# Chemical and Mathematical Aspects of Environmental (atmosphere) Monitoring (Final Program)

#### Sunday, September 11

Time	Activity
Plenary Session 1 Chair: Bezhan Chankvetadze	
09.00-09.30	Registration
09:30-10:00	Opening speeches
10:00-11:00	Andreas Wahner
	Atmospheric chemistry from gas phase to aerosol (Part 1)
11:00-12:00	Elizabeth Dinsdale
	Using microbial metabolism to investigate environmental conditions
12:00-12:30	Coffee-break
12:30-13:30	Ramaz Botchorishvili
	Numerical methods for forward and inverse modeling of atmosphere (Part
	1)
13:30-14:30	Lunch
	Plenary Session 2 Chair: Andreas Wahner
14:30-15:30	Andreas Hofzumahaus
	Radicals and photochemistry in the atmosphere
15:30-16:30	Hendrik Elbern
	<ul> <li>Regional atmospheric forecast model development using inverse</li> </ul>
	modelling and data assimilation (Part 1)
16:30-17:00	Coffee-break
17:00-18:00	Bezhan Chankvetadze
	<ul> <li>Miniaturized instrumental methods for chemical analysis of</li> </ul>
	atmosphere

## Monday, September 12

Time	Activity
	Plenary Session 3 Chairs: Hendrik Elbern, Ramaz Botchorishvili
09:00-11-00	Astrid Kiendler-Scharr
	Formation and composition of Aerosol in the atmosphere
11:00-11:30	Coffee-break
11:30-13:00	Andreas Wahner
	Atmospheric chemistry from gas phase to aerosol (Part 2)
13:00-14:00	Lunch
14:00-15:00	Ramaz Botchorishvili

	Numerical methods for forward and inverse modeling of atmosphere (Part
	2)
15:00 -16:00	Hendrik Elbern
	Regional atmospheric forecast model development using inverse modelling
	and data assimilation (Part 2)
16:00-16:30	Coffee-break
16:30-18:00	Seminar

#### Tuesday, September 13

Time	Activity
Plenary Session 4 Chair: Astrid Kiendler-Scharr	
09:00-10:30	Lamzira Lagidze
	Ecology of atmosphere
10:30-12:00	George Gaprindashvili
	<ul> <li>Geographic information system and environmental protection</li> </ul>
12:00-12:30	Coffee-break
12:30-13:30	Ketevan Kasradze
	Regional air quality modeling and assimilation with EURAD-IM for
	the EU Copernicus service.
13:30-14:30	Lunch
14:30-16:30	Seminar
16:30-17:00	Coffee-break
17:00-18:00	Seminar

### Wednesday, September 14

Time	Activity	
	Plenary Session 4 Chair: William Tong	
09:00-10-30	Robert Wegener	
	Measurement of atmospheric trace organic species by gas	
	chromatography and applying basic atmospheric reaction schemes to	
	observations	
10:30-12:00	Giorgi Jibuti	
	Application of mass-spectrometric methods in atmospheric	
	Analysis	
12:00-12:30	Coffee-break	
12:30-13:30	Tamar Janelidze	
	Modeling winds and their corrections by observations	
13:30-14:30	Lunch	
14:30-16:30	Seminar	

16:30-17:00	Coffee-break
17:00-18:00	Seminar
19:00-21:00	School Banquet

#### Thursday, September 15

Time	Activity	
Plenary Session 5 Chair: Ramaz Botchorishvili		
09:00-10:30	William Tong  • Sensitive Portable Microfluidics and Laser-Based Detectors for Environmental Monitoring	
10:30-11:00	Coffee-break	
11.00-12.30	<ul> <li>Bezhan Chankvetadze</li> <li>My personal entrepreneurial adventure: A long way of development, commercialization and application of a new kind of polysaccharide-based chiral selectors for liquid-phase separation of enantiomers</li> </ul>	
12:30-13:30	Lunch	
13:30-15:30	Seminar	
	Plenary Session 6 Chair: Bezhan Chankvetadze	
15:30-16:30	Avtandil Turdziladze  Organic nitrates in secondary organic aerosols	
16:30-17:00	Presentations by young scientists	
17:00-17:30	Coffee-break	
17:30-18:00	Summarizing the school, discussion, future plans and closing	