



## AGAT LABORATORIES' EXCEPTIONAL GROWTH: New Facility Acquisitions

The new facility is located at 5835 Coopers Avenue, just a few blocks east of the existing labs at the strategic intersection of HWY 401 & HWY 410.

Some of the features this newest technology centre will boast are:

- Expanded instrumentation for both Organics and Inorganics testing.
- Classrooms incorporating most recent audio visual technologies for client seminars and employee training.
- Dedicated sample reception with client lounge to service after hours drop-offs.
- Private after hours drop off lockers.

AGAT Laboratories' growth in Ontario has contributed to the need for a new facility addition to our current facilities in Mississauga, Ontario. We recently acquired a third facility in Mississauga, adjacent to our other two laboratories. The soon to be completed 47,000 square foot lab will house the Company's expanded Ontario environmental laboratories and bring AGAT's total lab capacity in Mississauga to 75,000 square feet in three locations. This newest addition along with the associated technology investments continues to demonstrate our company's commitment to meeting the needs of the local Ontario marketplace. In addition to these locations, AGAT continues to expand its branch network throughout Ontario with branch offices in Kitchener, London, and Hamilton.

Construction on this new state-of-the-art environmental laboratory is well under way and is scheduled to be operational in late 2007 or early 2008.

Over the next few months AGAT will complete the process of adding on to our new facility and installing new benching and instruments, essentially tripling existing capacity in Ontario. Our newest laboratory will ensure clients continue to receive services using the most current technology available in the marketplace.

"Our transition into past growth initiatives has gone very smoothly," says Marcus Maguire, Senior Vice President of AGAT Laboratories. "The new lab will provide us with new space and more of the same technologies that Ontario clients have become accustomed to seeing from AGAT."

With new labs in Ontario, Quebec and the Maritimes, and our established operations in the west, AGAT has positioned itself to be a truly National Canadian laboratory for the delivery of Environmental Chemistry services





## Montréal obtient **Accréditation.**

AGAT Laboratories is very pleased to announce their newest location in Montreal, Quebec has been awarded ISO 17025 accreditation by the Ministère du Développement durable, de l'Environnement et des Parcs (MDDEP). With its accreditation, AGAT Laboratoires Ltée is qualified to perform a broad range of environmental analyses for clients in Quebec.

Located on the TransCanada (Autoroute 40) adjacent to St. Laurent's expanding Technoparc (the heart of Québec's laboratory industry), this new facility will provide a strong presence and base to serve for the expansion of AGAT's laboratory services in Quebec. AGAT's operations in Montreal are headed by Philippe Morneau who joined AGAT's Ontario operation in 2000 after working in the analytical research and private laboratory industries for many years. His background was key to the successful start up of AGAT's Mississauga laboratory in early 2000. Philippe, who is very excited about the opportunity of returning to his native Montreal to lead AGAT's expansion in Quebec, is quick to recognize the accomplishments of the staff involved in this recent undertaking. "We have finally achieved our objective of full accreditation. A great deal of credit goes out to our staff in Quebec but also to our staff across the country who supported us in this ambitious venture."

Philippe also commented that setting up the lab and obtaining accreditation could only have succeeded with the leadership of excellent AGAT staff who have many years of environmental lab industry experience in the Province of Quebec. "Their experience, knowledge and dedication made the difference," he said. Among this group are France de Brienne - Organic Laboratory Manager, Sandra Lalli - Inorganic Laboratory Manager, Wendy Iagallo - Client Services Manager and Regis Castaing - Quality Assurance Manager.

## Dioxins & furans: **Ultra-traces HRMS**



This is a very exciting time for AGAT, as we enter the expanding market of Ultra-trace Chemistry; which can easily be dovetailed into Ultra-Trace analysis of PAHs and Polybrominated Diphenylethers (PBDPE)

### What are Dioxins and Furans?

PCDD/DF's are a family of compounds that make up 217 geometric isomers called congeners. These compounds do not occur in nature, and are not intentionally produced, but are the bi-products of chemical processes such as municipal waste incineration, smelting processes, and the preparation of polyvinyl chloride (PVC) plastics. PCDD/DF's are very resistant to chemical degradation and have a half-life of approximately 7 years. They are released during the above-mentioned processes into the atmosphere, and subsequently enter the waste cycle, and hence the food chain.

Dioxins and Furans are also very lipid soluble, and bio-accumulate. While all PCDD's and PCDF's are toxic to some degree, the most toxic is 2,3,7,8- Tetrachloro-p-dioxin. This compound is the most toxic chemical known to man. The actual mechanism of its toxicity is at present unknown, but is believed to be linked to the positions of the attached chlorine atoms in the 2,3,7,8, positions.

Of the 217 possible congeners, there are only 17 congeners that have chlorine in the 2,3,7,8 positions and these are thought to be the most toxic. Dioxin and Furan exposure can cause a host of adverse health effects such as:

- Immune system degradation/failure
- Nervous system degradation/failure
- Birth Defects
- Chloracne (a skin condition that causes terrible scarring)
- Cancer

AGAT is expanding its scope of analyses to include Polychlorinated Dibenzodioxins (PCDD) and Polychlorinated dibenzofurans (PCDF).

article continued on page 3 ▼

# employee spotlight...



■ **Jacky Takeuchi**  
Laboratory Manager  
Mississauga

Jacky graduated from Queen's University, in Kingston, Ontario with an Honours degree in Chemical Engineering and a degree in Biology. Jacky's past employment includes several years at the National Water Research Institute working on the development of new methods and working at Grace Dearborn for 6 years where she set-up the trace organics lab for the Bioremediation group. She also worked at Enviroclean for 5 years where she progressed from Junior Chemist to Trace Organics Supervisor.

In 2000 she joined AGAT Laboratories as a Senior Chemist for the Trace Organics lab then within a year she was promoted to Laboratory Manager. In the start up of AGAT's facility in Mississauga, Jacky was instrumental in setting up the Organic and Inorganic labs. In her role as Laboratory Manager, Jacky ensures the stringent needs of our clients are always met.

With over 20 years of environmental laboratory experience in both Inorganic and Organic streams, Jacky is one of the most skilled and experienced environmental chemists in Canada.



■ **Wendy Iagallo**  
Client Services  
and Logistics Manager  
Montréal

Wendy graduated from McGill University in 1996 with a Bachelors of Science Degree in Environmental Biology. After beginning her career in the environmental laboratory field as an Ecotoxicology Technician, Wendy moved into the position of Client Project Manager in 1998, where she responded to various client needs from file follow-up for specific accounts to preparing quotes and contract negotiation. In March 2007 Wendy joined the AGAT team in Montreal and has been busy organizing the workflow, including sample login, sample preparation, data reporting, and client calls. With her past experience dealing with a variety of client's, Wendy will be a strong positive addition to AGAT and our many Quebec environmental clients.

Visit us at  
[www.agatlabs.com](http://www.agatlabs.com)

Service Beyond Analysis

*Dioxines and Furans • article continued from page 2*

## How Can we Detect That Small an Amount?

Dioxins and Furans are analyzed by use of High Resolution Gas Chromatography/Mass Spectrometry. AGAT currently possesses the Waters/Micromass Autospec Premier HRGC/MS. This instrument is the flagship of the Waters instrument line, and possesses unprecedented resolving power and detection limits. The Autospec Premier uses magnetic sector double focusing technology. The ion beam is focused after it leaves the source and before it enters the magnetic field. It is then analyzed and re-focused before it enters the detector. This process affords resolving power up to 50,000 60,000. This means that this instrument can accurately resolve a molecule with a molecular weight of 50,000 amu from another molecule having a molecular weight of 50 001 amu. We can accurately detect concentrations of 80 pg/L (ppq).

For more information about Dioxins and Furans, please contact Jennifer Ross at 403.735.2005.

