

## SUMMARY

### 1.- MEMBERSHIP

▶ NEW MEMBERS (TOTAL)	<b>442 *</b>
▶ FELLOW MEMBERS IN PROCESS	<b>4</b>
▶ SENIOR MEMBERS IN PROCESS	<b>12</b>

<b>SERVICES TO THE MEMBERSHIP</b>	<b>348</b>
(UNIVERSITIES AND ENTERPRISES COUNSELING - ATTACHED 1 -)	

<b>APPLICATIONS IN PROCESS</b>	<b>280</b>
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### 2.- STUDENTS ACTIVITIES

▶ NEW STUDENT MEMBERS	<b>214</b>
▶ NEW STUDENT BRANCHES	<b>5</b>
▶ STUDENT BRANCHES IN PROCESS	<b>34</b>

#### SUPPORT TO STUDENT BRANCHES

■ RRR RRGOLD	<b>24</b>	STUDENTS
■ SUMMER MEETING	<b>74</b>	STUDENTS & PROFESORS
■ FALL MEETING	<b>273</b>	STUDENTS & PROFESORS

### 3.- PROFESSIONAL ACTIVITIES

▶ PROFESSIONAL MEMBERS INCORPORATES TO SOCIETIES	<b>228</b>
▪ TO PES	126
▪ TO OTHERS SOCIETIES	102
▶ INVITATIONS FOR SENIOR MEMBER	<b>155</b>
▶ DISTINGUISHED VISITORS	<b>47</b>

<b>CONTINUOUS EDUCATIONAL:</b>	<b>15</b>	TUTORIAL COURSES
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#### EVENTS:

▶ <b>22ND SUMMER MEETING - 2009 -</b>	
TECHNICAL EVENTS	<b>451</b>
▪ 242 PAPERS	
▪ 182 INFO SESSIONS	
▪ 21 MASTER LECTURES	
▪ 4 PANEL SESSIONS	
▪ 2 TUTORIAL COURSES	

▶ <b>20TH FALL MEETING - 2009 -</b>	
TECHNICAL EVENTS	<b>189</b>
▪ 97 PAPERS	
▪ 15 MASTER LECTURES	
▪ 77 INFO SESSIONS	

### 4.- ACHIEVEMENTS

▶ INCREMENTO EN LA MEMBRESIA TOTAL DE LA SECCION MEXICO EN	<b>25.6%</b>
▶ NEW STUDENT BRANCHES	<b>5</b>
▶ NEW STUDENT MEMBERS	<b>214</b>
▶ NEW PROFESSIONAL MEMBERS	<b>228</b>
▶ TO GET THE 2009 IEEE STUDENT - BRANCH MAGAZINE	

\* DULY REGISTERED ONLINE

## **MEMBERSHIP:**

The Mexico Section carried out:  
**471 PROCESS OF APPLICATION  
AND RENEWAL**

The Mexico Section incorporated:  
**442 NEW MEMBERS**  
**228 PROFESSIONALS**  
**214 STUDENTS**

### **SENIOR MEMBERS IN PROCESS**

- *Francisco Aguirre Mosqueda*
- *Hugo Aquino Navarrete*
- *Diego E. Gota Contreras*
- *Victor M. Cinostroza*
- *Ignacio Llamas Garro*
- *Jose M. Mora Tenorio*
- *Román M. Moreno*
- *René Roa Fierro*
- *Jorge A. Rojas-Ramirez*
- *Feledonio Sainz De Urquijo*
- *Luis A. Sedeno González*
- *Mario Jaquera*

### **FELLOW MEMBERS IN PROCESS**

*M.P. Gilberto Enriquez Harper*  
*Dr. Ricardo Mota Palomino*  
*M.P. Jesús Reyes Garcia*  
*Ing. Augusto Hintze Valdez*

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## **SERVICES TO THE MEMBERSHIP**

- ATTACHED 1 -

The Mexico Section gave consultancy to:

**Institutions of Superior Education,  
Enterprises and Privates**

in:

- ➔ **APPLICATIONS TO IEEE**
- ➔ **RENEWALS**
- ➔ **TECHNICAL SOCIETIES**
- ▶ **CONSULTANTSHIP AND PROCESSES FOR:**
  - ➔ **STUDENT BRANCHES FORMATION**
    - TECHNICAL CHAPTERS FORMATION
    - AFFINITY GROUPS FORMATION
    - BRANCHES REACTIVATION
    - NEW OFFICIALS REPORT
    - ACTIVITIES PLAN AND REPORT
    - SENDING OF REPORTS
  - ➔ **CHANGE OF GRADE TO MEMBER**
  - ➔ **NOMINATION TO SENIOR MEMBER**
  - ➔ **NOMINATION TO FELLOW**
- ▶ **ORIENTATION FOR:**
  - ➔ **ACQUISITION OF STANDARDS, BOOKS, ETC.**
  - ➔ **TO OBTAIN USERNAME, PASSWORD**
  - ➔ **ALIAS OF IEEE**
- ▶ **LOCATION OF:**
  - ➔ **SECTIONS DATA**
  - ➔ **TECHNICAL ARTICLES**
  - ➔ **STANDARDS**
  - ➔ **PUBLICATIONS**
  - ➔ **DIGITAL LIBRARIES**
  - ➔ **LOCAL EVENTS**
  - ➔ **REGIONAL EVENTS**
  - ➔ **INTERNATIONAL EVENTS**
- ▶ **VISITS TO EDUCATIONAL INSTITUTIONS:**
  - ➔ **GIVE CONFERENCES**
  - ➔ **BENEFITS FOR THE MEMBERSHIP**
  - ➔ **IEEE STANDS**

## **STUDENT ACTIVITIES**

The Mexico Section incorporated:

**214**

**NEW STUDENT  
MEMBERS**

The Mexico Section formed:

**5**

### **STUDENT BRANCHES**

- ➔ **TECHNOLOGICAL INSTITUTE OF TOLUCA**
- ➔ **OLMECAN UNIVERSITY**
- ➔ **TECHNOLOGICAL UNIVERSITY OF MEXICO - ATIZAPAN**
- ➔ **TECHNOLOGICAL OF SUPERIOR STUDIES OF COACALCO**
- ➔ **AUTONOMOUS UNIVERSITY OF MEXICO CITY**

### **9 BRANCHES IN PROCESS**

Receiving documents from schools

- ◆ **COMPUTING INVESTIGATION CENTER - IPN**
- ◆ **TECHNOLOGICAL INSTITUTE OF MERIDA**
- ◆ **TECHNOLOGICAL SUPERIOR INSTITUTE OF COMALCALCO**
- ◆ **EASTERN TECHNOLOGICAL SUPERIOR INSTITUTE OF THE STATE OF HIDALGO**
- ◆ **TECHNOLOGICAL SUPERIOR INSTITUTE OF JOCOTITLAN**
- ◆ **POLYTECHNIC UNIVERSITY OF PACHUCA**
- ◆ **ITESM - SANTA FE**
- ◆ **AUTONOMOUS UNIVERSITY OF CHIAPAS**
- ◆ **UAEM – TEOTIHUACAN VALLEY**

The Mexico Section provided attention to students  
of Superior Education Institutions to form new  
Student Branches:

## **34**

### **STUDENT BRANCHES IN PROCESS**

- ♦ UNIVERSITY CENTER ETAC
- ♦ UNIVERSITY CENTER JUSTO SIERRA
- ♦ I T E S C A
- ♦ SUPERIOR STUDIES INSTITUTE OF LOS CABOS
- ♦ TECHNOLOGICAL INSTITUTE CUAUHTÉMOC, CHIHUAHUA
- ♦ SUPERIOR STUDIES TECHNOLOGICAL INSTITUTE OF IXTAPALUCA
- ♦ SUPERIOR TECHNOLOGICAL INSTITUTE OF NUEVO CASAS GRANDES
- ♦ TECHNOLOGICAL INSTITUTE OF CD. CUAUHTÉMOC
- ♦ TECHNOLOGICAL INSTITUTE OF CUATITLAN IZCALI
- ♦ TECHNOLOGICAL INSTITUTE OF CULIACÁN
- ♦ TECHNOLOGICAL INSTITUTE OF TLALNEPANTLA
- ♦ SUPERIOR TECHNOLOGICAL INSTITUTE OF MISANTLA
- ♦ SUPERIOR TECHNOLOGICAL INSTITUTE OF TLAXCO
- ♦ SUPERIOR TECHNOLOGICAL INSTITUTE OF URUAPAN
- ♦ SUPERIOR TECHNOLOGICAL INSTITUTE OF XALAPA
- ♦ ITESM – CAMPUS TOLUCA
- ♦ UAEM - ZUMPANGO
- ♦ UNITEC - CUITLAHUAC
- ♦ AUTONOMOUS UNIVERSITY OF BAJA CALIFORNIA
- ♦ AUTONOMOUS UNIVERSITY OF SAN LUIS POTOSÍ
- ♦ AUTONOMOUS UNIVERSITY OF TABASCO
- ♦ LA SALLE UNIVERSITY- PACHUCA
- ♦ UNIVERSITY OF QUINTANA ROO
- ♦ UNIVERSITY OF TABASCO
- ♦ JUÁREZ AUTONOMOUS UNIVERSITY OF TABASCO
- ♦ LA SALLE UNIVERSITY PACHUCA
- ♦ POLYTECHNIC UNIVERSITY OF AGUASCALIENTES
- ♦ POLYTECHNIC UNIVERSITY OF PUEBLA
- ♦ POLYTECHNIC UNIVERSITY OF SAN LUIS POTOSÍ
- ♦ TECHNOLOGICAL UNIVERSITY OF LA MIXTECA
- ♦ SOUTHEASTERN TECHNOLOGICAL UNIVERSITY OF GUANAJUATO
- ♦ UNIVERSITY OF PEDREGAL
- ♦ UNIVERSITY OF SONORA
- ♦ UVM – VILLAHERMOSA

## **IN THE FOLLOWING EVENTS, SUPPORTED TO THE STUDENT BRANCHES**

### **RRR & RGOLD 2009**

#### **REGIONAL MEETING OF BRANCHES & REGIONAL MEETING GOLD, R9**

*Celebrated from the 12th to the 15th of November, 2009 at the **Escuela Superior Politécnica del Litoral, Universidad Católica Santiago de Guayaquil & Universidad Politécnica Salesiana in Guayaquil, Ecuador.***

The Mexico Section supported the participation of **24 officials** of the Student Branches with the transportation, inscription and the stay.

Oscar Rojas Padilla  
**UPIITA - IPN**  
Student Branches Coordinator of  
**MEXICO SECTION IEEE**

Jesús Heriberto Terrazas  
**TECHNOLOGICAL INSTITUTE OF CHIHUAHUA**  
President

Jorge M. Núñez Guardado  
**UNITEC – Atizapan**  
President

Antonio E. Benítez Mendoza  
**TECHNOLOGICAL INSTITUTE OF TOLUCA**  
President

Sofía Iraís Guerrero Sanabria  
**SUPERIOR STUDIES TECHNOLOGICAL OF COACALCO**  
President

Hugo Tapia Hernández  
**TECHNOLOGICAL OF SUPERIOR STUDIES OF COACALCO**  
Elected President

Jorge E. Conde Díaz  
**CINVESTAV – IPN**  
President

Alejandro Mayoral  
**LA SALLE UNIVERSITY**  
President

Marciano Saúl Vázquez Domínguez  
**LA SALLE UNIVERSITY**  
Elected President

Ignacio Cuauhtémoc Benítez  
**UNAM – FACULTY OF ENGINEERING**  
President

Martín Rodríguez Juárez  
**UNAM – FACULTY OF ENGINEERING**  
Elected President

- CONTINUOUS -

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## **RRR & RGOLD 2009**

### **REGIONAL MEETING OF BRANCHES & REGIONAL MEETING GOLD, R9**

Mayté Alandia Pérez

**UPIITA - IPN**  
President

Agustín Santana Romero

**UPIITA - IPN**  
Elected President

Edith Hernández

**TECHNOLOGICAL UNIVERSITY OF NEZAHUALCOYOTL**  
President

Patricia Islas

**TECHNOLOGICAL UNIVERSITY OF NEZAHUALCOYOTL**  
Elected President

Ana Ma. Solorzano Soria

**TECHNOLOGICAL INSTITUTE OF DURANGO**  
President

Luz Alejandra de Anda Nevarez

**TECHNOLOGICAL INSTITUTE OF DURANGO**  
Elected President

Jeovanny E. Bezares Leyva

**ESIME - IPN, CULHUACAN**  
President

Octavio Aguado Sánchez

**ESIME - IPN, CULHUACAN**  
Elected President

Roberto Carlos Canto Canul

**AUTONOMOUS UNIVERSITY OF CAMPECHE**  
President

Gabriel Núñez Vega

**TECHNOLOGICAL INSTITUTE OF SONORA**  
President

Luis Federico Pou Torres

**OLMECA UNIVERSITY**  
President

Saúl Martínez Meza

**SUPERIOR SCHOOL OF COMPUTING**  
President

Víctor Jesús Angulo Medina

**TECHNOLOGICAL INSTITUTE OF SONORA**  
Elected President

## **RVP-AI/2009**

### **22ND SUMMER MEETING**

From the 5th to the 11th of July, 2009.

**66 students and 8 professors** of 5 Student Branches were supported.

#### **UNAM**

10 STUDENTS

#### **IPN-ESIME-ZACATENCO**

16 STUDENTS

#### **TECHNOLOGICAL INSTITUTE OF TOLUCA**

10 STUDENTS

#### **TECHNOLOGICAL INSTITUTE OF MORELIA**

10 STUDENTS 8 PROFESSORS

#### **UNIVERSITY VERACRUZANA**

20 STUDENTS

## **ROC&C'2009**

### **20TH FALL MEETING**

From the 29th of November to the 5th of December, 2009.

**261 students and 12 professors** of 6 Student Branches and 5 in formation process were supported.

#### **TECHNOLOGICAL INSTITUTE OF VILLA GUERRERO**

70 STUDENTS 2 PROFESSORS

#### **IPN-CIC**

5 STUDENTS

#### **IPN-ESIME-CULHUACAN**

5 STUDENTS

#### **IPN-ESIME-ZACATENCO**

8 STUDENTS 2 PROFESSORS

#### **IPN-UPIITA**

3 STUDENTS

#### **SUPERIOR TECHNOLOGICAL INSTITUTE OF LA MONTAÑA**

40 STUDENTS 2 PROFESSORS

#### **SUPERIOR TECHNOLOGICAL INSTITUTE OF COATZACOALCOS**

25 STUDENTS

#### **AUTONOMOUS UNIVERSITY OF CD. JUAREZ**

35 STUDENTS 3 PROFESSORS

#### **UNIVERSITY VERACRUZANA**

30 STUDENTS

#### **UNIVERSITY MEXIQUENSE**

33 STUDENTS 2 PROFESSORS

#### **TECHNOLOGICAL UNIVERSITY OF NEZAHUALCOYOTL**

7 STUDENTS 3 PROFESSORS

## **IEEE STANDS WERE INSTALLED AT THE FOLLOWING EVENTS:**

- **Power Summer School UNAM 2009 (EVP-UNAM /2009)**, it was carried out at the Engineering Tower of the University Campus the 5th, 6th and 7th of August, 2009.
- The **Student Branch of UNAM**, at the **EX-STUDENT SOCIETIES WEEK OF THE ENGINEERING FACULTY (SEFI)**, from the 7th to the 9th of October, installed a Stand of the **IEEE** with the support of **Mexico Section**.
- **EXPO ACONTEC**, organized by the Engineering Department in Control and Automatization of the **INSTITUTO POLITECNICO NACIONAL**, and the **STUDENT SECTION OF ISA CONTROL**, it was carried out in the Cultural Center "Jaime Torres Bodet" the 30th of September and the 1st of October, 2009.
- **TISP - TEACHER IN-SERVICE PROGRAM UPIITA, IPN – MEXICO SECTION IEEE**  
**Development Program by the IEEE**. The **TISP** is being implemented in different countries all over the world, encouraging the young people for leaning over into technological careers.  
Wednesday, June 3rd, 2009.
- **RVP-AI**  
**22ND SUMMER MEETING**  
From the 5th to the 11th of July, 2009.
- **ROC&C**  
**20TH FALL MEETING**  
From the 29th of November to the 5th of December, 2009.

## **WE SUPPORTED THE STUDENT BRANCHES WITH THE VISIT OF OUR SAC.**

- **TISP - TEACHER IN-SERVICE PROGRAM UPIITA, IPN – MEXICO SECTION IEEE**  
Wednesday, June 3rd, 2009.
- **IV CONGRESS OF ELECTRIC AND ELECTRONIC TECHNOLOGY INNOVATION "TRANSFORMING ECOSYSTEMS, INNOVATING THROUGH ELECTRIC TECHNOLOGY"**  
**TECHNOLOGICAL INSTITUTE OF SONORA**  
October the 30th, 2009
- **THE AWARENESS OF THE STUDENT BRANCH of the TECHNOLOGICAL INSTITUTE OF DURANGO**  
October the 19th, 2009

## **PROFESSIONAL ACTIVITIES**

### **THE MEXICO SECTION INCORPORATED:**

**228**

#### ► **NEW PROFESSIONAL MEMBERS**

**(126)**

PROFESSIONAL MEMBERS INCORPORATED TO THE  
**POWER ENGINEERING SOCIETY**

**(102)**

PROFESSIONAL MEMBERS INCORPORATED TO THE  
OTHER SOCIETIES

#### ► **SENIOR MEMBER PROGRAM**

**155** INVITATIONS TO MEMBERS TO  
BECOME SENIOR MEMBER

#### ► **DISTINGUISHED VISITORS**

WE HAD THE HONOR TO HAVE THE PRESENCE  
OF THE FOLLOWING DISTINGUISHED VISITORS:

**Eng. Francisco Martínez**  
IEEE Globalization of Professional Activities  
**MGA Liaison to TAB**  
**IEEE**

**Eng. Enrique Alvarez Rodrich**  
Regional Director  
**IEEE - Latin America, R9**

**Ph.D. José Bernardo Rosas-Fernández**  
Centre for Advanced Photonics and Electronics  
**Cambridge University**

## **TUTORIAL COURSES**

The Continuous Education Secretary of Mexico  
Section IEEE carried out on its Training Center:

### **15 TUTORIAL COURSES**

- ♦ **THE DISTRIBUTION OF NETWORKS AND THE QUALITY OF ENERGY**  
February the 5th, 2009.
- ♦ **GENERATION TECHNOLOGIES OF ELECTRIC ENERGY**  
July 23rd and 24th, 2009.
- ♦ **REACTIVE POWER COMPENSATION IN ELECTRIC POWER SYSTEMS**  
July 30th and 31st, 2009.
- ♦ **MAINTENANCE AND TEST TECHNIQUES TO ELECTRIC EQUIPMENT**  
August 6th and 7th, 2009.
- ♦ **TRANSMISSION LINES PROTECTION AND SUBSTATIONS LIGHTNING ARRESTER**  
August 20th and 21st, 2009.
- ♦ **TRANSMISSION LINES AND DISTRIBUTION NETWORKS**  
September 3rd and 4th, 2009.
- ♦ **DISTRIBUTION NETWORKS (PLANNING AND DESIGN)**  
September 10th and 11th, 2009.
- ♦ **PROTECTION RELAY AND PROTECTION COORDINATION IN INDUSTRIAL ELECTRICAL SYSTEMS**  
September 24th and 25th, 2009.
- ♦ **GROUND SYSTEMS DESIGN FOR INDUSTRIAL AND COMMERCIAL INSTALLATIONS**  
October 15th and 16th, 2009.
- ♦ **ELECTRONIC EQUIPMENTS**  
October 20th and 21st, 2009.
- ♦ **ISOLATION COORDINATION OF TRANSMISSION LINES AND ELECTRIC SUBSTATIONS**  
October 29th and 30th, 2009.
- ♦ **GENERATORS PROTECTION ACCORDING TO IEEE C37.102 2006 GUIDE**  
November 18th and 19th, 2009.
- ♦ **ELECTRICAL POWER SYSTEM PROTECTION**  
November 26th and 27th, 2009.
- ♦ **POWER TRANSFORMERS IN ELECTRICAL SYSTEMS**  
December 3rd and 4th, 2009.
- ♦ **ELECTRIC ENERGY QUALITY OF SERVICE**  
December 10th and 11th, 2009.

## RVP-AI/2009

### 22ND SUMMER MEETING

From the 5th to the 11th of July, 2009.

## TECHNICAL PROGRAM

- ▶ 242 TECHNICAL ARTICLES
- ▶ 182 TECHNICAL CONFERENCES
- ▶ 21 MASTERFUL CONFERENCES
- ▶ 4 PANEL SESSIONS
- ▶ 2 TUTORIAL COURSES

## 451 TECHNICAL EVENTS

### THE FOLLOWING DISTINGUISHED CONFERENCISTS PARTICIPATED IN THE MEETING:

MOISTURE ASSESSMENT USING DIELECTRIC FREQUENCY RESPONSE AND TEMPERATURE DEPENDENCE OF DISSIPATION FACTOR

Eng. Peter Werelius  
**MEGGER, SWEDEN**

INTELLIRUPTER –RESTORER PULSES: A NEW PHILOSOPHY FOR SAFEGUARDING FUSIBLES

Eng. Jim Hart  
**S&C ELECTIC, USA**

PD & DIELECTRIC LOSSES DIAGNOSIS TO ASSES THE CONDITION OF TRANSMISSION CABLES AND ACCESSORIES

Dr. Heening Oejten  
**FONKEL**

TWACS, PL COMMUNICATION FOR GAUGES CABINET TYPE

Eng. Richard Marking  
**AMBAR, USA**

TENDENCIES ON THE TRANSFORMERS GAUGES

Eng. Erwin Retz  
**AREVA T&D**

ADVANCES IN ELECTRICAL INSULATION. METHODS AND APPLICATIONS

Eng. Ian Mac Knight  
**INSULBOOT / PLASTIC DIP MOLDING**

NEW METHODS FOR POWER SWITCHES TEST AND ANALYSIS

Eng. Frank Richter  
**KoCos Messtechnik AG GERMANY**

MOISTURE ASSESSMENT USING DIELECTRIC FREQUENCY RESPONSE AND TEMPERATURE DEPENDENCE OF DISSIPATION FACTOR

Mr. Mats Karlstrom  
**MEGGER, SWEDEN**

ADD TRIP SECURITY TO ARC-FLASH DETECTION FOR SAFETY AND RELIABILITY

Eng. Mark Zeller  
 Eng. Gary W. Scheer  
**SCHWEITZER ENG. LAB.**

ISOLATED MINERAL OILS, COMPARATIVE STUDY OF THE CONTENT OF WATER MEASURED BY THE PHOTOACOUSTIC AND COULOMETRIC KARL FISCHER METHODS

Eng. Alfonso De Pablo  
**GE ENERGY POWER SYSTEMS, SPAIN**

IEC 61850 – PRINCIPLES, APPLICATIONS AND BENEFITS

Dr. Alexander Apostolov  
**OMICROM ELEC., Australia**

MOISTURE ASSESSMENT USING DIELECTRIC FREQUENCY RESPONSE AND TEMPERATURE DEPENDENCE OF DISSIPATION FACTOR

Eng. Matz Ohlen  
**MEGGER, SWEDEN**

UPDATE TRANSMISSION LINE PROTECTION COMMUNICATIONS

Eng. Ken Fodero  
**SCHWEITZER ENG. LAB., USA**

INDICATORS OF INTELLIGENT FAILURES FOR DISTRIBUTION NETWORKS WITH SOFTWARE

Eng. Terje Venesth  
**METERING ENG. – NORTROLL**

SPLICE SHUNT, SOLUTION TO HOT SPOTS IN COMPRESSION JOINTS

Eng. Bob Whapham  
**PREFORMADOS, USA**

REPAIR VS REMANUFACTURE

Eng. Craig Stiegemeier  
**ABB**

POWER TRANSFORMER ON-LOAD TAP CHANGER EVALUATION USING DISSOLVED GAS-IN-OIL ANALYSIS

Eng. Norman Field  
**WEIDMANN DIAGNOSTIC SOLUTIONS**

THE INVESTIGATION ROLE, APPLIED TO THE DEVELOPMENT OF SUSTAINABLE ENEGETIC SYSTEMS

Ph.D. Olimpo Anaya Lara  
**INSTITUTE FOR ENERGY AND ENVIRONMENT UNIVERSITY OF STRATHCLYDE, U.K.**

A NOVEL CURRENT-BASED DIFFERENTIAL CT SUPERVISION FUNCTION

Eng. Branislav Cvorovic  
 Eng. Alfred Edward  
**AREVA T&D Limited, U.K.**

BUSBAR PROTECTION DESIGN FOR ECONOMY OF PANEL SPACE, MINIMISED POWER CONSUMPTION, AND ADVANCED PERFORMANCE

Eng. Henri Grasset  
**AREVA T&D Lattes, FRANCE**  
 Eng. Best Chris  
**AREVA T&D Stafford, U.K.**

THE IMPORTANCE OF IEC 61850 INTEROPERABILITY TESTING

Eng. J.C. Tan, Eng. C. Zhang  
**GUANGXI UNIVERSITY, CHINA**

THE ELECTRIC COMPANY OF THE FUTURE

Dr. Renato Cespedes  
**KEMA, USA**

COMPACT HYBRID SOLUTIONS IN HIGH TENSION AND COMPARATIVE STUDY AMONG AIS/GIS/HIS/HIBRIDAS (DTC)

Eng. Esad Avdic  
**SIEMENS, Vosnia**

COMPONENTS OF A WIDE MONITORING AND DIAGNOSTIC SYSTEM FOR TRANSFORMERS

Eng. Claude Kane  
**GENEREMEX**

COMPONENTS OF A WIDE MONITORING AND DIAGNOSTIC SYSTEM FOR TRANSFORMERS

Eng. Peter Kantardziski  
**GENEREMEX**

ADVANCED REAL-TIME SYNCHROPHASOR APPLICATIONS

Ph.D. Edmund Schweitzer III  
**SCHWEITZER ENGINEERING LAB.**

## **RVP-AI/2009**

### **22ND SUMMER MEETING**

From the 5th to the 11th of July, 2009.

WE HAD THE PARTICIPATION AND ASSISTANCE OF THE FOLLOWING INSTITUTIONS AND INVESTIGATION CENTERS:

### **36**

- SOUTHWEST JIATONG UNIVERSITY, CHINA
- STRATHCLYDE UNIVERSITY, GLASGOW, UK
- UNIVERSITY OF WATERLOO, CANADA
- UNIVERSITY OF MANCHESTER
- UNIVERSITY OF SIEGEN
- CICATA - IPN
- ELECTRICAL INVESTIGATION INSTITUTE
- MEXICAN INSTITUTE OF WATER TECHNOLOGY
- TECHNOLOGICAL INSTITUTE OF AGUASCALIENTES
- TECHNOLOGICAL INSTITUTE OF APIZACO
- TECHNOLOGICAL INSTITUTE OF CD. MADERO
- TECHNOLOGICAL INSTITUTE OF CELAYA
- TECHNOLOGICAL INSTITUTE OF SUPERIOR STUDIES OF IRAPUATO
- TECHNOLOGICAL INSTITUTE OF LA LAGUNA
- TECHNOLOGICAL INSTITUTE OF MORELIA
- TECHNOLOGICAL INSTITUTE OF PACHUCA
- TECHNOLOGICAL INSTITUTE OF QUERETARO
- TECHNOLOGICAL INSTITUTE OF TOLUCA
- SEPI-ESIME - IPN - CULHUACAN
- SEPI-ESIME - IPN - ZACATENCO
- AUTONOMOUS UNIVERSITY OF COAHUILA
- AUTONOMOUS UNIVERSITY OF THE MORELOS STATE
- METROPOLITAN AUTONOMOUS UNIVERSITY - AZCAPOTZALCO
- METROPOLITAN AUTONOMOUS UNIVERSITY - METROPOLITAN
- UNIVERSITY OF COLIMA
- UNIVERSITY OF GUADALAJARA
- UNIVERSITY OF GUANAJUATO
- UNIVERSITY OF LAS AMERICAS PUEBLA
- UNIVERSITY MICHOACANA OF SAN NICOLAS OF HGO.
- AUTONOMOUS NATIONAL UNIVERSITY OF MEXICO
- POLYTECHNIC UNIVERSITY OF GOMEZ DURANGO
- TECHNOLOGICAL UNIVERSITY OF PUEBLA
- TECHNOLOGICAL UNIVERSITY OF TORREON
- SOUTHWESTERN TECHNOLOGICAL UNIVERSITY OF GUANAJUATO
- UNIVERSITY VERACRUZANA - CD. MENDOZA
- UNIVERSITY VERACRUZANA - XALAPA

## **TUTORIAL COURSES**

- ▶ IEC 61850 – PRINCIPLES, APPLICATIONS AND BENEFITS
- ▶ RELIABILITY EVALUATION OF POWER ELECTRIC TRANSFORMERS SERVICE
- ▶ THEORETICAL & PRACTICAL WORKSHOPS OF OPGW OPTICAL FIBERS AND OTHER CABLES
- ▶ DESIGN AND MANUFACTURING OF POWER TRANSFORMERS

**ROC&C'2009**  
**20TH FALL MEETING**

From the 29th of November to the 5th of December, 2009.

**TECHNICAL PROGRAM**

- ▶ 97 TECHNICAL ARTICLES
- ▶ 15 MASTERFUL CONFERENCES
- ▶ 77 CONFERENCES

**189 TECHNICAL EVENTS**

**THE FOLLOWING DISTINGUISHED CONFERENCISTS PARTICIPATED  
IN THE MEETING:**

**THE IEEE, TODAY AND TOMORROW: BENEFITS  
AND ITS TECHNOLOGICAL VISION**

Ing. Francisco Martínez Chávez

**IEEE GLOBALIZATION OF PROFESSIONAL ACTIVITIES**

**TECHNOLOGICAL TRENDS**

M.C. Fernando Tavera Parra

**MEXICO BOARD IEEE**

**THE IEEE, IN THE SCIENTIFIC AND  
TECHNOLOGICAL DEVELOPMENT IN MEXICO**

Dr. José A. Calderón

**MEXICO BOARD IEEE**

**A NONINVASIVE STUDY OF FETAL HEART RATE  
VARIABILITY DURING LABOUR**

Ing. Fernando S. Schlindwein

**UNIVERSITY OF LEICESTER, UK**

**REACTIVE POWER CONTROL SYSTEM FOR  
WIND FARM APPLICATION USING IEC 61850  
PART I: OVERVIEW OF PROTECTION AND  
CONTROL SYSTEM AND USE OF GOOSE  
MESSAGES**

Ing. Michael Thompson

**SCHWEITZER ENGINEERING LABORATORIES, INC.**

**REACTIVE POWER CONTROL SYSTEM FOR  
WIND FARM APPLICATION USING IEC 61850  
PART II: VOLTAGE AND REACTIVE POWER  
REGULATION, CAPACITOR SWITCHING LOGIC,  
PROTECTION FUNCTIONS, AND SYSTEM  
VALIDATION**

Ing. Dale Kopf

**SCHWEITZER ENGINEERING LABORATORIES, INC.**

**EXAMINATIONS WITH DOBLE ADAPTATION  
BASED ON OPEN STANDARDS**

Dr. Francisco García Peñalvo

**UNIVERSITY OF SALAMANCA, SPAIN**

**BUS TENDENCIES OF PROCESS & BUS OF  
SUBSTATIONS, REPLACEMENT ARCHI-  
TECTURES FROM COPPER TO OPTICAL FIBER**

Ing. Manuel Cahuich

**SCHWEITZER ENGINEERING LABORATORIES**

**ADVANCES IN TRANSFORMERS MONITORING WITH  
SEL2414**

Ing. Máximo García

**SCHWEITZER ENGINEERING LABORATORIES, INC.,  
USA**

**NEXT GENERATION OF INTEGRAL SOLUTIONS  
WITH SEL3530 CONTROLLER OF REAL TIME  
AUTOMATIZATION AND SEL2440/2441**

Ing. Manuel Cahuich

**SCHWEITZER ENGINEERING LABORATORIES, INC.,  
USA**

**PLATFORM IEC61850, VISION AND ACTUAL STATUS**

Ing. Jean León

**SCHWEITZER ENGINEERING LABORATORIES, INC.,  
USA**

**SERVICES EVOLUTION AT IP/MPLS NETWORKS**

Ing. Freddy Turriaf

**ALCATEL-LUCENT**

**PERFORMANCE OF REDUNDANT ETHERNET  
NETWORKS FOR ELECTRIC SUBSTATION  
INSTRUMENTATION AND CONTROL Ph.D. Veselin  
Skendzic**

B.S. Gary W. Scheer

**SCHWEITZER ENGINEERING LABORATORIES, INC.,  
USA**

**COGNITIVE RADIOS: STATE-OF-THE-ART**

M.C. Gustavo A. Paredes Orozco

Dr. Luis Orozco Barbosa

**DATA PROCESSING INVESTIGATION INSTITUTE OF ALBACETE,  
SPAIN**

**SMART GRID**

Ing. Andrei Salas

**SIEMENS**

**INTERCHANGEABLE PRINCIPLES BASED ON THE  
IEC61850 STANDARD (PROJECT "LA VENTOSA")**

Ing. Claudio Alvarez

**SIEMENS**

**SERVICES EVOLUTION AT IP/MPLS NETWORKS**

Ing. Freddy Turriaf

**ALCATEL-LUCENT**

**ROC&C'2009**  
**20TH FALL MEETING**

From the 29th of November to the 5th of December, 2009.

WE HAD THE PARTICIPATION AND ASSISTANCE OF THE  
FOLLOWING INSTITUTIONS AND INVESTIGATION CENTERS:

**45**

- UNIVERSITY OF LEICESTER, UK
- DATA PROCESSING INVESTIGATION INSTITUTE OF ALBACETE, ESPAÑA
- UNIVERSITY OF SALAMANCA, ESPAÑA
- ASSOCIATION OF RADIO EXPERIMENTERS OF THE STATE OF MEXICO
- HONORABLE AUTONOMOUS UNIVERSITY OF PUEBLA
- EDUCATIVE INNOVATION AND FORMATION CENTER
- APPLIED SCIENCES AND ENGINEERING INVESTIGATION CENTER
- NATIONAL CENTER OF TECHNOLOGICAL DEVELOPMENT AND INVESTIGATION CINVESTAV – GUADALAJARA UNIT
- ELECTRICAL INVESTIGATIONS INSTITUTE
- AUTONOMOUS TECHNOLOGICAL INSTITUTE OF MEXICO
- TECHNOLOGICAL INSTITUTE OF AGUASCALIENTES
- TECHNOLOGICAL INSTITUTE OF APIZACO
- TECHNOLOGICAL INSTITUTE OF CHILPANCINGO
- TECHNOLOGICAL INSTITUTE OF CIUDAD MADERO
- TECHNOLOGICAL INSTITUTE OF COLIMA
- TECHNOLOGICAL INSTITUTE OF OAXACA
- IPN – COMPUTING INVESTIGATION CENTER
- IPN – COMPUTING SUPERIOR SCHOOL
- IPN – SUPERIOR SCHOOL OF PHYSICS AND MATHEMATICS IPN - ESIME – CULHUACÁN UNIT
- IPN - SEPI - ESIME – TELECOMMUNICATIONS DEPARTMENT
- IPN - SEPI - ESIME – CULHUACÁN UNIT
- IPN - SEPI - ESIME – ZACATENCO UNIT
- IPN - UPIITA
- ITESM CAMPUS MEXICO CITY
- AUTONOMOUS UNIVERSITY OF CD. JUÁREZ
- AUTONOMOUS UNIVERSITY OF GUERRERO
- AUTONOMOUS UNIVERSITY OF SAN LUIS POTOSÍ
- AUTONOMOUS UNIVERSITY OF TAMAULIPAS
- AUTONOMOUS UNIVERSITY OF THE MORELOS STATE
- METROPOLITAN AUTONOMOUS UNIVERSITY – AZCAPOTZALCO UNIT
- METROPOLITAN AUTONOMOUS UNIVERSITY – IZTAPALAPA UNIT
- UNIVERSITY OF COLIMA
- UNIVERSITY OF GUADALAJARA
- UNIVERSITY OF GUANAJUATO - FIMEE
- UNIVERSITY OF THE ATEMAJAC VALLEY- CAMPUS GUADALAJARA
- VALLE DE MÉXICO UNIVERSITY- CAMPUS LOMAS VERDES
- UNIVERSITY MICHOACANA OF SAN NICOLÁS OF HIDALGO
- AUTONOMOUS NATIONAL UNIVERSITY OF MEXICO – ENGINEERING FACULTY
- POLYTECHNIC UNIVERSITY OF ALTAMIRA
- POLYTECHNIC UNIVERSITY OF GOMEZ PALACIO
- POLYTECHNIC UNIVERSITY OF THE RIVERSIDE REGION
- SOUTHWESTERN TECHNOLOGICAL UNIVERSITY OF GUANAJUATO
- UNIVERSITY VERACRUZANA

## **ACHIVEMENTS 2009**

**25.6% INCREASE IN THE TOTAL MEMBERSHIP  
OF MEXICO SECTION**

**442 NEW MEMBERS**

**214 STUDENTS**



**228 PROFESSIONALS**

**(126)**

PROFESSIONAL MEMBERS INCORPORATED TO THE  
**POWER ENGINEERING SOCIETY**

**(102)**

PROFESSIONAL MEMBERS INCORPORATED TO THE  
OTHER SOCIETIES



**LIBRARY ACQUISITION**  
**IEEE STUDENT BRANCH MAGAZINE**

**5**

**NEW STUDENT BRANCHES**

- ➔ **TECHNOLOGICAL INSTITUTE OF TOLUCA**
- ➔ **TECHNOLOGICAL OF SUPERIOR STUDIES COACALCO**
- ➔ **AUTONOMOUS UNIVERSITY OF MEXICO CITY**
- ➔ **UNIVERSITY OLMECA**
- ➔ **TECHNOLOGICAL UNIVERSITY OF MEXICO -  
ATIZAPAN**

**9 BRANCHES IN PROCESS**

Receiving documents from schools

- ♦ **COMPUTING INVESTIGATION CENTER - IPN**
- ♦ **TECHNOLOGICAL INSTITUTE OF MERIDA**
- ♦ **SUPERIOR TECHNOLOGICAL INSTITUTE OF COMALCALCO**
- ♦ **EASTERN SUPERIOR TECHNOLOGICAL INSTITUTE OF  
HIDALGO**
- ♦ **SUPERIOR TECHNOLOGICAL INSTITUTE OF JOCOTITLAN**
- ♦ **POLYTECHNIC UNIVERSITY OF PACHUCA**
- ♦ **ITESM - SANTA FE**
- ♦ **AUTONOMOUS UNIVERSITY OF CHIAPAS**
- ♦ **UAEM - TEOTIHUACAN VALLEY**

**TO CARRY OUT THE 22ND SUMMER MEETING**

**451 TECHNICAL EVENTS**

**TO CARRY OUT THE 20TH FALL MEETING**

**189 TECHNICAL EVENTS**

## **ACTIVITIES PLAN 2010**

### **GENERAL:**

- **SOCIAL SERVICES AT ENTERPRISES OR INSTITUTIONS, FOR STUDENTS OF THE SECTION BRANCHES.**
- **EMPLOYMENT EXCHANGE FOR THE STUDENT BRANCHES OF MEXICO SECTION.**
- **TO CONTINUE INCORPORATING NEW VOLUNTEERS TO THE DIRECTIVE CHAPTERS OF THE MEXICO SECTION.**
- **TO GO ON WITH THE CLOSEST RELATIONSHIP WITH REGION 9 AND THE IEEE.**
- **TO ENCOURAGE THE SECTION MEMBERSHIP TO PARTICIPATE IN THE EVENTS OF THE MEXICO SECTION, OF THE REGION AND OF THE IEEE.**
- **TO OPTIMIZE THE MEMBERSHIP SERVICES, ACCORDING TO THE IEEE STATE-OF-THE-ART.**

### **MEMBERSHIP:**

- **TO CONTINUE PROMOTING, AT THE FORUMS, THE VALUE OF BELONGING TO THE IEEE.**
- **TO OPTIMIZE STRATEGIES TO RECOVER THE “ARRIERS”.**
- **TO CONTINUE WITH INSTITUTIONS AND ENTERPRISES VISITS FOR PROMOTING THE IEEE.**
- **TO CONTINUE GRANTING THE MEMBERSHIP TO THE PARTICIPANTS IN COURSES AND THE EVENTS OF THE IEEE MEXICO SECTION.**
- **TO BROADCAST THE DIFFERENT OPTIONS FOR INSCRIBING TO THE IEEE.**
- **TO CONTINUE PROMOTING THE PROFESSIONAL MEMBERSHIP TO SUPERIOR CATEGORIES.**

### **TECHNICAL ACTIVITIES:**

- **TO CARRY OUT THE POWER AND INDUSTRIAL APPLICATIONS SUMMER MEETING, ON ITS 23RD EDITION.**
- **TO CARRY OUT THE COMMUNICATIONS, COMPUTING AND ELECTRONICS FALL MEETING, ON ITS 21ST EDITION.**
- **TO CARRY OUT THE MEXICO SECTION IEEE MEETING OF BRANCHES.**
- **TO SUPPORT THE STUDENT BRANCHES OF MEXICO SECTION FOR THEIR PARTICIPATION IN THE NATIONAL MEETING OF BRANCHES, RNR’2010; & REGIONAL MEETING OF BRANCHES 2010, RRR – RRGOLD’2010.**
- **TO SUPPORT THE STUDENT BRANCHES OF MEXICO SECTION FOR THEIR PARTICIPATION INTO THE INTER-UNIVERSITY CONGRESS OF ELECTRONIC, COMPUTING AND ELECTRIC, CIECE’2010.**

## **CONTINUOUS EDUCATION**

- TO CONTINUE WITH THE EXTENSION OF **TUTORIAL COURSES** TO ALL THE **CHAPTERS OF THE MEXICO SECTION**.
- **TO CONSOLIDATE THE AGREEMENTS** OF CONTINUOUS EDUCATION WITH **SOCIETIES AND INSTITUTIONS** RELATED WITH THE **IEEE MEXICO SECTION**.
- TO GIVE **20 TUTORIAL COURSES**.

## **STUDENT ACTIVITIES**

- TO INCREASE THE **PUBLICATIONS OF THE IEEE LIBRARY** FOR THE **STUDENT BRANCHES**.
- TO REACTIVATE THE **STUDENT BRANCHES** WITH LOW ACTIVITY.
- TO CONSOLIDATE THE **EXISTING ACTIVE BRANCHES**.
- TO CONTINUE BROADCASTING THE **IEEE** IN THE INSTITUTIONS OF SUPERIOR STUDIES AND INVESTIGATION.
- TO KEEP UPDATED THE DIRECTORIES OF THE **SECTION BRANCHES**, INVARIABLY.

## **2010** **CHALLENGES**

- ATTEMPT TO INCREASE THE MEMBERSHIP 30%.
- ATTEMPT TO INCORPORATE 12 SUBSTATIONS OF IEEE.
- ATTEMPT TO INCORPORATE 15 NEW STUDENT BRANCHES TO IEEE.