## The 2003 Shot Peeners of the Year

Congratulations to **Paul Prevey** and **Dr. Niku-Lari**. Our 2003 Shot Peeners of the Year have made significant contributions to advancements in shot peening technology in industrial and academic forums. They both have demonstrated dedication and discipline that has resulted in advancing the understanding and practice of shot peening in myriad ways. We are grateful for the efforts of these pioneers whose contributions continue to improve our understanding of the peening process.

Paul Prevey serves as President and Director of Research at Lambda Research; a company he founded in 1977. Lambda Research is an independent research institute providing x-ray diffraction and related research services.



Mr. Prevey has

designed and conducted numerous automotive and aerospace related high and low cycle fatigue testing programs, including studies of the influence of various methods of machining and the residual stresses produced upon fatigue life. He has over 25 years experience in x-ray diffraction residual stress measurement, and has conducted over 3,850 studies of residual stress distributions for automotive, aerospace, and nuclear applications, involving over 115,500 residual stress measurements. He has developed laboratory procedures, apparatus, and software for residual stress measurement, percent cold work and hardness produced by machining, shot peening and other surface treatments.

Mr. Prevey's contributions to the area of residual stress measurement include original methods of determining x-ray elastic constants, methods of measuring plastic deformation by line broadening, and mathematical procedures and software for diffraction peak location subsurface data correction, as well as methods of precise diffraction peak location. He has authored 31 publications related to the field of x-ray diffraction. Mr. Prevey has served as Chairman of the Residual Stress Committee of the Society of Experimental Mechanics and is a fellow of the ASM. He is a member of ASTM Committee E-9 on Fatigue, Task Group 3 on Residual Stress Effects in Fatigue, and ASTM Committee E28.13 on Measurement Methods for Residual Stress, where he has served as the x-ray diffraction Group Chairman and author of ASTM Specification E915-83, "Verifying Alignment of X-ray Diffraction Instrumentation for Residual Stress Measurement." Other memberships include SEM, ASM, ASTM, TMS, ACS, ASC, and MRS.

In addition to these many contributions to the advancement of shot peening and surface treatment, Mr. Prevey has written or co-authored over 50 papers.

**Dr. Niku-Lari** is the founder and director of IITT-International (Institute for Industrial Technology Transfer). IITT International was founded to aid in the sharing of technology by organizing national and international conferences and seminars as well as publishing scientific and technological books and proceedings.

For over 30 years, Dr. Niku-Lari has helped to create a link between research and industry by setting several International Scientific Committees in many different areas such as Shot Peening, high power lasers, Artificial Intelligence and Expert Systems, Structural Analysis, Super conductivity, etc.

Several International conferences were organized in France, England, Germany, Switzerland, Italy and the



USA under the supervision of these International Scientific Committees. The ISCSP came into being through the efforts of Dr. Niku-Lari. With support from France's Centre Technique des Industries Mécaniques (CETIM) he toured many countries to build support for the concept of International Conferences

on Shot Peening. Dr. Niku-Lari was at the origin of the International Scientific Committee on Shot Peening which was founded in 1979 in Las Vegas, USA. This led to the first world conference on shot peening in 1981 in Paris.

Because of the good cooperation between ISC and industry, national shot peening organizations were created in France, UK, Germany, Japan and India for promoting shot peening research and application.

Dr. Niku-Lari delivers talks as an internationally recognized expert in the field of shot peening at companies and educational institutions worldwide. He has published his extensive research work through books and papers.

It is his research work, as well as his close contact with both potential users and service and equipment providers, that allows him to successfully share technology so that industry can benefit from the cost-effective process of shot peening.