AEWG-52 Primer

Monday, October 19, 2009

Stone Harbor Resort, Sturgeon Bay, Wisconsin

Local time is Central Daylight Time (UTC-5)

	Event	**Presenter**
7:30 - 8:15	Breakfast (included with primer registration)	
8:15 - 9:15	**Primer Lecture 1** *AE Instrumentation*	Rick Nordstrom Portland State University, USA
9:15 - 9:30	**15-minute break for Q&A and coffee**	
9:30 - 10:30	**Primer Lecture 2** *AE Feature-Based Analysis*	Tomoki Shiotani Kyoto University, Japan
10:30 - 10:45	**15-minute break for Q&A and coffee**	
10:45 - 11:45	**Primer Lecture 3** *Biomedical Applications*	Jihui Li Inova Fairfax Hospital, USA
noon - 1:15	**Lunch** (included with primer registration)	
1:15 - 2:15	**Primer Lecture 4** *AE Civil Structures I*	Richard Gostautas MISTRAS Group, USA
2:15 - 2:30	**15-minute break for Q&A and coffee**	
2:30 - 3:30	**Primer Lecture 5** *AE Civil Structures II*	David Kosnik & Daniel Marron Northwestern University, USA
4pm	**Adjourn**	
5pm	**Reception: appetizers and cash bar** (included for all registered primer & main technical session attendees)	

AEWG-52 Technical Sessions

Tuesday, October 20, 2009

Stone Harbor Resort, Sturgeon Bay, Wisconsin

Local time is Central Daylight Time (UTC-5)

	Event	Presenter
7:30 - 8:15	**Breakfast** (included with registration)	
8:30 - 10:00	**Technical Session 1**	
8:30	AE Source Characterization of Impact in Shot Peening	Manabu Enoki University of Tokyo, Japan
9:00	AE analysis supported by FEM simulation for proportions of super-elastic martensitic transformation	K. Yoshida University of Tokushima, Japan
9:30	Compression After Impact Strength Prediction in Graphite/Epoxy Laminates Using Acoustic Emission Data and Neural Networks	Anthony M Gunasekera Embry-Riddle Aeronautical Univ., USA
10:00 - 10:15	**Coffee Break - sponsored by MISTRAS Group**	
10:15 - 11:45	**Technical Session 2**	
10:15	Mechanisms of Rebar Corrosion and Corrosion-Induced Cracks in Concrete by AE	Masayasu Ohtsu Kumomoto Univ., Japan
10:45	Investigation of Acousto-Ultrasonics for Evaluating Early-Age Properties of Cement Paste	David Kosnik Northwestern University, USA
11:15	Latest improvements on Freeware AGU-Vallen-Wavelet, now including Choi-Williams transform	Jochen Vallen Vallen Systeme, Germany
11:45 - 12:45	**Lunch** (included with registration)	
1:00 - 2:00	**Tour of Maple-Oregon Lift Bridge, downtown Sturgeon Bay**	

AEWG-52 Technical Sessions
Tuesday, October 20, 2009 (continued)

Stone Harbor Resort, Sturgeon Bay, Wisconsin
Local time is Central Daylight Time (UTC-5)

	Event	Presenter
2:00 - 3:30	**Technical Session 3**	
2:00	AE Localization of Noises on a Lift Bridge	ITI Research Engineering Group Northwestern University, USA
2:30	AE Sensor Fusion System for Bridge Suspension Cable Corrosion Monitoring	Mark Carlos MISTRAS Group, USA
3:00	Self-Powered Wireless Sensor Network for Structural Health Prognosis	Richard Gostautas MISTRAS Group, USA
3:30 - 3:45	**Coffee Break - sponsored by Vallen Systeme**	
3:45 - 5:15	**Technical Session 4**	
3:45	Acoustic Emission Fatigue Life Prediction in Bridge Steel Using Backpropagation Neural Networks	Andrej Korcak Embry-Riddle Aeronautical Univ., USA
4:15	Neural Network Fatigue Life Prediction in Aluminum from Acoustic Emission Data	Muhammed Okur (Dr. Eric Hill) Embry-Riddle Aeronautical Univ., USA
4:45	Visualization of Fatigue Damage Process for Concrete Bridge Deck with AE Techniques	Shinpei Yoshimi Kyoto University, Japan
5:15	**Adjourn**	
6:00 - 9:00	**Boat Tour aboard *Harbor Lady*** (dinner included with registration; cash bar) depart from Stone Harbor Marina	

AEWG-52 Technical Sessions

Wednesday, October 21, 2009

Stone Harbor Resort, Sturgeon Bay, Wisconsin

Local time is Central Daylight Time (UTC-5)

	Event	Presenter
7:30 - 8:15	**Breakfast** (included with registration)	
8:30 - 10:00	**Technical Session 5**	
8:30	More On Transfer Functions of Acoustic Emission Sensors	Kanji Ono Univ. of California Los Angeles, USA
9:00	Evaluation of FBG Based Fiber Optic Acoustic Emission Sensors	Richard Gostautas MISTRAS Group, USA
9:30	Velocity Sensitivity Using Through Wave Calibration of Acoustic Emission Sensors Using Laser Interferometry	Pete Theobald, National Physical Laboratory, UK
10:00 - 10:15	**Coffee Break**	
10:15 - 11:45	**Technical Session 6**	
10:15	The Probabilistic Characteristics of Random Damage in Materials	Gary Qi University of Memphis, USA
10:45	Monitoring the Fatigue Procedure of Proximal Humeral Fracture Fixation Using Acoustic Emission Technique	Jihui Li Inova Fairfax Hospital, USA
11:15	Methodologies Involved in Practical Acoustic Emission Testing of Maraging Steel Rocket Motor Casings	V. Malolan Advanced Systems Laboratory, DRDO, India
11:45-12:45	**Lunch** (included with registration)	
1:00 - 2:00	**Commercial Presentations**	
2:00 - 2:15	**Coffee Break**	
2:15-3:30	**AEWG Business Meeting**	
3:30	**Adjourn**	