



PURDUE PEENER

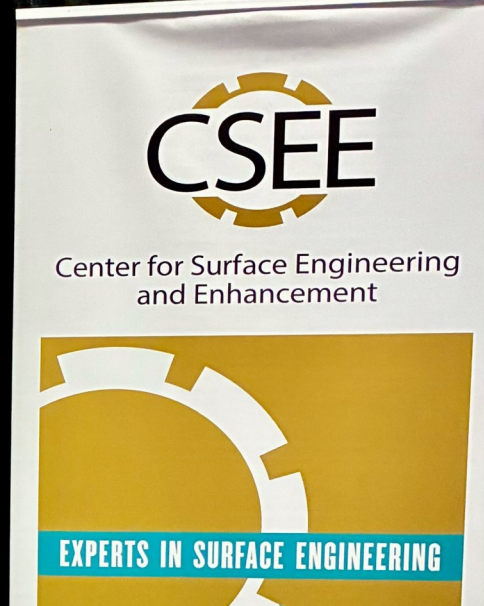
PURDUE
UNIVERSITY

Materials Engineering

Congratulations to Langdon Feltner for winning the Shot Peener of the Year Award!

Established in 1992, the Shot Peener of the Year award is presented annually by The Shot Peener Magazine to an influential voice in the peening industry, recognizing outstanding contributions to the advancement of the field.

Previous recipients include leading figures from both academia and industry. The Shot Peener of the Year award is widely regarded as one of the highest honors in the shot peening community.



PURDUE PEENER: 1ST EDITION

It is a pleasure to welcome you to the inaugural edition of the *Purdue Peener* newsletter. At the Purdue University School of Materials Engineering (MSE), we remain deeply appreciative of the support and partnership provided by our industry collaborators. Your engagement allows us to operate the Center for Surface Engineering and Enhancement (CSEE) and pursue impactful, industry-relevant work in shot peening and related areas.

We hope this first issue offers insight into our current activities and the momentum behind our programs. If you have questions or thoughts to share, please contact Maddi Walsh at mhoverm@purdue.edu. We look forward to keeping you updated on all things shot peening at Purdue and reconnecting with you in early 2026.

INSIDE THIS ISSUE

During the last several years the MSE/CSEE shot peening footprint has expanded noticeably and we're optimistic that this trajectory will only continue to rise. With this in mind, we're pleased to cover the following topics:

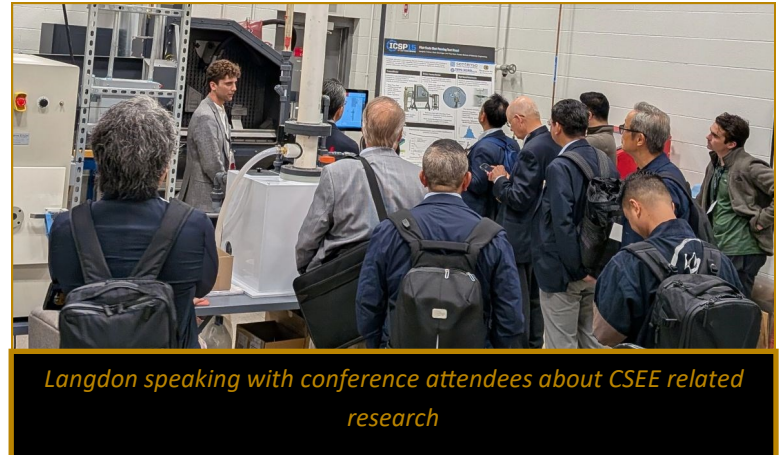
- A summary of the 15th International Conference on Shot Peening (ICSP15) which took place at Purdue in September (2025)
- The current shot peening related projects in CSEE and the upcoming CSEE meeting in December
- Langdon Feltner's successful "defense" of his PhD thesis and plans for 2026



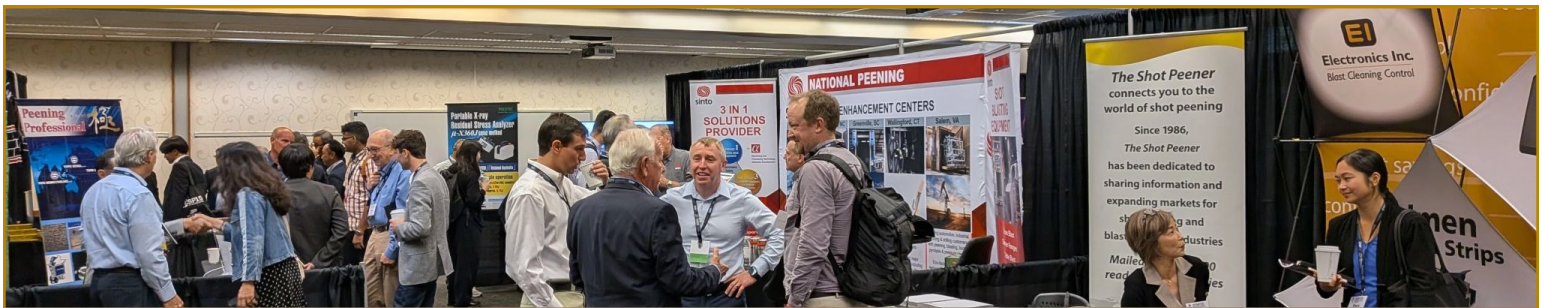
In September MSE had the privilege of hosting **ICSP15** at Purdue University, in West Lafayette, Indiana. Purdue University is a large public university with over 50,000 total students and is proud to be recognized as the #4 ranked Engineering College in the United States with over 10,000 engineering students.

With that backdrop, about 150 shot peening professionals (industry members, faculty and students) visited Purdue for the three-day conference. While a considerable amount of information can still be found about the conference at www.icsp15.org, here's a few of the key parts. There were over 50 technical presentation made by dozens of organizations from ten countries on a variety of peening topics.

The presentation titles, authors, and many of the presentations that were published in the conference proceedings can still be found on the website. In addition to the extensive technical program, the conference attendees had the opportunity to get a first hand look at some of the key shot peening related tools that MSE has to conduct industrially relevant shot peening both in CSEE and other project activities.



Langdon speaking with conference attendees about CSEE related research



Multiple peening and characterization demonstrations were carried out using state of the art equipment. This equipment is housed at Purdue's Manufacturing & Materials Research Laboratory (MMRL), which is a unique asset that provides a wide cross section of advanced, modern manufacturing services for many industries and companies. There was also an exhibition featuring more than 20 shot peening companies whose products and services garnered significant interest by the conference attendees.

As is the case for all of the International Conferences on Shot Peening, ICSP15 concluded with an International Scientific Committee for Shot Peening (ISCSP) meeting. In this meeting Nagoya, Japan was selected for the location of ICSP16, with Toyo Seiko being chosen to be the host institution. More information about ICSP16 will be available on the www.icsp15.org website as it becomes available.





Center for Surface Engineering and Enhancement

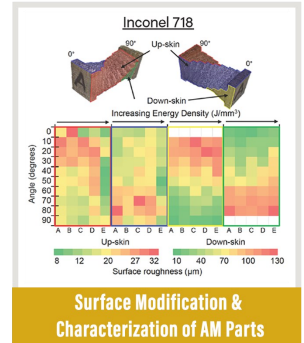
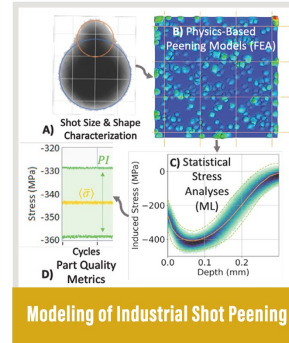
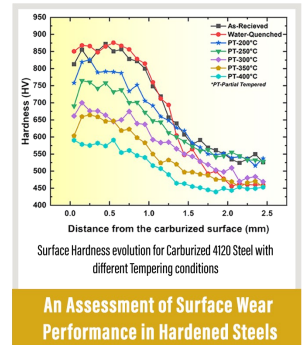
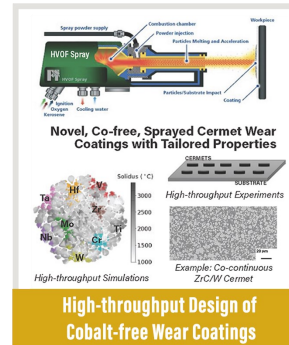
and Mike Sealy. The other is titled “Modeling of Industrial Shot Peening” an it is being advised by Professor Paul Mort with the research being conducted by PhD student Langdon Feltner.

These two projects, as well as the other two projects currently being researched in CSEE (An Assessment of Surface Wear Performance in Hardened Steels and High-Throughput Design, Fabrication, and Testing of High-Temperature Wear Coating Materials) will have their quarterly review on December 3, 2025. These reviews are typically reserved for CSEE member companies, however, if an individual has an interest in joining CSEE they may be extended an invitation to attend as a guest. Please contact Mark Gruninger (mgruninger@purdue.edu) if you’d like to be a guest at this CSEE meeting.

This review of Modeling of Industrial Shot Peening will be its last as Langdon has successfully defended his PhD thesis associated with this topic. About 20 CSEE members virtually attended his thesis defense on November 19. Langdon will graduate with his PhD in December in 2025 and begin his “professional shot peening career” in January 2026. We’re pleased to announce that

MSE has operated CSEE now for almost 10 years, with information about CSEE being able to be found at engineering.purdue.edu/MSE/CSEE.

Currently there are two shot peening related projects. One is titled “Surface Modification and Characterization of Additively Manufactured Parts” and it being advised by Professors Mike Titus



Langdon’s “role” upon his graduation will take place in two “locations”.

First, Langdon will have a post-doctoral research position at Purdue, with some teaching responsibilities, continuing his work in modeling shot peening for industrially related topics. Professor David Johnson will be Langdon’s manager at Purdue. Also, Langdon will become an associate for Electronics, Inc (EI). EI, which is located in Mishawaka, Indiana, is widely recognized as a leader in providing shot peening control solutions around the world. These roles seem quite appropriate as Langdon was just named the 2026 “Shot Peener of the Year” at the annual EI shot peening conference that took place in October. Please feel free to contact Langdon at lfeltner@purdue.edu to congratulate him on his accomplishments this fall and find out more about his plans!

CURRENT CSEE MEMBERS

