Eisenman Award Night

Craig D. Clauser
(Craig Clauser Engineering Consulting, Inc.)

Abstract: Failure Analysis of an Early Wrought Iron Cannon
In 1844 the Peacemaker, a large wrought iron naval gun, exploded on the deck of the USS Princeton while on an exhibition cruise on the Potomac River with President Tyler on board. The explosion killed Cabinet Secretaries and the subsequent investigation including a failure analysis was well documented. The cannon was an early example of the transition from cast to wrought metal for the manufacturing of heavy artillery. A brief description of the ship, the cannon, and the contemporary state of ferrous metallurgy is given. The failure analysis practices followed by the investigators at the time are reviewed and compared to today’s practices.

Biography: Craig D. Clauser, P.E.
Mr. Clauser is a Metallurgical Engineering and Materials Science graduate of Lehigh University. His work experience includes material evaluation and failure analysis for Westinghouse Electric Power Generation Division and heavy plate and seamless tube manufacture at Phoenix Steel Corporation. For the past thirty years he has been an engineering consultant. Mr. Clauser has long been active with ASM. He was Philadelphia Chapter Chairman in 1983 and has served as a Member and as Chairman of a number of National Committees. He is currently the Treasurer and on the Board of Trustees.

Thursday October 20, 2016
Maggios’ Restaurant
400 2nd Street Pike
Southampton PA, 18966

See Map and Directions on Page 5

Social Hour: 6:00 - 7:00pm, Dinner: 7:00pm
Prices: Members & Guests: $35.00; Retirees: $24.00; Students: $15.00

Meeting Registration: PLEASE NOTE**: All reservations must contact Trevor Jones at 215-721-1502 ext 1220 or on our website at http://philadelphia.asminternational.org no later than 1:00 PM on the Tuesday before the meeting to guarantee dinner availability.

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Menu: Classic Caesar Salad, Oven Roasted Potatoes, Vegetable Medley, Penne Parmesan with melted Mozzarella, sliced roast beef in gravy with rolls and horseradish cream sauce
Dessert: Ice Cream Sunday Station
Beverages: Freshly brewed Columbian coffee, Iced Tea, Soda. One hour open bar by consumption (2 drink tickets per person) - Cash bar following

Spouses and guests are invited and welcome.
CHAIRPERSON’S MESSAGE

OCTOBER 2016

With the first week of autumn coming to a close and football season in full swing, I am happy to welcome the cooler weather and share a few updates for the Philadelphia ASM Chapter.

As you have already been notified, our meeting this month will take place at Maggio’s in Southampton on Thursday, October 20th. I hope you are all looking forward to trying this new venue as much as I am. From what I hear, the service is wonderful, the atmosphere is unique and the food is excellent.

Trevor Shellhammer, our September guest speaker, gave an incredibly informative talk about the history of Bethlehem Steel. The upcoming October meeting is the Eisenman Award Night and we are looking forward to hearing from our speaker, Craig Clauser, PE. The topic of his presentation will be “Failure Analysis of an Early Wrought Iron Cannon”.

Please remember that our next meeting is Young Member’s Night, and it will be held at WE Automation in Philadelphia on November 17th.

I hope to see you in a couple of weeks at Maggio’s!

Sincerely,
Nick Cordisco
2016-2017 Chapter Chairperson

2016-2017 UPCOMING EVENTS

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Topic</th>
<th>Location</th>
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<tbody>
<tr>
<td>10-20-16</td>
<td>Thursday</td>
<td>Failure Analysis of an Early Wrought Iron Cannon, Craig Clauser, PE Eisenman Award Night</td>
<td>Maggio’s, 400 2nd St. Pike Southampton, PA 18966</td>
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<tr>
<td>11-17-16</td>
<td>Thursday</td>
<td>TBD</td>
<td>WE Automation</td>
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<tr>
<td>03-20-17</td>
<td>Monday</td>
<td>From Cast/Wrought to PM, Germant Mauer - ASM Director Sauveur Award Night</td>
<td>Union League, Philadelphia</td>
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Welcome New Members!

- John Long - Excel Technologies, Inc.
- Augustin Robies Duenas - Dana Corporation
- Sara Bynes

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2016 TEMPLE UNIVERSITY MATERIALS CAMP FOR TEACHERS

The inaugural Temple University Materials Teachers Camp was held from August 15 to the 19 at Temple University’s Ambler Campus. It was a collaborative effort between Temple’s College of Science and Technology and the Liberty Bell Chapter of ASM International, as well as the ASM Materials Education Foundation. The funding for the camp came from the initial grant by the Henry M. Rowan Family Foundation, Inc. back in 2013.

The attendees were teachers that had not previously attended a Materials Camp, with one exception. They were also primarily from the local area, again with two exceptions; one was from the Atlantic City area, and the other was from upstate New York. A total of 16 teachers attended. The teachers are set to take back fundamental materials information, that include lab experiments, to their classrooms which range from twelfth grade down to fifth and sixth grades.

The teachers that lead the course are trained and provided by ASM’s Materials Education Foundation. They are unsurpassed. We were fortunate to have Debbie Goodwin and Andrew Nydam as the camp’s two Master Teachers. Debbie recently retired after 31 years of teaching high school and middle school science, and she taught Materials Science and Technology (MST) for 17 years. She has made numerous MST presentations at regional and national conferences, including the National Science Teachers Association (NSTA). She has also served as a Master Teacher for the Foundation’s Materials Camp Teachers program since 2002. Debbie hails from the state of Missouri. Andy is a retired teacher from Olympia HS in the state of Washington. He is a licensed aircraft mechanic; a Master Tech. He is also an SAE automotive Master Tech with Nissan Motor Corp. (first in nation). Andy was a community college instructor for 17 years and a HS teacher for over 29 years, which included 20 years of teaching Materials Science. Andy received an NSF grant for Materials Science at PNNL in Richland, WA, and he assisted in authoring the Material Science Handbook (PNNL and Battelle). Andy is a Materials Science “master teacher” through NSF grants and Washington State’s Vocational Teacher of the Year.

The facilities at Temple University’s Ambler campus were ideally suited for the camp. The setting of the campus is part of 80 acres that includes a preserved arboretum. The classroom was in an adjacent building to Dixon Hall which is where the lab was located. The spacious lab was very conducive to the various experiments and hands-on demonstrations performed by the master teachers and the teacher participants. The support provided by Temple’s Science and Technology College was tremendous, including the meals for the sixteen participants.

Two people need to be singled out for their specific support of the camp, Professor George Mehler, College of Science and Technology, and Dr. Susan Jansen-Varnum, Professor and Associate Dean for Science Education. George, in particular, was available to render whatever support was needed throughout the week, and he helped with the setup on Sunday. George is a past HS science teacher from the Bucks County school system who went on to get his PhD. He is also an ASM Materials Education Foundation board member, and he was instrumental in promoting the teachers camp at Temple. Dr. Varnum was tremendously supportive of the camp, and he addressed the teachers at Monday’s opening session.

The week consisted of reviewing the teachers’ current science, technology, and math programs and providing the attendees with information that included lab demonstrations which cover all facets of materials. The week permitted teachers to perform practice labs and demonstrations in a supportive environment.

Unfortunately, Virginia Smith, the daughter of Henry Rowan was unable to attend. However, she sent an inspirational message that was read at the Awards Luncheon on Friday. We want to gratefully acknowledge the Henry M. Rowan Family Foundation for their generous grant that made this all possible.
Nominations Needed for Local Awards

The chapter Awards Committee is asking for our members to help to identify candidates for the local awards to be presented during the upcoming chapter year. In the past few years, the committee has noticed a decrease in the number of potential candidates for the various awards. Our conclusion is that this occurred because we aren’t as familiar with chapter members that fit the various categories, not because there aren’t as many deserving individuals.

We are asking that if you know someone who could fit one of these categories, please let us know. We will do any required investigation and consider your nominees during the upcoming awards committee meeting toward the end of 2016.

The local awards for which we are asking for help are:

- Adolph Schaefer Special Achievement Award
- Outstanding Company Support
- Young Member’s Award
- Metallurgical Engineering Assistant’s Award
- Distinguished Service Award
- Delaware Valley Materials Person of the Year

These awards are described in the 2015-2016 Chapter Yearbook.

If you have a potential candidate or need more information about any of the awards before making your decision, please contact John Janiszewski at 215-641-8849 or jjaniszewski@ltk.com.

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Directions to Maggio’s:
400 2nd St Pike, Southampton, PA 18966

Via North I-95:
Travel on I-95 to Exit 37 (Street Road, Route 132). Coming off the exit at the light, make a left. Continue on Street Road approximately 8 miles until you reach 2nd Street Pike. Turn left. Approximately .5 miles on the right.

Via South I-95:
Travel on I-95 to Exit 37 (Street Road, Route 132). Coming off the exit, make a right. Continue on Street Road approximately 8 miles until you reach 2nd Street Pike. Turn left. Approximately .5 miles on the right.

Via PA Turnpike (Route 276):
Travel to PA Turnpike Exit 351, also known as 28. Take Route 1 south (remain on right side) for 1/4 mile. Travel west on Street Road (Route 132) for approximately 9 miles until you reach 2nd Street Pike. Turn left. Approximately .5 miles on the right.

Via US Route 1 South:
Travel on Route 1 to Street Road (Route 132 West). Travel west on Street Road for approximately 5 miles until you reach 2nd Street Pike. Turn left. Approximately .5 miles on the right.

Via US Route 1 North:
Travel on Route 1 to Street Road (Route 132 West). Travel west on Street Road for approximately 5 miles until you reach 2nd Street Pike. Turn left. Approximately .5 miles on the right.

From NJ, Trenton/Mercer County:
I-95 South into Pennsylvania. Take I-95 south to Exit 37 (Street Road, Route 132). Turn right (West) on Street Road. Continue on Street Road approximately 8 miles until you reach 2nd Street Pike. Turn left. Approximately .5 miles on the right.

From NJ, Burlington County:
Take Tacony-Palmyra or other Bridge into Pennsylvania and go I-95 north to Exit 37 (Street Road, Route 132). Turn left (West) on Street Road. Continue on Street Road approximately 8 miles until you reach 2nd Street Pike. Turn left. Approximately .5 miles on the right.

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