

## NOVEMBER 2003 MEETING

### WHEN:

Thursday, November 20, 2003

### SCHEDULE:

5:00 p.m. **Social Hour**

6:00 p.m. **Dinner, Choice of:**

Pollo Baja Mar, Seafood Skillet Melt, Favoritos  
Carnitas de Puerco, Enchiladas de la Paz, Carne  
Asada Burrito al Carbon, Marinated Pollo Fajitas

7:00 p.m. **Speaker Presentation:**  
**Dr. Bimal Kad**

### WHERE:

[Rockin' Baja Lobster \(Old Town\)](#)

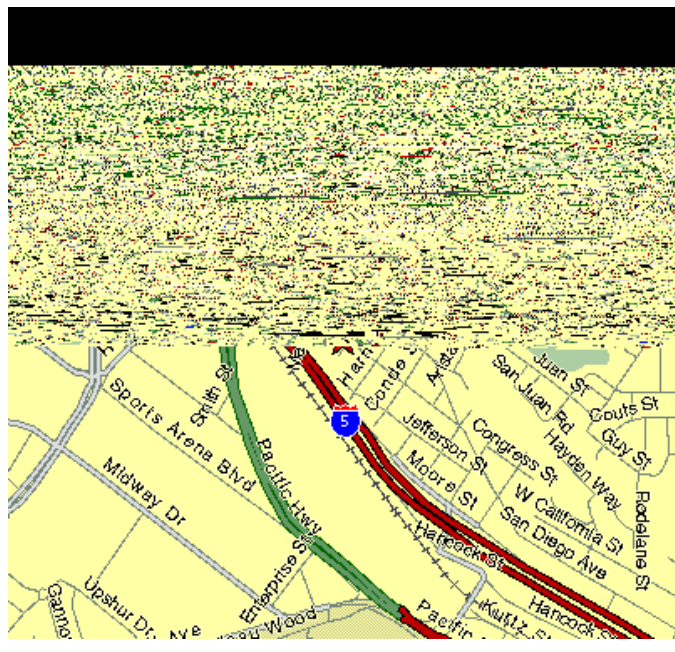
3890 Twiggs St.  
San Diego, CA 92110  
(619) 260-0305

### COST:

ASM Members - \$15  
Students - \$10  
Guests - \$20

### TO REGISTER:

Call the ASM Info Line at (619) 685-8848,  
or send an e-mail by November 17<sup>th</sup> to  
[sandiego@asmchapters.org](mailto:sandiego@asmchapters.org)



## DR. BIMAL K. KAD, UCSD DEPT OF STRUCTURAL ENGINEERING

PRESENTS:

### Oxide Dispersion Strengthened FeCrAl and Fe<sub>3</sub>Al Alloys: Application Development for the Power Generation Industry

#### Abstract

Mechanically alloyed oxide dispersion strengthened (ODS) Fe-Cr-Al alloy thin walled tubes and sheets are promising materials for use at temperatures up to 1200°C in the power generation industry. Target end-uses range from gas turbine combustor liners to heat exchanger tubes. Grain boundary creep processes at service temperatures, particularly in the hoop direction, are the dominant failure mechanisms for such components. The microstructure of ODS alloys consists of high aspect ratio grains aligned parallel to the tube axis. The high aspect ratio grain shape limits grain spacing and consequently the hoop creep response. This represents a critical materials challenge that must be overcome in order to fully exploit the potential of ODS alloys. Attempts to improve the hoop creep in ODS-alloy tube components by manipulating the factors that dictate and control the processed grain shape and recrystallization behavior will be described.

#### Biography

Dr. Kad received his MS (1986) and Ph.D (1990) degrees in Metallurgical Engineering and Materials Science at the University of Tennessee, Knoxville. He is presently Associate Research Scientist at the University of California-San Diego active in the development of high temperature materials, components, and sub-systems for Fossil Energy and Power Generation applications.

## Of Special Note ...

Chapter members who have been impacted financially by the fires (loss of house, employment, business, etc.) may be eligible for a no-cost membership extension of one year under the ASM International disaster policy.

Contact Phil McNaughton at  
[pmnaught@asminternational.org](mailto:pmnaught@asminternational.org) or  
800-336-5152 x5581 for more info.

## SUCCESSFUL FALL SEMINAR!

The Fall Seminar on NDE was a resounding success. The chapter would again like to thank all those who attended and the speakers who made it possible: Larry Olsen, Senior Aerospace Ketema (overview); Steve Shepard, Thermal Wave Imaging (thermal emission); Randy Jones, Inspection Technologies (ultrasonic inspection); Peter Don, Physical Acoustics Corporation (acoustic emission).

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<http://www.asmwest.com>  
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[Chuck.Driesler@Buehler.com](mailto:Chuck.Driesler@Buehler.com)



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ASM San Diego Chapter  
P.O. Box 86202  
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