

${\bf SUMMONS} \\ {\bf 18^{\ TH}\ SCIENTIFIC\ CONVENTION\ ON\ ENGINEERING\ AND\ ARCHITECTURE\ (CCIA\ 2016)}$

The José Antonio Echeverría Polytechnic University (CUJAE), Cuba's higher education leader in Technical Sciences and Architecture is pleased to invite the scientific and academic community to the XVIII SCIENTIFIC CONVENTION ON ENGINEERING AND ARCHITECTURE (18th CCIA) to be held in the International Conference Center in Havana City from November 21st to 25th, 2016.

The 18th CCIA's main goal is to create a place in which the academic and professional community share experiences and debate regarding the sustainable development and investigations related to the Convention's topics. The convention will also favor the establishment of contacts among professionals and academics and the international cooperation among institutions, organizations and universities which will allow the increasing of the qualitative level of higher education, so that they can accomplish their commitment with society.

Experts recognized national and international prestige lectures taught and developed roundtables, panels, oral presentations and poster presentations and videos. Will be taught plus pre-event exposure associated courses will be developed and will be visits to specialized centers of interest.

The 18th CCIA includes new congresses, symposiums and workshops and ones that have been successful in the past and covers the most important issues concerning scientific, technological, pedagogical and managerial development of engineering and architecture.

More info in www.ccia.cujae.edu.cu

EVENTS

• IX Cuban Congress on Mechanical Engineering and Metallurgy (CCIM 2016)

President of the Organizing Committee: Email:

ccim@mecanica.cujae.edu.cu

Tel: (53) 7266 3845

Themes:

Computational Mechanics in Mechanical, Mechatronic ad Biomechanical Systems. Design and Manufacturing of Mechanical and Mechatronic Systems. Engineering of Materials and Metallurgy: their technologies. Energetic Technologies.

➤ Besides the main themes of CCIM 2016, the **VIII Cuban Congress on Engineering of Maintenance** will take place with the following themes:

Management of Maintenance. Maintenance Technologies. Engineering of Transportation.

• II International Symposium about Distributed Generation (SIGEDI 2016)

President of the Organizing Committee: Miguel Castro Fernández, PhD

Email: mcastro@electrica.cujae.edu.cu Tel: (53) 72663008 / 72663012

Themes:

> Commission distributed generation and power grids.



President: Antonio Martinez Garcia,PhD Email: amg@electrica.cujae.edu.cu

Theme:

Distributed generation schemes.
The GD and centralized systems
Auto associated technologies GD
Protection and distributed generation.
The quality of energy and distributed generation.

> Commission Technologies associated with Distributed Generation.

President: Miriam C. Vilaragut Llanes, PhD Email: miriamv@electrica.cujae.edu.cu

Theme:

Generators. Solar and Photovoltaic Energy. Hydropower.

Wind power. Biofuels. Gas.

Solar and Photovoltaic Energy. Energy storage technologies Biomass.

> Maintenance Technology Commission.

President: Israel Gondres Torne, PhD

Email: igondrest@gmail.com

Theme:

Triboenergía.

Maintenance schedules.

Reliability centered maintenance

Conservation and protection of facilities

Commission Operation, Control and Service Materials.

President: Yolanda Llosas, PhD Email: yolanda@fiel.uo.edu.cu

Theme:

Fuels.

Lubricants.

Auxiliaries GD facilities.

Refrigerants.

Control Centers

Management Systems GD facilities

> Commission Distributed Generation and the Environment.

President: Elena Rosa Domínguez, PhD

Email: erosa@uclv.edu.cu

Theme:

Risks associated with GD facilities. Possible impacts of GD facilities on Environment. Impact assessment facilities on Environment GD.

Impact mitigation facilities on Environment GD. Vulnerability GD facilities.

> Commission Technology transfer and training.



President: Miriam C. Lourdes Filgueiras Sainz de Rosas, PhD

Email: miriaml@electrica.cujae.edu.cu

Theme:

Technology transfer schemes in GD.
Technological absorption capacity in GD schemes.
Industry and sustainable development.
Knowledge management within DG systems.
Business management within DG systems.

• IV International Congress on Chemical, Biotechnological and Food Engineering (CIIQBA)

President of the Organizing Committee: Beatriz Zumalacárregui de Cárdenas, PhD

Email: ciiqba2016@quimica.cujae.edu.cu
Tel: (53) 72663420, (53) 72607220

Themes:

Engineering of Chemical reactions. Production of biocombustibles Enzymic technologies Environmental biotechnology Biotecnology of food

Fermentations in biotecnological and food industries Technologies of food preservation and processing Nanotechnology and its applicationes in industries Valuation of physical and chemical properties Computerization applied to Chemical Engineering

Mathematical modeling, optimization and simulation of processes

Data processing, statistical analysis and experimental design

Artificial intelligence in Chemical Engineering

Synthesis and integration of processes

Assurance of quality in chemical, biotechnological and food processes

Deterioration, corrosion and engineering of materials.

Informatic dynamics of fluids

Culture of cells and recombined microorganisms

Extraction, separation, and purification of bioactive substances

The cnological processes in the production of beverages and liquors

Diet and nutrition

Advanced control system in unitary operations

• III Congress of Informatics Engineer and Informatics Systems. (CIIISI'16)

President of the Organizing Committee: Martha D. Delgado Dapena, PhD

Email: ciiisi@ceis.cujae.edu.cu

Tel: (53)72663775

Website: http://ccia.cujae.edu.cu/index.php/ciiisi/ciiisi2016

Themes:

Models of software development guided by models; Engineering of Requirements; Architecture of software; Testing and Checking; Management of Software Projects;



18th from november 21 to november 25, 2016 SCIENTIFIC CONVENTION ON ENGINEERING AND ARCHITECTURE HAVANA INTERNATIONAL CONFERENCE CENTER



Software Quality;

Interoperability among Applications;

Data Storages;

Research on Design Sciences

TI Consultancy;

Business Intelligence;

Systems of Academic Management;

Management of Business Processes;

Systems of Geographic Information;

Sanitary Informatics.

Pattern Recognition;

Optimization and Meta-heuristics;

Intelligent Agents and Multi-agent Systems;

Ontologies and Semantic Web;

Engineering of Knowledge;

Data of mining industry;

Processing of Natural Language;

Parallel and Distributed Programming;

Virtual Reality;

Criptografía;

Technological Safety in Software and Hardware;

Risks Management;

Teaching of Informatics;

Educational Technologies.

• III Cuban Congress on Natural Fibers FIBRATEC 2016.

President of the Organizing Committee: Joel Morales Salas, MSc Email: jmorales@ceter.cujae.edu.cu, fibratec@ceter.cujae.edu.cu

Tel: (53) 7266 3637, (53) 72663630

Themes:

1. Farm

- Seed Production
- Breeding and Fitogenetic Resources
- Cultivation technologies
- Diversification of Natural Fibers
- Harvesting and Postharvest

2. Industry and Sustainable Development

- Clean Technologies and Fibers Treatment
- Management of fibers and residuals
- Industrial Maintenance
- Economic Evaluation and Quality
- Development and use of soluble fibers
- The informatics and the natural fibers

3. Fiber and Energy

- Fibers, Energy and Energetic saving
- Use of alternative energies in the management of fibers
- Obtaining and use of biogas
- -Use of biomass for energy purposes and animal food

4. Arts and Culture

- Fiber: Art and Culture
- Craftsmanship Design and Restoration

- Applications of the Natural Fiber

• III International Congress on Civil Engineering

President of the Organizing Committee: Vivian Elena Parnás, PhD

Email: vivian@civil.cujae.edu.cu, ciic@civil.cujae.edu.cu

Tel: (53) 7266 3776, 72663265

Themes:

QUALITY CONTROL AND PATHOLOGY OF CONSTRUCTIONS

Quality control and structure's durability. Pathology of structures. Pathology of geotechnical constructions. Restoration of constructions.

STRUCTURES, GEOTECHNICS AND FOUNDATION

Structural analysis and design. Earthquake-resistant structures. Structural dynamics. Experimentation and instrumentation of structures and geotechnical constructions. Safety theory. Vulnerability of structures and geotechnical constructions. Structural optimization. Geotechnical problems. Design of superficial and deep foundations.

HIGHWAY ENGINEERING

Road Safety. Railways. Asphaltic Mixture. Recycling of pavements.

Flexible and rigid pavements for highways and airports. Ground-leveling on roads. Embankments. Topography and (Geodesics). Recycled raw materials. Ready-mixed concrete and precast

PHYSICAL AND NUMERICAL MODELING APPLIED TO CIVIL ENGINEERING

Physical and numerical modeling of civil structures: reticular and laminar structures, constructive systems, joints and connections. Computational mechanics of fluids and solids. Constitutive modeling of materials. Road structures and ground-leveling modeling. Physical and numerical modeling of geotechnical and foundational problems. Application of numerical modeling tools in the resolution of Geotechnical and Engineering problems.

MATERIALS AND TECHNOLOGY

Suplementary cement materials. Local productions. Recycled materials. Mortar and concrete design. New materials and technology.

• III International Congress of Education in Engineering and Architecture (CIEIA)

President of the Organizing Committee: Gerardo Borroto Carmona, PhD

Email: gborroto@crea.cujae.edu.cu

Tel: (53) 7266 3461

Workshops and themes of the Congress:

> V Symposium "The ICTs in the Learning Process of Technical Sciences" (TICACT 2016)

President of the Organizing Committee: Gerardo Borroto Carmona, PhD

Email: gborroto@crea.cujae.edu.cu, ticact@crea.cujae.edu.cu

Tel: (53) 7266 3229

Themes:

Innovation of the integration of the ICTs in the teaching learning process.

Teachers' training in the incorporation of ICTs in the teaching-learning process of Engineering and Architecture

Virtual instrumentation, simulators, trainers, and virtual labs.

Seriuos game and videogames. Its impact in teaching.

Creativity in development through ICTs.

Social networks, learning virtual communities and the personal learning environment.

Production, managment, and evaluation of educative materials.

> II Symposium on the Training of Engineers and Architects, (FIA) by its Spanish acronym, 2016

President of the Organizing Committee: Arasay Padrón Álvarez, PhD

Email: apadron@crea.cujae.edu.cu

Tel: (53) 7266 3229

Themes:

Curricular transformation in the training of engineers and architects.

The economical education and its role for the training of engineers and architects.

Technical Sciences Didactics for the training of engineers and architects.

The education of values in the process of training Engineers and Architects.

Peculiarities of the Engineer and Architects teaching.

Other teaching problems related to the education of Engineers and Architects. Sent from Pat's cell

The professor and his/her role for the training of engineers and architects in accordance with the necessities of the current society.

The methodological work and its influence on the training of engineers and architects

> XII International Workshop on Physics' Teaching for Engineering and Architecture (EFING 2016)

President of the Organizing Committee: Juan José Llovera González. PhD

Email: llovera@electrica.cujae.edu.cu

Tel: (53) 7266 3736

Themes:

Teaching laboratories of Physics in Engineering

Automation of Physics experiments

New Technologies in Teaching of Physics

Virtual environment to learn Physics

Didactics of Physics and didactics of postgraduate courses in Applied Physics

Curriculum of Physics for engineers

Contemporary pedagogical trends in teaching of Physics for engineers

Interrelation of Physics with other basic sciences in engineers' education

Formation of values from the teaching of Physics

Workshop on Master's and Doctoral Theses

> VII International Workshop on Mathematics' Teaching for Engineering and Architecture

President of the Organizing Committee: Teresa de Jesús. Carrasco Jiménez, PhD

Email: emia@cemat.cujae.edu.cu

Tel: (53) 72663484

Themes:

Advanced Mathematic Thinking

Geometrical Thinking

Algebraic and Numerical Thinking

Thinking related to Probability and Statistics

Solving problems

Evaluation in Mathematics

Formation of Professors and researchers in Educational Mathematics

Use of technologies in Mathematics Teaching

Curriculum of Mathematics

Programs of mathematical subjects and disciplines in Technical Sciences. Mathematics and interdisciplinary organization

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> VIII Workshop on the Teaching of Foreign Languages for Specific Purposes (TELEFE 2016)

President of the Organizing Committee: Laura Barreiro Pérez, MSc

Email: laura@arquitectura.cujae.edu.cu, telefe@arquitectura.cujae.edu.cu

Tel: (53) 72671124

Themes:

Applied Linguistics: (Psycholinguistics, Socio-linguistics, Pragmalinguistics, Neuro-linguistics and

Computational Linguistics)

Teaching Methodology of Foreign Languages

Educational Research

Education, Communication and Teaching of Values

Curriculum Design, Didactics and Evaluation

Pedagogical and Communicative Training for Professors and Professionals

Learning Strategies

Creativeness and Development

Terminology and Translation

Culture and Language

Use of Information and Communication Technologies in the Teaching-Learning Process of Foreign

Languages

• IX International Workshop on Applied Physics in Engineering (FISAPLIC 2016)

President of the Organizing Committee: Juan José Llovera González, PhD

Email: <u>llovera@electrica.cujae.edu.cu</u>

Tel: (53) 7266 3736

Themes:

Applied optic.

Digital Image processing.

Biophisics.

Surface and colloid physics.

Nanophisics and nanotechnologies.

Computational physics.

Workshop on Master and Doctoral Theses.

• IX Latin American University Symposium on the Environment

President of the Organizing Committee: José Antonio Díaz Duque, PhD

Email: suima@tesla.cujae.edu.cu

Tel: (53) 7266 4265

Website: http://suima.cujae.edu.cu

Themes:

Integral managment of natural resources (water resources, mountainous areas, coastal areas, agroproductive ecosystems, protected areas, mineral resources, ecotourism, hydrocarbons).

Environmental management (environmental management systems, environmental education, environmental knowledge, environmental communication, environmental community service, responsible consumption, environmental labeling).

Integrated waste management (recovery-recycling-reuse (R3), cleaner production, life cycle assessment, ecoefficiency, responsible production, bioenergy generation, mining environmental liabilities).

Studies and environmental assessments (environmental impact assessments, strategic environmental assessment, ecological footprint, environmental assessments, environmental strategies).

State, prevention and mitigation of water pollution, soil, air, waste water and solid waste. Treatment technologies.



Sustainability. University and sustainability, engineering and sustainability, university models supporting sustainability, university cooperation, knowledge generation and local development for sustainability

• IX Symposium on Industrial Engineering and Similars

President of the Organizing Committee: Marta Beatriz Infante Abreu, PhD

Email: <u>simposio@ind.cujae.edu.cu</u> Tel: (53) 7266 3521 or 72663390

Workshops and themes:

> XII International Workshop on Quality and Development (QUALITAS, 2016).

President of the Organizing Committee: Aleida González González ,PhD

Email: agonza@ind.cujae.edu.cu

Themes:

Quality Management Systems. Quality Engineering. Management Integrated Systems. Quality in the Teaching Process. ICTs in Quality Management: Data Mining, Entrepreneurial Architecture, among others. Improvement Methodologies. Approval Valuation.

> X International Workshop of Human Resources.

President of the Organizing Committee: Armando Cuesta, PhD

Email: cuesta@ind.cujae.edu.cu

Themes:

Human Resources and Entrepreneurial Improvement Management. Ergonomy. Organization of Work Process and Human Resources Planning. Human Resources and Competences. Systems of Performance Valuation, Selection, Training and Performance of Personnel. Learning Organizations and Knowledge Management. Communication and Audit. Informatics Systems Supporting Human resources Management.

> X Ibero-American Encounter of Applied Mathematics. (EIMA 2016).

President of the Organizing Committee: Rosario Garza Ríos, PhD

Email: rosariog@ind.cujae.edu.cu

Themes:

Teaching of Statistics and Operations Research. Exploratory Analysis and Data Mining. Multivariate Statistics. Experiments Design. Support Systems for Decision Making. Model Decisions with Multiple Criteria. Data Analysis. Optimization and Simulation. Artificial Intelligence. Statistics Applications and Operation Research in Industry and Services.

> IX Workshop on Enterprise Management

President of the Organizing Committee: Daniel Alfonso Robaina, PhD

Email: dalfonso@ind.cujae.edu.cu

Themes:

Enterprise Management. Dirección estratégica. Enterprise Improvement, Enterprise Economy, Negotiation and Marketing, Management Control and Commands Tables. Change Management. Knowledge Discovery. Diffuse Logics.

> IV Workshop on Entrepreneurial Informatics.

President of the Organizing Committee: Yadaris Ortega González, MSc

Email: yog@ind.cujae.edu.cu





Themes:

Electronic Bussinesses. Management of Entrepreneurial Information. Applications of Informatics in Entrepreneurial Management Process.

• IV International Congress on Built Environment and Sustainable Development (MACDES 2016)

President of the Organizing Committee: Dania González Couret, PhD Email: macdes@arquitectura.cujae.edu.cu, dania@arquitectura.cujae.edu.cu

Tel: (53) 72663277, (53)72600335

Themes:

Regional Planning and Rural Habitat.

Sustainable Cities.

Sustainable Architecture.

Sustainable conservation of built heritage.

Building Materials and Technologies.

Renewable Energies and other Ecotechnics.

Management for Sustainability.

Theoretical and Methodological appoaches for Sustainability.

Comunication and Capacity Building for Sustainability

• III International Congress on Management of Disaster's Risks

President of the Organizing Committee: Carlos Llanes Burón, PhD

Email: <u>llanes@civil.cujae.edu.cu</u>, <u>maray@cih.cujae.edu.cu</u>

Tel: (53) 7266 3836, (53) 7266 3384

Themes:

Importance of the Studies of Hazards for the prevention of natural disasters.

Vulnerability Studies for the Reduction of Risks to natural disasters.

Studies of Risks against Natural Disasters.

Warning and Early Alert Systems in the reduction of the natural disasters.

The Physical Planning, their importance on the Risk Management of natural disasters.

Importance of the Data Bases and the use of Geographical Information Systems for the prevention and mitigation of natural disasters.

Safe Hospitals Program in front of disasters. Safe Hospital Index.

Insurance as promoter of Risk Management against natural disasters

Psychological Preparation before, during and after the natural disasters in the Setting of Risks.

Management of risks of disasters in the design, construction, operation and maintenance of the chemistry, processing of minerals, energetic and the petroleum industries, as well as in other productive facilities where substances or dangerous materials that for some of their characteristics, represent a threat to the community and/or for the environment, are used or stored.

Management of risks of disasters in the transportation of substances or dangerous materials.

Prevention of technological disasters as a consequence of natural events

Management of risks technological disasters, industrial development and environment

The management of risks technological disasters as part of the general management of the companies

Experiences in the management of risks of technological disasters at territorial level: identification and evaluation of risks, emergencies plans, information and population's preparation.

Management of risks of disasters in facilities in those that one makes biological agents' use and their products, organisms and fragments of these with genetic information.

Management of risks in foods industries and facilities for storage and conservation of foodstuffs.





Management of risks of sanitary disasters at territorial level: territorial classification and urbanism, gathering of residuals, their treatment and final disposition, sanitary quality of the water and their readiness, systems of surveillance, control of vectors, information and population's preparation.

Experiences in the prevention of sanitary disasters associated to natural events.

The teaching of engineering and the architecture in pre and postgrade.

The scientific university investigation and its impact in the community.

The use and impact of new information technologies and communications.

The local actors's capacitation.

International nets of collaboration

• IX European and Latin-American Seminar on Engineering Systems, CITTEL 2016

President of the Organizing Committee: Caridad Anías Calderón, PhD Email: cittel2016@tesla.cujae.edu.cu, cacha@tesla.cujae.edu.cu

Tel: (53) 72663325

Themes:

Wireless communications and systems. Emerging communication systems. Pasive and active microwave's devices

Convergencia networks, services, equiment, terminales y applications for voice, data and videos.

Computing in the clouds

Management of networks, services and telecommunication business.

Internet technologies and services.

Information management and integration. Big data in Telecommunications.

Telecommunications and Telematics safety.

Energy, environment and telecommunications.

Technical rules and standards for Telecommunications and Telematics.

Radar applications (to meteorology, space geophysics and others) and radio astronomy (study of the sun).

Digital television.

Digital processing of signs and pattern recognition applied to telecommunications.

Teaching of Telecommunications and Telematics.

• VII International Conference of European - Latin American Center for Logistics and Ecological Projects.

President of the Organizing Committee: José Antonio Acevedo Suárez, PhD

Email: logespro@tesla.cujae.edu.cu

Tel: (53) 7266-35-43

Themes:

Technologies
Environment and sustainability
Bioenergy
Bio-resources
Logistics and supply chains
Mathematical modeling in Logistics
Entrepreneurial undertaking
Cooperative development
University-Enterprise Cooperation

• II International Symposium Of Modeling Applied to the Engineering (MAI 2016)

President of the Organizing Committee: Orestes Llanes Santiago, PhD



Email: vrip@tesla.cujae.edu.cu, orestes@electrica.cujae.edu.cu

Tel: (53) 72608454

Themes:

Modeling in:

> Hydraulic Engineering

- Modeling in river hydraulics and maritime
- Modeling in supply networks, sewer and storm drainage
- Modeling of groundwater
- Modeling in Hydrodynamics and morphology of coastal areas
- Modeling in Oceanography
- Modeling with applications in Fluid Mechanics
- Modeling in Environmental Hydraulics

Coordinator: Yoel Martínez González, PhD

Email: ymarq@cih.cujae.edu.cu

➤ Geophysical Engineering

- Modeling and simulation of physical processes and fields in the Geosciences: Propagation of physical fields and transportation of fluids (water, oil, gas, contaminants) in natural media
- Spatial statistics and multivariate: Gesoestadstics, classification (supervised and unsupervised), Exploratory Data Analysis and Data Mining.
- Inverse problems to solve tasks of Geosciences.
- Processing of signals and images to solve tasks of Geosciences.

Coordinator: Rosa Maria Valcarcel Ortega, PhD

Email: rosy@tesla.cujae.edu.cu

Electronic Engineering

- Finite element methods applied to the modeling of transistors
- Finite element methods applied to the design of sensors and wireless devices
- Computer tools applied to data processing arrangements of sensors (RNA, PCA, PLS, etc.)

Coordinator: Eduardo Martin Rodriguez, PhD Email: eduardo.martin@electrica.cujae.edu.cu

> Industrial engineer

- Modeling of work
- Modeling of production and services
- Modeling systems and logistics operations
- Modeling of supply chains and value networks
- Models of optimizing the use of resources
- Simulation models and operating systems
- Modeling companies and businesses
- Modeling in decision
- Statistical models in the company and the Economy

Coordinator: Jose Acevedo Suarez, PhD Email: acevedo@tesla.cujae.edu.cu



> Mechanical Engineering

Coordinator:

Email:

> Chemical engineering

- Mathematical modeling operations mass transfer, heat transfer in fluid flow operations in chemical and biological reactors.
- Mathematical modeling applied to the design of chemical processes.
- Mathematical modeling applied to the design of biotechnological processes.
- Mathematical modeling applied to design food processes.
- Models to estimate thermodynamic properties.
- Numerical methods and their application in process simulation in steady state.
- Dynamic simulation of equipment and processes.
- Applications of data mining in chemical engineering

Coordinator: Lourdes Cardenas Zumalacarregui, PhD

Email: lourdes@quimica.cujae.edu.cu

Civil engineering

- Numerical modeling of civil structures: cross-linked structures, sheet, building systems, knots and joints.
- Computational mechanics of solids, fluids and structures.
- Constitutive modeling of materials.
- Physical modeling in wind tunnels.
- Modeling of road structures and earthworks.
- Physical and numerical modeling of geotechnical and foundation problems.
- Application of numerical modeling tools for civil engineering problems.

Coordinator: Yoermes Gonzalez Haramboure, MSc

Email: yoermes@civil.cujae.edu.cu

• III International Congress of Bioengineering

President of the Organizing Committee: Angel Regueiro Gómez, PhD

Email: regueiro@electrica.cujae.edu.cu

Tel: (53) 7263704, (53) 72663717, (53) 72663718

Themes:

Biosignal processing and medical imaging

Teaching biomedical engineering.

Biomechanics.

Biomaterials.

Nanoscience and nanotechnology in bioengineering

Alternative medicine.

XII International Symposium on Automation.

President of the Organizing Committee: Ana Isabel C. González Santos, PhD

Email: <u>sia@electrica.cujae.edu.cu</u> Tel: (53) 7263343, (53) 72602055





Themes

Instrumentation and control of industrial processes: networks and communication protocols, technologies associated with the sector and manufacturing systems.

Theory and Control Engineering: predictive and adaptive control, optimal control, robust control, fractional control nonlinear control, digital control systems, diagnostics and fault detection and stability control systems. Artificial intelligence applied to automation: neural networks, fuzzy logic, evolutionary algorithms and intelligent agents.

Industrial Computers: SCADA systems, control systems, real-time embedded control, diagnostics and fault detection with software support and automation, information security systems control systems.

Identification, modeling and simulation: iidentificación systems, modeling and simulation.

Mechatronics: Area robotics in general. Planning and trajectories generation of robotic manipulators and mobile robots, control, design, implementation, and applications in this area, other mechatronic applications.

• VI PV Workshop Cuba

President of the Organizing Committee: Daniel Stolik Novygrod, PhD

Email: stolik@imre.oc.uh.cu, dstolik@fisica.uh.cu

Tel: (53) 7209 5812 cel 53572300

Themes

The increasing levels of photovoltaic penetration in the electricity grid.

Cost of Photovoltaic Energy: KWh vs. kWh with fossil fuel, kWp and installation, the total costs of photovoltaic applications (industrial power generation, agricultural, commercial and residential) photovoltaics systems.

Competition between of photovoltaic modules and different cells types.

Benefits of photovoltaics inverters, participation in the grid management.

The structures and metal supports for photovoltaic systems: Design, cost, alternative fixing.

Financings of the Photovoltaic Energy (feed in tariff, Net metering, PPA).

Storage of electricity via the photovoltaic energy.

Development of Photovoltaic Energy in Latin America, the Caribbean and worldwide.

Optimization of the design and the wiring cost photovoltaic.

Installation of large photovoltaic farms.

The risks and costs of photovoltaics against hurricanes and other natural disasters.

Promotion of possible establishment of a Photovoltaic Association in Latinoamerican and the Caribbean between producers, universities, scientists, engineers, researchers, economists and others.

All scientific activities held in the International Conference Center in Havana City, and delegates will have complete acces to all of them. In the CCIA 18 you can participate as speaker delegate, listener, etc.

CLOSING DATE FOR WORKS

ACTIVITIES	CLOSING DATE	
Sending of works	June 30th, 2016	
Accepting notification of works	August 20th, 2016	
Closing date for works that some recommnedations were	September 30th, 2016	
made		
Date of the event	21/11/2016 to 25/11/2016	

Interested in presentation of works, link www.ccia.cujae.edu.cu





REGISTRATION FEE

The registration fee of participants includes the accreditation module (folder, pen, CD with all papers accepted for the event, scientific program), participation in academic activities, opening and closing activities, participation\'s certificate and speaker\'s certificate if present work. Also in the category of delegated lunch it is included

» Delegate: 220.00 CUC

» Undergraduate student: 80.00 CUC

» Companion: 70.00 CUC

The registration fee for accompanying persons includes the opening and closing activities of the CCIA 18 and a Souvenir.

The payment can be made online through the website <u>www.cciacuba.com</u>, the payment maybe made in cash (CUC) at time of registration at the convention center.



Ing. Caridad Sago Rivera
Departamento de Evento HAVANATUR
Tel: (53) 72019780 / 72019777 / 72019861

Email: sago@havanatur.cu

Hosting Packages

Price per person per night expressed in Pesos Cubanos Convertibles, CUC

Hotels	Double Room	Single room
HOTEL PALCO ****		
HOTEL QUINTA AVENIDA *****		
HOTEL MELIA HABANA *****		
HOTEL OCCIDENTAL MIRAMAR ****		
HOTEL PANORAMA ****		
HOTEL MONTEHABANA ***		
HOTEL NEPTUNO TRITON ***		

Services included:

- » Accommodation for one night with breakfast
- » Transfers airport / hotel / airport
- » Daily transfers to the conference center as well as the official activities of the event
- » Personal Assistance

Another option:

Palace Convention through its international sales team makes and sells online a comprehensive package that includes the registration fee in the value of housing in the host Palco hotel with airport transfers. You can contact them via email: ventas@palco.cu referring to the name of the event.





Traveling with Copa Airlines attendees **18 Scientific Convention of Engineering and Architecture** (November 21th to November 25th, 2016) enjoy 20% off on your flight to Havana and Santa Clara.

To access this discount preferential D6623 visit www.copa.com and enter the Promotional Code box or call 1-800-FLY-COPA and quote promotional code. Valid only for participants of this convention and a companion benefit.

International Routes Restrictions: Valid for published fares. Not applicable on promotional rates or combined with any other promotion is not valid for travel agency purchases.

Valid for travel: November 21th to November 25th, 2016

Valid only on flights operated by Copa Airlines (CM) and / or Copa Airlines Colombia (CM*) on routes to Havana and Santa Clara, Cuba.

For more details on our reservation numbers and office addresses, can visit the following internet link on the Internet: http://www.copaair.com/sites/cc/es/acerca-de-copa-airlines/pages/nuestras-oficinas.aspx

Thanks for preferring Copa Airlines.

OFFICIAL LANGUAGES

Abstracts and works will be presented in Spanish, English, and Portuguese.

COMMUNICATION.

Information, participation notification, as well as, abstracts, etc, can be done through the Secretary of the Event CCIA 18 or using the corresponding emails.



ORGANIZING COMMITTEE.

President: Alicia Alonso Becerra, PhD

First Vicepresident: Daniel Alfonso Robaina, PhD

Vicepresidents:

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