

The Eleventh International Conference on Shot Peening

September 12-15, 2011
South Bend, Indiana USA

Triennial Conference and Exhibition of the International Scientific Committee for Shot Peening



CALL FOR PAPERS

YOU ARE INVITED TO SUBMIT A PAPER TO THE ELEVENTH INTERNATIONAL CONFERENCE ON SHOT PEENING (ICSP-11)

SCOPE

The ICSP-11 Organizing Committee is seeking papers that further the understanding and knowledge of shot peening. Related mechanical surface treatments, such as deep rolling, laser peening, ultrasonic peening, combined processes, and other cold work processes inducing compressive surface residual stresses, are within the scope of the conference, especially when compared to shot peening. Shot peening and related mechanical surface treatments have proved to be powerful instruments in enhancing the resistance of components to various kinds of stress-induced damage, largely with respect to fatigue and corrosion damage. The service lives of a wide variety of structural components, irrespective of shape and dimensions, can be improved dramatically by shot peening. The commercial benefits of applying mechanical surface treatments are increasingly recognized, particularly in the automotive and aerospace industries.

ICSP-11 will be an important international meeting for discussing the science, technology and applications of mechanical surface treatments. It will offer a unique forum, enabling scientists and engineers to deepen and update their knowledge of all aspects of mechanical surface treatments. The conference will cover a range of surface treatment topics based on technological aspects, process procedures, changes in the surface state, process simulation, service properties, and fields of application.

The study of shot peening's benefits and uses are crucial as the need grows for stronger and lighter metal components in transportation, medical and many other applications.

TOPICS

- **Applications**
Automotive, Aerospace, Welds, Mining, Gears, Springs, Medical
- **Modeling and Simulation**
Lifetime Prediction, Load Capability Prediction, Stress Profile, Incorporating Shot Peening Into Design
- **Alternative Processes**
Laser, Deep Rolling, Ultrasonic-Activated, Needle Peening, Burnishing
- **Fatigue and Fracture**
Steel, Aluminum, Titanium, Carburized Steel, Stress Relaxation by Time / Temperature
- **Surface Characteristics**
Measurement of Residual Stress, Stability of Residual Stress, Surface Finish
- **Technological Developments**
Machine Architecture, Alternative Media, Process Monitoring and Control, Specifications, Auxiliary Equipment, Non-Destructive Testing
- **Special Applications**
Fine Particle Shot Peening, Stress Corrosion Cracking and Fretting Remediation, Reduction of Sliding Friction, Medical Implant Tissue Adhesion Improvement, Medical Implant Peening Special Considerations, Cavitation Peening
- **Miscellaneous Topics**
Non-Classical Equipment and Technologies of Peening, Peen Forming, Theory / Mechanics, Applications and Benefits, Improvement of the Fatigue Behavior of Structural Components, Fundamental Aspects of Modeling

IMPORTANT DATES

Abstracts Due
June 1, 2010

Notification to Authors
August 1, 2010

Manuscript Drafts Due
January 1, 2011

Final Manuscripts Due
June 1, 2011

LOCATION

ICSP-11 will be held at the Century Center in South Bend, Indiana. The Century Center will be an ideal venue for the event. The facility has well-appointed auditoriums, exhibition space and dining rooms. South Bend, Indiana is accessible by several international airports.



GENERAL INFORMATION

SUBMISSION OF ABSTRACTS

The deadline for the submission of paper abstracts and posters is June 1, 2010. Submissions will be judged by the Local Organizing Committee on originality, significance, interest, clarity, relevance and correctness. Authors will be notified after August 1, 2010 regarding the acceptance of their submission.

Papers: The abstract should not exceed one page. Please use standard symbols and abbreviations. Length and format requirements for final papers are as follows: Word 2003 - 2007, 8.5 x 11-inches page size. Template is available for download at www.shotpeening.org/ICSP-11.

Posters: The poster forum allows researchers to present recent and ongoing projects. The poster session is an excellent forum to discuss new ideas and get useful feedback from the community. The poster submission should include a brief description of the research idea(s) and the submission must not exceed two pages. Accepted posters will be displayed at the conference.

Final Submissions: Submissions of the final manuscripts are due electronically. Detailed instructions for the submission process will be available at www.shotpeening.org/ICSP-11 after June 2010.

PROCEEDINGS*

Papers accepted and presented in person at ICSP-11 will be published in the ICSP-11 Final Proceedings. Preliminary Papers and Final Proceedings will be distributed to attendees at no charge. Copies of the Proceedings book will be available to the general public for a nominal fee. Accepted submissions will be treated as confidential prior to publication in the ICSP-11 Proceedings. Manuscripts submitted to the International Scientific Committee for Shot Peening (ISCSP) for publication at the conference become the property of ISCSP.

*All accepted papers will be distributed in preliminary copy form at the conference. The final ICSP-11 Proceedings book will include only papers presented by the author(s).

CONFERENCE LANGUAGE

English

REGISTRATION FEE

The registration fee is \$800.00. The fee includes administrative costs, Preliminary Papers, Final Proceedings, lunches, break refreshments and a banquet.

EXHIBITION

There will be an exhibition of products and services related to the topics of the conference. Interested companies and organizations should contact the Conference Chairman for costs and more information.

CONTACT INFORMATION

Conference Chairman
Jack Champaigne
Electronics Inc.
56790 Magnetic Drive
Mishawaka, Indiana 46545 USA
Telephone: 1-574-256-5001 Email: icsp11@shotpeening.org

For more information, visit www.shotpeening.org/ICSP-11

ICSP-11 is the conference of the International Scientific Committee for Shot Peening
"Promoting research and the dissemination of knowledge in the area of shot peening and allied processes."

The event will attract approximately 250 attendees from academic institutions and industrial organizations worldwide.



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