



# ELECTRON

THE IEEE CHARLOTTE SECTION NEWSLETTER

**IEEE POWER ENGINEERING SOCIETY - PRESENTS**

## **THE HYDRAIL INITIATIVE**

**Date:** **September 17, 2003**

**Time:** **6:00 p.m.** - Food and refreshments will be served

**6:30-8:00 p.m.** - Presentation

**Location:** **O. J. Miller Auditorium**, Duke Energy Center, 526 S. Church St., Charlotte

**Parking:** Park behind the Duke Energy Center (enter from Mint Street). At the entrance lift gate inform Security that you are attending an IEEE meeting.

**Contact:** **RSVP by September 16, 2003** by contacting:

David Wallach, PES Chapter Chair, **(704) 373-4167**, [djwallac@duke-energy.com](mailto:djwallac@duke-energy.com)

**Presenter:** **STAN THOMPSON, TRANSPORTATION CHAIRMAN, SOUTH IREDELL CHAMBER**

The planned 45 km. North Corridor transit line connecting Mooresville to Charlotte in North Carolina is an ideal test bed for an overlooked aspect of President Bush's hydrogen economy strategy, Hydrail". It may become home to the world's first Hydrail passenger line. "Hydrail" is a term of art for trains with electric traction motors powered by onboard hydrogen fuel cells. The integrated technology does not yet exist. Fuel cells are now built on much larger scales than the Apollo spacecraft units that furnished electricity and drinking water for the astronauts. By the year 2000, Tokyo Gas had already run a commercial fuel cell power generator for 49,000 hours, and in Anchorage, Alaska, a unit at the U. S. Postal Service facility was selling excess power to the commercial grid. Such large stationary units, perhaps railroad size, might be hydrail candidates, if they can be re-engineered robust enough to accept rail's inertial stresses and vibration. "Stationary fuel cell technology may be adaptable to rail transportation" -- that's the hydrail concept. This discussion will cover why and how we are facilitating its creation

. Stan Thompson has been a member of IEEE since 1973. He retired (he prefers "graduated") from BellSouth in 1996 after 33 years, most of which was spent in strategic planning. At retirement, he was Director of Virtual Transportation, managing the telework market within the Large Business segment. Just before that he was BellSouth Telecommunications' futurist for assessing environmental and transportation trends and market implications. In that role he worked with the US EPA's Mobile Source Reduction Team on reduction of congestion-rated vehicle emissions. Stan also served on the Charlotte Clean City Committee and later served eight years to become the senior member of the Atlanta Clean City Commission. Stan became involved in Hydrail while serving on the Transportation Committee of the Charlotte Chamber. He now chairs the Transportation Committee at the Mooresville/South Iredell Chamber of Commerce.

Born in Winston-Salem, Stan grew up in Charlotte and is a graduate of Pfeiffer College. He and his wife Phyllis live on Lake Norman near Mooresville. You can Email Stan at: [hst2nd@aol.com](mailto:hst2nd@aol.com).



**IEEE Charlotte Section**

The Institute of Electrical and Electronics Engineers

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# Family Fun Day Picnic

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THE IEEE - CHARLOTTE SECTION

Please join us at our annual Family Fun Day Picnic. This year's picnic will be held at Nevin Community Park. Nevin's is one of Charlotte's newest parks offering walking trails, soccer and softball fields, playgrounds, horseshoe pits and shuffleboard. The Family Fun Day activities will include:

- ⇒ Water balloon toss
- ⇒ Door Prizes
- ⇒ Music (you may bring your own CD's)
- ⇒ Put on your chefs hat and join the cookout Menu includes:
  - burgers, chicken, dogs
  - potato salad, baked beans, coleslaw
  - tea and soda.
- ⇒ Don't forget to bring your favorite Dessert - Prizes to be awarded

**Date:** Friday, September 12, 2003

**Time:** 3:00 PM – Games Begin, Dinner Served

**Location:** Nevin Community Park (Shelter #1) 6000 Statesville Road

**Directions:**

From I-85, take Statesville Road exit, go approximately 1 mile (away from City), take first right after Ranson Middle School.

From I-77, take Sunset Road east exit, go approximately ½ mile and make Right on Statesville Rd (HWY 21), go approximately ½ mile, park entrance On the left.

**Cost:** \$5.00 for members, \$7.00 for non members, \$3.50 for children 11 and under

**Reservations:** Please purchase tickets and RSVP by **September 11, 2003.**

**Contact the following for tickets:**

[David Pullen](#), Chair, Charlotte Section – (704) 947-2511

[Tracy Blackmon](#), Vice Chair, Charlotte Section – (704) 243-2454

[Randy Groves](#), Treasurer, Charlotte Section – (704) 805-2176

[Dick Jaeger](#), Executive Committee Director – (704) 895-3693

[David Wallach](#), Power Engineering Society Chapter Chair – (704) 373-4167; (704) 281-3821

[Robert Beazley](#), Communications Society Chapter Chair – (704) 609-7455

[Tom Mounts](#), Computer Society Chapter Chair – (704) 814-8951

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## Volunteers Needed!!!

**We need volunteers for the Charlotte Section and its Societies. Many positions are available and include: Executive Committee roles, Chapter Society activities, Fund Raising, etc.**

**If you would like to participate, please contact anyone on the Executive Committee.**

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