

# MEETING 1

**WHAT:** Heat Straightening  
**WHO:** Dr. Richard Avent, Louisiana State University  
Mr. Krishna Verma, Federal Highway Administration  
**WHEN:** Tuesday, November 7, 2006  
6 P.M. - 7 P.M.  
**WHERE:** Steamfitters Local #449 Technology Center  
1459 Woodruff Street • Pittsburgh, PA 15220  
**COST:** No Cost

# MEETING 2

**WHAT:** Friction Stir Welding of Steel  
**WHO:** Paul J. Konkol  
Concurrent Technologies Corporation (CTC)  
**WHEN:** Tuesday, November 14, 2006  
6:30 P.M. - Meeting Begins/Dinner Served  
7:15 P.M. - Presentation Begins  
**WHERE:** Holiday Inn - Greentree  
401 Holiday Drive • Pittsburgh, PA 15220  
**COST:** \$25 for Dinner (Students - \$15)

**Please RSVP to Lincoln Electric:** Phone - (724) 857-2750 • Fax - (724) 857-2751  
*These meetings are open to all who would like to attend.*

THE PITTSBURGH SECTION OF THE  
AMERICAN WELDING SOCIETY  
100 INDUSTRIAL BOULEVARD  
ALIQUIPPA, PA 15001  
[www.aws.org/sections/pittsburgh](http://www.aws.org/sections/pittsburgh)  
"MEETING NOTICE"

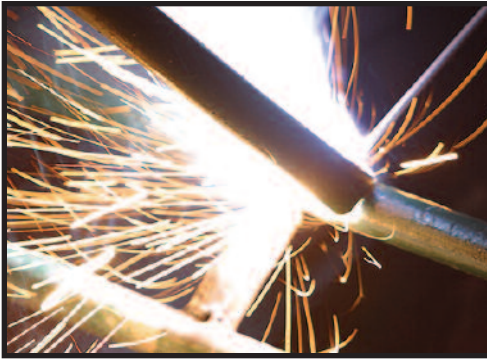
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# Spark UPDATE

AMERICAN WELDING SOCIETY • PITTSBURGH CHAPTER

# NOVEMBER 2006



# Spark UPDATE

AMERICAN WELDING SOCIETY • PITTSBURGH CHAPTER

## FUTURE AGENDA

**November 7** – “Heat Straightening” – *Dr. Richard Avent & Mr. Krishna Verma – Steamfitters Local #499*

**November 14** – “Friction Stir Welding of Steel” – *Paul Konkol – Holiday Inn Greentree*

**December 8** – Weld Off – *Boiler Makers Training Ctr.*

**January 9** – Past Chairman’s Night

**February 13** – Primer for CWI Training/Seminar – *Steam Fitters Local #449*

**March 13** – BOC – Soldering/Brazing

**March (TBA)** – Student Day

**April 10** – “Induction Heat Treating and Equipment”

**May 8** – “Fatigue Failures in Welded Structures - Causes and Prevention” – *Dr. Behrum Kapadia*

## *Sponsoring a Pittsburgh AWS meeting*

If you would like to sponsor a Pittsburgh AWS meeting the cost is \$100 and you will receive recognition at that meeting and link on our website to your website via a business card type graphic or other graphic/text. To sponsor a meeting please contact Peter Kinney at 412-503-4109 or Dave Daughterty 724-857-2750.

## *Thanks Goes Out To...*

Marstrand for allowing us to tour their facility and James Reynolds of Applications Technologies Company for their presentation.

## *Qualified Welding Inspectors*

We are looking for qualified welding inspectors or weld quality control personnel that could volunteer to help with the judging for our annual student weld-off to be December 8th at the Boilermakers Training Center in Pittsburgh. Please contact John Foley at 1-412-720-8051.

## *A Special AWS Meeting in Early November*

The Pittsburgh AWS Chapter would like to present a Heat Straightening Presentation by FHWA at Steamfitters Local 449 on the evening of Tuesday November 7th from 6 PM until 7 PM. Dr. Richard Avent of Louisiana State University and Mr. Krishna Verma from Federal Highway Administration will deliver the presentation. They will discuss the science and methods behind heat straightening of steel beams/girders and shapes.

Please RSVP to Lincoln Electric at 724-857-2750 phone or 724-857-2751 fax. This meeting is open to all that would like to attend.

*Presentation location:*  
Steamfitters Local 449 Technology Center  
1459 Woodruff Street • Pittsburgh, PA 15220  
412-481-0333

## *November AWS Meeting* Friction Stir Welding of Steel Paul J. Konkol - CTC

During our November meeting, Paul Konkol from Concurrent Technologies Corporation (CTC) will speak on “Friction Stir Welding of Steel.” This presentation will provide a description of the friction stir welding (FSW) process and show some interesting applications in aluminum and other non-ferrous metals. It will also show the evaluation of FSW tools and equipment for joining high-hardness armor plate and for FSW HSLA-65 structural steel in 10-foot long plates on a production-size, purpose-built FSW machine. Measurements were taken to compare the amount of weld distortion with that of a conventional (SAW). The mechanical properties, microstructures, and distortion of the weld regions will be discussed and compared to those of a HSLA-65 submerged-arc weldment.

*Please see the “MEETING NOTICE” on the reverse side for more information regarding date, time, location, cost and RSVP instructions.*