Affiliate Societies’ Committee Chairs
Named for 2013-2014 Term

The Boards of the Electronic Device Failure Analysis Society (EDFAS), Heat Treating Society (HTS), International Metallographic Society (IMS), and Thermal Spray Society (TSS) have appointed chairs to each of their committees for the 2013-2014 term. Chairs for ASM Society and General Committees and Councils appeared in the January 2014 issue of ASM News. The purpose of each committee is stated on the ASM website, www.asminternational.org. Click on Membership and Committees, followed by Committee Involvement, and then Affiliate Committees.

ELECTRONIC DEVICE FAILURE ANALYSIS SOCIETY (EDFAS)

Jeremy A. Walraven, technical staff, Sandia National Laboratories, Albuquerque, N. M., continues to serve as president of EDFAS.

Susan Li, device analysis lab manager, Spansion Inc., Sunnyvale, Calif., continues to serve as chair of the Education Committee. Leo G. Henry, managing engineer, ESD TLP Consulting, Fremont, Calif., continues to serve as vice chair.

Tom Moore, president, Waviks Inc., Dallas, continues as chair of the Membership and Nominating Committees.


Dan J. Bodoh, FA tools development, Freescale Semiconductor, Austin, Texas, was named chair and James J. Demarest, advisory engineer, International Business Machine, Albany, N.Y., was named vice chair of the Events Committee. Mr. Bodoh is general chair of ISTFA 2014.

Philippe Perdu, senior expert, CNES, Toulouse, France, continues to serve as chair of the International Growth Committee.

HEAT TREATING SOCIETY (HTS)

Roger A. Jones, corporate president, Solar Atmospheres Inc., Souderton, Pa., was elected president of HTS.

Thomas E. Clements, Engineering Manager-Metals and Thermal Processes, Caterpillar Inc., is currently serving as HTS immediate past president, as well as chair of the HTS Awards & Nominations and the HTS Finance Committees.


Continued on next page
HIGHLIGHTS…ASM Award Nominations

**Aquil Ahmad**, retired senior principal engineer, Eaton Corp., West Bloomfield, Mich., was named chair of the HTS Research and Development Committee.


**David Rollings**, consultant, Lake Villa, Ill., was named chair of the Membership Committee.

**Chuck Faulkner**, marketing manager, Heat Treatment, Houghton International, Valley Forge, Pa., was named chair of the HTS Exposition Committee.

**INTERNATIONAL METALLOGRAPHIC SOCIETY (IMS)**

**Richard Blackwell**, FASM, general manager, Buehler Canada, serves as president of IMS.

**Natalio T. Saenz**, technologist, Pacific Northwest National Laboratory, Richland, Wash., serves as IMS immediate past president and chair of the Nominating Committee.

**Jaret J. Frafjord**, technical director, IMR KHA Portland, Portland, Ore., serves as chair of the Publications Committee and IMS vice president.

**George Abraham**, IV, materials engineer, Allied High Tech Products Inc., Compton, Calif., continues to serve as chair of the IMS Education Committee.

**Katherine F. Day**, inside sales manager, PCC KLAD LLC, Cypress, Texas, was named chair of the Technology Committee.

**Jim Leftwich**, business development, PSI, Skokie, Ill., was named chair of the Membership, Marketing and Outreach Committee.

**THERMAL SPRAY SOCIETY (TSS)**

See page 2 of *iTSSe* in this issue for the TSS committee chairs.

If you are interested in serving on an Affiliate Society committee, please contact the respective committee chair directly to discuss further details. You may also leave inquiries with Sarina Pastoric at sarina.pastoric@asminternational.org or fax 440/338-6614.

ASM Board of Trustees

Nominations due March 15

It’s time to nominate candidates for ASM vice president and trustee. Qualifications include: materials professionals with broad experience in ASM, business, and management; experience in ASM committee and ASM chapter work; managerial experience (budgets and policy making) is most desirable; is an individual or chapter sustaining ASM member; understands the duties and responsibilities required and is willing to serve if elected; understands ASM’s strategy and objectives; has knowledge of the field of materials and information technology. Vice presidential nominees must have previously served on the ASM Board of Trustees. Contact Leslie Taylor at 440/338-5151 ext. 5500, or leslie.taylor@asminternational.org. Visit website for rules and nomination form at http://www.asminternational.org/about/governance/nominating-committee.

**Opportunities Specific to each Society:**

**ASM International**
- Term begins June 2014

**ASM Heat Treating Society**
- Attend two (2) Board meetings (October 2014 and Spring 2015)
- Participate in four (4) teleconferences
- Term begins September 2014

**ASM Thermal Spray Society**
- Attend one (1) Board meeting in October 2014
- Participate in two (2) teleconferences
- Receive a one-year complimentary membership in Material Advantage
- Term begins October 2014

**International Metallographic Society**
- Participate in monthly teleconferences
- Attend one (1) Board Meeting (August 2-6, 2015)
- Term begins August 2014

**IMS Joins ASM, HTS and TSS In Seeking Student Board Member Applications**

We’re looking for Material Advantage student members to provide insights and ideas to the ASM, HTS, TSS, and IMS Boards!

We are pleased to announce the continuation and expansion of our successful Student Board Member Programs. In addition to ASM, HTS, and TSS, IMS also seeks Student Board Members. Each Society values the input and participation of students and is looking for their insights and ideas.

An Opportunity like No Other!

- All expenses to attend meetings paid for by the respective Society
- Take an active role in shaping the future of your professional Society
- Actively participate in your professional Society’s Board meetings
- Gain leadership skills to enhance your career
- Add a unique experience to your resume
- Represent Material Advantage and speak on behalf of students
- Work with leading professionals in the field

**Student Board Member Applications**

**ASM Award Nominations**

**HIGHLIGHTS…ASM Award Nominations**

**Aquil Ahmad**, retired senior principal engineer, Eaton Corp., West Bloomfield, Mich., was named chair of the HTS Research and Development Committee.


**David Rollings**, consultant, Lake Villa, Ill., was named chair of the Membership Committee.

**Chuck Faulkner**, marketing manager, Heat Treatment, Houghton International, Valley Forge, Pa., was named chair of the HTS Exposition Committee.

**INTERNATIONAL METALLOGRAPHIC SOCIETY (IMS)**

**Richard Blackwell**, FASM, general manager, Buehler Canada, serves as president of IMS.

**Natalio T. Saenz**, technologist, Pacific Northwest National Laboratory, Richland, Wash., serves as IMS immediate past president and chair of the Nominating Committee.

**Jaret J. Frafjord**, technical director, IMR KHA Portland, Portland, Ore., serves as chair of the Publications Committee and IMS vice president.

**George Abraham**, IV, materials engineer, Allied High Tech Products Inc., Compton, Calif., continues to serve as chair of the IMS Education Committee.

**Katherine F. Day**, inside sales manager, PCC KLAD LLC, Cypress, Texas, was named chair of the Technology Committee.

**Jim Leftwich**, business development, PSI, Skokie, Ill., was named chair of the Membership, Marketing and Outreach Committee.

**THERMAL SPRAY SOCIETY (TSS)**

See page 2 of *iTSSe* in this issue for the TSS committee chairs.

If you are interested in serving on an Affiliate Society committee, please contact the respective committee chair directly to discuss further details. You may also leave inquiries with Sarina Pastoric at sarina.pastoric@asminternational.org or fax 440/338-6614.

ASM Board of Trustees

Nominations due March 15

It’s time to nominate candidates for ASM vice president and trustee. Qualifications include: materials professionals with broad experience in ASM, business, and management; experience in ASM committee and ASM chapter work; managerial experience (budgets and policy making) is most desirable; is an individual or chapter sustaining ASM member; understands the duties and responsibilities required and is willing to serve if elected; understands ASM’s strategy and objectives; has knowledge of the field of materials and information technology. Vice presidential nominees must have previously served on the ASM Board of Trustees. Contact Leslie Taylor at 440/338-5151 ext. 5500, or leslie.taylor@asminternational.org. Visit website for rules and nomination form at http://www.asminternational.org/about/governance/nominating-committee.

**Opportunities Specific to each Society:**

**ASM International**
- Term begins June 2014

**ASM Heat Treating Society**
- Attend two (2) Board meetings (October 2014 and Spring 2015)
- Participate in four (4) teleconferences
- Term begins September 2014

**ASM Thermal Spray Society**
- Attend one (1) Board meeting in October 2014
- Participate in two (2) teleconferences
- Receive a one-year complimentary membership in Material Advantage
- Term begins October 2014

**International Metallographic Society**
- Participate in monthly teleconferences
- Attend one (1) Board Meeting (August 2-6, 2015)
- Term begins August 2014

**IMS Joins ASM, HTS and TSS In Seeking Student Board Member Applications**

We’re looking for Material Advantage student members to provide insights and ideas to the ASM, HTS, TSS, and IMS Boards!

We are pleased to announce the continuation and expansion of our successful Student Board Member Programs. In addition to ASM, HTS, and TSS, IMS also seeks Student Board Members. Each Society values the input and participation of students and is looking for their insights and ideas.

An Opportunity like No Other!

- All expenses to attend meetings paid for by the respective Society
- Take an active role in shaping the future of your professional Society
- Actively participate in your professional Society’s Board meetings
- Gain leadership skills to enhance your career
- Add a unique experience to your resume
- Represent Material Advantage and speak on behalf of students
- Work with leading professionals in the field

**Student Board Member Applications**

**ASM Award Nominations**

**HIGHLIGHTS…ASM Award Nominations**

**Aquil Ahmad**, retired senior principal engineer, Eaton Corp., West Bloomfield, Mich., was named chair of the HTS Research and Development Committee.


**David Rollings**, consultant, Lake Villa, Ill., was named chair of the Membership Committee.

**Chuck Faulkner**, marketing manager, Heat Treatment, Houghton International, Valley Forge, Pa., was named chair of the HTS Exposition Committee.

**INTERNATIONAL METALLOGRAPHIC SOCIETY (IMS)**

**Richard Blackwell**, FASM, general manager, Buehler Canada, serves as president of IMS.

**Natalio T. Saenz**, technologist, Pacific Northwest National Laboratory, Richland, Wash., serves as IMS immediate past president and chair of the Nominating Committee.

**Jaret J. Frafjord**, technical director, IMR KHA Portland, Portland, Ore., serves as chair of the Publications Committee and IMS vice president.

**George Abraham**, IV, materials engineer, Allied High Tech Products Inc., Compton, Calif., continues to serve as chair of the IMS Education Committee.

**Katherine F. Day**, inside sales manager, PCC KLAD LLC, Cypress, Texas, was named chair of the Technology Committee.

**Jim Leftwich**, business development, PSI, Skokie, Ill., was named chair of the Membership, Marketing and Outreach Committee.

**THERMAL SPRAY SOCIETY (TSS)**

See page 2 of *iTSSe* in this issue for the TSS committee chairs.

If you are interested in serving on an Affiliate Society committee, please contact the respective committee chair directly to discuss further details. You may also leave inquiries with Sarina Pastoric at sarina.pastoric@asminternational.org or fax 440/338-6614.
2014 Bradley Stoughton Award for Young Teachers
Winner receives $3000
Deadline March 1

This award recognizes excellence in young teachers in the field of materials science, materials engineering, design, and processing. Are you aware of a colleague who:

• Is a teacher of materials science, materials engineering, design, processing, and related fields
• Has the ability to impart knowledge and enthusiasm to students
• Is 35 years of age or younger by May 15 of the year in which the award is made
• Is an ASM Member

Nominate them for the 2014 award!

Honorary Membership
Deadline February 1

Honorary Membership in the Society was established in 1919. It recognizes distinguished service to the materials science and engineering profession, ASM’s strategic plan/initiatives, and to the progress of mankind. Honorary Membership is among the most prestigious awards of the Society. Consequently, it is expected that all nominees will be truly outstanding individuals who have significantly furthered the purposes of the Society through an evidenced appreciation of the importance of materials science and through distinguished service.

2014 ASM International Student Paper Contest
Deadline April 1

The contest recognizes the best technical paper with a graduate or undergraduate student as first author that is published in an ASM sponsored publication during the year. The winner will be recognized and presented with their award during the ASM Leadership Awards Luncheon to be held in Pittsburgh during October 12-15 in conjunction with MS&T’14. The award consists of a certificate, $500 cash prize, and up to $500 toward expenses to attend MS&T’14. The paper will also be published in one of ASM’s publications.

ASM-IIM Visiting Lecturer for 2014
Deadline February 15

The cooperative Visiting Lecturer program of ASM International and the Indian Institute of Metals (IIM) is seeking lecturers for 2014. Criteria for the 2014 ASM-IIM Visiting Lecturers are as follows:

• ASM members who visit India
• Experience delivering technical presentations of interest to government, industrial, or academic organizations
• Able to lecture on current technological conditions in India
• Available between April 1 and December 31
• Definite travel plans to and from India using own funds

The award carries with it an $800 honorarium to be used for travel expenses within India and a certificate of recognition to be presented at the ASM Leadership Awards Luncheon scheduled for October in Pittsburgh during MS&T’14.

Engineering Materials Achievement Award
Deadline March 15

The Engineering Materials Achievement Award recognizes an outstanding achievement in materials or materials systems relating to the application of knowledge of materials to an engineering structure or to the design and manufacture of a product. The purpose of this award is to seek out and recognize outstanding developments in the application of materials in products or in engineering structures and to honor the organization or individuals responsible for them.

Do you know of an innovative, cutting-edge scientific achievement that has distinctly impacted industry, technology, and society within the past 10 years? Consider submitting a nomination for the Engineering Materials Achievement Award.

NOMINATION FORMS & RULES

Applications, nomination forms, and rules for all of these awards can be found at http://www.asminternational.org/membership/awards

For more information, contact Christine Hoover at 440/338-5151 ext. 5509, or christine.hoover@asminternational.org.
From the Foundation: New Director Joins ASM

In October, ASM’s Materials Education Foundation welcomed its new Director of Development and Operations, Nichol Campana, who introduces herself in this debut column that will report on Foundation activities every other month.

Prior to joining the ASM Materials Education Foundation, I worked at the American Cancer Society for 10 years and held various positions during my time there. My expertise and background are centered on nonprofit management and fundraising. Since joining the Foundation, I have been focused on developing a fundraising platform to ensure financial success, as well as building the brand and reputation of this wonderful organization. In addition, I plan to utilize my best practice expertise—methods and techniques to produce results, which are used to benchmark and gain knowledge and understanding. I have plans to work with the Foundation staff and Board of Trustees on the implementation of those best practices and benchmarking exercises. ASM Materials Education Foundation asks that you stay tuned for all of our new and exciting initiatives.

I was fortunate enough to be hired in time to attend MS&T 2013, in Montreal, where I had the opportunity to attend the ASM Materials Education Mini-Materials Camp. It was truly a wonderful experience. The instructors were very engaging and the students were receptive and participatory. One experiment in particular stood out, and made me wonder if I would have been a better science student if interactive learning had been part of my education. The experiment utilized a racquet ball and liquid nitrogen and demonstrated the effects of extremely cold temperatures on different materials. The instructor asked what would happen if he dropped the ball—would it break or bounce? To their amazement, the ball shattered and made a loud noise. The students were encouraged to touch the material to feel the effects of temperature change on the material. Like the students, it left me wanting more and filled me with many questions. If you have not previously experienced the ASM Materials Camps, I highly encourage you to attend. I also look forward to meeting many ASM members in my new role with the Foundation. Feel free to contact me at nichol.campana@asminternational.org.

HIGHLIGHTS...Certificate Program Graduates

The International Metallographic Contest (IMC), an annual event cosponsored by the International Metallographic Society (IMS) and ASM International to advance the science of microstructural analysis, just got more enticing. Updates to the rules recently approved by the IMS Board are designed to encourage participation and to simplify the process for participants to submit entries. There are now five different classes of competition—down from 11 classes—covering all fields of optical and electron microscopy:

- Class 1: Optical Microscopy—All Materials
- Class 2: Electron Microscopy—All Materials
- Class 3: Student Entries—All Materials (Undergraduate or Graduate Students Only)
- Class 4: Artistic Microscopy (Color)—All Materials
- Class 5: Artistic Microscopy (Black & White)—All Materials

All of the classes have increased prize money! Best-In-Show receives the most prestigious award available in the field of metallography, the Jacquet-Lucas Award, which includes a cash prize of $3000.

The international competition showcases the finest work of metallographers, scientists, technicians, and students from around the world. The contest is open to all (except contest judges), including non-members.

For a more complete description of the new rules, tips for creating a winning entry, and judging guidelines, visit www.metallography.net.

Certificate Program Graduates

Congratulations to all who completed their Certificate Program through ASM’s Education offerings in 2013! If Oscars were given for a job well done, we’d nominate you! Completing this extra coursework while continuing in your full time position takes tremendous dedication. We’re sure it was worth it, knowing that this achievement will make such a positive difference in your career path. Well done!

Extension Diplomas & 2013 Graduates:

- Applied General Metallurgy: Eduardo Bejarano, Matthew Byrne, Susan Cavanaugh, Marcia Clark, Rick Clary, Robert Doggett, Timothy Howard, Brian Krueger, Eric Pintueles, and Jeff A. Stanford
- Corrosion: Susan Cavanaugh
- Ferrous Metallurgy: Susan Cavanaugh, Irene Hardgrove, and James I. Middleton, Jr.
- Heat Treating: Dayna Fettig
- Non Ferrous Metallurgy: Susan Cavanaugh
- Testing & Inspection: Matthew Byrne and Tammy Hankes
- Welding Metallurgy: Thomas H. Boone, Rick Clary, Robert Doggett, Bhupinder Kataria, and James Rodrigues

ASM Certificate Programs are valuable in furthering knowledge in a chosen field and can lead toward the next career goal. Learn how you, too, can achieve a Certificate in a related field. Contact Liz Halderman, Lifelong Learning Advisor at 800/336-5152 ext. 5707 or liz.halderman@asminternational.org.

ASM’s reengineered website has arrived! Visit the new www.asminternational.org today.
Chapter News

Rhode Island’s Spouse Night

On December 11, the ASM Rhode Island Chapter held its spouse’s meeting at the Barker Theatre in Providence. Members and guests of the Chapter were treated to an entertaining evening consisting of the production, *Bell, Book, and Candle*. At the end of the play, the entire cast and crew joined the attendees for wine and a light dinner, making for a delightful evening.

Puget Sound Learns about Kayak Construction

The Puget Sound Chapter’s last meeting of the year is usually more social with a less-technical talk of interest to family members. In keeping with that tradition, the December 2013 topic was on kayak construction. The speaker, Dr. Roy Baggerly, FASM, recently retired from Boeing. His presentation included showing a 17-ft kayak and a paddle, both of which he built. He also highlighted the unique techniques and methods used by the Aleut people to construct their kayaks. These methods suggest the Aleuts understood tribology and used technology to reduce wear and friction.

LA and Ravi Honor Golf Organizer

In recognition of his long work with the Scholarship Golf Tournament, Dick Berryman (center, Scholarship Golf Tournament chair and Chapter Council Representative, District II), receives a certificate of appreciation from Ravi Ravindran, FASM, (right, ASM president) and a package of golf balls from Mike Hahn (left, Chapter secretary) while Chuck Daugherty (back, Scholarship Golf Tournament Committee member) looks on.

VOLUNTEERISM COMMITTEE

Profile of a Volunteer

Ron Radzilowski, FASM
Manager - Metallurgical Technology
Severstal North America

Ron Radzilowski is an ASM Fellow and industry veteran with 47 years of work experience—but he brings the energy and enthusiasm of youth to his profession. “I can’t sit around! I don’t participate in conferences and symposiums for my own benefit. I do it for my company and for ASM because I owe them a debt of gratitude."

After working in the metals industry for nearly a half century, Radzilowski is still learning, still traveling internationally, and still sharing his expertise—as Manager of Metallurgical Technology for Severstal North America, and on ASM committees for Volunteerism, Emerging Technology Awareness (ETAC), and New Products & Services. He also helps with the summer ASM Materials Camp for Teachers at the University of Michigan.

For Severstal in Dearborn, Radzilowski advises senior management on technical aspects of steelmaking and “technology benchmarking.” He enjoys working with entrepreneurial companies to explore new technologies that work with steel in the automotive industry and elsewhere.

Radzilowski has held every officer role for the Detroit ASM chapter and encourages students and young professionals to get involved. He knows that support from a company’s senior management plays a critical role. He sees two key advantages to ASM: first, as an “information society” at the forefront of disseminating new technology as well as archiving older information—and just as importantly, providing a means to interact at the local and national level. “I meet people and take back ideas for commercialization and share what others are doing—in both technology and business.”

About his 2009 election as ASM Fellow, he says, “We should be a model for the young, giving back on the national level, but also as a mentor at the local level, getting younger people involved. As a volunteer leader, Radzilowski’s enthusiasm is keeping ASM alive for the next generation.

Updated Online Products

To continue providing the most current, searchable information in the industry, ASM released an update to the *ASM Medical Materials Database* on December 19. This represents the fourth successful and on-time quarterly release of the database for 2013.

The *ASM Handbooks Online* also was updated the same day and now includes the new Volume 5A: *Thermal Spray Technology*.

Check out the new content of both products on ASM’s newly redesigned website. Visit www.asminternational.org, select Materials Resources, and then choose from the list of Online Databases.

For a list of upcoming ASM Training Courses, see our ad on page 26 of this issue.
Williams Joins EWI Board
Columbus-based technology innovator EWI recently welcomed David B. Williams, FASM, of The Ohio State University (OSU) to its Board of Directors. Williams is dean of the OSU College of Engineering. From 2007 to 2011, he served as the President of the University of Alabama, Huntsville. Prior to 2007, Williams spent 31 years at Lehigh University in Bethlehem, Pa., as an MSE professor. He directed Lehigh’s Electron Microscope Lab and the Microscopy School from 1980-88. A native of Leeds, England, Williams received his degrees from the University of Cambridge. In 2013, Williams was selected as the Alpha Sigma Mu Lecturer.

Materials Research Society Honors Dresselhaus
Massachusetts Institute of Technology professor emeritus Mildred Dresselhaus received the Material Research Society’s Von Hippel Award during the organization’s fall meeting in Boston. In her acceptance speech, the awardee recalled that Arthur R. von Hippel embodied scientific curiosity and mentorship and shared her passion for music. Dresselhaus received the award for her pioneering contributions to the fundamental science of carbon-based and other low-electron-density materials, leadership in energy and science policy, and exemplary mentoring of young scientists. Von Hippel encouraged Dresselhaus to study carbon—especially graphite—and made her part of his string quartet. Von Hippel died in 2003 at age 105, having worked in the lab until age 90.

Jones Receives Heritage Award
William R. Jones, FASM, CEO of Solar Atmospheres Inc., Souderton, Pa., received the Heritage Award at the Metal Treating Institute (MTI) Fall Meeting in Las Vegas on October 12. This prestigious award is given in recognition of an individual’s lifetime commitment to the betterment of the commercial heat treating industry with one or more notable accomplishments. Only nine people in the 78-year history of MTI have ever received this award.

Spain Joins Alpha Sigma Mu
The Alpha Sigma Mu MSE Honorary Society recently welcomed Spain as its newest chapter affiliate. Frederick Schmidt, FASM, the honor society’s president, welcomed the new members and commended the University of Oviedo and the community for contributions to global technology. In his presentation, Schmidt reported there are 58 active chapters in North America at prominent university locations, and active international chapters in Australia, Canada, and Spain. The honor society expects to charter new chapters in Austria (Wels), Brazil, Germany, Hungary, Poland (Krakow), and Russia (St. Petersburg).

IN MEMORIAM
George S. Ansell, FASM, of Tucson, Ariz., died on August 30, 2013. Ansell, born in 1934, was the Colorado School of Mines’ 13th president, serving 1984-1998. He earned a bachelor’s degree in metallurgical engineering in 1954 and a master’s the following year, both from Rensselaer Polytechnic Institute (RPI). After serving in the U.S. Navy, he was appointed to the Metal Physics Consultant Staff of the U.S. Naval Research Laboratory as a physical metallurgist. Ansell earned a Ph.D. in metallurgical engineering from RPI in 1960 and joined their faculty that same year. He was named Robert W. Hunt Professor and later, dean of the school of engineering at RPI. After his retirement from Mines in 1998, he received an honorary degree and the metallurgy department was renamed the George S. Ansell Department of Metallurgical and Materials Engineering. Ansell was a member of the ASM Rocky Mountain chapter.

Robert H. McCreery, FASM, 88, Portland, Ore., passed away on October 13. He was born on September 11, 1925, in Muncie, Ind., served with the U.S. Army during WW II, and earned his B.S. from Purdue University. McCreery worked as a metallurgical engineer at Teledyne Portland Forge, retiring in 1990. He was a licensed professional engineer and a life member of both ASM International and ASME. McCreery also was a past ASM trustee. Author of several technical articles, his topics included nondestructive case depth measurements and effects of reduction on strand cast steel.

Word has been received at ASM Headquarters of the death of Life Member Robert W. Carter of Libertyville, Ill. (Chicago Chapter).