## **IEEE Lexington Section Report**

Created for October 2010 Region 3 Meeting Prepared by Chris Franklin, Section Secretary

The Lexington Section (Kentucky) has about 412 members. Participation in meeting and events has increased this year due to factors such as increased student participation, an interest in volunteer activities and the offering of professional development hours. A new student branch was created this year at the ITT Technical Institute in Lexington.

The 2010 officers are: John Barnes, Chair Jerry Goerz, Vice-Chair and Membership Development Chair Chris Franklin, Secretary Ray Williams, Treasurer Stuart Talbert, Professional Activities Chair Adam Ward, Past Chair and Web Master Regina Hannemann, Student Activities Chair Jack McKinney, Educational Activities Chair Elwood West, Awards Chair

The Lexington IEEE Section has had an active schedule of social, educational outreach, and member development activities during the past year.

Date	Meeting
Sep. 24, 2009	Tour of KET TV studio in Lexington Kentucky. Students from ITT attended.
Sep. 26, 2009	Region 3 Web-Based Training classes.
Oct. 27, 2009	New Standards on Machine Safety, presented by Chris Brogli with Rockwell Automation. Held at ITT and was attended by students there. This meeting counted toward professional development hours.
Nov. 7, 2009	Region 3 Web-Based Training classes.
Nov. 19, 2009	Presentation on Thermal Equipment Sales. This meeting counted toward professional development hours.
Dec. 15, 2009	EXCOM Meeting to plan future section events.
Dec. 17, 2009	Dinner Meeting with Louisville Section. Section business included officer elections for 2010 and participation awards for 2009.
Jan. 21, 2010	Touch screen demonstration and seminar at Awesome Inc. in downtown Lexington. Presented by Nick Such of Awesome Inc.
Feb. 9, 2010	IEEE sponsored Electrical and Computer Engineering Student Paper

## Summary of Section Meetings

	Contest, at University of Kentucky
Mar. 11, 2010	Panel discussion of Sudden Unexplained Acceleration events in automobiles.
Apr. 29, 2010	Presentation of planned 2010 Robot Camp and request for volunteers. Movie night with University of Kentucky student section.
May 20, 2010	Presentation on Sustainability by Mark Henson of Rockwell Inc. This meeting counted toward professional development hours.
June 17, 2010	Detailed training for Robot Camp volunteers. The training included assembling and programming the Lego NXT kits used at the camp. This was a joint meeting with the student branches of ITT and University of Kentucky.
July 8, 2010	EXCOM meeting to plan future events and review lessons learned from Robot Camp and Student Picnic.
Aug. 12, 2010	Tour of energy efficient solar house. Presentation on energy savings and construction techniques by the owner Tom Lowery.
Sep. 2, 2010	EXCOM meeting to plan future events and discuss results of Student Picnic and Robot Camp.

## **Summary of Section Events**

Date	Event
Nov 7-8, 2009	SPAC at University of Kentucky. Presentation on what EEs do in the design/build construction industry by Adam Ward.
Feb. 20, 2010	University of Kentucky Engineering Day
Mar. 18-21, 2010	2010 SoutheastCon
Aug. 2-6, 2010	IEEE Robotics Camp at Southside Technical School (Fayette County Public Schools).
Aug. 26, 2010	Engineering Student cookout at the University of Kentucky.

## **Key Section Activities**

The Lexington IEEE Section has a strong focus on outreach to students both at the primary school and advanced academic levels.

2010 was the second year for the Lexington Section IEEE Robotics Camp for entering fifth graders in Fayette County KY Schools. The camp ran in the mornings for 5 days. It taught basic robotics using the Lego NXT kit. The students learned to program the robots to accomplish a series of challenges including navigating obstacle courses, utilizing sensors to make decisions, and a robot war competition. Each day a group of section members was

present to assist the teams of students in reaching their goals.

The response by campers, parents, volunteers, and Fayette County Public School (FCPS) teachers has been very positive. We have feedback from many teachers across the FCPS system. We have been invited to participate in additional STEM (Science, Technology, Engineering, and Mathematics) activities in the FCPS system. IEEE members enjoyed the chance to work with students and to give something back to the profession. Next year we are planning to expand the program to support all 33 grade schools in the FCPS system and are working to setup funding through IEEE Foundation for the purchase of NXT kits and software.

The section continues to assist the University of Kentucky student branch by welcoming students with a cookout, judging and funding prizes for a student paper competition, funding a plaque for students who win or place in the Senior Design project competition, and helping students travel to Southeastcon for robotics and technical paper competitions. During Engineering Day the section taught a hands on class in motor construction. Each student constructed their own basic motor and were able to take it home. Each year the section hosts a cookout for engineering students at the University of Kentucky. The cookout welcomes the students back to campus. The cookout is well attended and gives the section a great opportunity to increase student awareness of IEEE.

The section is active in helping grow membership at ITT Technical Institute. The students there formed a student branch in 2010. The section provides funds to the student branch and holds meetings at ITT to facilitate student participation. Several ITT students volunteered to help with the robot camp.

The section is gathering petitions to start a Power and Energy Society chapter and an Industrial Applications Society chapter.