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**MARVIN L. JANSSEN, PhD**

**SPECIALIZATION: ENGINEERING MECHANICS  
AGRICULTURAL ENGINEERING  
TIRE MECHANICS  
TIRE and VEHICLE MODELING  
TIRE RESEARCH  
TIRE TESTING**

**EDUCATION**

- 1970 - PhD in Theoretical and Applied Mechanics, University of Illinois
- Dissertation Topic – “The Dynamic Response of a Two Dimensional Photoelastic Model of the Human Head.”
- 1966 – M.S. in Agricultural Engineering, University of Illinois
- Dissertation Topic – “Conversion of Farm Tractor Engines from Gasoline to LP Gas.”
- 1964 – B.S. in Agricultural Engineering, University of Illinois

**PROFESSIONAL EXPERIENCE**

- 1995 – 2007: Manager of Tire Engineering Technology, Hankook Tire Company, LTD – Akron Technical Center
- Directed and coordinated advanced tire engineering technology focused on the development of computer aided engineering tools for use by tire development engineers.
  - Directed implementation and certification of tire testing techniques to meet requirements of Original Equipment customers.
  - Planned and controlled department budget.
  - Coordinated research plans with Hankook research departments in Korea.
  - Participated in product design reviews for products engineered in North America.
- 1980 – 1995: Manager of Advanced Tire Engineering, Bridgestone / Firestone Inc.
- Planned and directed programs in new tire development

- Assisted in coordinating and consolidating advanced tire programs between Bridgestone and Firestone
- Directed programs which resulted in Finite Element and Computer aided tire design technology used on a routine basis to improve engineering design, productivity and quality.
- Directed programs to meet advanced vehicle program requirements for O.E. customers.
- Formulated and directed joint programs with O.E. customers which resulted in new standards for tire and vehicle systems analysis and simulation.

1978 – 1980: Group Leader – Dynamics Research Laboratory, Firestone Tire and Rubber Company

- Supervised operation of research laboratory facility and a group of six research scientists
- Conducted and directed research programs in the area of tire and vehicle dynamics, noise, vibration and handling.

1974 – 1978: Senior Project Engineer – Tire Development, Firestone Tire and Rubber Company

- Conducted programs to develop and evaluate new tire concepts
- Developed new analytical and experimental techniques to quantify tire performance

1969 – 1974: Research Scientist – Central Research, Firestone Tire and Rubber Company

- Applied experimental stress analysis techniques to the study and quantification of pneumatic tire behavior

## **PUBLICATIONS**

M.L. Janssen and D.J. Schuring “**Structural and Performance Characteristics of Agricultural Tires**”, ASAE/SAE Paper # 851090, November 1985.

M.L. Janssen and G.L. Hall “**Effect of Ambient Temperature on Radial Tire Rolling Resistance**” SAE Paper # 800090, February 1980.

M.L. Janssen and J.D. Walter “**Stresses and Strains in Tires**” Tire Science and Technology, TSTCA Vol. 3, No. 2, May, 1975.

J.D. Walter, G.N. Avgeropoulous, M.L. Janssen and G.R. Potts, “**Advances in Tire Composite Theory**”, Tire Science and Technology, TSTCA, Vol. 1, No. 2, May, 1973.

M.L. Janssen and J.D. Walter, “**Rubber Strain Measurements in Bias, Belted Bias and Radial Ply Tires**”, presented at the 99<sup>th</sup> meeting of Division of Rubber Chemistry of the American Chemical Society, Miami Beach, Florida, April 1971.

M.L. Janssen and C.E. Bowman, “**The Dynamic Response of Two Dimensional Photoelastic Models of the Human Head**”, ASME Paper # 70-BHF-15, 1970.