

ENERGY SYMPOSIUM

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Pittsburgh Section, American Chemical Society

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Drake Well Museum

Petroleum History Institute

BIOMASS ENERGY TECHNOLOGY FOR PENNSYLVANIA

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ABSTRACT: The reopening of the Drake Well Museum comes at a time when changes and choices seem to be in process for energy companies and customers in Pennsylvania. Biomass energy technologies are among the options that could be especially important for energy in the state. This brief outline on the biomass option addresses biomass resources, uses/consumption of biomass energy and the following technologies: energy crops, biomass combustion, co-firing with coal, co-firing with natural gas, gasification, biogas, and automotive fuels from biomass. On each of these we describe what it is, what issues are important and what are the plusses and minuses of the technology.

ABOUT THE AUTHOR: Dr. Hughes is a consultant on utilization of biomass technology for power, heat, gaseous and liquid fuels, as well as geothermal technology. From 1990 to 2003 he was Manager, Biomass Energy at the Electric Power Research Institute (EPRI), Palo Alto, CA. Dr. Hughes earned his B.S., M.S., and Ph.D. degrees in physics from California Institute of Technology, Pasadena, CA.