



## INVITED SESSION SUMMARY

*2016 IEEE International Autumn Meeting on Power, Electronics and Computing (ROPEC 2016)*

*November 9-11, 2016:*

**Title of Session:**

The design and implementation of Intelligent Agents and Multi-Agent Systems, TICS and Healing  
<http://ropec.org/>

**Name, Title and Affiliation of Chair:**

Arnulfo Alanis Garza- Instituto Tecnológico de Tijuana. México  
Margarita Ramírez Ramírez- Universidad Autónoma de Baja California, México  
Bogart Yail Márquez Lobato, Instituto Tecnológico de Tijuana. México  
José Sergio Magdaleno Palencia, Instituto Tecnológico de Tijuana. México

**Details of Session (including aim and scope):**

In recent years, agent technology has grown significantly in all fields, especially in the field of e-health and electrical energy consumption.

The Agent-oriented software engineering based on agent-oriented methodology is a new phenomenon in the field of software engineering today. The special features of this intelligent agent such as autonomy, reducing the cause of the operating costs and performing automatic functions on some systems.

The use of new communication technologies, distributed systems and intelligent agents can also be seen as a new phenomenon in medicine and electrical consumption topics.

Also, Biomedical engineering is a growing engineering field. It is deeply rooted in the culture of interdisciplinary research and collaboration. It opens ways for exploring frontiers in many scientific fields. By establishing collaboration and partnership, biomedical engineering is designated to play a key role in transforming and revolutionizing future medicine and healthcare practices. Biomedical engineering is more than a multidisciplinary approach.

**Area:** computing

### **List of topics of interest**

- Co-operation between intelligent agents to improve patient management (e.g., distributed patient scheduling).
- Agents that provide remote or elderly care delivery.
- Agents that provide information about medical services.
- Multi-agent systems for patient monitoring and diagnosis.
- Successful applications of agents and multi-agent systems in health care.
- MAS that improve medical training or education (e.g. tutoring systems).
- Medical agent-based decision support systems.
- Social acceptance of agent-based systems.
- Integration and use of medical ontologies.
- Electrical consumption savings
- Mobile-Health (MHealth)
- eTherapy
- eHealth
- Wearable Communication Devices
- Rehabilitation
- Technologies Assistive Technologies and Devices Bioinformatics
- Big data and data mining in Healthcare and Biomedicine
- Sports Activities Optimization
- Clinical decision support systems
- Advances in healthy aging analytics
- Complexity and complex systems
- Perception and Emotions
- Innovation
- Technology of the information and communication
- Entrepreneurship
- Tics's in education

### **PAPER SUBMISSION:**

Please submit your paper using the conference web page.

<https://easychair.org/conferences/?conf=ropec2016>

The paper title as well as the abstract has to be in English, and the body of the paper either English or Spanish and is limited to 6 pages using the IEEE templates found at [http://www.ieee.org/conferences\\_events/conferences/publishing/templates.html](http://www.ieee.org/conferences_events/conferences/publishing/templates.html)

### **Publication:**

All the papers presented at the conference will be uploaded to the IEEExplore for worldwide exposure as well as published in the conference CDROM

**Timelines -**

- Full Paper submission: July 17, 2016:
- Acceptance notification: September 2, 2016
- Final paper submission: September 16, 2016
- Conference: November 9-11, 2016: ROPEC 2016

**Main Contributing Researchers / Research Centres (tentative, if known at this stage):**

Dr. Lenin G. Lemus-Zúñiga (Universitat Politècnica de València. España)  
Dr. Arnulfo Alanis Garza (Instituto Tecnológico de Tijuana. México)  
Dr. Bogart Yail Márquez Lobato (Instituto Tecnológico de Tijuana. México)  
Dra. María del Rosario Baltazar Flores (Instituto Tecnológico de León. México)  
Dr. Víctor Manuel Zamudio Rodríguez (Instituto Tecnológico de León. México)  
Dr. Carlos Lino Ramírez (Instituto Tecnológico de León. México)  
Dr. José Sergio Magdaleno Palencia (Instituto Tecnológico de Tijuana. México)  
Dra. Margarita Ramírez Ramírez (Universidad Autónoma de Baja California)  
Dra. Esperanza Manrique Rojas (Universidad Autónoma de Baja California)

**Website URL of Call for Papers (if any):****Email & Contact Details:**

Arnulfo Alanis Garza <alanis@tectijuana.edu.mx>  
Margarita Ramírez Ramírez <maguiram@uabc.edu.mx>  
José Sergio Magdaleno Palencia <jmagdaleno@tectijuana.edu.mx>  
Bogart Yail Márquez Lobato <bogart@tectijuana.edu.mx>

**Short CVU:****Arnulfo Alanis Garza**

He is a professor in the Computer System Department at Mexico's National Technological - Technological Institute of Tijuana.

It is a Computer Systems Engineer from the Technological Institute of San Luis Potosi, He is a doctor of science degree in 2007 from the Polytechnic University of Valencia, Spain. It is desirable PRODEP profile. It has 20 + years in the development projects and with 20+ years of academic experience. Its air current research focus on intelligent learning, intelligent agents and their applications, areas of health, neurosciences, biomedical and bioinformatics, computer perceptual, affective computing, among others.

**Margarita Ramírez Ramírez**

She is a Professor research of Universidad Autónoma de Baja California, specifically in Facultad de Contaduría y Administración. She studied the bachelor and Master Degree in Tijuana's Technological Institute in 1990 and 2005 respectively; also he is has a Doctor degree in Education in 2012 from Universidad del Pacifico Norte. She is desirable PRODEP profile. It has 25 years of academic experience and his current research focus are on Information Technologies, Health Information Technologies, among others

Computer Engineering, Master in Applied Economics, Doctor of Science and Post doctorate in social simulation. A date has participated in research projects with the Metropolitan Planning Institute of Tijuana; Multiyear Impact Assessment Habitat Agenda; Ecological Zoning and Planning - Territorial Municipality of Juarez.

**José Sergio Magdaleno Palencia**

He is a professor in the Computer System Department at Mexico's National Technological, specifically in Tijuana's Technological Institute. He studied the bachelor and Master Degree in Tijuana's Technological Institute in 1990 and 2003 respectively; also he is has a Doctor degree in Science in 2015 from Baja California Autonomous University. He is desirable PRODEP profile. It has 25 years of academic experience and his current research focus are on intelligent learning, hypermedia educational systems, intelligent tutoring, among others.

**Bogart Yail Márquez Lobato**

Research Professor of National Institute of Mexico, specifically in Tijuana's Technological Institute, their training is Computer Engineering, Master in Applied Economics, Doctor of Science and Post doctorate in social simulation. A date has participated in research projects with the Metropolitan Planning Institute of Tijuana; Multiyear Impact Assessment Habitat Agenda; Ecological Zoning and Planning - Territorial Municipality of Juarez.