### Schedule of the course:

### Sunday, September 26, 2010

**6:00PM** Registration, Hilton Hotel Conference Center

**6:30 PM** Welcome Introduction and Announcements - Mian N. Riaz

7:00 PM Social/Mixer with Cash Bar, Hilton (optional)

# Monday, September 27, 2010

**7:40 AM** Bus leaves hotel to Rudder Tower, Texas A&M University

8:00 AM "Introduction to Extrusion" - Mian N. Riaz

**9:00 AM** "Material Handling: Scalping, Magnetic Protection, Product Conveyance, Dust Control, Weighing, Mixing, Coating, Material Flow & Distribution, Hybrid Batching" and "Slipform Construction" - Gerald M. Leukam

**10:30AM** Break

10:45AM "Material Handling": Continued - Gerald M. Leukam

11:45AM Group Photo

**12:00PM** Lunch

**1:00 PM** "Principles of Dry Extrusion and Its Application in Aquatic Feed and Pet Food" - Hennie Pieterse

1:45 PM "Dry Extrusion of Full Fat Soy and Partially Defatted Soybean Meal" - Nabil W. Said

2:30 PM Break

2:45 PM "An Overview of Soy in Aquaculture Diets" - Michael Cremer

3:30 PM "Other Commercial Applications of Dry Extrusion" - Nabil W. Said

**4:15 PM** Bus Leaves for FPRDC for Multiple Demonstrations:

- "Full Fat Soy Using Whole Soybeans with a Dry Extruder" Chris Mack
- "Full Fat Soy Using Dehulled Soybeans with a Dry Extruder " Chris Mack
- "Fisheries By-Products Recycling with a Dry Extruder" Chris Mack

#### Tuesday, September 28, 2010

**7:40 AM** Bus Leaves Hotel for Rudder Tower, Texas A&M University

8:00 AM "Principles of Aquaculture Nutrition - Part 1" - Delbert Gatlin

9:15 AM "Optimizing Aqua Feed Quality: Oxidation Control, Microbial Growth Control, and

### Palatability" - Jim Mann

- **10:15AM** Break
- 10:30AM "Continuous Spray and Coating Systems" Dave Mattice
- **11:15AM** "Solutions to Common Grinding Problems" Chad Cook
- 12:00 PM Lunch
- **1:00 PM** "Commercial Vitamin Product Forms, Vitamin Premixes and Their Performance in Aquatic Feed" Donnie Campbell
- 2:00 PM "Ultra Fine Grinding for Aquatic Feed" Phil Erickson
- 2:30 PM Break
- 2:45 PM "Characteristics and Applications of Interrupted Flight Expanders" Moe Williams
- **3:30 PM** "Processing of Full Fat Soy Products, Pet Foods, and Aquaculture Feeds Using Interrupted Flight Exapnders" Moe Williams
- **4:00 PM** Bus Leaves for Riverside Campus for Multiple Demonstrations:
  - "Full Fat Soy Using Interrupted Flight Expander" Moe Williams and Chris Mack
  - "Surface Coating Systems for Aquaculture Feed" Terry Stemler
  - "Aquatic Feed Using Interrupted Flight Expander" Moe Williams and Chris Mack

### Wednesday, September 29, 2010

- 7:40 AM Bus Leaves Hotel for Rudder Tower, Texas A&M University
- **8:00 AM** "Detour to FPRDC to inspect Single and Twin-Screw Extruders" Cater-Mattil Hall, Wenger Associates
- **8:45AM** "Ingredients and Recipe Considerations " Galen Rokey
- 9:45 AM Break
- **10:00AM** "Preconditioning Technology " Gerry Hertzel
- **10:45AM** "Single and Twin Screw Extruders and Their Applications in Aquatic Feed" Joe Kearns
- 11:45AM Lunch
- 1:00 PM "High Fat Extrusion and Product Densification" Galen Rokey
- 1:45 PM "Drying and Cooling Systems for Aquaculture Feed " Tom Barber
- 2:45 PM Break
- **3:00 PM** "Product Analysis Laboratory" Galen Rokey and Joe Kearns

- **4:15 PM** Bus Leaves for FPRDC for Multiple Demonstrations:
  - "Salmon Feed for Vacuum Infusion Using a Single Screw Extruder" Galen Rockey
  - "Ultra-Fine Fish Feed Using Twin Screw Extruder" Gerry Hertzel
  - "NIR Analyzer on Ingredients and Aqua Feed" Tom Sliffe

# Thursday, September 30, 2011

- 7:40 AM Bus Leaves Hotel for Rudder Tower, Texas A&M University
- 8:00 AM "Automated Control of Extrusion System" Michael Bachelor
- 9:00 AM "Principles of Aquaculture Nutrition Part 2" Delbert Gatlin
- 10:00AM Break
- **10:15AM** "Extrusion Die Technology " Gerry Hertzel
- 11:00AM "Vacuum Infusion Coating Principles for Aquatic Feed" Jim Schulte
- 11:45 PM Graduation Lunch
- **1:15 PM** "Extrusion Processing Technologies "- Galen Rokey
- 2:15 PM "Micro-Aquatic Feeds" Joe Kearns
- 2:45 PM Break
- **3:00 PM** "Ensuring a Smooth Running Extrusion Operation" Galen Rokey
- **4:00 PM** Bus Leaves for FPRDC for Multiple Demonstrations:
  - "Floating Catfish Feed Using Single Screw Extruder" Galen Rokey
  - "High Fat Yellow Tail Feed Using a Twin Screw Extruder" Gerry Hertzel
  - "Vacuum Infusion for Aquatic Feed" Jim Schulte

### Friday, October 1, 2011

- **7:40 AM** Bus Leaves Hotel for Rudder Tower, Texas A&M University
- 8:00 AM "Odour Control in an Aquafeed Plant" Jim Schulte
- 8:45 AM "Shrimp Feed Management and Feed Physical Characteristics"-Addison Lawrence
- 10:15AM Break
- **10:30AM** "Least Cost Feed Formulation" Chris Bailey
- 11:30AM "Wrap-Up" Mian N. Riaz and Delbert Gatlin
- 11:45 PM Bus Leaves for Hotel

- **1:30 PM** Optional Tour of Texas A&M University's Aquaculture Facilities Delbert Gatlin (Leave from Hilton)
- **3:00 PM** Bus Returns to Hotel