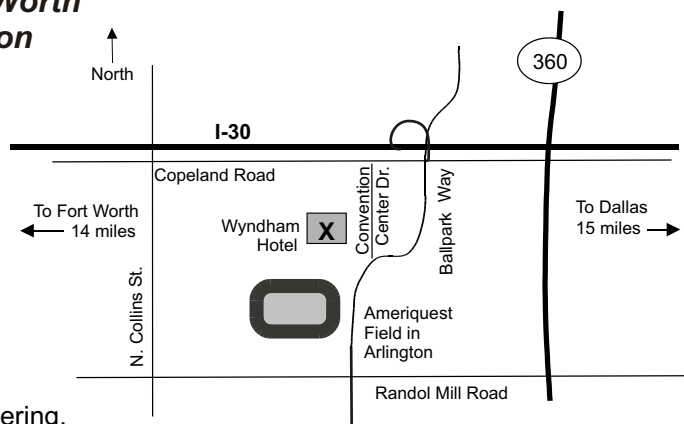




**IEEE** Fort Worth  
Section

MetroCon takes place at the Wyndham Arlington Hotel on I-30 in Arlington. The Wyndham is located mid-way between Dallas and Fort Worth, immediately off of I-30 in front of Amerquest Field in Arlington. From both Dallas and Fort Worth, take the Ballpark Way exit. DFW Airport is just 8 miles north of the hotel. See map for further directions, or the Wyndham Arlington Hotel website. There is free parking available on the hotel grounds.



MetroCon is an annual technical conference addressing the latest technology developments in the Dallas/Fort Worth Metroplex. The theme of the 19th annual conference is "Innovating for Society" with a focus on Emerging Technology, Biotechnology, and Power Engineering.

**See MetroCon website for detailed abstracts, speaker biographies, and on-line registration**  
(<http://www.metrocon.org>)



**Emerging Technology - Biotechnology - Power Engineering**  
**Wednesday, September 14, 2005 - Brought to you by the IEEE Fort Worth Section**



IEEE Fort Worth Section  
P.O. Box 1594  
Hurst, TX 76053-1594

Sponsors:

**LOCKHEED MARTIN**



**TECHFORTWORTH**  
A Business and Technology Incubator



Keynote speaker Michael Melvill, a veteran test pilot, made history on June 21, 2004 when he flew SpaceShipOne at Mach 3 beyond the earth's atmosphere, and again in September when he made the first of two Ansari X Prize qualifying flights above the 100 km Karman Line. Only ten pilots have qualified for the Astronaut Badge by flying an airplane into space: eight from the U.S. Air Force/NASA X-15 program, plus Brian Binnie and Mike Melvill from the Scaled Composites Tier One project.

**Certificates will be provided for continuing education credit.**

Time	Emerging Technology	Biotechnology	Power Engineering
8:30-9:30	<b>Energy Harvesting Technologies for Wireless MEMS Sensor Networks</b> Edward S. Kolesar, TCU	<b>Nano and Microcrystalline Silicon as a Diverse Biomaterial Platform</b> Jeffrey L. Coffey, TCU	<b>Fuel Cell Basics and the DoD Fuel Cell Projects</b> Nicholas M. Josefik, U.S. Army Corps of Engineers
9:45-10:45	<b>Noise and Reliability of High-k Gate Stacks</b> Zeynep Celik-Butler, UTA	<b>Engineering of Ocular Drug Delivery Systems</b> Alan Weiner, Alcon Research, Ltd.	<b>Broadband Over Power Lines and Radio Communications</b> Jim Haynie, American Radio Relay League
11:00-12:00	<b>Human Simulator</b> Bruce Dubin, UNT Health Science Center	<b>Confocal Total Internal Reflection Microscopy: A Novel Technique of Investigating Single Molecules in Tissue</b> Julian Borejdo, UNT Health Science Center	<b>Ethics Training for Professional Engineers</b> Gus Khankarli, Collin County Texas Dept. of Transportation
12:00-1:30	<b>Keynote Luncheon Address: Michael Melvill, Astronaut, SpaceShipOne VP &amp; GM, Scaled Composites</b>		
1:30-3:00	<b>Question and Answer Session with Keynote</b> 1:30pm to 2:00pm	<b>Holographic Visualization of 3D Data for Medical Applications</b> Harold "Skip" R. Garner, Jr., UT Southwestern Medical Center	<b>Electric Transmission and the Proposed Nodal Market</b> Beth Garza, ERCOT
	<b>Submarine-Launched and Recovered Multi-Purpose UAV (MPUAV) Overview</b> Robert A Ruskowski, Jr. Lockheed Martin Aeronautics Company	<b>Tag-free Biosensors with Resonant Photonic Lattices</b> Debra D. Wawro, Resonant Sensors Incorporated	
3:15-4:45	<b>Testing Object-Oriented Software and Web-Based Applications</b> David Kung, UTA	<b>Exploring Microgravity Bioreactors for Pancreatic Islet Cell Transplantation</b> Lynne P. Rutzky, UT Health Science Center at Houston	<b>Texas: Boom Times for Wind Generation</b> Henry Durrwachter, TXU Energy
		<b>Clinical Applications of Photochemical Bonding</b> J. Lester Matthews, PhotoBioMed Corporation	

See <http://www.metrocon.org> for detailed abstracts, speaker biographies, and on-line registration.

### Early Registration Deadline: August 26th.

Refund Policy: Requests must be received in writing by September 2nd. A withdrawal fee of \$50 will apply. Substitutions are permitted.

Late Registration is available beginning at 7:00 am the day of the conference.

Email for information on Group Discounts: [info@metrocon.org](mailto:info@metrocon.org). Call (817)935-4514 for additional information.

**Seating for late registration may be limited.**

Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Company: \_\_\_\_\_  
Email: \_\_\_\_\_  
Phone: \_\_\_\_\_  
IEEE Member Number: \_\_\_\_\_

### Method of Payment:

☐ Check or Money Order Enclosed (make checks payable to IEEE Fort Worth)  
☐ Visa ☐ Mastercard ☐ American Express

Credit Card Number:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Expiration:

\_\_\_\_ - \_\_\_\_

Signature:

### Mail Registration and Payment to:

MetroCon Registration  
IEEE Fort Worth Section  
P.O. Box 1594  
Hurst, TX 76053-1594

### Fees:

	Early	Late
Professional, IEEE Member	<input type="checkbox"/> \$175	<input type="checkbox"/> \$225
Professional, Non-member	<input type="checkbox"/> \$250	<input type="checkbox"/> \$300
Students, Retirees	<input type="checkbox"/> \$75	<input type="checkbox"/> \$75