



A Five Star Chapter



January 2010

OUR 90th YEAR As A CHAPTER!

The Link Newsletter

www.nd-asm.org

Happy 90th Year!

Greetings ASM-Notre Dame chapter members! The members of the Executive board would like to wish our members and their families a Happy New Year! This month we have a tour of the Hessert Aerospace Laboratory at the University of Notre Dame. As always visitors are welcomed to our meetings.

Are you being published? Have you been promoted? Are you retiring? Does your company have a job opening? Do you have announcements you would like to share with ASM-ND Chapter? If so, please email a member of the Executive Board so we can put it in the LINK!

The members of the Executive Board want to hear from you! What meeting topics would interest you? Is there a plant tour you or someone else would like to give? Is there a topic you are an expert on and would like to share your knowledge with the other chapter members? Let us know! We are always open to ideas from our members.

Material Highlights

There are two common mechanisms for diffusion in solids: vacancy diffusion and interstitial diffusion. Substitutional atoms typically move by vacancies while interstitial atoms move by interstitial diffusion. Vacancy diffusion occurs when the large substitutional atoms moving into vacancies in solid, while interstitial diffusion happens when the smaller interstitial atoms “force” their way between the larger atoms.

Tour of Hessert Laboratory at the University of Notre Dame

Tour Given by: Professor Robert Nelson

6:00 pm Tuesday, Jan. , 2010

Has it been years since you were last in a university laboratory? Are you dieing (dying) to find out how university laboratories have changed since you were last in one? Or are you just curious about the advances in aerospace that are taking place at the University of Notre Dame? Then come to the tour of Hessert Aerospace Laboratory at the University of Notre Dame. The Hessert Aerospace Laboratory is home of aerospace research at the University of Notre Dame and contains subsonic, transonic, super sonic, and atmospheric wind tunnels, a water tunnel, particle dynamics laboratories, an anechoic wind tunnel, an aero-optics laboratory, and various other laboratories. In addition to aerospace research there is also research on wind turbines taking place in Hessert. Hessert laboratory was built in 1991 and is a 38,000 square foot facility.

Professor Robert Nelson is a professor in the department of aerospace and mechanical engineering at the University of Notre Dame. His research interests are in the fields of applied aerodynamics, flight stability and control, aircraft wake dynamics, and wind turbine controls. He received in BS and MS from the University of Notre Dame and his PhD from Pennsylvania State University.

Date/Time: Jan. 19, 2010.
6:00 PM Start of Tour
8:00 PM Dinner at Sorin's

Location: University of Notre Dame
Hessert Laboratory for Aerospace Research
Notre Dame, IN 46556

Dinner: Sorin's at the Morris Inn
University of Notre Dame

Dinner Choices: Chicken Scaloppine \$24, Sauteed Salmon \$27, and Beef Tenderloin Tournedos \$30. Dinner includes salad and sorbet.

Please RSVP via the Google Calendar invite, on the website, or email Tim Conrad at tlconrad@gmail.com or Bob Merryfield at klmerryfield@aol.com by Tuesday Jan 18.

Hessert Aerospace Laboratory

Past and Future Meetings

22 September	General Sheet Metal Tour
20 October	High Strength Ceramics for Engine Applications , Stephen T. Gonczy, PhD
17 November	Allen's Nine Rules for Business Turnarounds , Terry Allen

December	No Meeting
January	Tour of Hessert Laboratory at the University of Notre Dame
February	TBD
March	TBD
April	TBD
May	Social Event

**Directions to Hessert Aerospace Laboratories at the University of Notre Dame
From Business 31/ IN 933**

Turn east onto Douglas Road. Follow Douglas Road east through the first stop light at Juniper/ St. Joseph drive. Drive ~400 m and take the first right onto Wilson Drive (if you reach the roundabout you have traveled too far). At the first Stop sign you will turn right onto Holy Cross Drive. Follow Holy Cross Drive until you reach the gate. Park in the visitor parking lot. Walk along the side walk along Holy Cross Drive , and cross St. Joseph Drive. Turn right after crossing St. Joseph Drive. The third building on your left will be Hessert, you will first walk past the Power Plant and the water tower and then the Facilities Building.

For Older Individuals and Persons with Limited Mobility.

There is a limited amount number of visitor parking spots next to the Hessert Laboratory. From Business 31/IN 933 turn east onto Douglas Road. At the first stop light turn right onto St. Joseph Drive. You will drive pass three buildings on your right; the Facilities and Maintenance Building, the Multidisciplinary Research Building, and Hessert Laboratory. Take the first right immediately after Hessert Laboratory into a small visitor parking lot. The lot will say 1 hour visitor parking but that is not enforced after 5 PM.

For a Detailed Map of Notre Dame’s Campus please visit: <http://nd.edu/campus-and-community/campus-map/>

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