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Ph.D., 1968 Engineering Mechanics, Rutgers University, Effects of High Hydrostatic Pressure on the Mechanical Behavior and properties of Polymers

M.S., 1961 Agricultural Engineering, Rutgers University, Recirculation in Wagon Drying of Baled Hay

B.S., 1958 Agricultural Engineering, Rutgers University

Experience

2008 - Professor Emeritus, Rutgers University

1984 - 2008 Professor II, Rutgers University

1988 - 1990 Director, Center of Excellence for Controlled Environment Agriculture

1986 - 1988 Agricultural Research Advisor to USAID Mission, India

1981 - 85 Associate Director of the New Jersey Agricultural Experiment Station and Dean of Research

1965 - 84 Research Associate, Assistant-Associate-Full Professor of Biological and Agricultural Engineering, Cook College, Rutgers University. Undergraduate Advisor for Agricultural Engineering Majors, Undergraduate Advisor for Environmental Technology Majors, Teaching Undergraduate and Graduate Courses, Graduate Director, Research in Mechanization, Structures and Environment, Processing, and Greenhouse Systems

1964 - 65 Graduate work in Applied Science and Teaching Assistant, University of California, Davis

1960 - 64 Lay Missionary, Cuttington College, Suacoco, Liberia. Teaching college courses (undergraduate), Dean of Men, Director of Admissions and Registrar. Head, Agriculture Program and College Farm

1958 - 60 Assistant Instructor in Agricultural Engineering, Rutgers University. Teaching undergraduate Engineering courses, Research on Hay Drying, Forage Self-feeding, and Mechanization

Publications and Papers on:

Applied Mechanics, Solar Heating Systems, Livestock Housing, Mechanization of Horticultural Crops, Agricultural Systems Analysis, Greenhouse Systems, Processing, Waste Heat Utilization, Cogeneration, and Research Management and Planning

Scientific and Professional Societies:

American Society of Agricultural Engineers

International Solar Energy Society (Past Chairman of Agricultural division)

American Society of Heating, Refrigeration and Air Conditioning Engineers

Sigma Xi (Honorary Research Society)

American Association for the Advancement of Science

Indian Society of Agricultural Engineering

Publications

- Mears, D.R. "The Aggies Among Us." The Rutgers Engineer. Vol. 7, No. 2. December 1956.
- Mears, D.R. "Methods of Creating a Drying Force." Unpublished paper. Agr. Eng. Dept. Rutgers University. 1959.
- Mears, D.R. The Theoretical Psychrometry of Recirculation. Unpublished paper. Agr. Eng. Dept. Rutgers University. 1959.
- Mears, D.R. The improvement of quality of harvested products. Article for magazine: Farm and Power Equipment. 1959.
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- Mears, D.R., D.G. Kirkpatrick and M.J. Moore. "Timing of an Event Dependent Upon Ground Speed." ASAE Paper No. 66-312. Amherst, MA. June 26-29, 1966.
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- Roberts, W.J. and D.R. Mears, "Double Covering a Film Greenhouse Using Air to Separate the Layers." ASAE Paper No. 68-402. Logan, UT. June 18-21, 1968.
- Roberts, W.J. and D.R. Mears, "Double Covering a Film Greenhouse Using Air to Separate the Layers," Trans. ASAE, Vol. 12, No. 1, 1969.
- Mears, D.R. and K.D. Pae, "Deformation and Fracture Characteristics of Polycarbonate Under High Pressure." J. of Polymer Sci. B, Polymer Letters, Vol. 7, 1969.
- Mears, D.R., K.D. Pae, and J.A. Sauer, "Effects of Hydrostatic Pressure on the Mechanical Behavior of Polyethylene and Polypropylene." J. Applied Physics, Vol. 40, No. 11, 1969.
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- Singley, M.E., W.J. Roberts and D.R. Mears. "Experimental Dairy Barn." ASAE Paper No. 69-405. W. Lafayette, IN. June 22-25 1969.
- Mears, D.R., W.J. Roberts. "Methods of Accelerating Forage Drying." ASAE Paper No. 69-162. W. Lafayette, IN. June 22-25 1969.
- Mears, D.R., W.J. Roberts and M.E. Singley. "Radial Folded Plate Roof for a Circular Dairy Barn." ASAE Paper No. 69-905. W. Lafayette, IN. June 22-25 1969.

Singley, M.E., W.J. Roberts and D.R. Mears. "An Experimental Dairy Housing Facility." ASAE Paper No. NA 69-304. Montreal, Canada. August 17-20, 1969.

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Mears, D.R., W.J. Roberts, J.C. Simpkins and P.W. Kendall. 1977. "The Rutgers Solar Heating System for Greenhouses." ASAE Paper No. 77-4009. June 26-29. 1977.
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Roberts, W.J. and D.R. Mears, "Design and Considerations for Greenhouses in the United States Now and in the Future." Proceedings of the International Symposium on More Profitable Use of Energy in Protected Cultivation." International Society of Horticultural Sciences, Lund, Sweden, August 22-26, 1977.

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