

# Tentative Workshop Agenda

**2006 Wind Induced Vibrations of Cable Stay Bridges Workshop**  
**April 25 - 27, 2006**  
**St. Louis, Missouri**

<b>DAY ONE</b>		
<b>Tuesday - April 25, 2006</b>		
Time	Topic	Speaker(s)
10:00 - 1:00	Registration	
1:00 - 1:15	Welcome / Introduction	<i>S. Gupta</i>
1:15 - 2:05	Review of Bridge Cable Vibrations in Japan	
	<i>The Practical Cases of Aerodynamic Vibration of Stayed Cables</i>	<i>M. Matsumoto</i>
2:05 - 2:30	Review of Bridge Cable Vibrations Within the USA	<i>H.R. Bosch</i>
2:30 - 3:00	Break - Vendor Exhibits	
3:00 - 3:30	Overview of Research Program Under SPR-3(078)	<i>P. Liles and H.R. Bosch</i>
3:30 - 4:15	Recent Wind Tunnel Testing (Canada) <i>Recent Wind Tunnel Experiments in Canada on Inclined and Yawed Stay Cables</i>	<i>S. Cheng, J.B. Jakobsen, G.L. Larose, M.G. Savage, and H. Tanaka</i>
4:15 - 5:00	Recent Wind Tunnel Testing (USA) <i>Wind Tunnel Model Studies to Investigate Stay Cable Vibration and Its Mitigation</i>	<i>P.P. Sarkar, K.C. Mehta, and R. Scott Phelan</i>
5:00	Adjourn for Day 1	
5:30 - 7:30	Welcome Reception in Exhibit Hall	

**DAY TWO**

**Wednesday - April 26, 2006**

Time	Topic	Speaker(s)
7:30 - 8:00	Breakfast - Vendor Exhibits	
8:00 - 9:30	Mechanics of Wind & Rain/Wind Induced Cable Vibrations	
	<i>Understanding the Mechanism of Rain-Wind-Induced Vibrations in the Context of Dry Cable Vibrations Observed in the Field And in the Wind Tunnel</i>	<i>D. Zuo and N.P. Jones</i>
	<i>The Generation Mechanism of Inclined Cable Aerodynamics - Rain-Wind Induced Vibration and Dry-State Galloping</i>	<i>M. Matsumoto</i>
9:30 - 10:00	Parametric Excitation of Cables	
	<i>New Insights into Deck-Stay Interaction</i>	<i>M.Y. Liu and N.P. Jones</i>
10:00 - 10:30	Break - Vendor Exhibits	
10:30 - 12:00	Mitigation Methods & Design Issues (Part I)	
	- Cable Surface Treatment	
	<i>Various Surface Treatments Applied on Cables to Reduce RWIV</i>	<i>O. Flamand</i>
	- Cross-Ties between Cables	
	<i>Vibration Mitigation Through Cross-Ties Between Cables: Analysis &amp; Design Experiences (Tentative)</i>	<i>L. Caracoglia and S.T. Hague</i>
	<i>Influence of Cross-Tie Geometry and Details on Mitigation of Wind-Induced Vibrations</i>	<i>S.W. Park and H.R. Bosch</i>
12:00 - 1:00	Lunch	
1:00 - 2:30	Mitigation Methods & Design Issues (Part II)	
	- Dampers on Cables	
	<i>Damping of Stay-Cable Vibrations: Modeling Overview and Design Implications</i>	<i>J.A. Main and N.P. Jones</i>
	<i>Experience with Visco-Elastic and Hydraulic Dampers for Stay Cables</i>	<i>J.P.C. King and B.J. Vickery</i>
	- Dampers on Cables and Cross-Ties between Cables	
	<i>Analysis and Design of Vibration-Suppressing Systems</i>	<i>S. Stoyanoff, B. Pridham, P. Irwin, and S. Gamble</i>
	<i>Effectiveness of Using Dampers on Cables and Cross-Ties Between Cables</i>	<i>S.W. Park and H.R. Bosch</i>
2:30 - 3:00	Break - Vendor Exhibits	
3:00 - 4:00	Design Guidelines Documents	
	<i>PTI Guidelines for Design and Installation of Stay Cables</i>	<i>D. Goodyear</i>
	<i>Development of a Guidelines Document for Aerodynamic Design of Stay Cables</i>	<i>J.J. Shen and H.R. Bosch</i>
4:00 - 4:20	Maintenance & Inspection of Bridge Stay Cable Systems	
	<i>Maintenance and Inspection of Bridge Stay Cable Systems</i>	<i>H. Tabatabai</i>
4:20 - 5:00	Maintenance & Inspection: Recent Experience	
	- Luling	
	<i>Structural Evaluation of Stay Cables of the Luling Bridge</i>	<i>A. Mehrabi and H. Ghara</i>
	- Talmadge Memorial	
5:00	Adjourn for Day 2	

**DAY THREE**

**Thursday - April 27, 2006**

<b>Time</b>	<b>Topic</b>	<b>Speaker(s)</b>
7:30 - 8:00	Breakfast - Vendor Exhibits	
8:00 - 9:00	Recent Experience - Retrofits - Fred Hartman & Veterans Memorial <i>Texas Experience and Retrofits for Stay-Cable Vibrations</i>  - East Huntington / Weirton-Steubenville or Cochrane <i>Lessons Learned in West Virginia About Wind-Induced Vibration of Two Cable-Stayed Bridges</i>	<i>K. Ramsey</i>  <i>B. Dillman, J. Francisco, and A. Mongi</i>
9:00 - 10:00	Recent Experience - New Designs - Zakim / Ravel / Natcher / SOBRR <i>Rain-Wind Vibration: Different Approaches at Different Locations</i>  - Emerson	<i>M. Abrahams, V. Chandra, and R. Hsu</i>
10:00 - 10:30	Break - Vendor Exhibits	
10:30 - 11:30	Innovative Dampers & Other Techniques <i>New Developments in Cable Stay Vibration Suppression</i> <i>Development of a MR Fluid Based Tuned Mass Damper for Cable Vibration Control</i>	<i>D. Micklus and B. Lecing</i>  <i>C.S. Cai and W.J. Wu</i>
11:30 - 12:00	Panel Discussion & Wrap Up	
12:00	Adjourn for Day 3	
1:00	Technical Advisory Committee - Business Meeting	