Experts in GC Training

For high quality jobs in the United States, U.S. based employers need a highly skilled, technical workforce. Workers who are highly skilled are more productive, independent, flexible, and pro-active. To this end, Custom Solutions Group LLC has established training courses in gas chromatography at our facility in Katy, Texas, just outside of Houston.

Custom Solutions Group LLC offers practical, hands-on training in gas chromatography for both novice and experienced gas chromatographers. Because we are highly proficient in a number of hardware and software platforms, we are able to tailor each training course to the specific needs of individual chromatographers. Because we are expert in a variety of ASTM, GPA, and other industry-standard methods, we can assist individual chromatographers meet the varied needs of employers in the petroleum, petrochemical, natural gas, high purity gas, specialty gas, specialty chemical, semi-conductor gas, catalysis, biofuel and research industries.

For more information, contact us at service@customsolutionsgroup.org, or call Jed Sullenger at 832-540-9127. We hope we can serve you.

Topics covered in the basic GC course include:

- Theory and Principles of Gas Chromatography
- Hardware Function and Principles
- Carrier Gas and Supply Gas Controls
- Types of Injectors and Inlets
- Columns, Classifications and Principles
- Detector Types, Uses, and Functions
- Software Controls
- Method Editing
- Instrument Calibration
- Data Reprocessing
- System Automation
- Sampling Issues
- Valve Hardware and Function

Class Schedule for Spring 2015

Tuesday through Wednesday, February 10 and 11, 2015.
Thursday through Friday, February 12 and 13, 2015.

Tuesday through Wednesday, April 7 and 8, 2015.
Thursday through Friday, April 9 and 10, 2015.

Each course is a two-day course. About half of the class is spent in a classroom setting with abundant use of props. The other half is spent in the Custom Solutions Group Test Laboratory for concrete, hands-on application. Classes begin at 9:00 a.m. Central Time. Classes end at about 4:30 p.m. Central Time. Lunch is provided.
With the move of U.S. GC manufacturing overseas, Custom Solutions Group was formed in April 2004 to provide U.S.-based gas chromatographers with the highest quality, customized solutions in gas chromatography. In conjunction with our business partners, Custom Solutions Group designs, builds, and commissions new and used gas chromatographs, customized to meet the needs and the specific analytical challenges of scientists, chemists, engineers, and technicians in a variety of industries, including: petroleum, petrochemical, natural gas, high purity gas, specialty gas, specialty chemical, semi-conductor gas, catalysis, biofuel and research industries.

Our team combines decades of experience in customized gas chromatography. We are made in the U.S.A. on the U.S. Gulf Coast, and because our operations heavily emphasize continuous quality improvement and just-in-time manufacturing, we can provide fast, flexible solutions at the highest value in the least amount of time, saving time and money for inexperienced, understaffed, and overburdened laboratories.

**Petroleum and Petrochemicals**
- Natural Gas and Natural Gas Liquids (including early regroup and extended analyses)
- Refinery Gas and Refinery Gas Liquids (including rapid refinery gas analysis)
- Simulated Distillations
- Detailed Hydrocarbon Analysis
- High Purity Ethylene and Propylene
- Trace CO and CO₂
- Acid and Sulfur Gases
- Trace Sulfur Speciation
- Sulfur Simulated Distillations

**Specialty Gas**
- Permanent Gases
- Rapid Synthetic Gas Analysis
- Medical Gases
- Trace Impurities in High Purity Gas
- Reference Gases and Reference Gas-Liquids Standards
- Hydrogen Generation and Fuel Cell Analysis
- Beverage Grade CO₂ Analysis
- Chlorine Gas Analysis
- Halocarbon Gases and Liquids
- Hydride Gases
- Acid Gases

**Research and BioFuels**
- Catalyst Research
- Membrane Research
- Greenhouse Gas Analysis
- Ethanol Analysis
- Biodiesel Analysis

**Electronics Gas Analysis**
- Trace Impurities in Hydride Gases
- Trace Impurities in Fluoride Gases
- Trace Impurities in Chloride Gases
- Trace Impurities in High Purity Halocarbon Gases

**Special Products**
- Automated Stream Selection
- Heated Cylinder Gas Autosamplers
- Liquified Petroleum Gas Autosamplers
- Specialty Gas Autosamplers
- Low Pressure and Vacuum Sampling Panels
- Class 1 Division 2 and Class 1 Division 1 Enclosures