-Othman:

<https://www.comsoc.org/distinguished-lecturer/jalel-ben-othman>



Professor Jalel Ben-Othman's tour in Mexico, in collaboration with Morelos, Puebla and Monterrey chapters.

In Puebla, Professor Jalel Ben-Othman participated in the keynote conferences organized by the National Institute of Astrophysics, Optics and Electronics within the framework of the Electronics Seminar.

DLT, September 25, 2018



10º Seminario de Electrónica y
Diseño Avanzado, 2018

“Developing IoT Solutions for Smart
Homes/Buildings, Smart Car and Smart
Energy”

Fawzi Behmann,
President TelNet Management Consulting Inc.
Vice-Chair, IEEE NA Communications Society

September 25, 2018



Professor Fawzi Behmann's tour in Mexico, in collaboration with Morelos, Puebla and Monterrey chapters.

In Puebla, Professor Fawzi Behmann participated in the keynote conferences organized by the National Institute of Astrophysics, Optics and Electronics within the framework of the 10th Advanced Electronics and Design Seminar.

Formation of the student chapter ComSoc, December 9, 2018



Cecelia Jankowski
Managing Director
Member and Geographic Activities
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Fax +1 732 867 9943
c.jankowski@ieee.org

DECEMBER 10, 2018

IGNACIO ZALDIVAR-HUERTA
INAOE
APARTADO POSTAL 51 Y 216
PUEBLA PUE 72000
MEXICO

Dear Ignacio Zaldivar-Huerta:

Congratulations! It is a pleasure to inform you that the requirements of the Member and Geographic Activities Board Operations Manual have been met and the IEEE Communications Society Student Branch Chapter at the Instituto Nac De Astrofisica, Optica & Electronica has been formed. The effective date of this Student Branch Chapter formation is December 9, 2018.

On behalf of the IEEE and its members, I would like to welcome your Branch Chapter to the student program. If you have any questions or need assistance, please do not hesitate to contact our Student Services department at:

Student Services
IEEE Member and Geographic Activities Department
445 Hoes Lane
Piscataway, NJ 08854

student-services@ieee.org, email
+1 732 562 5527, phone
+1 732 463 9359, fax

Sincerely,

Cecelia Jankowski
Managing Director
Member and Geographic Activities

cc: T. Ramos – Region 9 Director
S. Corrado – Region 9 Student Activities Chair
C. Quintero Ruiz – Region 9 Student Representative
K. Letalef – Communications Society President
N. Kato – Communications Society Vice-President
S. Guo – Communications Society Director Membership Services
S. M. Brooks – Executive Director Communications Society
C. Cronin – Executive Volunteer Services Administrator Communications Society
E. Gutierrez-D – Puebla Section Chair
Perez Salgado – Puebla Section Student Activities Chair
J. Rangel-Magdaleno – Student Branch Counselor
H. Morales – Student Branch Chair
L. Gonzalez – Student Branch Chapter Chair

2019

DLT 2019, may 28



New Directions in Technology Innovations for 5G and Beyond

Sudhir Dixit
Main member and basic Internet evangelist at the Basic Internet Foundation in Norway

Biography
Sudhir Dixit is currently a Senior Fellow and Evangelist of Basic Internet at the Basic Internet Foundation in Norway and heads its San Francisco office. He has over 30 years of experience in computer networking and telecommunications, and related fields. From 2015 to 2017 he was the CEO and Co-Founder of a start-up, Skydot, Inc, in the cloud-based and collaboration space. From December 2013 to April 2015, he was a Distinguished Chief Technologist and CTO of the Communications and Media Services for the Americas Region of Hewlett-Packard Enterprise Services in Palo Alto, CA, and prior to this he was the Director of Hewlett-Packard Labs India from September 2009. Prior to joining HP Labs Palo Alto, Dixit held a joint appointment with the Centre for Internet Excellence (CIE) and the Centre for Wireless Communications (CWC) at the University of Oulu, Finland. From 1996 to 2008, he held various positions with leading companies, such as with BlackBerry as Senior Director, with Nokia and Nokia Siemens Networks in the United States as Senior Research Manager, Nokia Research Fellow, Head of Nokia Research Centre (Boston), and Head of Network Technology (USA). From 1987 to 1996, he was at NYNEX Science and Technology and GTE Laboratories (both now Verizon Communications) as a Staff Director and Principal Research Scientist.

Dixit has 21 patents granted by the USPTO and has published over 200 papers and edited, co-edited, or authored eight books, published by Wiley, Artech House and Springer. He is presently on the editorial boards of IEEE Spectrum Magazine, Cambridge University Press Wireless Series and Springer's Wireless Personal Communications Journal and Central European Journal of Computer Science (CEJS). He is Chairman of the Working Group C on new directions in networking and communications at the Wireless World Research Forum (WWRF), where he is also a Board Member. From 2010 to 2012, he was an Adjunct Professor of Computer Science at the University of California, Davis, and, since 2010, he has been a Docent of Broadband Mobile Communications for Emerging Economies at the University of Oulu, Finland.

A Life Fellow of the IEEE, IET, and IETE, Dixit received a Ph.D. degree in electronic science and telecommunications from the University of Strathclyde, Glasgow, U.K., and an M.B.A. from the Florida Institute of Technology, Melbourne, Florida.

Abstract
This talk aims to highlight the major advances in technologies that will enable 5G meet its objectives. Description of major new RAN technologies for 5G systems will form the first part of the talk. The second part will constitute the description of future CN technologies and the resulting flexible network architecture solutions leveraging the confluence of IT and telecommunications. More specifically, the first part will detail PHY layer technologies such as Enhanced MIMO, Massive MIMO (also known as Large Scale Antenna Systems), mmWave ultra broadband transmission techniques and air interface adaptations for efficiently handling the massively parallel access in sensor networks for IoT applications. Networking solutions based on intra and inter technology Heterogeneous Networks (HetNets) as well as Cloud RAN architectures will also be presented. The latter part will go into the details of virtualization and SDN by covering such topics as the benefits of virtualization, potential architectures and ecosystems, standards activities targeting SDN/NFV in 5G networks, and some selected use cases of (and roadmap towards) NFV deployments. This talk will be concluded with a brief description of open research and technology challenges for implementation of future generation networks.

Martes 28 de mayo, 12 h
Auditorio del Centro de Información

CONACYT inaoe



Professor Sudhir Dixit's tour in Mexico, in collaboration with Morelos, Puebla and Guadalajara chapters.

In Puebla, Professor Sudhir Dixit participated in the keynote conferences organized by the National Institute of Astrophysics, Optics and Electronics.

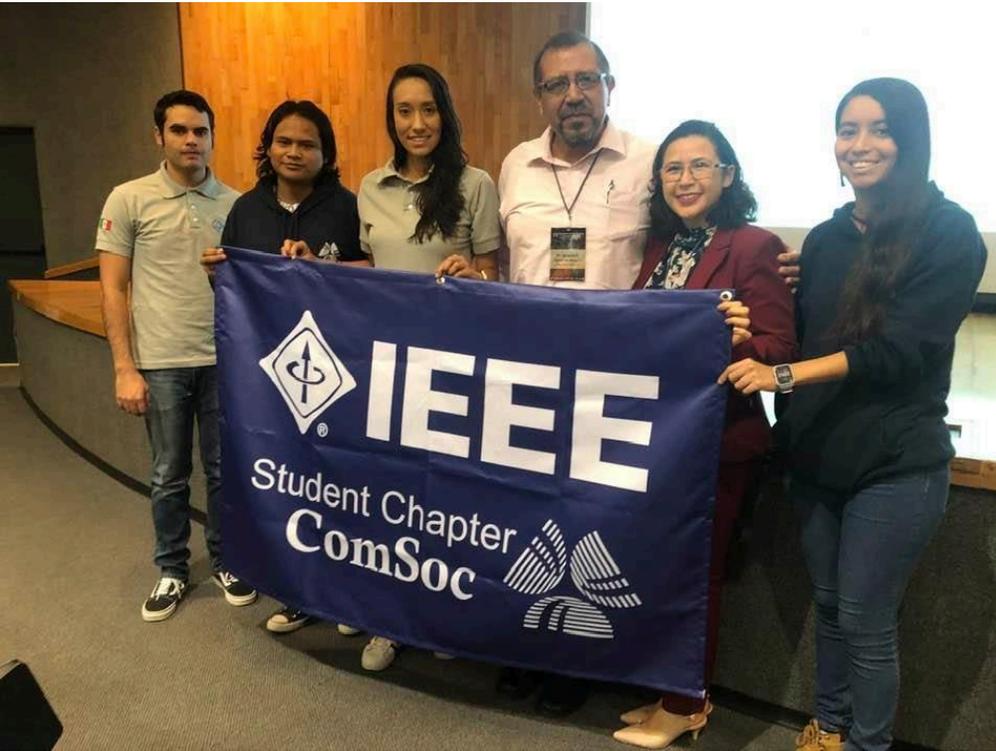
Participation of others ComSoc nationals members, September 25, 2019



María Catalina Ovando Chico graduated in Electronic Engineering and Communications from the *Universidad Iberoamericana Puebla* and a Ph.D. from the *Universidad Politécnica de Madrid*. Her doctoral dissertation is entitled “Application of the techno-economic analysis in the deployment of LTE 800 MHz in the rural areas of Spain” and received the distinction Cum Laude distinction. Her research lines are technology adoption and innovation in Mexico, innovation policies and telecommunications, digital platforms and their impact on productive industries, and telecommunications policy. She has been involved in several research projects within the telecommunications industry. She is a member of the editorial board of *Strategy, Technology & Society Journal*, **IEEE Puebla section member** and a Mexican national researcher level 1. She is a professor at UPAEP at the graduate school programs in Strategic Planning and Management Technology since May 2015. She teaches the courses of Technology Innovation Models, Electronic Business Logistics and Technology Evolution.



Presence of the student chapter ComSoc



IEEE day 2019



Recruitment day, November 7, 2019



Dr. Ignacio Enrique Zaldívar Huerta

Tutor de Capítulos ComSoc

PRESENTE

La rama estudiantil del IEEE y los capítulos estudiantiles IEEE del INAOE, CAS, I&MS, ComSoc y EDS, tienen a bien invitarte al evento de reclutamiento organizado por los estudiantes de la coordinación de electrónica adscritos al IEEE. La cita es el jueves 7 de Noviembre de 2019 en el salón de eventos de INAOE, en punto de las 17:00 hrs. Tendremos información acerca de los beneficios de la membresía y de las diferentes sociedades del IEEE. Habrá comida, concursos y sorpresas para los nuevos miembros y para aquellos que renueven.

¡Esperamos contar con tu valiosa presencia!

Sinceramente,

Hans Israel Morales López
Presidente de la Rama Estudiantil IEEE del INAOE



- Student Full year \$ 27.00
- Student Half Year \$ 13.00



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*For 2020 membership year only.

● Lectures

- “Fibras ópticas, filtros fotónicos y su uso en telecomunicaciones ópticas” en la “Semana TEC-INAOE 2017” Organizada por la **rama estudiantil IEEE sección Puebla**, en conjunto con el departamento de eléctrica y electrónica del Instituto Tecnológico de Puebla.
 - “Osciladores Optoelectrónicos: Una alternativa para generar señales microondas” “Semana TEC-INAOE 2018” Organizada por la **rama estudiantil IEEE y robotics and Automation Society Sección Puebla**, Instituto Tecnológico de Puebla. Puebla, Pue. Marzo 2 de 2018.
 - “Transmisión Experimental Bidireccional Utilizando un Filtro Fónico de Microondas”, IEEE Day Organizada por la **rama estudiantil IEEE** de la Benémerita Universidad Autónoma de Puebla. Puebla. Pue a 4 de octubre de 2018.
 - “Aplicaciones de la fotónica en el dominio de las microondas” Third Congress **IEEE-UG Photonics Society Student Branch** Salamanca, Guanajuato. a 16 de noviembre de 2018.
 - “Aplicaciones de la fotónica en el dominio de las microondas”, Fourth Congress **IEEE-UG Photonics Society Student Branch** Salamanca, Guanajuato. a 25 de octubre de 2019.
-

Problems Encountered

- Is difficult to establish communication with Carol Cronin or the staff.
 - The most of DL's **did not answer** the invitations to participate in a tour.
-

Problems Solutions Plans

- To establish a better way to be in communication with Carol Cronin or the staff. (facebook, WhatsApp...).
 - Regarding to the DL's, **I wait proposals !**
-

Next Year Work

- Plan 1

- ◆ To promote new memberships for ComSoc in events where Puebla section participates.
 - ◆ To promote new memberships for ComSoc in others Universities and Institutes.
 - ◆ Coordinate the visit of a Distinguished Lecturer of ComSoc.
 - ◆ To promote new IEEE membership between the attendants.
-

Thanks (obrigado, gracias) for your attention



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<http://www.inaoep.mx>

<http://www-elec.inaoep.mx/espanol/personal/investigadores/zaldivar.html>