

Standing Committee: Education Activities Subcommittee (EASC) Report

Chair: Bakr Hassan (bakr.hassan@gmail.com) (IEEE Bahrain Section)

EASC activities are divided into three areas. The areas are Pre-University Activities, Continuing Education Activities and Accreditation Activities. The detailed accomplished and planned activities for the 2012 are detailed below.

Pre-University Activities (Sohaib Qamar Sheikh, Coordinator)

A new (Sub-)Sub-Committee called Pre-University Works was approved to increase and streamline activities in the region. The team will be responsible for promoting public relations (PR) support for pre-university activities being organized or planned and coordinate with global Pre-university Education Coordinating Committee (PECC), a *standing committee* of the IEEE Educational Activities Board (EAB). The committee includes Sohaib Qamar Sheikh (R8 Pre-University Activities Coordinator), Yasemin Baser (Turkey Section), Muhammad Mustafa (Jordan Section) and Joyce Mwangama (South Africa Section). They will be responsible for promoting activities in Europe, Middle East and Africa respectively, liaison with the Region 8 student activities committee (SAC) and support & empower pre-university activities all over the region

Teacher In-Service Program (TISP)

- 1. A 2nd TISP presentation was organized in Tunisia on December 19, 2011. The activity was well received by the attendees
- 2. A TISP workshop was successfully organized on March 21, 2012 in Toulon-Var University, Toulon, France. The workshop was organized by the IEEE Tunisia section, IEEE Education Society (ES) Tunisia chapter, the HANDIBIO laboratory, and participants of the 2nd Tunisian TISP Workshop in cooperation with the Research Groups on Intelligent Machines (REGIM Lab.), the IEEE Region 8 Educational Activities Subcommittee, and the IEEE Educational Activities Board (EAB). The workshop had 24 participants and received excellent feedback.
- **3.** A 3-hour TISP workshop is being organized during the R8 Student Branch Congress being held in Madrid, Spain from 25-29 July, 2012. The workshop is part of the Education Track at the congress which is completely being coordinated by the Pre-University Works Committee (PUW).
- 4. TISP Workshop requests have been received from the UAE Section, Ministry of Education, Bahrain, and for the ME-SBC due to be held in Lebanon next year. All requests have been forwarded to the EAB staff to initiate preparatory teleconferences.

Engineering Projects In Community Service-in-IEEE (EPICS-in-IEEE)

- 1. An EPICS application was submitted by the GJU Student Branch, Jordan in April, 2012.
- 2. EPICS applications for projects in Sweden and Palestine are complete and will be submitted in the next month.
- An E-notice regarding the program is in the process of being sent to all R8 members with the help of EPICS High Administrator. The aim of the E-notice is to make members in our region aware of this program.

Ongoing discussion with Intel Education (EMEA) for the development of a career preparation activity in the region.

EPICS-in-IEEE activities in Southern and Eastern Africa



• Humanitarian Activities - October 2012

| Country | Project Title | Project leader or co-leader | Approved Grant | University/ Academic Institution |
|-----------------|--|--------------------------------|-------------------|--|
| Namibia | Mobile Science lab for High School in Rural Area | Prof. Zacchaeus Oyedokun | US \$ 5,625 | Polytechnic of Namibia |
| South Africa | Photovoltaic Powered study lamp incorporating an AM/FM radio and mobile phone charger | Dr Edward Chikuni | US \$ 5,000 | University of KwaZulu Natal (UKZN) |
| Uganda | Kyambogo University And Agha Khan Poverty Reduction And Enviromental Conservation Through Solar Powered Solutions | Lwanga Herbert | US \$ 5,000 | Kyambogo University (KYU) |
| Zambia | Digital Teaching Units | Dr Hastings Ma Libati | US \$ 4,935 | Copperbelt University (CBU) |
| Zambia | OpenBTS (Open Base Transceiver Station) implementation in | Mpaisha Phiri | US \$ 5,000 | University of Zambia (UNZA) |



The 99th IEEE Region 8 Committee Meeting

| | Chikankata | | | |
|-----------------|---|--------------|----------------|--------------------------------|
| South Africa | Air-quality microsensors for Earth Observations | Johan Venter | US \$ 9,300 | University of Pretoria (UP) |

Webinar Series

The webinar series has been planned to advertise Pre-University activities. The first planned webinar was on 1st March, 2012 and will be given by Liz Burd (Chair, PECC).

Four more webinars will be held as per the following schedule:

- TISP April 2012
- EPICS-in-IEEE June 2012
- Education Portals August 2012
- Humanitarian Activities October 2012
- TBA -December 2012
- 1. PUW organized a webinar on TISP in April, 2012 which received favorable response. We were also a part of the global EPICS-in-IEEE webinar organized in May, 2012. Both webinars had more than 20 participants.
- 2. Webinars on our Education portals and Humanitarian activities will be organized in August and October respectively.

Outreach Efforts

PUW committee has continued its outreach efforts with events and direct member outreach.

- 1. As mentioned in the report earlier, an EPICS E-notice has been dispatched to all IEEE members in Region 8.
- 2. To increase social media outreach, we have created facebook and twitter pages, and are maintaining them actively.
- An outreach event was organized at the Jordanian SBC to reach out to the student members in the section. This action resulted in one EPICS application being sent from the section. Our Middle East Coordinator, Muhammad Mustafa, can been seen in the picture below presenting about our programs to the participants.
- 4. PUW organized an event called 'Why Engineering?' for 50 students from few of the most prestigious schools in UK including Eton College, Langley Academy, Beechwood School and Slough & Eton College on June 26, 2012. The talk was followed by a competition where teams of students had to build a Robot Arm from regular craft supplies. The robot arm lesson was taken from TryEngineering.org where more than a 100 different lessons are available to make learning more practical and fun for students. This session was kindly sponsored by R8 Technical Activities and Slough & Eton College.



IEEE R8 Student Branch Congress, 2012

PUW is completely responsible for organizing the Education Track and two non-technical workshops at the congress due to be held in Madrid, Spain from 25-29 July, 2012. Below are the details of the workshops,

Education Track:

- 1. Teacher In-Service Program A 3 hour long workshop is organized for 30 participants and includes 3 components
 - a. Pre-University Activities overview by Liz Burd, Chair PECC.
 - b. TISP lesson on tall tower by Fabio Domingos, IST Student Branch TISP team
 - c. Pre-University R8 Focus and Updates by Sohaib Qamar Sheikh, R8 Pre-University Coordinator
- 2. Contributing for education innovation: The fall of the chalkboard A 1.5 hour workshop on a new project by Rui Costa from the IST student branch which aims to provide students with a new methodology to study more effectively through videos and online exercises. Details about this project can be accessed at http://82.102.6.169/~academic/en. The website is currently a prototype and will be launched completely during the congress.
- 3. Engineering for Change A 1.5 hour workshop by Adrian Pais, VC Humanitarian Activities on how students can get involved in social projects to increase their practical knowledge and contribute to their society.

 TryComputing,org Session – A 15 min session sponsored by IEEE CS to advertise the TryComputing portal and their education related programs.
Non-Technical Workshops:

Non reennear workshops.

1. Two 1.5 hour long workshops on EPICS will be delivered by Moshe Kam and Sohaib Qamar Sheikh. PUW Coordinator for Africa, Joyce Mwangama will also be present to give a case study of an EPICS program she was involved with in the past.

Partner with other IEEE pre-university programmes, including mentoring programmes such as IEEE Student-Teacher and Research Engineer/Scientist (STAR). STAR developed within EAB due to historical reasons, however as of 2012, WiE is now part of the member and geographic activities (MGA) board. The activity may be coordinated irrespective of its administrative position within IEEE.

Appointments to higher level committees: as per a proposal by the pre-university coordinator in Dec. 2011, Maciej Borówka, Kraków, Poland has been nominated to serve on the global *EPICS-in-IEEE* committee.

• TryEngineering (<u>www.tryengineering.org</u>)

TryEngineering was translated to seven languages. Last year, it's translation in Arabic was initiated with Saudi Aramco. IEEE Saudi East section and EAB providing support. The translation has been completed and it was launched Feb.17, 2012.



Continuing Education (CE) (Niovi Pavlidou, Coordinator)

- A webinar on the IEEE's Continuing Education (CE) Technical English Programme (TEP) was organized on 10 January 2012. The organizing team was comprised by Saurabh Sinha, IEEE Region 8 Vice-Chair: Technical Activities, Steve Welch, Director of CE, Educational Activities Division (EAD), Niovi Pavlidou, IEEE R8 Lead Volunteer for CE (Educational Activities Subcommittee (EASC)), and Burt Dicht, Director of University Programs, Educational Activities Division (EAD).
- The web-based seminar was offered to relevant officers in Region 8: Section Chairs, Chapter Chairs, Region 8 EA officers, the Chapters Coordination Subcommittee (ChCSC) and several interested (invited) members in the Region. The duration of the webinar was one hour, the lectures and discussion slots as a whole. The slides, supported by the recording of the webinar, are available from the IEEE Region 8 (Technical activities, Educational activities) website.
- The event was organized on WebEx facilities and the attendance has been improved in relation to the last CE event (a general online Blackboard discussion on CE). Based on the obtained experience some new proposals for future events are now being considered.
- Further, a sub sub-committee on Continuing Education R8 has been established with the participation of Dr. George Papadopoulos to boost the CE activities in Region 8. As a first initiative a webinar on Electric Vehicles is considered in the near future.
- A webinar is planned on 03 July 2012 at 3 pm (United Kingdom) time. The webinar is intended to all members of IEEE Education Society in R8 and to the Section Chairs of R8. Topic: Fuzzy Logic Systems in Educational Assessment Speaker: Riadh BESBES, PhD, educational supervisor for secondary schools in Tunisia
- Another webinar is planned on the same date 03 July 2012 at 4.30 pm (United Kingdom) time. The webinar is intended for members of IEEE Vehicular Technology Society in Region 8 and to the Section Chairs in Region 8. Topic: Introduction to Electric Vehicles Speaker: Vladimir Katic, IEEE Serbia and Montenegro Section
- These topics were discussed and initiated at the R8 meeting in Berlin

Accreditation Activities (Bakr Hassan, Coordinator)

- The Gulf Accreditation Sub-Committee held number of teleconference meetings discussing the proposal for establishing a GCCC Accrediting Organization for Engineering, Computing & Technology. A workshop was conducted on March 29, 2012 in Berlin to discuss the draft proposal. The workshop was attended by key people from the accrediting agencies in the Gulf attended as well as several IEEE volunteers from EAB and R8. More teleconference meetings ate planned to finalize the proposal. Further meetings are planned with NCAAA in Saudi Arabia and other accrediting agencies from the Gulf.
- Accreditation works moves forward in the Southern/Eastern African area.