



COST Action FP0903 (MAFor)
 CLIMATE CHANGE AND FOREST MITIGATION
 AND ADAPTATION IN A POLLUTED
 ENVIRONMENT
 Chair of the Action: Dr Elena Paoletti, IPP-CNR



COST Action ES0804 (ABBA)
 ADVANCING THE INTEGRATED MONITORING
 OF TRACE GAS EXCHANGE BETWEEN
 BIOSPHERE AND ATMOSPHERE
 Chair of the Action: Dr Lutz Merbold, ETH Zurich



FP 7 Project:
 Integrated non-CO₂
 Greenhouse gas Observing System
 Chair of the Project:
 Dr Alex Vermeulen, ECN



**Poznan University
 of Life Sciences**
 Department of Meteorology
 Chair of the Department:
 Dr Janusz Olejnik

Summer school: Flux measurement techniques for non CO₂ GHG: methods, sensors, databases and modelling

PROGRAM

This ten-day summer school will consist of lectures/exercises (4 to 8 hours per day) in Mierzecin Palace Conference Centre, including on hand measurements of trace gases at Tuczno forest site and a visit to Rzecin wetland site, both run by PULS.

Our course will address a variety of topics related to flux measurement techniques: e.g. eddy covariance technique, database and eddy data post-processing, chamber measurements, air profile measurements, and modelling. We would like to prepare groups of trainees with comparable knowledge for exercises and therefore we ask to fill out the application form with special attention to point 10.

All lectures/exercises are prepared and given by 14 invited experts:

Dennis Baldocchi, University of California, USA,	Bogdan Chojnicki PULS, Poland,	Werner Eugster - ETH Zurich, Swetzerland,
Silvano Fares,CRA, Italy,	Arjan Hansen, ECN,The Netherland,	Radek Juszczyzak PULS, Poland,
Monique Leclerc University of Georgia, USA	Lutz Merbold ETH Zurich, Switzerland,	Meelis Mölder - Lund University, Sweden,
Janusz Olejnik PULS, Poland,	Dario Papale - University of. Tuscia, Italy,	Mari Pihlatie, University of Helsinki, Finland,
Marek Urbaniak PULS, Poland,	Timo Vesala -University of Helsinki, Finland,	

The cost of the summer school is about 800 Euro per trainee (excluding travel costs). We expect about 30-35 trainees. The deadline for application is 20st of February 2013 (application form attached). The applicants will be informed about the results of application procedure by the 1th of March 2013.

The table below shows the general program of the summer school – details and keywords of all lectures and exercises will be sent to selected trainees in March 2013. Outside the clas, trainers will be available for students (personal communication) the day before and the day after theirs classes.

Please send this information and application form to anybody who could be interested,

Local Organizer, Janusz Olejnik

4.05 Saturday	15:00 - Arrival to Mierzecin Conference Center (bus from Poznan Lawica Airport)				16:00 – 17:00: Janusz Olejnik (L1) Welcome	17: 00 – 18:30: Monique Leclerc : (L2) Introduction
DATE 2013	9:00-10:30	11:00-12:30	14:00-15:30	16:00-17:30	SUBJECT keyword (L- lecture, E exercise),	TRAINER
05.05 Sunday	L 3	L 4	E 1	E 2	Introduction (L3, L4) Chamber and EC demonstration (E1, E2)	Monique Leclerc University of Georgia, USA (L3, L4) Marek Urbaniak, Radek Juszcak , PULS.Poland, (E1, E2)
06.05 Monday	L 5	L 6	L 7	L 8	Introduction (L 5, L6) N2O, CH4 fluxes (L 6, L 7, E 3)	Timo Vesala , Univ., Helsinki, Finland (L5) Lutz Merbold ETH Zurich, Switzerland (L7, L8) Arjan Hansen , ECN, The Netherland (L7, L8)
07.05 Tuesday	L9	E 4	E 5	L 10	N2O, CH4 fluxes (L 6, L 7, E 3) Database and eddy data post-processing	Arjan Hansen , ECN, The Netherland (L9, E4, E5) Lutz Merbold ETH Zurich, Switzerland (L9, E4, E5) Dario Papale , Univ. Tuscia, Italy (L9, E5)
08.05 Wednesday	E 6	E 7	E 8	E 9	Database and eddy data post-processing Excursion to Tuczno forest and Rzecin wetland sites	Dario Papale , Univ. Tuscia, Italy (L9, E5) Januz Olejnik , PULS, Poznan, Poland
09.05 Thursday	L 11	E 10	L 12	E 7	N2O measurements by chambers Ozone measurement by eddy covariance	Mari Pihlatie , University of Helsinki, Finland (L10, E6) Silvano Faresi , ARC, Italy (L11, E7)
10.05 Friday	L 13	E 11	L 14	E 12	Air profiles method Modelling	Meelis Mölder , Lund Univ., Sweden (L11, E 7) Werner Eugster , ETH, Zurich, Switzerland (L12,)
11.05 Saturday	E 13	L 15	L 16	L 17	Modelling Summary lectures based on ESPM 228	Werner Eugster , ETH, Zurich, Switzerland (E1,2) Dennis Baldocchi , University of California, USA
12.05 Sunday	L 18	L 19	L 20 E 14		Summary lectures based on ESPM 228 Farewell lecture and summary of the TS	Dennis Baldocchi , University of California, USA Januz Olejnik , PULS, Poznan, Poland
12.05 Monday	7:00 Departure to Poznan					

