

IEEE Charlotte Section Report to Sections Congress. August, 2014

2013 Section Executive Committee:

Section Chair:	Bruce Magruder
Section Vice Chair:	Ken Dunn
Section Treasurer:	Terence Fagan
Section Secretary (and PES Chair):	Sukuman Kamalasan
Women in Engineering	Nan Bousaba
Education (statewide joint) Society Chair:	Jim Conrad
Communications Society:	Yu Wang

2013 Highlights

*Meeting Activities*

Charlotte focused in 2013 on increasing activities available to members, trying to answer the perennial question, “why IEEE when so many things vie for my time?” Meetings offered were sufficient for 20 hours of PDH or CE credit to maintain professional accreditations. Tours were particularly well attended by professional members in the Section.

DATE (2013)	EVENT
2/4	ExCom Kickoff
2/8	Charlotte Communications Society Meeting [note: no L31 report]
2/19	SWITCH, A Documentary on Energy (PES) [note: no L31 report]
3/28	CPCC Fab Lab Tour [note: no L31 report]
4/18	The Future of Automated Guided Vehicles [note: no L31 report]
5/2	UNC Charlotte Senior Design Expo
6/13	Olde Mecklenburg Brewery Tour
6/18	Lunch & Learn: Nova Lighting
6/20	Embedded Controls
6/27	ExCom Meeting [note: no L31 report]
7/3	ExCom Meeting
7/25	Carotek Tour
7/30	ExCom Meeting
8/8	Piedmont Plastics Tour
8/13	Lunch & Learn: Fiber Optics
8/22	Hackerspace Charlotte
8/24	USNWC Tour
8/26	ExCom Meeting
9/5	Lunch & Learn: LEED v4 and US Green Building Council NC
9/12	ABB Plant Tour
9/24	ExCom Meeting
10/10	Coca-Cola Bottling Consolidated Tour
10/17	The Road Less Traveled: A Journey of Career Discovery and Opportunity
10/29	The Hydrail Initiative: Coming to Cities Near You [note: no L31 report]
11/7	Siemens Gas Turbine Plant Tour

DATE (2013)	EVENT
11/26	ExCom Meeting
12/6	UNC Charlotte Senior Design Expo

Charlotte Section has two associated student sections, UNC Charlotte and Central Piedmont Community College.

- The Section is very active with the UNC group, typically holding four to six meetings each academic year on campus.
- Activity with the CPCC group has been less frequent, but with the marquee programs there (fabrication lab and a German-model apprenticeship program), the Section is increasing focus there.
  - IEEE has less time to mentor CPCC students as they are typically enrolled for a shorter program or transfer to UNC to complete Bachelors degrees; however, the value of connecting these students with professional members is clear and is expected to improve with more IEEE meetings on the CPCC campus.
  - *2014 note:* CPCC student IEEE members plan to attend the ASEE Robotics Competition (in lieu of Southeast Con) jointly with their ASME student colleagues; high student turnover inherent in the two-year program benefits from a joint effort (maintains critical mass).
- Additionally, Charlotte is home to Johnson C. Smith University, a private, four-year research university (and historically black college). The section recently learned that JCSU offers a Bachelor in Computer Science program; accordingly, Charlotte Section is soliciting interest for starting a student branch on this campus.

### *Section Plans, Needs & Lessons Learned*

Social Networking is popular with the “active” membership.

- Most event attendance is a core of 30-40 members in various combinations. Most of those members subscribe to the Section [Meetup](#) site.
  - Whether cause or correlation is unclear, but leadership hypothesizes this facilitates planning for event attendance.
  - *Very few (<10 in 2013) meeting attendees RSVP'd via IEEE site announcements.*
  - *A shared, “subscribe-able” calendar for the Section webpage, with similar functionality to Meetup might improve attendance at Section events.*
    - Pre-planning, i.e. “get it on the calendar.”
    - Easy RSVP.
    - Routine reminders of upcoming “RSVP'd” events.
- The section also maintains Facebook and Twitter accounts, posting *ad hoc* pictures and posts from meetings. No evidence suggests these efforts increase meeting attendance or member valuation of IEEE membership, but maintaining the sites requires negligible effort.
- A significant fraction of Charlotte based engineers live in South Carolina (Charlotte is a border city). Depending on a members default address, they may be assigned to Charlotte or Columbia sections. We could better serve those members if MGA tools (SAMIEEE in particular) allowed Charlotte to directly contact those IEEE members.

The section commissioned a group this spring to identify one or more SIGHT Projects appropriate for IEEE Charlotte Sponsorship. Niru Kumar led this effort, but the initiative foundered as she left the region after completing her doctoral studies. UNC Charlotte hosts many international students and IEEE Charlotte is hopeful one or more will pick up the mantle.

2014 Synopsis (to date):

Elections were held in December 2013. Our Computer Society Chair, Claude Hargrove, left his post with UNC Charlotte at the end of June, leaving that society without ExCom representation.

The section has held several ExCom meetings and nine technical meetings to date in 2014.

Date	Activity	Notes
January 23	The Face of Clean Energy in NC	Sponsored by NC Sustainable Energy Association
January 25	Myers Briggs Type Inventory	Jennifer Ammentorp (R3 PES) presented. Focus on 2014 Section leadership & student participation
January 27	The Growing Grid	Student PES sponsored
February 4	The 21 <sup>st</sup> Century Energy Industry	Sponsored by PES. <i>Featuring the movie "Switch" plus a personal appearance by distinguished creator, Dr. Scott Tinker.</i>
February 22	LEGO Mindstorm	E-Week, elementary & middle school student focused. Sponsored by Education Society and UNC Charlotte. <i>A BIG hit with both students and parents: new faces, as well as strong WIE interest.</i> Charlotte Section plans to repeat the event in September.
April 10	Tour PolyTech	PolyTech is an invention incubator company in Charlotte.
April 17	Solar Decathlon House	Showcase for UNC Charlotte's entry in the 2013 US Dept of Energy's Sustainable Living Design/Build competition.

May 1	UNC Charlotte Senior Design Expo	Showcase for graduating students' capstone projects.
August 8	Raspberry Pi	Ben Nuttall, an emissary from the UK foundation that CREATED Raspberry Pi stopped to speak with UNC Charlotte students and IEEE Charlotte.

R/S,  
Ken Dunn, P.E.  
Charlotte Section Vice Chair, 2014