



NEWSLETTER

January 2009

Vol. 18, No. 5

CHAPTER OFFICERS

Chairman
PATRICK ANDERSON
(471-2260)

Vice-Chairman
STEPHANIE ROTHRAUFF
(471-7227)

Secretary
BETH HERZOG
(471-3932)

Treasurer
HAROLD BURRIER
(499-8662)

EXECUTIVE COMMITTEE

MARK CARLSON
GARY DOLL
CARLA GIACOBONE
DENNIS HUFFMAN
CHRIS LAPOLE
JIM LAVERICK
DAVE MILAM
KRICH SAWAMIPHAKDI

SUSTAINING MEMBERS

JLK METALLURGICAL, LLC
RAM SALES, INC.
THE TIMKEN COMPANY

EDITOR

Carla Giacobone
The Timken Company
GSP-29
PO Box 6931
Canton, OH 44706-0931
Phone: 330-471-4639
Fax: 330-471-5575
E-mail:
carla.giacobone@timken.com

Materials Issues in Commercial Aircraft Wheels and Brakes

Aircraft wheels and brakes are a demanding application for engineering materials. With each new commercial aircraft, the demands increase to manage higher loads, higher temperatures with lighter weight. Each wheel must be capable of supporting nearly 30 ton of aircraft with a roll life of 80,000 kilometers or more. Brakes must be capable of stopping the aircraft, while absorbing more than 100 MJ of energy. The equipment must function at arctic temperatures of -55C and cope with friction material temperatures approaching 2000C. This talk will discuss the performance requirements for wheels and breaks and how the selection and properties of engineering materials allows those demanding requirements to be met.

About the Speaker

Dr. Charles A. Parker, FASM, is project leader for wheels and brakes at Honeywell Aircraft Landing Systems, South Bend, IN. Dr. Parker joined Honeywell in 1994 and currently is project leader for Airbus A380 wheels and brakes. Until 2002, he was a member of the Friction Materials Research & Development Team, where he made significant contributions to the development of low-cost friction materials, as well as helping to define the mechanisms of surface wear in carbon brake friction materials.

Before coming to South Bend, Dr. Parker worked for nine years at AlliedSignal Research & Technology, Des Plaines, IL. He has his master's and Ph.D. from Massachusetts Institute of Technology, and a bachelor's from Stanford University. He is an ASM fellow and a past chairman of the ASM Chicago Chapter as well as the Notre Dame Chapter.

2008-2009 ASM Canton-Massillon Chapter Technical Meeting Schedule

2ND Thursday Each Month

<u>Date</u>	<u>Event</u>	<u>Speaker</u>	<u>Topic</u>
September 11th, 2008	Technical Meeting	Valeriy Buryachenko, Micromechanics & Composites LLC.	Micromechanics of Composites and Nanocomposites with Plastic Matrix, Ceramic Matrix, and Metal Matrix
October 9th, 2008	Technical Meeting	Shuvo Roy, Cleveland Clinic	Nanotechnology & BioMEMS
November 13th, 2008	Technical Meeting	Brian Mehosky, Timken	Common Misconceptions about Patent Law
December 11th, 2008	Holiday Event - 2nd April Gallerie (324 Cleveland Ave NW, Canton, OH) (Speaker: Patrick Buckohr Topic: Artwork/sculptures in downtown Canton)		
January 8th, 2009	ASM International Trustee Night	Dr. Charles Parker, Honeywell	Materials Issues in Commercial Aircraft Wheels and Brakes
February 12th, 2009 Location TBD	Joint Meeting with Cleveland Chapter	Ned Tufekcic, ProInvest Financial	Economic Outlook with emphasis on technology and science
March 12th, 2009	Local Plant Tour	Babcock and Wilcox (180 S. Van Buren Avenue in Barberton) The facility has 3 main areas of focus: Environmental Control Technologies, Energy Conversion/Combustion, Advanced Materials Development.	
April 20th, 2009	Joint STLE Meeting at Lolli's	David Holden, Joe Gibbs Racing	Joe Gibbs Racing * Note Date Change *
May 14th, 2009	Student Night	Short Talks by Local Students	Science Fair Winners
June 2009	Summer Golf Outing		



Special Message to the Membership from President Roger Fabian

All of us have an asset in our professional portfolio that won't depreciate with the stock market, the price of oil, tight credit or the numerous challenges facing our world economy.

It's our ASM membership. And these days, we can count on it to provide value that's highly useful -- particularly during unpredictable times.

I've had the chance to talk to a lot of ASM members during my chapter visits. Whether we're on the front-end of our careers or we've been at this for years, the facts are the same: We need to stay current and stay connected. And our ASM membership can help us to do this in numerous ways:

- Your Local Chapter. No one knows the local materials scene better than other ASM members. Stay in touch with your chapter to find out what's going on and where the opportunities are.
- ASM Career Center. Members can post their resumes at no cost. (If you know a fellow member who can use the help, please pass this note along to them.)
- Membership Directory. Our professional networks are always growing and in flux. Find out the latest contact information to get in touch with friends and colleagues.
- More Useful Information. I'm pleased to announce that in January, ASM members will be able to access a dozen top materials journals online -- including the world-renowned *Met Trans A&B* -- at no cost. Details will be announced next month.
- More Value. Our brand-new ASM Points program launches next month, bringing you additional access to our premium online content -- again, at no cost. You'll be hearing about this exciting new program very soon.
- Ongoing Access to exclusive member benefits, member discounts, education courses, magazines, publications -- everything you've always valued from ASM.

When times are the most challenging, our ASM membership is even more valuable to us. I encourage you to take advantage of the many opportunities that ASM provides for staying up to date and in touch with our materials profession.

Roger's "Member's Voice" column appears in this morning's AM&P eNews. Have a look at Roger's accompanying YouTube video at <http://www.youtube.com/watch?v=BZAb5P0dU6Q>.

December Membership Meeting

Many attendees of the December meeting wanted to know more about the speaker. His name is Patrick Buckohr and his website can be found at www.buckohr.com. Examples of his artwork are on this site. If you would like to find him, you can always ask the Second April gallery, www.secondapril.org.

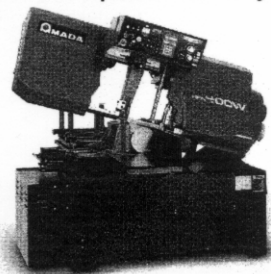
SAWING SOLUTIONS
from Ram Sales Inc.



We can supply your company with the machines and blades for just about any sawing application. From tough alloys to advanced composites, we have the products and expertise to help you.

Contact us for more information or to discuss your application.

P.S. We can help with the easy jobs too!



906 Moe Dr
Akron Oh 44310

Phone: 800-426-3452
Fax: 330-630-2828
www.SAWSand BLADES.com

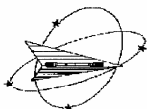


Helping you **predict** and **prevent** maintenance, reliability, compliance and safety problems with:

- Mechanical Integrity Evaluation
- Electrical System Heat Surveys
- Non-Destructive Testing
- Process Machinery Inspection
- Heat Exchanger Assessment
- Lifting Device Safety Inspection
- Energy Loss Identification
- Documentation Services
- QA/QC Auditing

For more information contact:

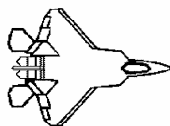
Bob Roush (330) **494-9436** or **800-321-0878** or write:
GFS/NDE, 5250 Mayfair Road, P.O. Box 2908, North Canton, OH 44720
broush@gfsnde.com



WESTMORELAND MECHANICAL TESTING & RESEARCH, INCORPORATED

Where The Search For Excellence is Never Ending

Specializing in:
Mechanical Testing (Tensile, Stress/Creep, Charpy)
Fracture Toughness (J1C, K1C, COD, Short Rod)
Chemical Analysis
Heat Treat Capabilities (Specializing in Aluminum)
Full Machining Capabilities
Fatigue Testing (Low & High Cycle, Da/Dn)
Metallographic and Microhardness



For All Your Testing Needs, Contact:
P.O. Box 388, Old Route 30, Westmoreland Drive
Youngstown, PA 15696 USA
Phone: (724) 537-3131; Fax: (724) 537-3151
E-Mail: admin@wmtr.com; Web-Site: http://www.wmtr.com



Now Accepting All Major Credit Cards!

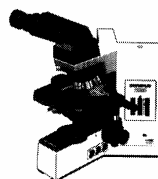
Materials Testing Laboratory
Fastener Testing

ICS Converters of Cellulose Sponge

900 Moe Dr. Akron, Ohio 44310

Custom fabrication of standard & compressed sponge for a wide range of industrial applications including;

Laboratory, Electronics, Steel Finishing, Maintenance,
plus hundreds of others. Call for more information and samples.
1-800-737-9671 or Visit our Web-Site icsponge.com



OLYMPUS

B & B Microscopes, Ltd.

SALES - SERVICE - REPAIR

Andre Domino

E-Mail: BBMicro@USAOR.NET
888-SCOPES-0 Voice Mailbox: 161
(888-726-7370)
Fax: 724-934-0310 - All Orders
Telephone: 724-934-3811 / 800-433-1749

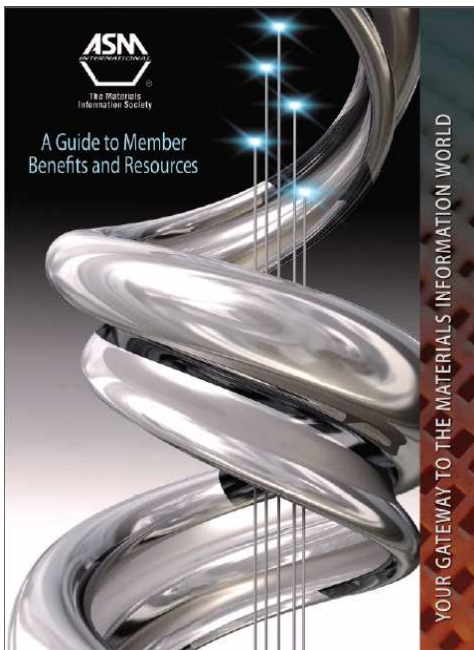
ADVERTISE WITH US!

Place your advertisement in ten issues of the monthly NEWSLETTER / Announcement for the following rates (discount for Chapter Sustaining Members). Contact Mark Carlson at (330)471-3609 for details.

Up to 2 sq. in. @ \$50.00

Up to 7 sq. in. @ \$75.00
(Business cards included)

Up to 15 sq. in. @ \$150.00



Are You Taking Full Advantage of your ASM Benefits?

Email Patrick Anderson (patrick.anderson@timken.com) to receive a PDF copy of the most recent Membership Benefits Guide

CHAPTER SUSTAINING MEMBERS

JLK Metallurgical, LLC
Ram Sales, Inc.
The Timken Company

COME VISIT US ON THE WEB!

WWW.ASM-CANTON.ORG