



## VACUUM GAUGING THEORY & TROUBLESHOOTING

### Who should attend?

This course is designed for individuals in the semiconductor industry who require the knowledge and skills to operate Residual Gas Analyzers and understand vacuum gauge theory.

### Course Benefits

Increase knowledge of essential semiconductor engineering and science principles.

Prepare technicians for follow-on equipment training.

### Course Objective Summary

- Common definitions and engineering conventions used for vacuum.
- Operating principles and characteristics of indirect thermal conductivity gauges.
- Operating principles and characteristics of indirect high vacuum gauges.
- Operating principles and characteristics of direct capacitance manometer gauges.
- Factors affecting gauge accuracy and performance.
- Vacuum gauge troubleshooting techniques.
- Theory of operation of residual gas analyzers and interpretation techniques.

### Course Modules

1. *Definitions and Conventions*
2. *Indirect Gauging - Thermal Conductivity*
3. *Indirect Gauging - High Vacuum*
4. *Direct Gauging- Factors Affecting Accuracy*
5. *Troubleshooting*
6. *Residual Gas Analyzers - Definitions and Concepts*
7. *Residual Gas Analyzers - Construction, Tuning and Sensitivity*
8. *Residual Gas Analyzers - Sampling and Interpreting Spectral Analysis*

### Registration Information

**Prerequisites:** **None**

**Course Length:** **2 Hours**

**Course Type:** **Web-based Training**

**Course Number:** **TRMWEBB112**

To enroll or for more information on our products and services, please call a registrar at one of the numbers below or by email [metron.training@metrontech.com](mailto:metron.training@metrontech.com)

- 1-800-657-1516 (United States)
- 1-512-278-7497 (International)

### Computer System Requirements:

Attending this course requires a Windows 98, NT, 2000 or XP computer using Internet Explorer 5.5 or higher. 128MB RAM or higher and high-speed Internet access is also highly recommended.

*Note: This course is brought to you by Metron in conjunction with MKS Instruments.*