



Oct 2013
ASM-AFS Joint Technical Meeting
Monday, Oct. 21



Development and Properties of a High Performance Structural Steel

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Materials & Physical Research
Illinois Dept. of Transportation

Date: Monday, October 21, 2013

Location: Barrack's Cater Inn, EastPort Banquet and Meeting Center, 703 Mariners Way, East Peoria, IL 61611

4:30pm Check-in/Social Hour
5:30pm Dinner
6:30pm Technical presentation

Free Parking is available. The cost of the dinner is subsidized and will be \$18 at the door (\$0 students) for ASM-AFS members, \$24 for other attendees (\$7 non-member students). **RSVP to Michael A. Adashek (madashek89@gmail.com) or 414-750-6114) by 10/16/2013.**

Abstract:

The presentation describes the development and implementation of 70 ksi and 50 ksi yield strength versions of ASTM A710 Grade B steel for use in bridges and highway structures. The presentation traces the historical roots of copper steels and the influence of nickel on atmospheric corrosion resistance, the machinability of A710 Gr B when milled, drilled and ground, and how its hot rolled properties in sheet form were predicted by the use of ferrite multipliers and gage factors.

Speaker:

Christopher Hahin, Engineer of Structural Materials & Bridge Investigations of IL Dept of Transportation, is responsible for investigations of structural materials and their relationship to design construction, and failure for the Bureau of Materials & Physical Research. He represent the Bureau on structural alloys and movable bridges to DOTs, Federal & city government, universities, consultants, and industry. He has authored more than 140 journal articles and corporate, government, and military technical reports on materials, their deterioration, corrosion, impact toughness, fatigue and fracture, and their use in machine design, structures and pressure vessels. He is a contributor to Advanced Casting Technology Conference, Kalamazoo, MI, 1986; ASM Metals Handbook, Vol. 13, Corrosion, 1987; Vol 13A, 2003 and patentee in field.