

HPLC & GC

Chromatography Training Seminars

London: June & July 2009

Chromatography Training Seminars

Venue: De Vere Venues, 17 Portland Place, London, W1B 1PU.

Seminar 1: HPLC Troubleshooting

Date: Monday 29th June 2009

Topics: **HPLC Instrumentation**

- An overview of the HPLC instrument
- The solvent
- The pump
- The injector
- Connections, tubing and fittings
- The detector

HPLC Columns

- Reversed phase column or stationary phase?
- Understanding interactions
- Care and maintenance
- Peaks, retention and temperature

The Liquid Chromatographic Process

Seminar 2: HPLC Method Development & Optimisation

Date: Tuesday 30th June 2009

Topics: **Resolution**

- Efficiency
- Capacity factor
- Selectivity

HPLC Columns

- The matrix
- The stationary phase

The Mobile Phase

- Elution types
- pH effects
- pH modifiers
- Ion pairing
- Temperature

Optimising LC Methods

- Isocratic separations
- Gradient separations

UHPLC: Investigations into technical developments

Seminar 3: The GC Seminar

Date: Wednesday 1st July 2009

Topics: **Fundamentals of GC**

- What are the advantages of GC over other separation techniques?
- Limitations of GC

Capillary GC Columns

- Differences between packed and capillary columns
- Types of capillary column (PLOT, WCOT and SCOT)

GC Instrumentation

- Inlets and injection techniques including: split, splitless, cool on-column, purge & trap and headspace
- Using inlet and oven temperature to assist with effective elution and separation of analytes
- What attributes make a good detector?

GC Column Selection

- Choice of appropriate column chemistry and dimensions

GC Troubleshooting

- Recommendations on system/column maintenance and how to address specific GC problems

The Next Step in GC: GC/MS

Full notes and booklet provided for each seminar.

Your Seminar Instructor:

Dr. James Rudge has been involved in various aspects of chromatography since 1996.

Since obtaining his BSc. (Hons.) in Biochemistry and Ph.D in Organic Chemistry from the University of Wales, Swansea, he has built an impressive theoretical and practical knowledge of analytical chemistry and chromatographic techniques through his work at Phenomenex and close links with industry.

James has extensive experience presenting short and long courses in a variety of subjects relating to chromatography. He has presented seminars to audiences around the world, and brings a large amount of contemporary knowledge to his seminars. These seminars will be presented with an enthusiasm for the subject and wealth of knowledge that will leave all those who attend refreshed and better prepared to utilise their skills in their work.

SPECIAL OFFER

£249 per seminar

Book any 2 seminars, pay £449 (save £49)

Book any 3 seminars, pay £599 (save £148)

