

# Agricultural Chemistry Department Profile



Report to Stakeholders

October 2010

## About the LSU AgCenter

The LSU AgCenter is dedicated to providing innovative research, information and education to improve people's lives. Working in a unique statewide network of parish extension offices, research stations and academic departments, the LSU AgCenter helps Louisiana citizens make the best use of natural resources, protect the environment, enhance agricultural enterprises and develop human and community resources.



## Agricultural Chemistry

**Address:** Rm 102  
Highland Road  
LSU campus  
**Phone:** 225-342-5812  
**Fax:** 225-342-0027

**Website:**  
LSUAgCenter.com/  
departments/Ag\_Chemistry

**Office Hours:**  
7:30 a.m. - 5:00 p.m.  
Monday-Friday

**Mark LeBlanc, Ph.D.**  
Department Head  
MLeBlanc@agcenter.lsu.edu

**Research Focus:**  
Researchers within the LSU AgCenter utilize the AgChemistry Department for analytical services required by their research projects.

**Regulatory Focus:**  
AgChemistry is the official laboratory responsible for analyzing agricultural chemicals and other farm input components.

**Extension Focus:**  
The Agricultural Chemistry Department provides analytical support for extension personnel of the LSU AgCenter.

## Highlights



The Agricultural Chemistry Department provides analytical chemistry support to the research and extension efforts of the LSU AgCenter. Analyses are performed on plant and animal tissues, soil, water, feeds, fertilizers, pesticides agricultural chemicals and agricultural commodities. The laboratory will analyze these sample types for the general public for a fee. In addition, AgChemistry provides regulatory monitoring of animal feeds, pet foods, plant food and agriculture liming materials for the Louisiana Department of Agriculture and Forestry.

### Research Highlights

Researchers within the LSU AgCenter utilize the AgChemistry analytical capabilities to perform tests for protein, fat and fiber in feeds, nutrients and metals in water, chemical residue matrices, antibiotic use in feeds, PCBs in marine mammals, melamine in feeds and for other studies. Laboratory equipment available within the AgChemistry unit include state of the art multiple gas and liquid chromatographs, ICP and tandem mass spectrometers.

### Regulatory Highlights

AgChemistry is the analytical laboratory for the Division of Pesticide and Environmental Programs of the Louisiana

Department of Agriculture and Forestry and is responsible for analyzing agricultural chemicals and other farm input components as part of the regulatory enforcement of pesticides, feed, pet foods, fertilizers, limes and for the meat inspection program for the state of Louisiana. Analyses are performed on plant and animal tissues, soil, water, feeds, pet foods, fertilizers, pesticide formulations, marketplace samples of pesticides, structural mixes, agricultural chemicals, agricultural commodities, water monitoring, disinfectants, damage complaints, veterinary pharmaceuticals and meat and seafood products. The AgChemistry Laboratory is a member of the Food Emergency Response Network (FERN).

### Extension Highlights

AgChemistry provides analytical support for LSU AgCenter extension personnel and the general public for a fee. Tours of the facility for classes and professional groups are available on appointment.



## Significance of Programs

The regulatory, research and extension work done by Ag Chemistry Department includes analyses of over 10,000 samples per year. In addition, Louisiana consumers are assured quality product purchases with registration and review of product labels on feeds, pet foods, fertilizer and agricultural liming products. The Department also provides analytical support for the Food Emergency Response Network (FERN), the Environmental Protection Agency (EPA) and the United States Department of Agriculture (USDA).

## AgChemistry Department Facts

- Building: 53,000 square feet
- Employees: 21
- Inorganic samples
  - Feed
  - Liquid Fertilizer
  - Dry Fertilizer
  - Research
  - Miscellaneous
- Organic samples
  - Residue
  - Formulations
- Research Samples
  - Water
  - Feed
  - Fertilizer
  - Chemical residue
  - Plant tissue

## Future Plans

In 2009, the AgChemistry Laboratory was accepted into FERN laboratory system. This endeavor allowed AgChemistry to enter into a cooperative agreement with the USDA FSIS which will provide an exciting future for expansion of laboratory work and research dynamics for the LSU AgCenter. The addition of new types



of analytic chemistry equipment will allow researchers to seek answers using chemical and microbiological methodologies previously unavailable. Additional cooperative agreements are expected with this association.

## LSU AgCenter Departments and Schools

Maximizing the potential for the state's agricultural industries and improving the quality of life for all Louisiana citizens are the major initiatives of the LSU AgCenter.

To achieve its mission of serving the people of Louisiana and providing them with the latest research-based information on a vast variety of topics, the LSU AgCenter operates 11 academic departments/schools in Baton Rouge in conjunction with the LSU College of Agriculture. In addition, four other specialized departments also contribute to the mission. These 15 units are an integral part of the LSU AgCenter's research and outreach activities.

Faculty members in the LSU AgCenter's on-campus units are involved in a variety of efforts, including research, classroom teaching and extension education. They cover topics ranging from agricultural economics to human ecology and from entomology to experimental statistics.

The LSU AgCenter has the most successful record of commercialization of intellectual property in the LSU System. Since 2000, nine new companies have been started based on licensed technology from LSU AgCenter. The income is distributed among the LSU System, the inventors and more research.



For the latest research-based information on just about anything, visit our website: [LSUAgCenter.com](http://LSUAgCenter.com)

Visit our website: [LSUAgCenter.com](http://LSUAgCenter.com)

Louisiana State University Agricultural Center: William B. Richardson, Chancellor. Louisiana Agricultural Experiment Station: David Boethel, Vice Chancellor and Director. Louisiana Cooperative Extension Service: Paul D. Coreil, Vice Chancellor and Director. The LSU AgCenter provides equal opportunities in programs and employment.