

## 2008 IAJC-IJME Conference Program



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International Conference  
on Engineering & Technology

November 17-19, 2008 - Music City Sheraton  
Nashville, TN, USA

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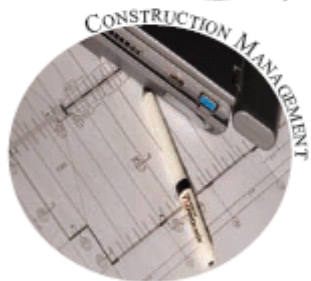
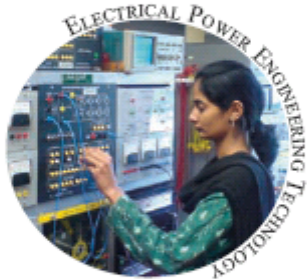
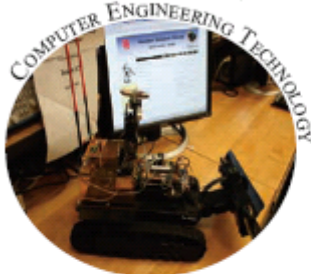




# Engineering Technology Opens the Door to a World of Opportunity

**We Create Opportunities All Over the World**

The University of Houston's College of Technology is leading the future of innovation through the advancements of its Department of Engineering Technology.



- Initiatives including courses in biotechnology and petroleum engineering technology
- In the 2006 ASEE list of 50 schools that offer B.S. degrees in engineering technology, UH ranked 8<sup>th</sup> in the number of degrees awarded and 5<sup>th</sup> in the number of degrees awarded to women
- Six state-of-the-art engineering technology research labs including the AT&T Technology Lab
- Exceptional growth in the construction management technology and network communications master's degree programs
- Over \$1M in expenditures from external grants and contracts
- Robotics community outreach via Coordination of Robotics Education (CORE)
- Student internships and other opportunities through the Texas Manufacturing Assistance Center (TMAC)
- Over 750 students and 33 faculty and staff

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The University of Houston is an EEO/AA institution.

## *Conference Committee Members*

### **Conference General Chair**

***Dr. Mark Rajai***

California State University, Northridge

Phone: 818-677-2167

Email: [president@iajc.org](mailto:president@iajc.org)

### **Conference Associate Chair**

***Dr. Farrokh Attarzadeh***

University of Houston

Phone: 713-743-4078

Email: [fattarzadeh@central.uh.edu](mailto:fattarzadeh@central.uh.edu)

### **Technical Co-Chairs**

***Dr. Raghu Korrapati***

Walden University

Phone: 803-422-6397

Email: [rkorrapa@waldenu.edu](mailto:rkorrapa@waldenu.edu)

***Dr. Alok K. Verma***

Old Dominion University

Phone: 757-683-3766

Email: [averma@odu.edu](mailto:averma@odu.edu)

### **International Co-Chairs**

***Dr. Robert A. Matthews***

University of Louisville

Phone: 502-852-7101

Email: [rmatt@louisville.edu](mailto:rmatt@louisville.edu)

***Dr. Saeid Moslehpour***

University of Hartford

Phone: 860-768-4211

Email: [moslehpou@hartford.edu](mailto:moslehpou@hartford.edu)

### **Engineering and Applied Science Chair**

***Dr. Ali Eydgahi***

University of Maryland Eastern Shore

Phone: 410-651-7559

Email: [aeydgahi@umes.edu](mailto:aeydgahi@umes.edu)

**Engineering Technology Co-Chairs**

***Dr. Vijay Vaidyanathan***

University of North Texas

Phone: 940-369-8996

Email: [vvaidyan@unt.edu](mailto:vvaidyan@unt.edu)

***Dr. Abdul R. Yarali***

Murray State University

Phone: 270-809-6915

Email: [abdul.yarali@murraystate.edu](mailto:abdul.yarali@murraystate.edu)

**Industrial Technology Chair**

***Dr. Philip D. Weinsier***

Bowling Green State University

Phone: 419-433-5560 x 20628

Email: [philipw@bgsu.edu](mailto:philipw@bgsu.edu)

**Program Chair**

***Victor J. Gallardo***

University of Houston

Phone: 713-743-4690

Email: [vjgallar@central.uh.edu](mailto:vjgallar@central.uh.edu)

**Proceeding Chair**

***Dr. Hisham Alnajjar***

University of Hartford

Phone: 860-768-4846

Email: [alnajjar@hartford.edu](mailto:alnajjar@hartford.edu)

**Registration Chair**

***Dr. Abdul R. Yarali***

Murray State University

Phone: 270-809-6915

Email: [abdul.yarali@murraystate.edu](mailto:abdul.yarali@murraystate.edu)

**Web Administrator**

***Saeed Namyar***

Namyar Computer Solutions

Phone: 859-322-9852

Email: [info@namyar.com](mailto:info@namyar.com)

## Message from the Conference General Chair



On behalf of the board of directors of the International Association of Journals and Conferences (IAJC), it is my pleasure to welcome you to the 2008 IAJC-IJME international conference. IAJC, its main flagship journal, *International Journal of Modern Engineering (IJME)*, nine other affiliate journals, and 10 well-known universities and organizations have put together one of the most prestigious international conferences of the year.

IAJC is a first-of-its-kind, pioneering organization. It is a prestigious and exclusive global multilayered umbrella consortium of academic journals, conferences, organizations, and individuals committed to advancing excellence in all aspects of technology-related education.

Conference Statistics: A total of 487 abstracts from more than 150 educational institutions and companies were submitted from around the world. After a multi-level review process—papers were subjected to blind reviews by three or more highly qualified reviewers—a total of 143 papers were accepted and are published in the conference proceedings. This reflects an acceptance rate of less than 30 percent, which is one of the lowest acceptance rates of any international conference. Authors included presidents, deans, chairs, faculty, industry experts, and students representing more than 100 major educational institutions and companies from the United States and 15 other countries.

This conference has three divisions: Engineering (ENG), Engineering Technology (ENT), and Industrial Technology (IT). Selected papers from this conference will be considered for publication in one of the growing list (10 or more) of IAJC member journals.

Organizing a major conference was a monumental task. I want to thank the conference committee and all division/session chairs and reviewers for their hard work in developing an exciting program. I personally hope you will seek them out to thank them for their fine work.

It is my sincere hope to continue offering this type of high-quality and unique conference in the future. We are seeking dedicated individuals to join us on the planning committee for the next conference. Please look for our advertisement on the IAJC Web site: <http://www.IAJC.org>.

The 2008 IAJC-IJME International Conference is being held at the Music City Sheraton Hotel in Nashville, TN, USA, November 17–19, 2008. On behalf of the 2008 IAJC-IJME conference committee and IAJC board of directors, we thank you for participating in this great conference and hope you will consider submitting papers in all areas of engineering and related technology for future conferences.

Sincerely,

A handwritten signature in black ink that reads 'Mark Rajai'.

Mark Rajai

IAJC President & 2008 Conference General Chair

# Message from the Dean of College of Technology, University of Houston



U N I V E R S I T Y of H O U S T O N

COLLEGE OF TECHNOLOGY  
OFFICE OF THE DEAN



Dear Conference Participants:

I am delighted to welcome you to the 2008 IAJC-IJME Joint International Conference on Engineering and Technology. The College of Technology at the University of Houston (<http://www.tech.uh.edu>) is a proud co-sponsor of this event.

The conference theme, *Globalization of Technology: Imagine the Possibilities!* is both timely and of high interest. The global distribution of technology is having a transformative effect on the way nations, societies, and industries communicate, produce goods, innovate, and invest. Breakthroughs in medicine and biology offer humankind hope heretofore inconceivable. Modern communication technologies enable instant communication linking individuals and groups across the globe. New manufacturing and agricultural technologies have transformed methods of production and the workforce, increasing both productivity and efficiency. Advanced materials are impacting every sector of the economy. Indeed, this is an exciting time for those of us who are engaged in science and technology. I look forward to the ensuing presentations and dialogue and what will come from this event.

Dr. Mark Rajai and the Conference Planning Committee have made every effort to insure that your time is well spent and productive. Please make sure to contact them if you have questions or need assistance. Finally, the city of Nashville offers an excellent conference venue. Not only does it have a rich and varied history, but it has emerged as a leading commercial, intellectual, and entertainment center.

Best wishes for a pleasant stay in Nashville and a productive and successful conference.

Sincerely,

A handwritten signature in black ink that reads "William E. Fitzgibbon, III".

William E. Fitzgibbon, III  
Dean, College of Technology  
University of Houston



## *Message from the President of Murray State University*



Dear Conference Participants:

I am pleased to extend my warmest greetings to everyone attending the International Association of Journals and Conferences/International Journal of Modern Engineering (IAJC-IJME) conference and to welcome all of the delegates who have traveled from around the world. A diverse and highly innovative group of academicians, scientists, engineers, post-doctoral associates, graduate students and business leaders have converged at IAJC- IJME conference with the goal of advancing the field of engineering and technology in the spirit of collegiality, knowledge sharing, peer networking and connections created among academics and industry.

The success of IAJC as a first-of-its-kind, pioneering organization with the intention of becoming a prestigious and exclusive global multilayered umbrella consortium of academic journals, conferences, organizations and individuals committed to advancing excellence in all aspects of technology-related education is due solely to the wonderful team effort of many dedicated scientists and faculty from several universities combined with outstanding technical contributions.

I extend my sincerest appreciation to each member of the IAJC-IJME committees for their help and dedication to making this conference a success.

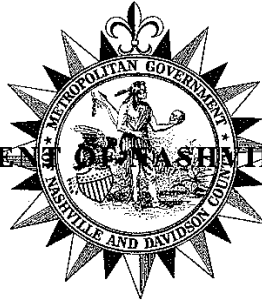
Sincerely,

*Randy J. Dunn*

Randy J. Dunn  
President, Murray State University

# *Message from the Mayor of Nashville, Tennessee*

**METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY**



**KARL F. DEAN  
MAYOR**

**OFFICE OF THE MAYOR  
METROPOLITAN COURTHOUSE  
NASHVILLE, TENNESSEE 37201  
(615) 862-6000  
(615) 862-6040 FAX**

November 12, 2008

Dear friends;

It is my pleasure to welcome the International Association of Journals and Conferences and International Journal of Engineering conference attendees to Nashville. We are honored to serve as your host city and hope you will take some time to enjoy the sights and sounds that only Nashville can offer.

While you are here, I encourage you to take advantage of our city's diverse offerings. I am extremely proud of our brand as Music City, but you will quickly find we have more to offer than music venues. Downtown is home to an expanse of cultural activities and entertainment options. The Frist Center for the Visual Arts, the Country Music Hall of Fame and Museum, and the Schermerhorn Symphony Center are just a few.

I wish you the very best for a successful conference and know you will enjoy your time with us. We hope to see you back many times in the future.

Sincerely,

Karl F. Dean  
Mayor



## Program Overview

**Monday  
November 17, 2008**

<b>All Day</b>	<b>Free Airport Shuttle to Sheraton</b>
<b>4:00 - 7:00</b>	<b>Registration Room Belle Meade</b>
<b>5:00 - 6:00</b>	<b>Conference Committee Meeting Room Belle Meade</b>
<b>6:00 - 7:00</b>	<b>Open Reception Room Belle Meade</b>

**Tuesday  
November 18, 2008**

<b>8:00 - 12:00</b>	<b>Registration</b>				
<b>8:00 - 8:45</b>	<b>Breakfast Room Tulip Grove E</b>				
<b>8:45 - 9:15</b>	<b>Welcome and Opening Remarks Room Tulip Grove E</b>				
<b>9:15 - 9:30</b>	<b>Break</b>				
<b>9:30 - 11:30</b>	Evergreen TECHNICAL SESSION	Kingsley TECHNICAL SESSION	Edgewood TECHNICAL SESSION	Belmont TECHNICAL SESSION	General Thomas TECHNICAL SESSION
	<b>ENT 202</b>	<b>ENG 106 ENT 205</b>	<b>ENT 203</b>	<b>ENT 208</b>	<b>ENT 209</b>
<b>11:30 - 1:00</b>	<b>Lunch Break (Not Included) IAJC Executive Board Meeting Room Oakland</b>				
<b>1:00 - 2:45</b>	Evergreen TECHNICAL SESSION	Kingsley TECHNICAL SESSION	Edgewood TECHNICAL SESSION	Belmont TECHNICAL SESSION	General Thomas TECHNICAL SESSION
	<b>ENG 107</b>	<b>ENG 107</b>	<b>ENG 107</b>	<b>IT 304</b>	<b>ENT 201</b>
<b>2:45 - 3:00</b>	<b>Break</b>				
<b>3:00 - 4:45</b>	Evergreen TECHNICAL SESSION	Kingsley TECHNICAL SESSION	Edgewood TECHNICAL SESSION	Belmont TECHNICAL SESSION	General Thomas TECHNICAL SESSION
	<b>IT 305</b>	<b>IT 305</b>	<b>ENG 103</b>	<b>ENG 103</b>	<b>ENG 104</b>
<b>6:30 - 8:30</b>	<b>Dinner Banquet / Keynote Speakers / Award Ceremony Room Tulip Grove E</b>				

**Wednesday  
November 19, 2008**

<b>8:00 - 10:00</b>	<b>Registration</b>				
<b>8:30 - 10:30</b>	Evergreen TECHNICAL SESSION	Kingsley TECHNICAL SESSION	Edgewood TECHNICAL SESSION	Belmont TECHNICAL SESSION	General Thomas TECHNICAL SESSION
	<b>ENG 101</b>	<b>IT 301</b>	<b>IT 302</b>	<b>IT 302</b>	<b>ENT 206</b>
	Oaklands POSTER SESSION				
	<b>IT P 401</b>				
<b>10:30 - 10:45</b>	<b>Break</b>				
<b>10:45 - 12:30</b>	Evergreen TECHNICAL SESSION	Kingsley TECHNICAL SESSION	Edgewood TECHNICAL SESSION	Belmont TECHNICAL SESSION	General Thomas TECHNICAL SESSION
	<b>ENT 204</b>	<b>ENG 102</b>	<b>ENG 105</b>	<b>IT 303</b>	<b>ENT 207</b>
	Oaklands POSTER SESSION				
	<b>ENT P 401</b>				
<b>12:30</b>	<b>Conference Ends</b>				
<b>1:00 – 2:30</b>	<b>IAJC Board of Directors Meeting Room Cheekwood &amp; Ante</b>				

**Conference, Middle East Special Sessions  
Power and Water University  
Wednesday  
November 19, 2008**

<b>8:00 - 8:30</b>	<b>Breakfast</b>		
<b>8:30 - 9:00</b>	<b>Welcome and Opening Remarks</b>		
<b>9:00 - 10:30</b>	Evergreen TECHNICAL SESSION	Kingsley TECHNICAL SESSION	Edgewood TECHNICAL SESSION
	<b>ENG 108</b>	<b>ENG 108</b>	<b>ENG 108</b>
<b>10:30</b>	<b>Conference Ends</b>		

# Meeting and Event Facilities

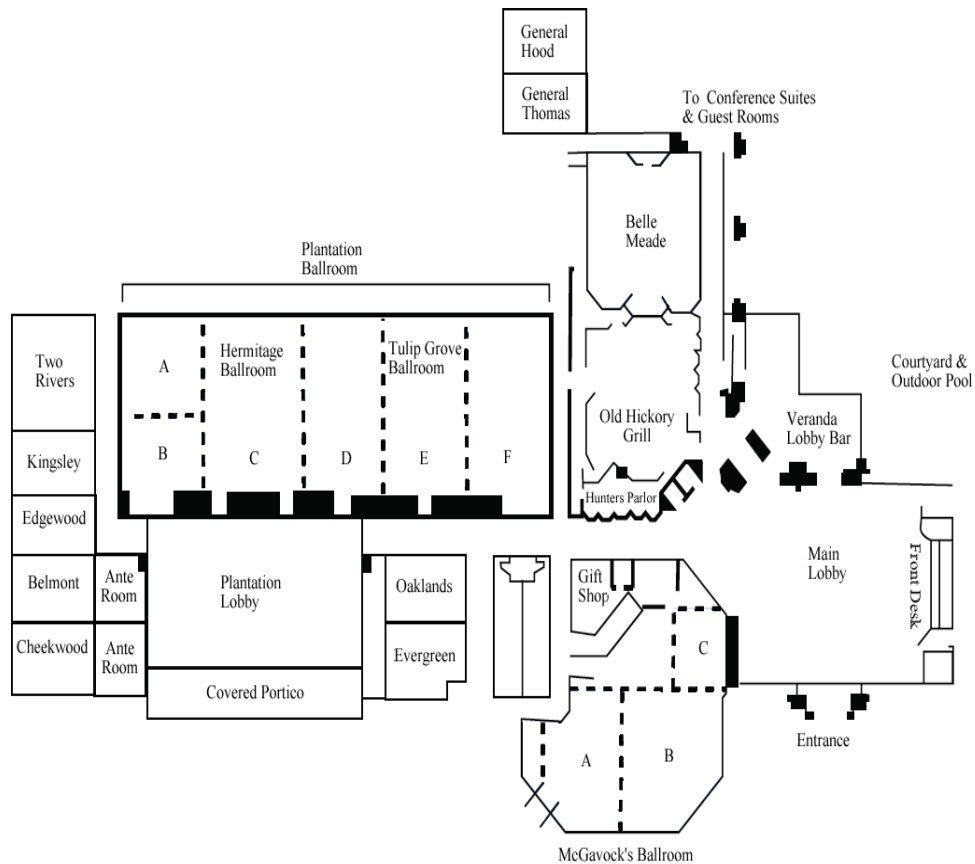


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# Conference Program

**Tuesday  
November 18, 2008**

<b>9:15 - 9:30</b>	<b>Break</b>				
<b>9:30 - 11:30</b>	<b>ENT 202</b>	<b>ENG 106 ENT 205</b>	<b>ENT 203</b>	<b>ENT 208</b>	<b>ENT 209</b>

## **ENT 202: Topics in Measurement and Instrumentation**

**Session Chair: Frank Atuahene**

*Georgia Southern University*

**Time and Place:** *Tuesday - November 18, 9:30 am - 11:30 am, Room Evergreen*

### **Paper#001**

*Title: Development and Field Testing of a Hybrid Water Heating and Dehumidification appliance*

*Author: Aaron K. Ball, Chip Ferguson, William McDaniel*

### **Paper#040**

*Title: A Low-Power Instrumentation and Recording System for Swing Door Usage Analysis*

*Author: Dale H. Litwhiler, Thomas H. Gavigan*

### **Paper#051**

*Title: Education of a the Citizen Architect through Designing Mobile Health Clinic Concepts*

*Author: Elizabeth Martin*

### **Paper#060**

*Title: Development of a new equipment to measure the hydraulic conductivity of clay liners to facilitate construction and maintenance of structures with compacted clay*

*Author: Frank Atuahene*

### **Paper#092**

*Title: Stethoscope for Monitoring Neonatal Abdominal Sounds*

*Author: Jonathan M. Hill, Andrew Maloney, Kelly Stephens, Ronald S. Adrezin, Leonard Eisenfeld*

### **Paper#190**

*Title: Design and Testing of a Permanent Magnet Axial Flux Wind Power Generator*

*Author: Garrison F. Price, Todd D. Batzel, Mihai Comanescu, Bruce A. Muller*

## **ENG 106: Topics in Material Science & Properties**

**Session Chair: Victor J. Gallardo**

*University of Houston*

**Time and Place:** *Tuesday - November 18, 9:30 am - 11:30 am, Room Kingsley*

### **Paper#004**

*Title: Optical Properties and Applications of Nanoscale Silicon*

*Author: Adam A. Filios*

**Paper#113**

*Title: Post-Formed Mechanical Properties Prediction for CAE Crash Applications*

*Author: Payam H. Matin, Ali Eydgahi*

**Paper#157**

*Title: An Analysis of the Energy Requirement for the Improved Mechanical Properties of a Polymer-Clay Nanocomposite*

*Author: Rex Kanu, Dennis Weldishofer*

**ENT 205: Selected topics in Mechanical and Manufacturing Engineering Technology**

**Session Chair: Asad Salem**

*Texas A & M University*

**Time and Place:** *Tuesday - November 18, 9:30 am - 11:30 am, Room Kingsley*

**Paper#019**

*Title: Flow Angle Effects on Supersonic Flutter of Curved Panels*

*Author: Mohamed Salim Azzouz, Idir Azouz*

**Paper#024**

*Title: Enhancement to the Conditioned Head Turn Technique to Measure Infant Response to Auditory Stimulus*

*Author: Barry A. Hoy, Eleanor L. Hoy*

**Paper#062**

*Title: The Integration of Cost into Mechanical Engineering Design Analysis*

*Author: Gary S. Drigel*

**Paper#064**

*Title: Determining the spinning reserve in power systems by corrected recursive PJM method*

*Author: Mohammad Taghi, Ameli, Golnazsadat, Mahdavihah, Saeid Moslehpour*

**Paper#240**

*Title: Measuring Agility of Organizations – A Comprehensive Agility Measurement Tool (CAMT)*

*Author: Ameya S. Erande, Alok K. Verma*

**ENT 203: Topics in Aviation Systems**

**Session Chair: Mary Johnson**

*Purdue University*

**Time and Place:** *Tuesday - November 18, 9:30 am - 11:30 am, Room Edgewood*

**Paper#029**

*Title: Standardized Measures of Safety: Finding Global Common Ground for Safety Metrics*

*Author: Timothy D. Ropp, Brian G. Dillman*

**Paper#043**

*Title: No Hassle Check-in of Aircraft Customers and Baggage*

*Author: Katie Baloun, Renee Hendricks, Denver Lopp*

**Paper#044**

*Title: Planning of Non-routine Work for Aircraft Scheduled Maintenance*

*Author: Josanne Aungst, Mary E. Johnson, Sung Soo Lee, Denver Lopp, Marc Williams*

**Paper#047**

*Title: Introduction of Lean Six Sigma Principles into Aeronautical Engineering Technology Courses*

*Author: Mary E. Johnson, Sergey Dubikovsky*

**Paper#048**

*Title: Learning Aerospace Design and Manufacturing Processes to Demonstrate ABET Program Objectives*

*Author: Brent Vlasman, Sergey Dubikovsky, Jonathan Schwartzkopf, David Vallade*

**Paper#131**

*Title: Development of Safety Event Metrics for an Aviation Organization*

*Author: Anthony J. Morell, Mary E. Johnson, Edie K. Schmidt, Michael W. Suckow*

**Paper#164**

*Title: Implementing Safety Management Systems for Aviation into an Aviation Technology Curriculum*

*Author: Timothy D. Ropp*

**ENT 208: Topics in International Engineering Education**

**Session Chair: Chandra Sekhar**

*Purdue University*

**Time and Place:** *Tuesday - November 18, 9:30 am - 11:30 am, Room Belmont*

**Paper#057**

*Title: International Engineering Research and Educational Collaboration on Gallium-Nitride (GaN) Lasers and Light Emitting Diodes (LEDs)*

*Author: Xiaomin Jin, Bei Zhang, Fei Wang, Jason Flickinger, Sean Jobe, Tao Dai, Guoyi Zhang*

**Paper#115**

*Title: A Comparative Analysis and Evaluation of Different Approaches of Globalization of Engineering Curriculum in the USA*

*Author: Quamrul H. Mazumder*

**Paper#126**

*Title: International Partnerships in Engineering Education: American and African Perspectives*

*Author: J. Antonio, S. Moaveni*

**Paper#171**

*Title: Integrating Chinese Students into an American Capstone Engineering Technology Design Course*

*Author: Rebecca P. Blust, Scott J. Schneider*

**Paper#198**

*Title: Preparing the Engineering Technology Graduate for the Global Marketplace*

*Author: Walter O. Craig*

**Paper#203**

*Title: Relevance of Student Input in Globalization Of Engineering Education*

*Author: Willie K. Ofosu, Francois Sekyere*

**ENT 209: Topics in Management and Entrepreneurship**

**Session Chair: Masaru Okuda**

*Murray State University*

**Time and Place:** *Tuesday - November 18, 9:30 am - 11:30 am, Room General Thomas*

**Paper#030**

*Title: Identification of Significant Factors and Topics for Establishing a Standard Evaluation Instrument for Six Sigma Black Belt Projects*

*Author: Bruce DeRuntz, Ron Meier*

**Paper#055**

*Title: Situating a Senior Project Course in a University QEP Research-Based Instructional Framework*

*Author: Farrokh Attarzadeh, William Fitzgibbon, Enrique Barbieri, Miguel Ramos*

**Paper#093**

*Title: Development of a Research Oriented Wireless System for Human Performance Monitoring*

*Author: Jonathan Hill, Majdi Atallah, Kevin Ball*

**Paper#144**

*Title: Task Diminishment: Construction value loss through sub-optimal execution*

*Author: John R. Patton*

**Paper#158**

*Title: Risk Assessment of Highway Bridges: A Reliability-Based Approach*

*Author: Reynaldo M. Pablo*

**Paper#177**

*Title: Identifying Prevention Methods to Reduce CTS Incidents: Based on Analysis of Employee Perception and by Utilizing the Strain Index.*

*Author: Gabriel C. Smith, Mandara D. Salvage*

**Tuesday  
November 18, 2008**

<b>11:30 - 1:00</b>	<b>Lunch Break (Not Included) IAJC Executive Board Meeting</b>				
<b>1:00 - 2:45</b>	<b>ENG 107</b>	<b>ENG 107</b>	<b>ENG 107</b>	<b>IT 304</b>	<b>ENT 201</b>

**ENG 107 Section 1: Topics in Engineering Education - I**

**Session Chair: Mir M. Atiqullah**

*Southern Polytechnic State University*

**Time and Place: Tuesday - November 18 - 1:00 pm - 2:45 pm - Room 1**

**Paper#002**

*Title: Enhancing Students' Math and Science Education through Information Technology Skills in Robotics*

*Author: Keith Williamson, Nehad ElSawaf, Tarek Abdel-Salam, Tijjani Mohammed*

**Paper#016**

*Title: Active Learning in Manufacturing Engineering Programs*

*Author: Arif Sirinterlikci*

**Paper#023**

*Title: Transformational Paradigm for Engineering and Technology Education*

*Author: Enrique Barbieri, William Fitzgibbon*

**Paper#025**

*Title: Educational Institution Strategies to Increase U.S. Innovation*

*Author: Matthew E. Elam, Jerry D. Parish, Ben D. Cranor*

**Paper#031**

*Title: Continuous Improvement Process Based on Outcome Based Education*

*Author: Chandra Sekhar*

**ENG 107 Section 2: Topics in Engineering Education - II**

**Session Chair: Ali Eydgahi**

*University of Maryland, Eastern Shore*

**Time and Place:** *Tuesday - November 18, 1:00 pm - 2:45 pm - Room Kingsley*

**Paper#039**

*Title: Enhancing Global Education: Making Steel Connection Sculpture Available Online to Students in Developing Countries*

*Author: Karen Chou, Saeed Moaveni*

**Paper#094**

*Title: The Evolution of a Collaborative Multi-disciplinary Engineering Design Experience*

*Author: Judy L. Cezeaux, Eric W. Haffner, Thomas Keyser*

**Paper#100**

*Title: Facing Idea Engineering Roadblocks*

*Author: La Verne Abe Harris*

**Paper#111**

*Title: Incorporating System-Level Design Tools into Upper-Level Electrical Engineering Courses*

*Author: Wagdy H. Mahmoud*

**Paper#139**

*Title: Teaching Circuits to Multiple Disciplines: Hardware, Software, Both?*

*Author: Noureddine Bekhouche, Terry Marbut*

**ENG 107 Section 3: Topics in Engineering Education - III**

**Session Chair: Victor J. Gallardo**

*University of Houston*

**Time and Place:** *Tuesday - November 18, 1:00 pm - 2:45 pm - Room Edgewood*

**Paper#141**

*Title: Multiprocessing Computer System Design A course with Hardware - Software System Design Approach*

*Author: Omer Farook*

**Paper#145**

*Title: A Simple Deadlock Avoidance Algorithm in Flexible Manufacturing Systems*

*Author: Paul E. Deering*

**Paper#146**

*Title: Improved Learning of Engineering Mathematics Through Hands-On Real World Laboratory Experiments*

*Author: Peter Shull*

**Paper#181**

*Title: Intelligent Design and Engineering Design Education*

*Author: Suzanne Keilson*

**Paper#209**

*Title: Teaching Electromagnetic Fields with Computer Visualization*

*Author: Yeqin Huang, Bill W. Yang, Robert Adams, Brian Howell, James Z. Zhang, Kenneth Burbank*



## **IT 304: Topics in Wireless Sensors/Networks**

**Session Chair: Ravindra Thamma**

*Central Connecticut State University*

**Time and Place:** *Tuesday - November 18, 1:00 pm - 2:45 pm, Room Belmont*

### **Paper#087**

*Title: Autonomous Mobile Robot Using RTK GPS*

*Author: Thongchai Phairoh, Keith Williamson*

### **Paper#110**

*Title: A Wireless Sensor Network Communication Model for Automation of Electric Power Distribution.*

*Author: M. Muthukumar, N. Sureshkumar, MA. BhadriNarayan*

### **Paper#124**

*Title: Advanced Mobile Communications for Emergency Management and Crisis Response*

*Author: Mike Bowman*

### **Paper#174**

*Title: GPS Satellite Precision Global Surveying*

*Author: S. Akbar, M. Thakkar, D. Jones, K. Adom, N. Rashidi*

### **Paper#213**

*Title: Monitoring of Distributed Pipeline Systems by Wireless Sensor Networks*

*Author: Yuanwei Jin, Ali Eydgahi*

## **ENT 201: Topics in RFID and Communications**

**Session Chair: Rudy Ottway**

*Murray State University*

**Time and Place:** *Tuesday - November 18, 1:00 pm - 2:45 pm, Room General Thomas*

### **Paper#009**

*Title: Pre-amp EDFA ASE Noise Characterization for Optical Receiver Transmission performance*

*Author: Akram Abu-aisheh, Hisham Alnajjar*

### **Paper#010**

*Title: Design Co ordination of Pre-amp EDFAs and PIN Photon Detectors for Use in Telecommunications Optical Receivers*

*Author: Akram Abu-aisheh, Hisham Alnajjar*

### **Paper#185**

*Title: A Bi-level Block Coding Technique for Encoding Data Sequences with Sparse Distribution*

*Author: Li Tan, Jean Jiang*

### **Paper#228**

*Title: A Real-time DSP-Based Optical Character Recognition System for Isolated Arabic characters using the TI TMS320C6416T*

*Author: Haidar Almohri, John S. Gray, Hisham Alnajjar*

### **Paper#232**

*Title: Telephone Systems Engineering in Brazil: Indigenous v Foreign Technology*

*Author: Wainer da Silveira e Silva, Regina Coeli Silva*

**Tuesday  
November 18, 2008**

2:45 - 3:00	Break				
3:00 - 4:45	IT 305	IT 305	ENG 103	ENG 103	ENG 104

### **IT 305 Section 1: Topics in IT Education - I**

**Session Co-Chairs: Jessica Buck & Ali Osareh**

*Jackson State University, NC A&T State University*

**Time and Place:** *Tuesday - November 18, 3:00 pm - 4:45 pm, Room Evergreen*

**Paper#037**

*Title: A comparison of Instructional Methods for Improving the Spatial-Visualization Ability of Freshman Technology Seminar Students*

*Author: Chip Ferguson, Meagan Karvonen, Aaron Ball, Edward Case*

**Paper#053**

*Title: A Remote Control Project to Enhance Undergraduate Students' Interest and Knowledge in Industrial Automation*

*Author: Akbar Eslami, Aliza Williams, Loella Lapat, Ali Osareh*

**Paper#059**

*Title: Establishing an ISO 17025 Compliant Laboratory at a University*

*Author: Karen Hullihen, Verna Fitzsimmons, Michael Fisch*

**Paper#070**

*Title: A Jitter Education: First-Year Lab*

*Author: Gene L. Harding*

**Paper#072**

*Title: An International Lean Certification Role Delineation Delphi Study Applied to Develop Graduate-level Curriculum in Lean Manufacturing*

*Author: Hiral A. Shah, Tracy S. Tillman*

### **IT 305 Section 2: Topics in IT Education – II**

**Session Chair: Mike Bowman**

*Murray State University*

**Time and Place:** *Tuesday - November 18, 3:00 pm - 4:45 pm, Room Kingsley*

**Paper#088**

*Title: Minority Influence on Engineering Technology in Shaping Industrial Education Policy*

*Author: John Kugler*

**Paper#151**

*Title: Enhancing Student Leadership, Entrepreneurship, & Innovation Skills through Active Learning*

*Author: Raj L. Desai*

**Paper#152**

*Title: Technology Transfer and Sustainability - Adapting Factors: Culture, Physical Environment, and Geographical Location*

*Author: Rashed M. Al-Thawwad*

**Paper#193**

*Title: Globalization Issues In The Industrial Technology Transfer Supply Chain*

*Author: Todd Myers*

**Paper#229**

*Title: Global Trends in Patenting*

*Author: Ben Cranor, Jerry D. Parish, Matthew E. Elam*

**ENG 103 Section 1: Topics in Computational & CAD Techniques – I**

**Session Chair: Asad A. Salem**

*Texas A&M University*

**Time and Place:** *Tuesday - November 18, 3:00 pm - 4:45 pm, Room Edgewood*

**Paper#014**

*Title: Numerical Modeling for the Calculation of Temperatures in Multiple Coated tools*

*Author: Andrew Otieno*

**Paper#021**

*Title: Slicing Issues in CAD Translation to Rapid Prototyping*

*Author: B.V. Chowdary, D.R. Sahatoo, Fahraz Ali*

**Paper#036**

*Title: An Approximate Equation for the Condition Numbers of Well-Scaled Matrices*

*Author: Chin-Chieh Chiang, John P. Chandler*

**Paper#054**

*Title: Part Design and Development through CAD/CAM and CAE Systems: A Reverse Engineering Approach*

*Author: Fahraz Ali, B.V. Chowdary, C.A.C. Imbert*

**Paper#082**

*Title: Hand Tremor Detection via Adaptive Empirical Mode Decomposition and Hilbert-Huang Transform*

*Author: James Zhang*

**ENG 103 Section 2: Topics in Computational & CAD Techniques – II**

**Session Chair: Payam H. Matin**

*University of Maryland Eastern Shore*

**Time and Place:** *Tuesday - November 18, 3:00 pm - 4:45 pm, Room Belmont*

**Paper#083**

*Title: Application of Computer Aided Design (CAD) in Knowledge Based Engineering*

*Author: Jared May*

**Paper#133**

*Title: Comparison Between Multiple Regression Models to Study Effect of Turning Parameters on the Surface Roughness*

*Author: Ravindra Thamma*

**Paper#191**

*Title: Finite Element Analysis of Cutting Forces and Stresses on Microtools in the Micromachining of Aluminum Alloys*

*Author: Andrew Otieno, Clifford Mirman*

**Paper#230**

*Title: Stochastic FE Heat Transfer Analysis Applied to a Storage Container Design*

*Author: Asad Salem, Yousri Elkassabgi*

**ENG 104: Topics in Virtual Instruments & Distance Education**

**Session Chair: Idir Azouz**

*Midwestern State University*

**Time and Place:** *Tuesday - November 18, 3:00 pm - 4:45 pm, Room General Thomas*

**Paper#061**

*Title: Integrating Virtual Lab Simulation Software into an MET Program*

*Author: Joseph Fuehne*

**Paper#063**

*Title: Application of a Block-based Approach in Design of a Reconfigurable Virtual Instrumentation Platform*

*Author: Gilbert Osei-Dadzie, Kwame Osei Boateng*

**Paper#079**

*Title: A Classroom/Distance Learning Engineering Course on Wireless Networking with Virtual Lab*

*Author: Jai P. Agrawal*

**Paper#137**

*Title: Study of Electrical Power Systems using LabVIEW Virtual Instruments (VI) Modules*

*Author: Nikunja Swain, James A. Anderson*

**Tuesday,  
November 18, 2008**

<b>6:30 - 8:30</b>	<b>Dinner Banquet / Keynote Speakers / Award Ceremony Tulip Grove E</b>
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**Wednesday  
November 19, 2008**

<b>8:30 - 10:30</b>	Evergreen TECHNICAL SESSION	Kingsley TECHNICAL SESSION	Edgewood TECHNICAL SESSION	Belmont TECHNICAL SESSION	General Thomas TECHNICAL SESSION
	<b>ENG 101</b>	<b>IT 301</b>	<b>IT 302</b>	<b>IT 302</b>	<b>ENT 206</b>
	Oaklands POSTER SESSION				
	<b>IT P 401</b>				

**ENG 101: Topics in Control & Signal Processing**

**Session Chair: Willie K. Ofofu**

*Penn State University*

**Time and Place:** *Wednesday - November 19, 8:30 am - 10:30 am, Room Evergreen*

**Paper#104**

*Title: Reliable and Robust  $H_\infty$  Control for a Class of Uncertain Descriptor Systems*

*Author: Lingtao Zhang, James Z. Zhang, Robert Adams, Peter Tay*

**Paper#116**

*Title: Quickest Descent control of nonlinear system with Singular Control Chatter Elimination*

*Author: Dale McDonald*

**Paper#117**

*Title: A Trajectory following Control Algorithm for Chatter Elimination with reduced stiffness*

*Author: Dale McDonald*

**Paper#122**

*Title: Simulation Based Methodology for Selection and Integration of Real-time Control Electronics into Complex Dynamic Mechanical Systems*

*Author: Mekonnen Tesfay Tesfu, J. Schlattmann, Lars Ziemer*

**Paper#140**

*Title: Analysis of Stress in Speech Using Empirical Mode Decomposition*

*Author: Nyaga Mbitiru, Peter Tay, James Z. Zhang, Robert D. Adams*

**IT 301: Topics in Information Technology**

**Session Co-Chairs: Cliff Mirman & John Spurlin**

*Northern Illinois University, Norfolk State University*

**Time and Place:** *Wednesday - November 19, 8:30 am - 10:30 am, Room Kingsley*

**Paper#096**

*Title: The effect of computer utilization by technology students for problem solving on pedagogy*

*Author: L. Tawfik, H. Tawfik, K. Shahrabi*

**Paper#123**

*Title: An Evaluation of Privacy and Security Issues at a Historical Black University*

*Author: Michael Jones*

**Paper#125**

*Title: Technology Integration into Architecture Building Systems*

*Author: Robert W. Tango*

**Paper#156**

*Title: A Pilot Project in Evaluating the Use of Tablet-PCs and Supporting Technologies in Sophomore Electronic Technology Courses*

*Author: Kuldeep S. Rawat, Mehran Elahi, Gholam H. Massiha*

**Paper#188**

*Title: Synchronous Replication of Remote Storage*

*Author: Timur Mirzoev*

**Paper#196**

*Title: Building Information Modeling: An Academic Perspective*

*Author: Vivek Sah, Clark Cory*

**IT 302 Section 1: Topics in Manufacturing, Construction and Product Design – I**

**Session Co-Chairs: Richard Meznarich & Stan Lightner**

*Nebraska at Kearney, Western Kentucky University*

**Time and Place: Wednesday - November 19, 8:30 am - 10:30 am, Room Edgewood**

**Paper#099**

*Title: Determination of Machining Parameters of Corn Byproduct Filled Plastics*

*Author: Kurt A. Rosentrater, Andrew Otieno, Pratyusha Melampati*

**Paper#102**

*Title: A Comparison of Job Completion Times Using Three Different Batch Processing Implementations*

*Author: Lee R. Clendenning*

**Paper#107**

*Title: A Computer-Based Economic Analysis for Manufacturing Process Selection*

*Author: M. Djassemi*

**Paper#112**

*Title: Globalization of technology – imagine the possibilities*

*Author: Mani Manivannan*

**Paper#114**

*Title: Routing Map for Automated Robotic Part Delivery System in Manufacturing Environments*

*Author: Payam Matin, Ali Eydgahi*

**IT 302 Section 2: Topics in Manufacturing, Construction and Product Design – II**

**Session Chair: Youakim Al-Kalaani**

*Georgia Southern University*

**Time and Place: Wednesday - November 19, 8:30 am - 10:30 am, Room Belmont**

**Paper#195**

*Title: Process to Product Orientation: Re-engineering Experience from a Developing Country*

*Author: Victor Raj*

**Paper#220**

*Title: Developing a Design for Manufacturing Handbook*

*Author: Mohsen Hamidi, Kambiz Farahmand*

**Paper#221**

*Title: Examining Neutral Formats for Visualization and Data Exchange*

*Author: Nate Hartman, Adrian Lim*

**Paper#231**

*Title: Examining 2007 São Paulo City Subway Line - 4 Construction Site Accident*

*Author: Analia Maria Andrade Pinto, Wainer da Silveira e Silva*

**Paper#234**

*Title: A Model for Managing Civil Construction Company Systems*

*Author: Carlos Alberto Pereira Soares, Christine Kowal Chinelli*

**Paper#246 (presentaion only)**

*Title: Recruiting and Retaining Learners in Construction Management*

*Presenter: Timothy Brockman*

**ENT 206: Topics in Engineering Technology Education - I**

**Session Chair: Omer Farook**

*Purdue University*

**Time and Place:** *Wednesday - November 19, 8:30 am - 10:30 am, Room General Thomas*

**Paper#017**

*Title: High School and University Collaborative Engineering Technology Project*

*Author: Asad Yousuf, William Lehman, Casey Smith, Elisha Dotson*

**Paper#027**

*Title: Program Evaluation: Graduate and Employer Perceptions Regarding Job Preparedness Skills of Design Technology Graduates.*

*Author: Bonnie Higgins*

**Paper#028**

*Title: An Old Tool with a New Twist - Innovating With Inductive Teaching Methods*

*Author: Ronald Farrell, Kevin Henderson, Sue Boutilier*

**Paper#041**

*Title: Successful Strategies for Educating Students With Disabilities In Technologies Education*

*Author: Elinor Foster-Blackwell*

**Paper#066**

*Title: Filling the Void in Computer Education: Establishing and Developing a Responsive Computer Network Engineering and Security Program*

*Author: Guy C. Hembroff, Yu Cai, Dan Miller*

**IT P 401: Poster Session**

**Time and Place:** *Wednesday - November 19, 8:30 am - 10:30 am, Room Oaklands*

**Paper#090**

*Title: Cognitive Responses to Engineering Designed Products*

*Author: John Mativo*

**Paper#167**

*Title: VLSI and SPICE Modeling of ALU*

*Author: Saeid Moslehpour, Srikrishna Karatalapu*

**Paper#179 (presentation only)**

*Title: Web-Based Videos: Enhance and Reinforce Manufacturing Laboratory Activities*

*Author: Stan Lightner, Richard Meznaric*

**Paper#192**

*Title: Virtual Private Network Technology with Open Source and Vendor Based Systems*

*Author: Veeramuthu Rajaravivarma*

**Paper#212**

*Title: On-Line Emission Monitoring for Power Generation Modeling*

*Author: Youakim Al Kalaani*

**Wednesday  
November 19, 2008**

<b>10:30 - 10:45</b>	<b>Break</b>				
<b>10:45 - 12:30</b>	Evergreen TECHNICAL SESSION	Kingsley TECHNICAL SESSION	Edgewood TECHNICAL SESSION	Belmont TECHNICAL SESSION	General Thomas TECHNICAL SESSION
	<b>ENT 204</b>	<b>ENG 102</b>	<b>ENG 105</b>	<b>IT 303</b>	<b>ENT 207</b>
	Oaklands POSTER SESSION				
	<b>ENT P 401</b>				

**ENT 204: Topics in Renewable Energy**

**Session Chair: Keith Williamson**

*Virginia State University*

**Time and Place:** *Wednesday - November 19, 10:45 am - 12:30 pm, Room Evergreen*

**Paper#012**

*Title: Biotechnology: Gearing up to Manufacture Biofuels Including Ethanol and Biodiesel*

*Author: Alton L. Kornegay, Dominick E. Fazarro, David W. Hoffa*

**Paper#084**

*Title: Comparing Swiss and U.S. homes in the area of energy efficiency*

*Author: Jason Kutch, Daphene C. Koch, PhD, William J. Hutzal, P.E., & Eric Holt*

**Paper#085**

*Title: Alternative Energy Choices, Conservation, and Management: A Primer for Advanced Manufacturing Managers*

*Author: Jeffrey M. Ulmer, Troy E. Ollison*

**Paper#095**

*Title: Solar Airports*

*Author: Serdar Z. Elgun, Kamal Shahrabi*



### **Paper#129**

*Title: Feasibility Study for Replacing Asynchronous Generators with Synchronous Generators in Wind Farm Power Stations*

*Author: Saeid Moslehpour, Mohammad Taghi Ameli, Amin Mirzaie*

## **ENG 102: Topics in Robotics & Intelligent Systems**

### **Session Chair: Payam H. Matin**

*University of Maryland Eastern Shore*

**Time and Place:** *Wednesday - November 19, 10:45 am - 12:30 pm, Room Kingsley*

### **Paper#006**

*Title: Automatic faults diagnosis by application of neural network system and condition-based monitoring using vibration signals*

*Author: Adyles Arato Junior*

### **Paper#034**

*Title: Integration of 3D Stereo Vision Measurements in Industrial Robot Applications*

*Author: Shaopeng Cheng, Xiaoting Chen*

### **Paper#105**

*Title: Implementing an Adaptive Robot with Multiple Competing Objectives in a Service Industry Environment*

*Author: Fletcher Lu, Lorena Harper*

### **Paper#154**

*Title: Navigational Aids to Predict The Position Of Automated Guided Vehicles With Ultrasound And Radio Frequency Sensing*

*Author: Ravindra Thamma*

### **Paper#162**

*Title: 2D Edge Detection through Manipulation of Non-cooperative Featureless Payloads*

*Author: Trevor P. Robinson, Adam W. Stienecker*

## **ENG 105: Topics in Modeling & Simulation**

### **Session Chair: Quamrul H. Mazumder**

*University of Michigan*

**Time and Place:** *Wednesday - November 19, 10:45 am-12:30 pm, Room Edgewood*

### **Paper#175**

*Title: Application of Software Configurable Digital Servo Amplifiers for Electric Machine control courses*

*Author: Shiyong Lee*

### **Paper#187**

*Title: A Simulation Program for Demonstration and Analysis of Closed Loop Negative Feedback Control*

*Author: Thomas Scott, Paul E. Deering*

### **Paper#199**

*Title: A Hands-On Kanban Simulation Kit for Lean Manufacturing*

*Author: Shaojun Wang, Doug Koch, Yifeng Ren*

### **Paper#205**

*Title: Simulink-based Simulation of Quadrature Amplitude Modulation (QAM) System*

*Author: Xiaolong (James) Li*

## **IT 303: Online/Web Systems**

**Session Chair: Richard Clendenning**

*Catalyst Technologies*

**Time and Place:** *Wednesday - November 19, 10:45 am - 12:30 pm, Room Belmont*

**Paper#042**

*Title: Utilizing Webcam Technology to Bring Students Into the Field*

*Author: Daphene Koch, Mark Shaurette*

**Paper#065**

*Title: A Space Efficient Local Look-up Search Peer-to-Peer Protocol for Trustworthy key distribution*

*Author: Graciela Perera, Robert Kramer, Anthony Weaver*

**Paper#086**

*Title: Novel Automatic Utility Data Collection System using IEEE 802.15.4-Compliant Wireless Mesh Networks*

*Author: Jin Zhu, Recayi Pecen*

**Paper#118**

*Title: Development of a Global Web-Based Industrial Process Control Laboratory for Undergraduate and Graduate Engineering Technology Education*

*Author: Mohammad Al-Khedher, Dale McDonald*

**Paper#153**

*Title: Prototype Model for Real Time Home Surveillance System over the Internet*

*Author: Rathika Rajaravivarma*

## **ENT 207: Topics in Engineering Technology Education – II**

**Session Chair: Pete Klein**

*Ohio University*

**Time and Place:** *Wednesday - November 19, 10:45 am - 12:30 pm, Room General Thomas*

**Paper#089**

*Title: Graphics Course Formative Feedback and Teaching Innovation using Screen Capture Technology*

*Author: John Irwin*

**Paper#135**

*Title: Role of Simulation Software in Enhancing Student Learning in Computer Organization and Microcontroller Courses*

*Author: Nikunja K. Swain, James A. Anderson, Raghu B. Korrapati*

**Paper#147**

*Title: Curriculum Innovation: Technical Sales*

*Author: Peter W. Klein*

**Paper#148**

*Title: Engineering Technology Education: A National Picture*

*Author: Philip Weinsier, David J. Brown*

**Paper#170**

*Title: Automatic Identification and RFID Course and Equipment for Teaching and Research*

*Author: Sam Guccione, Uros Marjanovic*

## **ENT P 401: Poster Session**

**Time and Place:** *Wednesday - November 19, 10:45 am - 12:30 pm, Room Oaklands*

### **Paper#206**

*Title: An Engineering Design of the China's Social Structure In a Technology Era*

*Author: George Yang*

### **Paper#233**

*Title: Engineer Women Take Top Level Management In Brazil*

*Author: Regina Coeli Silva*

**Wednesday  
November 19, 2008**

<b>12:30 PM</b>	<b>Conference Ends</b>
<b>1:00 – 2:30</b>	<b>IAJC Board of Directors Meeting</b>

**Conference Middle East Special Sessions  
Power and Water University  
Tehran, Iran**

**Wednesday  
November 19, 2008**

<b>8:00 - 8:30</b>	<b>Breakfast</b>		
<b>8:30 - 9:00</b>	<b>Welcome and Opening Remarks</b>		
<b>9:00 - 10:30</b>	TECHNICAL SESSION	TECHNICAL SESSION	TECHNICAL SESSION
	<b>ENG 108</b>	<b>ENG 108</b>	<b>ENG 108</b>

**ENG 108 Special Engineering Session for Asia  
\* Power and Water University of Technology \***

**Session Chair: Mohammad Taghi Ameli**

*Power and Water University of Technology, Tehran, Iran*

**Time and Place:** *Wednesday - November 19, 9:00 am - 10:30 am*

**Paper#056**

*Title: Propagation Characteristics of Aberrated Partially Coherent Flat-topped Beam in Turbulent Atmosphere*

*Author: F. D. Kashani, B. Ghafary*

**Paper#074**

*Title: Recognition of the Real Target in the Rosette Pattern Using Blind Source Separation and Hidden Markov Model*

*Author: Hossein Ebrahimi Dinaki, Shahriar Baradaran Shokouhi, Hadi Soltanizadeh*

**Paper#120**

*Title: Failure Analysis of Gas Turbine Blades*

*Author: Mehdi Tofighi Naeem, Seyed Ali Jazayeri, Nesa Rezamahdi*

**Paper#134**

*Title: Analysis of Metallurgical and Mechanical Failure of a Centrifugal Compressor*

*Author: Nesa Rezamahdi, Seyed Ali Jazayeri, Mehdi Tofighi Naeem*

**Paper#224**

*Title: A Low-power Technique for Extracting the Main Characteristics of an Analog Sine-wave Signal*

*Author: Soheil Ziabakhsh, Seyyed Hossein Alavi Rad, Alireza Saberkari, Shahriar Baradaran Shokouhi*

**Paper#226**

*Title: An Investigation of Solidification Conditions and Melt Treatment on Microporosity Formation*

*Author: Keivan Davamia, Mehrdad Shayganb, Mohammad Kazem Besharati Givi, Mahmood Mousavi Mashhadi*

**Paper#239**

*Title: Reducing the Undesirable Effects of Wind Farms High-Penetration on Frequency*

*Author: Mohammad Taghi Ameli, Vahid Sotudehnegad, Saeid Moslehpour*

**Conference Middle East Special Sessions  
Power and Water University  
Tehran, Iran**

**Wednesday  
November 19, 2008**

<b>10:30</b>	<b>Conference Ends</b>
<b>11:00 - 12:00</b>	<b>IAJC Middle East Executive Board Meeting</b>

## Keynote Speakers Biographies



**Dr. William E. Fitzgibbon, III**  
**Dean, of College of Technology**  
**University of Houston**

William E. Fitzgibbon, III earned both his BA and PhD degrees from Vanderbilt University in 1968 and 1972 respectively. He is currently serving as Dean of the College of Technology of University of Houston and holds professorial rank in both the Department of Mathematics and the Department of Engineering Technology of the University of Houston. Previously he served as Chair of the Department of the Mathematics, co-Head of the Department of Computer Science and President of the University of Houston Faculty Senate. Currently he is Dean of the College of Technology of the University of Houston. Over the course of his career he has held faculty positions at the University of California, San Diego and the University of Bordeaux I and the University of Bordeaux II as well as a research position at Argonne National Laboratory in Illinois. His academic discipline is applied mathematics with specialization in mathematical biology (mathematical models in epidemiology and ecology), reactive flow, nonlinear partial differential equations and integro-differential equations. He has well over 130 research articles plus numerous articles, reviews, and reports and has lectured extensively in North America, Europe and Asia.

He serves on the Advisory Board of Directors, Houston Technology Center, Board of Advisors, Abramson Family Center for the Future of Health (a cooperative venture of the University of Houston and the Methodist Hospital, and the Technion), the Board of Advisors, Dean and Provost, LPR Publications, Horsham, Pennsylvania, and on the Honorary Editorial Board of Infectious Disease: Research and Treatment: 2008. He is Vice President of Innovative Computing for Advanced Technology, Memberships include: the American Mathematical Society, the Society for Industrial and Applied Mathematics, the American Society for Engineering Education, the Society of Mathematical Biology, the Irish Mathematical Society, the Keck Center for Computational Biology (a consortium of UH, Rice, Baylor College of Medicine), the Houston World Affairs Council, Technology Executive Club Houston, Houston Petroleum Club, Omicron Delta Kappa, Sigma Xi, Phi Kappa Phi, Phi Beta Delta, Pi Mu Epsilon, and Tau Alpha Pi.



**Dr. James Gantt**  
**Chairman of the Board of Directors**  
**ITERA**

Dr. James Gantt became the Director of the Center for Telecommunications Systems Management (CTSM) in February, 2005. The CTSM is part of the Murray State University Program of Distinction in Telecommunications Systems Management, established in 1999. The Center focuses on outreach to students, industry, and government agencies. [www.murraystate.edu/tsm/ctsm](http://www.murraystate.edu/tsm/ctsm) He is currently serving as Chairman of the Board of Directors of the International Telecommunication Education and Research Association (ITERA). ITERA is an organization made up of 17 Universities and Colleges with academic programs in Telecommunications. [www.itera.org](http://www.itera.org) Dr. Gantt attended Murray State University and received a Bachelor of Science with honors (Cum Laude) in 1971. In 1972, he received a Master of Science degree in Computer Science majoring in Operations Research from the University of Missouri at Rolla.

In 1978, he received an Education Specialist degree in Management from Ball State University. Moving to Atlanta, Georgia he was employed as an Operations Research Analyst with the Army Institute for Research in Management Information, Communications, and Computer Sciences (AIRMICS). He was selected to spend the 1981-1982 school year at the Massachusetts Institute of Technology as a Fellow in the Center for Advanced Engineering Studies. He completed his Ph.D in Industrial and Systems Engineering at the Georgia Institute of Technology in 1989. In 1998, Dr. Gantt was honored with Doctor of Laws (Honoris Causa) from Bowie State University. In 2003 he was honored as a Distinguished Alumnus of Murray State University.

When the Army Research Laboratory (ARL) was formed in 1992, he became the Chief of the Software Technology Branch and then the Chief of the Software and Intelligent Systems Division. In September, 1996, he became the acting Director of the Information Science and Technology (IS&T) Directorate. He was selected to become a member of the Senior Executive Service and Director of IS&T in June, 1998. Between May, 2000 and December, 2004 Dr. Gantt served as the Deputy Director and then Director of ARL's Computational and Information Sciences Directorate. As Director he was responsible for conducting research for the Army in Computational, Computer, Communications, and Atmospheric Sciences research. He directed a yearly budget of approximately \$175M and managed 350 government employees and 450 on-site contractors. From July, 2003 to December, 2004 Dr. Gantt also served as the Chief Information Officer of ARL.

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*The Organizing Committee of the 2008 IAJC-IJME International Conference would like to thank Arash Attarzadeh of Shell Oil Co. for the design of form letters and flyers, Harold Halliday, the press operator, Sally J. Rowland, director of printing and postal services, and the following graduate assistants in the College of Technology, University of Houston for their diligent work assisting the committee.*

- *Aditya Gupta*
- *Mayuri Satish Mahajan*
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