**SFA Training Program Overview**

**Description**

This 1 ½ - 2 day session is designed to prepare you to operate the Bran & Luebbe TrAAcs 800 Segmented Flow Analyzer (SFA) proficiently and independently. Through a combination of interactive learning activities and hands-on projects, you will master the skills necessary to perform analyses while gaining a conceptual understanding of instrumental functionality, methods, and procedures.

**Learning Outcomes**

As a result of this session, you will…

- Value the TrAAcs 800 as a useful tool for your research and for additional applications beyond your own
- Understand the basic theory of colorimetry and how it is used to quantify dissolved analytes
- Understand TrAAcs 800 chemistry, fluidics, and mechanics
- Know where to go to find answers to questions regarding analysis
- Be able to set up, execute, and analyze a TrAAcs 800 run and pass all QC tests established within the prescribed limits
- Be prepared to analyze samples from your own research project
- Be able to troubleshoot simple problems/errors occurring during an analysis
Topical Outline

I. Introduction

II. Theory and Hardware
   A. Hardware Overview
   B. SFA Theory
   C. Sample Prep
   D. B&L Methods and Schematics

III. Software
   A. New Run Setup & Main Page
   B. Channel
   C. Tray Protocol
   D. QC
   E. Software Project

IV. Operation
   A. Hardware Installation
   B. GEL Procedures
   C. Dye Test
   D. Trial Run A
   E. Standard Prep
   F. Trial Run B

V. Post Run & Summary
   A. Data Analysis
   B. Dispersion/Carryover
   C. Troubleshooting
   D. Quiz
   E. Planning For the Future