

PUBLICATIONS:**A. Refereed Archival Journals**

Schmidt, P.S. and Brown, E.L., "Effect of Helicopter Pitching Velocity on Rotor Lift Capability", *Journal of the American Helicopter Society*, V.8, No.4, October, 1963.

Schmidt, P.S. and Leppert, G., "Heat Transfer from a Plasma in Tube Flow", *ASME Journal of Heat Transfer*, V.92, No.3, August, 1970.

Park, G.G., and Schmidt, P.S., "Numerical Modeling of Thermal Stratification in a Reservoir with Large Discharge to Volume Ratio", *Journal of the American Water Resources Association*, V.9, No.5. October, 1973.

Schmidt, P.S., "Spectroscopic Temperature Measurements", *Instrumentation Technology*, V.22, No.12, 1975.

Fruh, E.G., Schmidt, P.S., and Maguire, B., "Environmental Evaluations at Power Plant Sites", *Journal of the American Water Works Association*, V.68, No.7, July, 1976.

D'Arcy, G.P. and Schmidt, P.S., "Magnetohydrodynamic Entry Flow for a Plane Channel in an Axial Magnetic Field", *Journal of Fluid Mechanics*, V.80, No.2, April, 1977.

Wong, C.P., Vliet, G.C., and Schmidt, P.S., "Magnetic Field Effects on Bubble Growth in Boiling Liquid Metals", *ASME Journal of Heat Transfer*, V.100, No.3, August, 1978.

Schmidt, P.S. and Lamont, J.M., "Graduate Education Program in Energy Systems Engineering", *IEEE Transactions on Education*, V.E21, No.3, August, 1978.

Urdaneta, A. and Schmidt, P.S., "Thermodynamic and Economic Analysis of Heat Pumps in Industrial Heat Recovery", *ASME J. Energy Resources Technology*, V.102, No.3, 1980.

Schmidt, P.S., "Enrollment and Financial Aid Policy", *Issues in International Graduate Education*, Council of Graduate Schools of the United States, Washington, September, 1980.

Schmidt, P.S., "Electricity and Industrial Productivity: A Technical and Economic Perspective", *Energy: The International Journal*, V.12, No.1, 1987.

- Sutarwala, M.A., Schmidt, P.S., and Crawford, M.M., "Design and Operation of an Induction Melting System with Gas Preheat", *Transactions of the American Foundrymen's Society*, V.96, No.1, 1988.
- Sutarwala, M.A., Crawford, M.M., and Schmidt, P.S., "Expert System Model for Melt Shop Configuration and Operation", *Transactions of the American Foundrymen's Society*, V.96, No.1, Technical Paper 88-140, 1988.
- Chen, Peishi and Schmidt, P.S. , "An Integral Model for Dielectrically-Enhanced Drying of Hygroscopic and Nonhygroscopic Materials", *Drying Technology*, V.8, No.2, 1990.
- Chen, Peishi, Sanio, Michael R., and Schmidt, P.S., "Exploratory Study of Microwave Heating in Drying of Hardwood Veneer", *Journal of Microwave Power and Electromagnetic Energy*, V.25, No.1, 1990.
- Sparrow, F.T. and Schmidt, P.S. , "Demand-Side Management Implications of Electrically-Based Manufacturing Technologies", *Energy*, V.18, No.10, 1993.
- Price, D.W. and P.S. Schmidt, "Microwave Regeneration of Adsorbents at Low Pressure: Experimental Kinetics Studies", *Journal of Microwave Power and Electromagnetic Energy*, V.32, N.3, 1997
- Price, D.W. and P.S. Schmidt, "VOC Recovery Through Microwave Regeneration of Adsorbents: Process Design Studies", *Journal of Air and Waste Management*, V.48, No.12, 1135-1145, 1998
- Price, D.W. and P.S. Schmidt, "VOC Recovery Through Microwave Regeneration of Adsorbents: Comparative Economic Analysis", *Journal of Air and Waste Management*, V.48, No.12, 1146-1155, 1998
- Salinas, M.J., D.W. Price and P.S. Schmidt, "VOC Recovery Using Microwave Regeneration of Adsorbents: Pilot Column Studies", (accepted for publication in the *Journal of the Air and Waste Management Association*).
- Barr, R.E., P.S. Schmidt, T.J. Krueger, and C.Y. Twu, "An Introduction to Engineering Through an Integrated Reverse Engineering and Design Graphics Project", *Journal of Engineering Education*, V.89, No.4, October 2001, pp. 413-418.

B. Refereed Conference Proceedings

- Park, G.G. and Schmidt, P.S., "Heat Dissipation in a Power Plant Cooling Bay", ASME Paper 72-WA/HT-61, November, 1972.

- Schmidt, P.S. and Daruvalla, S.R., "Evaluation of Self-Paced Instruction in Engineering Courses", *Proceedings of the Second IEEE-ASEE Frontiers in Engineering Education Conference*, Purdue University, April, 1973.
- D'Arcy, G.P. and Schmidt, P.S., "Entry Region Effects on Flow and Pressure Drop of Lithium in Fusion Reactor Blankets", *Technology of Controlled Thermonuclear Fusion Experiments and Engineering Aspects of Fusion Reactors*, USAEC Symposium Series No.31, April, 1974.
- Parkin, J.R., Schmidt, P.S., and Vliet, G.C., "Boiling Potassium Heat-Removal Blanket for Fusion Reactors", *Proceedings of the First Topical Conference on Technology of Controlled Nuclear Fusion*, USAEC CONF-740402, San Diego, March, 1974.
- Fruh, E.G., Schmidt, P.S., and Maguire, B., "Baseline Environmental Evaluations in Energy Systems", *Water Management in the Electric Power Industry*, CRWR Symposium Series, No.5, Austin, TX, January, 1975.
- Wong, C.P., Vliet, G.C., and Schmidt, P.S., "Analytical and Experimental Studies of Bubble Growth in Superheated Liquid Metals Under Uniform Magnetic Fields", *AIChE Symposium Series*, V.73, No.164, December, 1976.
- Wong, C.P., Vliet, G.C., and Schmidt, P.S., "Magnetic Field Effects on Bubble Growth in Boiling of Liquid Alkali Metals", *Proceedings of the Second Topical Conference on Technology of Controlled Nuclear Fusion*, ERDA CONF-760935, Richland, WA, September, 1976.
- Schmidt, P.S. and Branch, J.M., "Performance of Gas Turbines and Combined Cycles Operating on Fuels Produced by In-Situ Gasification of Lignite", *Proceedings of the Twelfth Intersociety Energy Conversion Engineering Conference*, Washington, September, 1977.
- Schmidt, P.S., "Evaluation and Improvement of Efficiency in Industrial Boilers and Process Heaters", *Proceedings of the International Conference on Management and Efficient Use of Energy*, Tucson, AZ, October, 1977.
- Urdandeta, A., and Schmidt, P.S., "Evaluation of Energy Utilization Analysis Methods for Industrial Processes", *Proceedings of the International Conference on Management and Efficient Use of Energy*, Tucson, AZ, October 1977.
- Schmidt, P.S. and Heare, J.R., "The Role of State Government in Industrial Energy Conservation", ASME Paper 78-TS-7, November, 1978.
- Schmidt, P.S., Fisher, D.B., Barr, C., "User-Oriented Software for Industrial Energy Conservation", *Proceedings of the Fourth Industrial Energy Conservation Technology Conference*, Houston, April, 1982.

- Schmidt, P.S., "The Technical and Economic Basis for Improved Industrial Productivity Through Electrification", *Proceedings of the Tenth Energy Technology Conference*, Washington, March, 1983.
- Fisher, D.G. and Schmidt, P.S., "Evaluation of Cogeneration Feasibility with a Microcomputer", D.B. Fisher and P.S. Schmidt, *Proceedings of the Fifth Industrial Energy Conservation Technology Conference*, Houston, April, 1983.
- Schmidt, P.S., "Energy Conservation and Production Cost Considerations in Industrial Electrification", *Proceedings of the Mid-Atlantic Energy Conference*, Baltimore, December, 1983.
- Bierschenk, J.M., Strohl, S.A., and Schmidt, P.S., "Microcomputer Software for Refrigerant Properties and Cycle Analysis", *Proceedings of the Seventh Industrial Energy Technology Conference*, Houston, May, 1985.
- Schmidt, P.S., "Electricity and Industrial Productivity", *Joint U.S.-Soviet Symposium on Energy Conservation*, National Academy of Sciences/Soviet Academy of Sciences, Moscow, June, 1985.
- Schmidt, P.S., "Radiant Electrothermal Technologies for the Process Industries", *Conference on Radiant Wave Electroheat*, Toronto, December, 1985.
- Bierschenk, J.M. and Schmidt, P.S., "Microcomputer Analysis of Pumping System Performance", *Proceedings of the Eighth Industrial Energy Technology Conference*, Houston, June, 1986.
- Accad, J.A. and Schmidt, P.S., "Model Studies of Evaporation Under Combined Microwave and Convective Heating", *Proceedings of the Eighth International Heat Transfer Conference*, San Francisco, August, 1986.
- Bergman, T.L., Evans, T.A., and Schmidt, P.S., "Experimental Studies of Dielectric/Convective Drying in Nonhygroscopic Porous Beds", *Proceedings of the 2nd ASME-JSME Joint Thermal Engineering Conference*, Honolulu, March, 1987.
- Schmidt, P.S. and Karp, A., "A Comprehensive Research Program for Dielectrically Enhanced Drying", *22nd Microwave Power Symposium*, Cincinnati, September, 1987.
- Schmidt, P.S., Pearce, J.A., Bergman, T.L., and Torres, V.M., "A Six Kilowatt Research System for Microwave-Enhanced Drying", *22nd Microwave Power Symposium*, Cincinnati, September, 1987.

- Pearce, J.A., Yand, S.I., and Schmidt, P.S., "A Research Program for Dielectric Heating and Drying of Industrial Materials", *Symposium on Microwaves in Materials Processing*, Materials Research Society Annual Conference, April, 1988.
- Schmidt, P.S. and Sanio, M.R., "Economics of Microwave and Radio-Frequency Materials Processing", *Symposium on Microwaves in Materials Processing*, Materials Research Society Annual Conference, April, 1988.
- Schmidt, P.S., "Electrotechnologies and Industrial Growth: Some Prospects for the Future", *2nd Canadian National Congress on Electrotechnology*, Toronto, April, 1988.
- Sanio, M.R. and Schmidt, P.S., "Capital and Operating Cost Factors in Industrial Dielectric Heating", *23rd Microwave Power Symposium*, Ottawa, Ontario, August, 1988.
- Chen, P. and Schmidt, P.S., "An Integral Model for Convective Drying of Hygroscopic and Nonhygroscopic Materials", *Proceedings of the 8th International Drying Symposium*, Paris, September, 1988.
- Chen, Peishi, Sanio, MR., and Schmidt, P.S., "Technical Evaluation of Dielectric Heating in the Drying of Hardwood Veneer", *24th Microwave Power Symposium*, Stamford, Connecticut, August, 1989.
- Sanio, M.R. and Schmidt, P.S., "A Procedure for Estimating Capital and Operating Costs of Dielectric Heating Equipment", *Proceedings of the 2nd International Conference on High Frequency/Microwave Heating and Processing*, Arnhem, The Netherlands, September, 1989.
- Chen, Peishi, Schmidt, P.S., and Sanio, M.R., "Preliminary Evaluation of Process Parameters for Dielectrically-Enhanced Drying", *Proceedings of the 2nd International Conference on High Frequency/Microwave Heating and Processing*, Arnhem, The Netherlands, September, 1989.
- Torres, V.M., Hitzfelder, J.D., and Schmidt, P.S., "Assessment of Productivity Enhancements in Pet Food Drying Using RF Heating", *Proceedings of the 2nd International Conference on High Frequency/Microwave Heating and Processing*, Arnhem, The Netherlands, September, 1989.
- Melendez, W., Flake, B.A., and Schmidt, P.S., "Process Simulation Model for Convective and Dielectrically-Enhanced Single-Zone Tunnel Dryers", *Simulation of Thermal Energy Systems*, ASME Symposium Volume H-00527, December, 1989.

- Schmidt, P.S., "Electrotechnologies and Industrial Pollution Control", *Proceedings of the 12th Industrial Energy Technology Conference*, Houston, TX, June, 1990.
- Grolmes, J.L., Schmidt, P.S., and Bergman, T.L., "Radio-Frequency Enhanced Drying of Gypsum Wallboard", *25th Microwave Power Symposium*, Denver, CO, August, 1990.
- Melendez, W., Tatsch, D.J., and Schmidt, P.S., "A Characteristic Drying Curve Principle for Dielectrically-Enhanced Drying", *25th Microwave Power Symposium*, Denver, CO, August, 1990.
- Schmidt, P.S., "Technology, Economics, and Applications of Microwave and Radio-Frequency Processing", *Proceedings of the ElecTec'90 Conference*, City of Industry California, November, 1990.
- Chen, Peishi and Schmidt, P.S., "Model for Drying of Flow-Through Beds of Granular Products with Dielectric Heating", *Transport Phenomena in Materials Processing*, ASME Symposium Volume HTD-146, December, 1990.
- Schmidt, P.S., Bergman, T.L., Pearce, J.A., and Chen, P., "Heat and Mass Transfer Considerations in Dielectrically-Enhanced Drying", *Proceedings of the 8th International Drying Symposium, Drying '92*, A.N. Mujumdar, ed. Elsevier Science Publishers, Amsterdam, 1992.
- Schmidt, P.S., "Potential Impact of Electrotechnologies on Industrial Pollution Control", *Proceedings of the Ecoworld '92 Conference*, Washington, June 14-17, 1992.
- Schmidt, P.S. and A.P. Weissenberger, "Microwave Regeneration of Adsorbents", *Proceedings of the Fourth Biennial Symposium on Microwave Processing of Materials*, Materials Research Society, San Francisco, April, 1994.
- Roy, P. and P.S. Schmidt, "Dielectric Loss Factors for Industrial Adsorbents Loaded with Volatile Organic Compounds", *Proceedings of the 31st International Microwave Power Symposium*, 1996.
- Pearce, J.A. and P.S. Schmidt, "Radio Frequency Induction Heating of Carbon-Based Adsorbents", *Proceedings of the 32nd International Microwave Power Symposium*, 1997.
- Blessing, T., J.H. Davis and P.S. Schmidt, "A Microwave Applicator for Rapid Drying of Moving Webs with Close Capture of Volatile Organic Compounds", *Proceedings of the 32nd International Microwave Power Symposium*, 1997.

- Ezekoye, O.A., C.D. Lowman and P.S. Schmidt, "A Simple Phenomenological Analysis of Polyethylene Weld Strength", *Proceedings of the National Heat Transfer Conference*, 1997.
- Salinas, M.J., D.W. Price and P.S. Schmidt, "VOC Recovery Using Microwave Regeneration of Adsorbents: Pilot Column Studies", Paper 99-356, 92nd Annual Conference of the Air and Waste Management Association, St. Louis, June 21-23, 1999.
- Baker, D., O. Ezekoye, P.S. Schmidt, C. Jones and M. Liu, "ThermoNet: A Web-Based Learning Resource for Engineering Thermodynamics", Proceedings of the 2000 Annual Conference of the American Society for Engineering Education, St. Louis, MO, June 21, 2000
- Barr, R.E., P.S. Schmidt, T.J. Krueger and C.Y. Twu, "An Introduction to Engineering Through an Integrated Reverse Engineering and Design Graphics Project", Proceedings of the 2000 Annual Conference of the American Society for Engineering Education, St. Louis, MO, June 21, 2000
- Schmidt, P. S. and J.J. Beaman, "PROCEED: A Department-Wide Curriculum Reform Initiative in Project-Centered Education", Proceedings of the 2003 Annual Conference of the American Society for Engineering Education, Nashville, TN, June 2003.
- Schmidt, P. S, J. Jones, G.C. Vliet, and T.L. Jones, "A Project-Centered Approach to Teaching of Thermal-Fluid Systems Analysis and Design", Proceedings of the 2003 Annual Conference of the American Society for Engineering Education, Nashville, TN, June 2003.
- Schmidt, P. S. and J.J. Beaman, "Managing a Major Curriculum Reform Effort in a Large Research University", Proceedings of the 2003 International Mechanical Engineering Congress and Exhibition, ASME Paper IMECE2003-43515, November 2003.
- Schmidt, P. S. and T.L. Jones, "Automated Outcomes-Based Assessment Process for Traditional and Project-Based Engineering Instruction", Proceedings of the 2004 International Mechanical Engineering Congress and Exhibition, ASME Paper IMECE2004-60947, November 2004.

C. Other Major Publications

- Voltin, M.J. and Schmidt, P.S., "Fuel Conservation Implications of the Breeder Reactor", *Mechanical Engineering*, V.98, No.3, March, 1976.

- Schmidt, P.S. and Berman, I., "Fuel-Cells and Coal-Derived Fuels", *Power Engineering*, V.84, No.10, October, 1980.
- Schmidt, P.S., "Microcomputers in Energy Management: Parts I & II", *Chemical Engineering*, June and July, 1982.
- Schmidt, P.S. and Fisher, D.B., "Checklist for Evaluating Microcomputer Software", *Power*, August, 1983.
- Schmidt, P.S. and Fisher, D.B., "Shopping for Software", *Public Power*, September, 1983.
- Schmidt, P.S. and Williams, M.A., "Evaluating Microcomputer Software for Engineering Applications", *Plant Engineering*, V.38, No.10, April, 1984.
- Schmidt, P.S. and Williams, M.A., "Analysis of In-Plant Cogeneration Using a Microcomputer", *Turbomachinery International*, May, 1984.
- Sanio, M.R. and Schmidt, P.S., "Costs for Industrial Dielectric Heating", *Sprechsaal: International Ceramics and Glass Magazine*, V.123, No.3, 1990.
- Sanio, M.R. and Schmidt, P.S., "Costs for Industrial Dielectric Heating", *Werkstoffe & Konstruktion*, V.4, No.1, 1990.
- "Great Teaching in a Great University", *Discovery*, V.14, No.4, pp. 22-24, 1997.
- "Recovery of VOC's by Microwave Regeneration of Adsorbents", Proceedings of the EPA/DOE Workshop on VOC Recovery, Cincinnati, Sept. 16-17, 1998. EPA/625/R-99/005, pp. 27-29, July 1999.
- "Neoelectrification: New Directions in Industrial Energy Use at the Millenium", invited paper, 3rd Quadrennial Forum of the International Electric Research Exchange, Kobe, Japan, April 19-22, 1999.

D. Books/Book Chapters Authored/Co-authored, Edited/Co-edited

- P.S. Schmidt, *Industrial Energy Conservation Technology: Proceedings of the First National Conference*, Ed., Texas Industrial Commission, Austin, 1979.
- P.S. Schmidt and M.A. Williams, *Industrial Energy Conservation Technology: Proceedings of the Second National Conference*, Eds., Texas Industrial Commission, Austin, 1980.

- P.S. Schmidt, "Energy Conservation in Steam and Condensate Systems", in *The Energy Management Handbook*, pp. 164-202, W. Turner, Ed., John Wiley & Sons, New York, 1982.
- P.S. Schmidt, "The Form Value of Electricity: Some Observations and Cases", in *Electricity Use, Productive Efficiency, and Economic Growth*, S.H. Schurr and S. Sonnenblum, Eds., Electric Power Research Institute, Palo Alto, 1986.
- P.S. Schmidt, *Electricity and Industrial Productivity: A Technical and Economic Perspective*, Pergamon Press, New York and London, 1984.
- P.S. Schmidt, L.C. Witte, and D.R. Brown, *Industrial Energy Management and Utilization*, Hemisphere, New York, 1987.
- P.S. Schmidt, F.T. Sparrow, J.H. Vanston and J. W. Zarnikau, *Industrial Electrification in the Information Age*, Edison Electric Institute, Washington, 1994.
- P.S. Schmidt and P. Chen, "Mathematical Modeling of Dielectrically-Enhanced Drying" *Mathematical Modeling and Numerical Techniques in Drying Technology*, pp. 439-480, I. Turner and A.S. Mujumdar, Eds., Marcel Dekker, 1997.
- P.S. Schmidt, "Steam and Condensate Systems", in *Energy Management Handbook, 4th Ed.*, Wayne C. Turner, Ed., Fairmont Press, 2001
- P. Schmidt, O. Ezekoye, J. Howell, D. Baker, Moran, M.J., H.N. Shapiro, *Fundamentals of Engineering Thermodynamics, Web Edition*, John Wiley Publishers, 2001.
- P. Schmidt, J. Howell, Ezekoye, D. Baker, *Thermodynamics: An Integrated Learning System*, John Wiley and Sons, New York, 2006. ISBN # 0-471-14343-X
- P. Schmidt, J. Howell, Ezekoye, D. Baker, *ThermoNet: Web Site to Accompany Thermodynamics: An Integrated Learning System*, John Wiley and Sons, New York, 2006. URL: <http://www.wiley.com/college/schmidt> . (Accessible by password only. Contact author for information.)

PATENTS:

- "Ground Effect Machine", U.S. Patent 3,261,420, assigned to Bell Aerospace Corporation, Wheatfield, N.Y. Aerodynamic device for the stabilization and control of air-cushion vehicles.

"Method and Apparatus for Rapid Drying of Coated Materials with Close Capture of Vapors", U.S. Patents No. 6,207, 941 and 6,323,470, issued March 27, 2001 and November 27, 2001 respectively (with J. Davis and T. Blessing).