

FEBRUARY 2004 MEETING JOINT MEETING WITH SAMPE

WHEN:

Thursday, February 19, 2004

SCHEDULE:

6:00 p.m. **Reception**

6:30 p.m. **Dinner**

Choice of 8oz Prime Top Sirloin Steak,
Chicken Marsala, or Salmon Filet

7:30 p.m. **Speaker Presentation:**
Mr. Douglas Waldron

WHERE:

The Butcher Shop Steakhouse

5255 Kearny Villa Road
San Diego, CA
(858) 565-2272

COST:

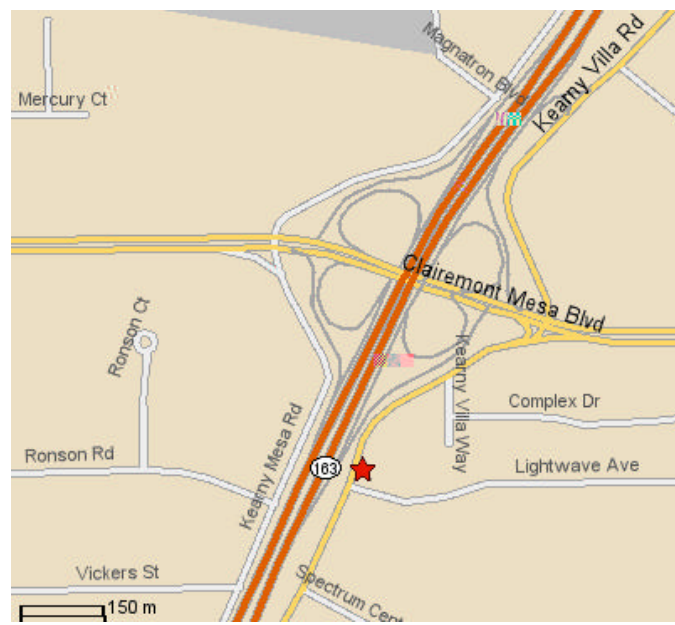
ASM Members - \$18

Guests - \$22

Students - \$10

**REGISTRATION with ENTRÉE SELECTION
REQUIRED BY NOON 2/16/04:**

Call ASM Info Line at (619) 685-8848, or send an
e-mail to sandiego@asmchapters.org.



DOUGLAS WALDRON

Advanced Joining Technologies Inc.

Presents:

FRICITION STIR WELDING

Abstract

In friction stir welding (FSW), a cylindrical, shouldered tool with a profiled probe is rotated and slowly plunged into the butt-joint line between two pieces of sheet or plate material. Frictional heat is generated between the rotating probe and the workpieces. This heat causes the material at the weld to soften and produces a solid-state weld that is stronger and more defect free than traditional welds. A new Boeing Ventures spin-off company, Advanced Joining Technologies Inc. (AJT), utilizes FSW to produce semi-fabricated components throughout multiple industry sectors. Boeing has invested deeply into this new welding method and has implemented it into its Delta launch vehicle production operations. While the basic patent for FSW was listed in 1991 by The Welding Institute, Boeing has an additional 50 patents or patent pending discoveries credited to Boeing since 1995. The presentation will cover the description of the process and also cover some example production applications that are utilizing the process both within Boeing and AJT.

Bio

Mr. Douglas Waldron, a Boeing Technical Fellow, has worked at Boeing since 1986 – first at Boeing-Canoga Park, CA and later at Boeing-Huntington Beach, CA. He led the development and implementation of FSW for The Boeing Company and is now leading the effort in offering FSW as a commercial, viable manufacturing service for multiple industries including aerospace, transportation, marine, structural, and oil & gas sectors. Mr. Waldron graduated from Utah State University in 1984 and has been credited with over 10 patents in welding and metal alloy development throughout his career.

San Diego County Engineering Council NATIONAL ENGINEER'S WEEK BANQUET

Friday, February 27, 2004

6:00 pm to 9:15 pm

DoubleTree Hotel, Mission Valley

Cost: \$37/person or \$370/Table for 10

For more info, go to www.newsdl.org

Abe Hurlich Award

Applications are currently being accepted for the 2003-2004 Abe Hurlich San Diego Chapter Student Award. This annual award is given to a local materials science student who exhibits outstanding merit in scholarship, leadership, and service. The award was established in memory of Abe Hurlich, a member and past-chair (1960) of our chapter, and past-president of ASM International (1977). The award consists of a \$1200 scholarship, one-year ASM membership, and medallion. For applications, visit at the chapter website or call the Info Line.

Materials Camp 2004 for High School Juniors/Seniors!

- * Materials Camp-Canada, July 4-11
- * Materials Camp USA-East (Cleveland) August 9-15
- * **Mini-Camp (One Day only)** - Los Angeles - Date TBA

For more information about Materials Camp and to get a copy of the application form, visit the ASM website at www.asminternational.org/foundation.

Hurry, the application deadline is January 31st!

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