

# **STEEL 101**

A full-day seminar and panel discussion presented by  
**Jonathan Oram, Technical Group Manager and Chief Metallurgist, Steel Warehouse**  
Sponsored by ASM International, Notre Dame Chapter

<b>Course Date:</b> March 23, 2010 8:30 a.m. Registration 9:00 a.m. to 3:00 pm Formal Program	<b>Course topics:</b> 1. Steel Compositions 2. Production Methods 3. Processing 4. Testing 5. Forming 6. Classifying 7. Applications 8. Panel Discussion
<b>Course Location:</b> The Learning Center at General Sheet Metal Works 1927 S. Main Street South Bend, Indiana 46613	
<b>Course Cost:</b> \$135 includes lunch and all course materials. Full-time students: \$95.	

## **Who should attend:**

Students, technicians, laboratory personnel, designers, purchasers, sales people, and managers - if you work for a metals-related company, this course is for you. This is intended for beginners as well as those who need to refresh their understanding of the metallurgy of steel.

## **What you will learn:**

The purpose of this class is to provide an overview of the metallurgy of steel, concentrating in the area of carbon and low-alloy steels. You will learn how carbon and low-alloy steels are manufactured, how these materials can be strengthened by alloying, cold-working and heat treatment, the effects of processing on the internal structure of the materials, how structure affects properties and learn specific failure mechanisms. The afternoon session will include a panel discussion with local technical specialists. Students are encouraged to bring their materials problems (examples, pictures, parts) for discussion with our team of experts. This session on real world problem solving will provide the student with insight to successful approaches to solving material related problems.

## **Our Panel of Experts**

**Mr. David A. Guisbert, P.E., President, QA Metallurgical Services LLC**

**Dr. Albert Miller, PhD. University of Notre Dame (retired)**

**Mr. John E. Ullman, Principal Engineer, Honeywell, Inc. (retired)**

## **About the instructor**

Jon is Technical Group Manager and Chief Metallurgist for the Steel Warehouse companies in South Bend, Indiana. He began his career with the former Bethlehem Steel Corporation, working in a number of engineering and supervisory positions, primarily in customer technical service and product application. Following his retirement, Jon served as Corporate Quality Assurance Manager for the former Metro Metals and has been with Steel Warehouse for over 9 years. Jon's areas of expertise include: structural steel, plate, and bar, as well as hot-rolled, cold-rolled, coated, and galvanized sheet. Much of his career has been devoted to matching customer needs with product and process capabilities, new product development and cost savings programs with dozens of customers. He has served on inter-company task forces, including the AISI Railcar Committee and the NW Indiana Forum Steel in Residential Construction Group. Jon had the responsibility for training all 2000 employees of Bethlehem-Burns Harbor in production and use of galvanized products, and much of the Steel Warehouse work force in the area of steel metallurgy. In addition, he has been a lecturer at PMA on topics related to higher-strength steels.

Jon earned his Bachelor of Metallurgical Engineering degree from the Rensselaer Polytechnic Institute. He has worked in the steel industry for over 42 years. He has been a member of ASM International for many years, and has served as Secretary and Chairman of the Notre Dame Chapter.

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## **Two ways to register and pay:**

1) **Register and pay online at <http://www.nd-asm.org>**

2) **By Mail: Send to:** ASM Treasurer, 302 E. Fairview Ave., South Bend, IN 46614

Questions? Call: Josh Haines, 1-574-339-7772, e-mail: [treasurer@nd-asm.org](mailto:treasurer@nd-asm.org)

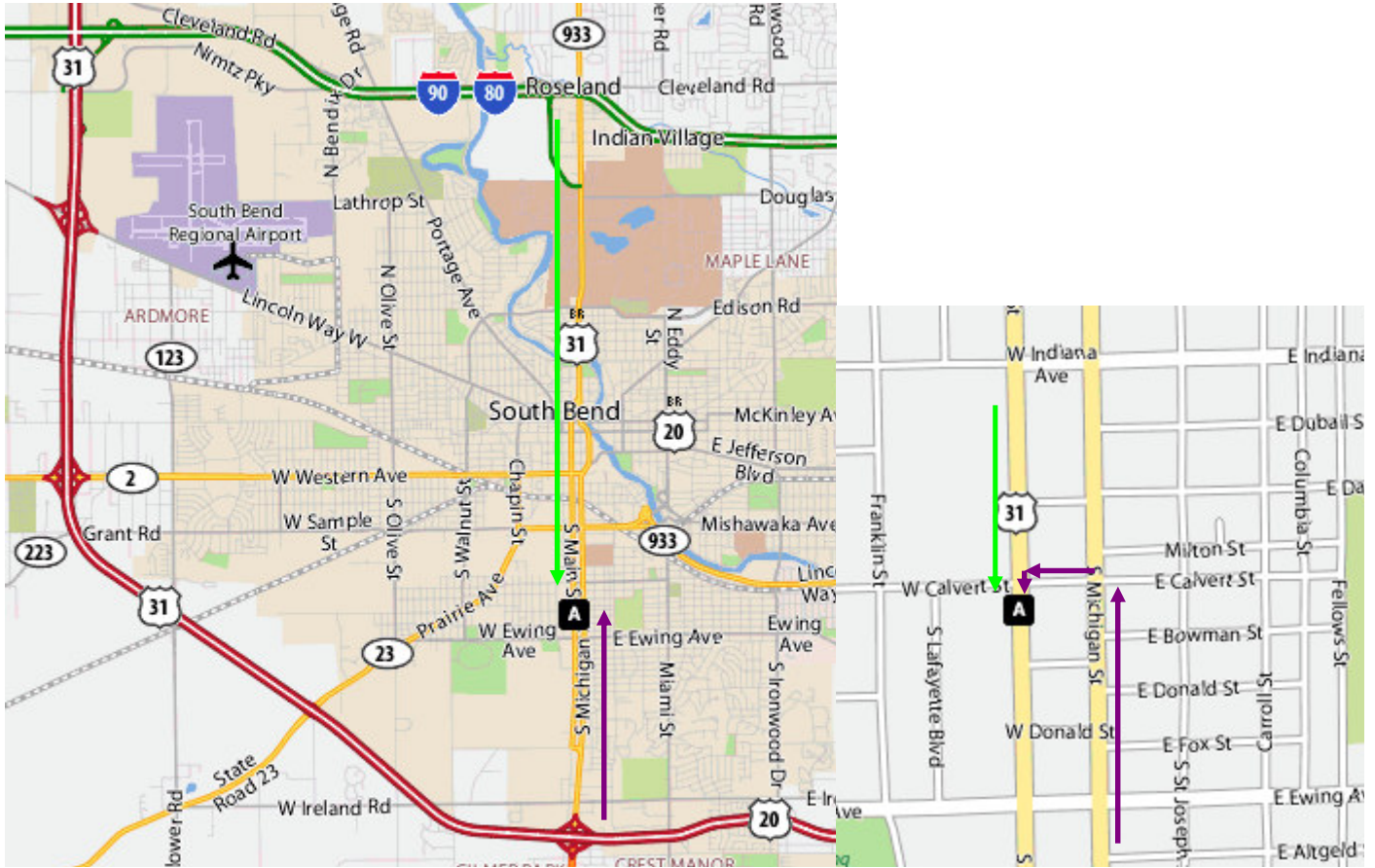
Please register me for the Steel 101 Course, sponsored by ASM International, Notre Dame Chapter.

Please make checks payable to: ASM Notre Dame Chapter

Name:		Company:	
Address:		E-mail:	
City:	State:	Zip:	Telephone:
Total Amount Enclosed:	\$		

Fee: \$135. Full-time students \$95.

## Directions to The Learning Center at General Sheet Metal Works:



### From the Indiana East-West Toll Road:

- Take exit #77 South Bend/Notre Dame.
- Turn right at the light onto US-31BUS.
- Continue on US-31BUS for 3.9 miles. US-31BUS turns into South Main Street
- The Learning Center at General Sheet Metal Works is located just past the intersection of South Main Street and Calvert Street on the west side of the street. Park in the lot next to the building.

### From the US 20 Bypass (south):

- Take the Michigan Street exit.
- Head north on Michigan Street for 2.3 miles, staying in the left lane.
- Turn left on Calvert Street (5th Stop light)
- Head West 1 Block and turn left onto South Main Street
- The Learning Center is on the west side of the street. Park in the lot next to the building.