University of Waterloo Department of Chemical Engineering

Friday, June 21, 2013, 2:00pm – 3:00pm, Room: QNC 1501 Coffee and Donuts served at 1:45pm

Seminar 1: "Braskem Initiative on Renewable Technologies – Goals and Strategy"

Selma Barbosa Jaconis

Technology Specialist, Renewable Technologies, Braskem S.A.

Abstract: Braskem is one of the most important Brazilian chemical and petrochemical companies. It is the largest producer of thermoplastic resins in the Americas and the eight-largest in the world. Its production is focused on thermoplastic resins (PE, PP, PVC) and basic chemicals. Braskem believes that it is necessary to find new ways to prioritize the responsible use of materials, eco-efficient operations and products, and diversified raw materials. Braskem is the world leader in biopolymers because of its Green Polyethylene (Green-PE), which is produced from sugarcane ethanol on a 200kton/year commercial scale plant since September 2010. Awarded and recognized worldwide, Braskem's Green PE captures up to 2.5 metric tons of CO₂ from the atmosphere for each ton of polymer produced. Along these lines, Braskem has intensified its research efforts in renewable chemicals and products. This seminar will discuss Braskem's approach to monitor the technological trajectories of this new type of bio-based industry in the short, medium and long-term. The roadmap tool is used to evaluate the competitiveness of novel technologies and their impact on the marketplace.

Short Bio: Selma B. Jaconis has 24 years of industrial experience in both public and private sectors for companies and research institutions in Brazil, working as a Researcher at the R&D Center Pirelli Cables, as Head of the Laboratory of Plastics and Rubber - Division of Chemistry at the Institute for Technological Research (IPT) for the State of São Paulo, as Senior Researcher at Suzano Petrochemical and nowadays as Technology Specialist at Braskem S.A. corporate office. She is responsible for evaluating renewable technologies and for creating a roadmap in order to look for new opportunities and challenges in green chemistry. She holds degrees in Chemical Engineering, MASc and MBA. She is also currently enrolled in the part-time PhD program.

Seminar 2: "Green Chemistry and Renewable Feedstock"

Mariana Doria

Technical Advisor for Regulatory Affairs, Brazilian Chemical Industry Association

Abstract: The Brazilian Chemical Industry Association (ABIQUIM) is a nonprofit organization that brings together about 170 different-size chemical companies and service providers to the chemical industry. Its mission is to increase the competitiveness and the sustainable development of the chemical industry in Brazil. The association performs statistical monitoring of the sector, promotes specific studies regarding sector activities and products, monitors regulatory changes and advises companies on technical, economic and foreign trade issues. It also promotes funding for innovation and technological sustainable development. Since 1978 ABIQUIM has a Technology Committee to promote innovation leading to increased competitiveness in the chemical sector. This seminar will discuss topics relevant to innovation in green chemistry and renewable feedstock.

Short Biography: Dr. Mariana Doria is an expert in industrial development. She has a degree in Chemical Engineering from the Federal University of Rio de Janeiro, Brazil, and a PhD in Economics and Management from the University of Trento, Italy. Her thesis "Innovation and Regulation in the Chemical Industry: The Case of the European Union, 1976 - 2003" analyzed the relationship between regulation and technological development in the chemical sector. She has seven years of experience working on regulatory analysis, industrial innovation, and regional sustainable development. She is currently the Executive-Coordinator of Abiquim's Technology Committee.