

# Alltech Young Scientist Areas of Interest for Research Papers

# **Animal Feeding Strategies and Modeling**

Nutritional solutions and feeding strategies aimed at improving production, health and fertility of livestock, aquaculture, and companion animals are important to the world-wide agriculture industry. We seek submissions that identify and apply technology to improve animal production capability and efficiency while ensuring health and fertility are optimized. Nutritional solutions, production techniques, vitamins and trace mineral requirements, *in vitro* and computer modeling, and related topics will be considered.

# **Crop Science**

Plant and soil health research showcases the agronomic and environmental benefits of modern crop production, with the overall goal to provide sustainable solutions to the key issues faced on farm in modern crop production systems. From citrus fruit in Florida, rice in China, tea in Sri Lanka, grass production and conservation, and grain and forage production, research into the environmental benefits of crop-specific products, addressing pathogens affecting yield, nutrient availability, soil microbes, and related topics are sought.





### **Analytical Methods**

Robust analytical techniques are key to establishing appropriate quality control and regulatory standards within the agriculture industry. For example, such techniques are used for responding to product consistency with inorganic and organic minerals, and mycotoxin related matters. Research papers may be submitted relating to techniques for quality and regulatory standards in food and feed, rapid detection of contaminants or toxins, as well as optimizing methods for detecting toxins in feed or food materials, or other analytical method development. Nutrigenomics as a technique for nutritional supplementation evaluation will also be considered.

### **Food Chain Safety and Traceability**

This area focuses on the detection, risk evaluation and remediation of toxic contaminants and mycotoxin problems in animal feeds and in the human food chain. Research into detection methods, risk evaluation and remediation strategies for food and feed contaminants will be considered. Tracking and working with large sets of data to determine trends and developments in the food chain may also be included.

### **Human Health and Nutrition**

The objective of research in this area is to identify technologies and their applications that can be used to enhance human health and welfare via improved nutritional strategies, the use of functional foods or supplements and the prevention or mitigation of disease.





### Other

The science of the agriculture industry is vast. While broad topics have been identified above, we acknowledge students around the world are studying a variety of other agriscience topics. Paper submissions related to the agriculture industry, food production and nutrition will be considered. If you are uncertain if your paper meets these criteria, please email <a href="mailto:youngscientist@alltech.com">youngscientist@alltech.com</a>.

