

**The Peoria Chapter of ASM International
February 3, 2003 at the Mark Twain Hotel - Packard Plaza**

SPECIAL EVENT: RETIREE NIGHT

Presents

MICROSTRUCTURE OF IRON METEORITES

George F. Vander Voort / Buehler Ltd.

TECHNICAL CHAIRMAN:

Rich Little

Social Hour - 4:30pm • Dinner - 5:30pm

Technical Talk - 6:00pm

Prepaid Reservations Required by January 27, 2003!! Reservations are \$12.00.

Call at Jeff Jensen (309) 578-8153 jensen_jeff_a@cat.com or

Please make all checks payable to Peoria Chapter of ASMÓ

About Our Speaker...



George Vander Voort, Director of Research and Technology for Buehler Ltd., is a graduate of Drexel University and Lehigh University with a background in metallurgy and materials science and 29 years experience in the specialty steel industry. A past president of the International Metallographic Society and past chairman of ASTM Committee E-4 on Metallography, George has six patents and nearly 200 publications including *Metallography: Principles and Practice* (McGraw-Hill, 1984; ASMI, 1999) and the ASM video course, *Principles of Metallography*. He is currently serving as a trustee for ASM International. He is also associate editor of *Materials Characterization* and on the editorial board of *Praktische Metallographie*. He is a member of ASM International, IMS, ASTM, TMS, RMS, ISS, MSA, DGM, MSSA, PSM, I&AS, and the State Microscopy Society of Illinois. George is a fellow of ASMI and ASTM and has 25 awards for his microscopy work including the Jacquet-Lucas Grand Prize and the Dubose-Crouse Award of the International Metallographic Contest.

◆ ◆ CHANGE IN ADDRESS? CALL KELLY LANE (309) 578-1567 ◆ ◆

Sustaining Member Trivia Question

Peoria Chapter of ASM always thanks the Sustaining Members for their support. To give further recognition, we will spotlight our sustaining members for this month's trivia question.

Who is longest running Sustaining Member and how many years they have been a member?

Come to the February meeting to submit your answer and win dinner for **FREE**. If more than one member has the correct answer, the **FREE** dinner will be given by random drawing.

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Materials Park, OH 44073
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Tech Chair Bio

Rich Little founded R.W. Little & Associates in Peoria, Illinois in 1981 as a Consulting Metallurgical Engineer, specializing in Failure Analysis. He is a licensed Professional Engineer and earned a B.S. Degree in Metallurgical Engineering from the University of Illinois in 1976. After completing his formal education, he gained experience as a consulting engineer with a highly respected failure analysis firm in Houston, Texas before returning to Illinois to establish his company. Rich has been active in numerous professional and technical organizations, serving in elected offices, lecturing and teaching. He has been a member of ASM International for almost 28 years and is a former member of the Peoria Chapter of ASM executive committee. Rich currently serves as Chairman of the Long Range Planning Committee.

ASM EXECUTIVE COMMITTEE MEETING
Date: February 2, 2003
Time: 3:00pm
Place: The Packard Plaza

ABSTRACT

Several types of meteorites have been found on earth. The metallic type, basically Fe-Ni-Co alloys, are believed to have come from the core of one or more prototype planets that never completely formed but exploded creating the asteroids that circle the sun mainly between Mars and Jupiter (2.1 to 3.5 A.U. from the sun), although some have orbits that are quite eccentric. Most meteorites are believed to be of asteroid origin, but not all. Evidence of meteorite craters has been found on the earth, our moon, several planets, and on asteroids.

More than 500 metallic meteorites have been either seen to land on earth (a "fall") or were discovered based on their appearance after impact (a "find") and most have been studied metallographically. The talk will cover the microstructural constituents of meteorites and will illustrate them using color etching techniques. Color etching adds an extra dimension, as it is sensitive to crystal orientation, chemistry variations and residual deformation. The structures of the three common Fe-Ni meteorites, hexahedrites, octahedrites and ataxites, will be shown.