



## **Dr. Riad Al-Samadi, P.Eng.**

Chief Executive Officer

Dr. Riad Al-Samadi is a Water Technology Specialist and owner of Advanced Water Solutions Inc. (AWS), an advanced water purification company registered in Ontario, Canada since 1999.

Riad started his career as a Senior Engineer with Xytel Corporation designing high tech research systems for water and hydrocarbon processing. He then joined ICI Canada (Chemetics Acid Technology Division) where he worked for 7 years as a Senior Process Development Specialist. Dr. Al-Samadi pioneered significant improvements in the design of acid absorption towers and developed and patented high temperature MMA waste acid and titanium dioxide waste acid recovery processes. The latter was demonstrated on a large scale at the Tioxide Canada plant in Montreal.

Riad then joined ZENON Environmental Systems (now Suez Water Technologies) for 8 years, specializing in the design and development of RO, NF and MF membrane processes for water purification and wastewater treatment. He continued applying his advanced water technology expertise while working as a Senior Water Technology Consultant with Hatch Associates, solving mining and metallurgical plant water problems, performing environmental assessments for copper smelters and promoting water conservation and water recycling technologies in Chile, South Africa and Europe. Over the past few years, Riad has also been consulting full time with Ontario Power Generation Inc. in Toronto, Canada where he is providing technical leadership in support of the nuclear power stations' advanced high purity demineralized water plants, radioactive liquid waste, stator cooling water systems and spent nuclear fuel pool chemistry and operations. Dr. Al-Samadi represented Canada as an international Cooperation Expert at the IAEA conference in Slovenia on spent nuclear fuel water chemistry in 2009.

Riad continues to advance membrane technologies, focusing on water reuse, membrane concentrate recovery and waste minimization in industrial service water applications, radioactive waste processing, municipal and industrial reclaimed water, uranium ISR recovery, brackish water desalination and drinking water production. Dr. Al-Samadi has eight granted U.S. patents, one Canadian patent, two Chinese patents, one Mexican patent, one Singapore patent, as well as three registered U.S. Trademarks.

Dr. Al-Samadi holds B.Sc, M.Sc. and Ph.D. in Chemical Engineering from the University of Bath, England. He is a fully licensed Professional Engineer in the Province of Ontario and Saskatchewan, Canada.