

ANALYTICAL METHODS in CHEMICAL ECOLOGY

a post graduate course (doktorandkurs)

when: Augusti 31 - September 18, 2009

where: Chemical Ecology, Plant Protection Biology,
Swedish University of Agriculture (SLU), Alnarp

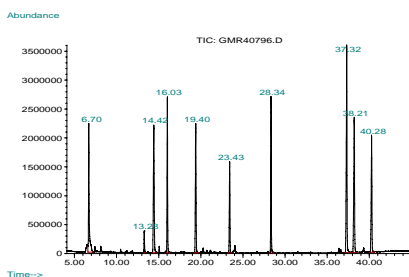
students: maximum 16 participants

course fee: SEK 3.000:-

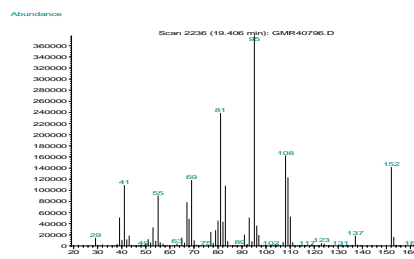
This 4½ ECTS course is an introduction to modern analytical methods used in Chemical Ecological and Ecotoxicological research, such as:

- methods for sampling organic compounds
- understanding chromatography; both gas chromatography and liquid chromatography
- how to chose an analytical column, and why ...
- different methods for identification of organic compounds
- methods for quantification, and the reliability of quantitative analysis

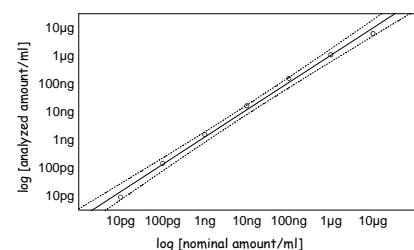
The course will also include a practical part: volatile collection, sample preparation, GC-MS analysis, and evaluation, using the analytical instrumentation at Chemical Ecology, Plant Protection Biology, Swedish University of Agriculture (SLU), Alnarp



separation



identification



quantification



MOST WELCOME!!!!

/Göran Birgersson
course leader



postgraduate course: ANALYTICAL METHODS IN CHEMICAL ECOLOGY – fall 2009

preliminary schedule

week	Aug./Sept	am = 09.15 – 12.00 – lectures		pm = 13.00 – 17.00 – lab work	
36	Monday 31	introduction for new co-workers: lab routines, safety regulations, etc		practically & safety in the lab ... grp. A	
	Tuesday 1	Chem.Ecol. seminar	introd. to Analytical Methods in Chemical Ecology	practically & safety in the lab ... grp. B	group 1: introd. to bioassays
	Wednesday 2	collection methods: analysis in general, aeration / adsorbents ...		group 1: make adsorb. column, aeration	group 2: introd. to bioassays
	Thursday 3	collection methods (continued), gas chromatography		group 2: make adsorb. column, aeration	group 3: introd. to bioassays
	Friday 4	gas chromatography (continued) – chromatography in general		group 3: make adsorb. column, aeration	
37	Monday 7	liquid chromatography (HPLC)		group 1: extraction & GC-MS	group 2: introd. to GC-EAD
	Tuesday 8	identification: Kováts index, FTIR, UV-Vis		group 2: extraction & GC-MS	group 3: introd. to GC-EAD
	Wednesday 9	mass spectrometry		group 3: extraction & GC-MS	group 1: introd. to GC-EAD
	Thursday 10	mass spectrometry (continued)		group 1: processing GC-MS data	group 3: introd. to GC-SSR
	Friday 11	alternative massspectrometric methods, quantitative analysis		group 2: processing GC-MS data	group 1: introd. to GC-SSR
38	Monday 14	introduction to mass spectrometric analysis		group 3: processing GC-MS data	group 2: introd. to GC-SSR
	Tuesday 15	Chem.Ecol. seminar	mass spectrometric analysis (continued)		
	Wednesday 16	mass spectrometric analysis (continued)			
	Thursday 17	mass spectrometric analysis (continued) / spare time – questions			
	Friday 18	results from laboratory work – discussion; course evaluation		"olfaction in the daily life ..."	

lectures in Seminar room in V-house (A14 = 2846B)

lab.work in chemistry lab or the small seminar room "Akvariet".