



ARNOLD E. ANDERSON
11314 Mayfield Avenue
Livonia, Mich., 48150

BORN: Portland, Oregon on May 8, 1931

EDUCATION

Reed College, 1949-1953, Physics and Mathematics Majors
Portland University, 1953, General Engineering
Oregon State University, 1954-1956, Mechanical Engineering, BSME
Chrysler Institute, 1956-1957, Automotive Engineering
Univ. of Michigan Grad. School, Eve. Prog., 1957-1961, Engineering Mechanics

TECHNICAL EXPERIENCE

Ford Motor Company, Research Engineer, 1957 to June 1987 retirement
Initiated Friction Materials Research Project, 1963
Led Mechanical Engineering Aspects of Brake Project, 1964-1968
Responsible for Friction Materials & Systems Research, 1968 to retirement as
Principal Research Engineer, Engineering & Manufacturing Staff.

President, Founder of Tribo-Diagnostics Corporation, 1987.

TECHNICAL SOCIETY ACTIVITY

Society of Automotive Engineers, Member
Brake Lining Subcommittee, Member (1966-)
Brake Executive Committee, Member (1986-)
Brake Effectiveness Task Force Chairman (1984-1987)

Sigma Xi, Ford Chapter, Charter Member

Charter Member, Great Lakes Thermal Analysis Society

Member, Engineering Society of Detroit

ASME/EPA Expert Panel Member on Alternatives to Asbestos in Brakes, 1986-87

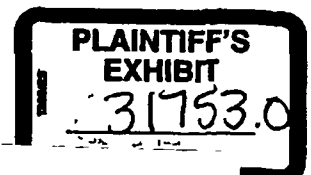
ASME/ASLE International Wear Conferences, Technical Paper Reviewer:
Brakes, Friction and Wear; 1981, 1983, 1985, 1987, 1989
Session Chairman, 1981

Awarded SAE 'Outstanding Contribution to Brake Industry,' October 21, 1986.

SAE/FMSI/AI Fibers in Friction Materials Symposium, 1987 Session Chairman and
Panelist.

OTHER DATA

Brake mechanic - 1949 to 1956 (part and full time, college support)
Ford Motor Company Technical Innovation Awards, 1984, 1985, and 1988
Patents Issued - 13
Publications and Presentations - 24



SCF-FORD-3590

TECHNICAL SOCIETY PUBLICATIONS AND PRESENTATIONS

A. E. Anderson

1. "A New Laboratory Friction and Wear Test for the Characterization of Brake Linings," A. E. Anderson, S. Gratch, and H. P. Hayes, presented at the SAE Annual Congress, January 1967, Preprint No. 670079.
2. "Wear in Brake Materials," A. E. Anderson, ASM Wear Conference Invited Paper, Presented in Chicago, Denver, and Boston, Summer of 1969.
3. "Brake Materials," A. E. Anderson, Invited Paper on Materials for Rolling and Sliding Contact, ASME Winter Annual Meeting, December, 1970.
4. "Power Requirements of Electric Vehicles," G. F. Herbert and A. E. Anderson, Presented at the SAE Annual Congress, January 1971, Preprint No. 710238.
5. "The Effect of Cure Variations on Chemical and Functional Properties of Resin Bonded Friction Materials," A. E. Anderson, R. L. Gealer, and M. H. Weintraub, Presented at the SAE Annual Congress, January 1972, Preprint No. 720054.
6. "Friction and Wear of Paper Type Wet Friction Materials," A. E. Anderson, Presented at the SAE Midyear Meeting, May 1972, Preprint No. 720521.
7. "Asbestos Emissions from Brake Dynamometer Tests," A. E. Anderson, R. L. Gealer, R. C. McCune, and J. W. Sprys, Presented at the SAE Midyear Meeting, May 1973, Preprint No. 730549.
8. "Wear of Phenolic Resin-Asbestos Friction Materials," A. E. Anderson, R. L. Gealer, and M. H. Weintraub, presented at the ACS Meeting in Los Angeles, April 1974. Published in ACS Coatings and Plastics Preprints, Volume 34, Number 1.
9. "Wear of Resin-Asbestos Friction Materials," M. H. Weintraub, A. E. Anderson, and R. L. Gealer, Advances in Polymer Friction and Wear, Plenum Press, New York, N. Y. 1974.
10. "Thermal Response Characterization of Wet Friction Elements," A. E. Anderson and M. H. Weintraub, Invited Paper for the Federation of Analytical Chemistry and Spectroscopy Societies Conference, Dearborn, Michigan, November 1977. Abstract Number 192.
11. "Brake Lining Mechanical Properties, Laboratory Specimen Studies," A. E. Anderson and R. A. Knapp, Presented at the SAE Midyear Meeting, August 1979, SAE Preprint No. 790715.
12. "Friction Material Riveting Studies -- Load-Deflection Characteristics and Finite Element Modelling," R. A. Knapp and A. E. Anderson, Presented at the SAE Midyear Meeting, August 1979, SAE Preprint No 790716 and in 1979 SAE Transactions.

TECHNICAL SOCIETY PUBLICATIONS AND PRESENTATIONS

A. E. Anderson

13. "Wear of Brake Materials," A. E. Anderson, Published and a Chapter of the Wear Control Handbook, ASME, 1980.

14. "Friction and Wear of Brake Linings -- Interfacial Aspects," M. H. Weintraub and A. E. Anderson, Invited Paper for the American Chemical Society Meeting, Toronto, Ontario, June 1983. Abstract No. 57, ACS 57th Colloid and Surface Science Symposium.

15. "Friction Excited Oscillations," A. E. Anderson, invited paper, presented at the SAE Brake Colloquium, Atlantic City, New Jersey, October, 1985.

16. "Development of Non-Asbestos Friction Materials," M. H. Weintraub and A. E. Anderson, ENRA Symposium Series, Wuppertal, Germany, 1986.

17. "Hot Spots in Automobile Friction Systems," A. E. Anderson, invited paper, presented at SAE Brake Colloquium, Atlantic City, New Jersey, October, 1986.

18. "The Challenge of Developing, Manufacturing, and Qualifying Non-Asbestos Brake Material for Class 6, 7, and 8 Vehicles -- Challenges to the Vehicle Manufacturer," A. E. Anderson, panelist, and presentation to the SAE Truck and Bus Meeting, King of Prussia, Pennsylvania, November, 1986.

19. "Analysis of the Feasibility of Replacing Asbestos in Automobile and Truck Brakes," Co-author and Expert Panel Member of report prepared for the EPA by the American Society of Mechanical Engineers and Battelle Columbus Division, April 15, 1987.

20. "BRAKES: A Diagnostic Expert System for Engineers," P. M. Tuchinsky, L. S. Vora, A. E. Anderson, S. Hatfield, C. Gunther, and R. A. McWorter, published in ESD Expert Systems for Advanced Manufacturing Technology Proceedings. Paper presented June 9, 1987 in Dearborn Michigan.

21. "Fiber Emissions from Railroad Brakes," A. E. Anderson, presented at SAE Brake Colloquium, Atlantic City, New Jersey, October 1987.

22. "Brake System Performance--Effects of Fiber Types and Concentrations," presented at Fibers in Friction Materials Symposium, Atlantic City, New Jersey, October 1987. Published in Fibres in Friction Materials Symposium Proceedings.

23. "Consequences of an EPA Ban on Asbestos in Friction Materials and Automotive Brake Systems," A. E. Anderson, presented at SAE Brake Colloquium, Orlando, Florida, October 18, 1988.

24. "Hot Spotting in Automotive Friction Systems," A. E. Anderson and R. A. Knapp, to be presented at the 7th International Conference on Wear of Materials, April 11, 1989. Published in Conference Proceedings.