

**SPECIALTY GASES PRODUCTION AND GAS ANALYSIS**  
Presented by Specialty Gas Expert Ray Borzio

**COMBINING THEORY + LAB EXERCISES**

**IDEAL FOR:**

Management / Cylinder Fill Technicians  
Analytical lab technicians  
Sales & applications specialists

**SYLLABUS:**

**Days 1 & 2:**

Cylinder prep, zero and ultra-pure gas filling, purity analysis, trace impurity analyzers

**Day 3:**

Medical USP oxygen filling, cGMP refresher training, oxygen assay analysis. A separate certificate of completion is issued to satisfy FDA requirements.

**Days 4 & 5:**

Gas mixture filling, pressure fill techniques, by-weight filling, binary gas analyzers, basic gas chromatography, advanced mix calculations, PPM mixtures, reactive gas mixture production, gas mixture stability requirements



*"Finally, specialty gas producers have a school that addresses real world production problems presented by someone with real world production experience. This course was invaluable and thoroughly enjoyable."*

Kelly Root, VP Sales  
Capitol Welders, Baton Rouge LA

**DATES:** March 28-April 1, 2011  
June 20-24, 2011  
Sept. 12-16, 2011  
Dec. 12-16, 2011

**LOCATION:** Specialty Gas Institute at  
Global Calibration Gases  
1500 15th Ave. Dr. E. #109  
Palmetto FL 34221

**COURSE FEES** \$1,875 / 3 Days \$1,250  
\$950 1-day FDA/cGMP  
Includes lunch & refreshments

**TO REGISTER:** (941) 722-7203  
(919) 621-0980  
training@specialgas.com

**Course includes Certificates of Completion and Training Manuals**

**P: (941) 722-7203    www.globalcalibrationgases.com    F: (941) 722-5700**  
**1500 15th Ave. Dr. East #109    Palmetto FL 34221**