# Hydromantis

Environmental Software Solutions, Inc.

# **Specialized Expertise**

Hydromantis staff are experienced in a wide range of project activities. Our commitment is to provide our clients with senior engineering expertise and support. We stay abreast of the latest developments in the industry, allowing us to provide our clients with the most appropriate solutions to meet their environmental needs. Extensive experience has been accumulated by Hydromantis staff in the area of process evaluation, optimization, planning, pre-design and detailed design and construction management of:

- Physical, chemical and biological treatment systems
- Industrial wastewater treatment systems from a wide range of industries
- Process water treatment systems

We have experience with all major types of water and wastewater processes for environmental control.



#### Process Expertise

- Physical
- Chemical
- Mechanical
- Biological
- Tertiary
- Hydraulics
- Biosolids Treatment/Disposal
- Energy Management

Our work is solutions oriented. This is demonstrated by developing quality solutions for our clients that are cost effective and innovative.

We maintain the same approach for all of our clients - large and small - and tailor our services to meet our clients' technical, financial, and administrative needs.





Expert Water & Wastewater Treatment Modeling Software & Services

www.hydromantis.com

## **Engineering Experience**

#### Rajeev Goel, Ph.D., P.Eng., P.E.

#### Education

Ph.D. (Environmental Engineering), University of Tokyo (1997), Tokyo, Japan

Master of Engineering (Environmental Engineering), Asian Institute of Technology (1994), Bangkok, Thailand

Bachelor of Engineering (Civil Engineering), Birla Institute of Technology and Science (1987), Pilani, Rajasthan, India

#### Experience

Over 25 years of experience in the field of water and wastewater engineering with focus on application and development of modeling and simulation tools. Rajeev has extensive experience with conventional activated sludge processes, biological nutrient removal processes, and anaerobic treatment technologies.

#### Spencer D. Snowling, Ph.D, P.Eng.

#### Education

Ph.D, McMaster University, Hamilton, Ontario, Canada

Bachelor of Engineering Management, McMaster University, Hamilton, Ontario, Canada

#### Experience

Over 18 years of environmental modelling experience, including 15 years of advanced wastewater model development and application experience. Spencer oversees development of Hydromantis' flagship wastewater simulator, GPS-X, and has extensive experience applying simulation technology for process design, optimization and training.

### **Process Simulation Services**

Hydromantis provides the following simulation services for wastewater treatment design and optimization:

- Beta-testing new system designs
- Identifying bottlenecks in existing systems
- Plant capacity analysis (overall plant capacity and/or specific unit processes)
- Troubleshooting process problems
- PID Controller design and analysis
- Energy usage analysis and optimization
- Dynamic event analysis (wet weather, toxic spill, etc.)
- Chemical dosage control optimization
- Training simulators for operators



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Hydromantis offers expert consulting for treatment plant modelling, design and optimization and is the developer and owner of the industry's most popular modelling and simulation software including: GPS-X, Toxchem, CapdetWorks and WatPro.

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