## PAUL J. STURMAN, Ph.D., P.E.

Industrial Coordinator/ Research Professor, Center for Biofilm Engineering Montana State University, Bozeman, MT, 59717 (406) 994-2102; FAX (406) 994-6098, E-mail: paul s@montana.edu

#### HIGHEST DEGREE:

Ph.D. Environmental Engineering, Montana State University, 2004

## PROFESSIONAL REGISTRATION:

Registered Professional Engineer, Montana, #10536PE

# PROFESSIONAL EXPERIENCE:

Industrial Coordinator/Research Professor, Center for Biofilm Engineering, Bozeman, MT, 2000-Research Engineer, Center for Biofilm Engineering, Bozeman, MT, 1995-1999 Environmental Engineer, Matney-Frantz Engineering, Bozeman, MT, 1990-1995

#### AREAS OF EXPERTISE:

#### Technical:

- Biofilm assessment and control in industrial and potable water systems
- Development of testing protocols for assessing the efficacy antimicrobial products and surfaces
- Engineered systems for microbial process control
- Control of microbial souring of oil in pipelines and subsurface formations
- Biodegradation of organic chemicals in soil and groundwater

## **Technology Transfer:**

- Communication of biotechnology research advances with industry and government
- Organization of bi-annual technical meetings for Engineering Research Center Industrial Associates
- Organization and presentation of biofilm analytical methods workshops for industry and academic researchers and strategic planning workshops for industrial partners

### MEMBERSHIP IN PROFESSIONAL SOCIETIES

Parenternal Drug Association Society of Petroleum Engineers Society of Industrial Microbiology

#### **SELECTED PUBLICATIONS:**

Kaatz-Wahlen, L, A. Parker, D. Walker, M. Pasmore and P. Sturman. 2016. Predictive modeling for hot water inactivation of planktonic and biofilm-associated *Sphingomonas parapaucimobilis* to support hot water sanitization programs. Biofouling 32:7, 751-761.

Sturman, P.J. 2012. Biofilm Control in Industrial Water Systems. In: *Biofilm Control in Drug Manufacturing*. Ed: Clontz L and Wagner C. PDA DHI Technical Books. October 2012.

Sturman, P.J., O.R. Stein, J. Vymazal and L. Kröpfelová. 2008. Sulfur Cycling in Sub-Surface Constructed Wetlands. Chapter 29 <u>Wastewater Treatment, Plant Dynamics and Management in Constructed and Natural Wetlands</u>. Vymazal, J. (ed.) pp. 329-344. Springer, Dordrecht.

Kjellerup, B.V., R.H. Veeh, P. Sumithraratne, T.R. Thomsen, K. Buckingham-Meyer, B. Frolund, and P.J. Sturman. "Monitoring of Microbial Souring in Chemically Treated Produced Water Biofilm Systems Using Molecular Techniques. Journal of Industrial Microbiology and Biotechnology. 32:4, pp 163-170. 2005

Sanders, P.F. and P.J. Sturman. "Biofouling in the Oil Industry", invited chapter, <u>Petroleum Microbiology</u>, American Society for Microbiology (ASM) Press, Washington D.C. 2005.