

Evaluation of atmospheric condition in Tbilisi and surrounding area

Giorgi Jibuti^a, *Franz Rohrer*^b, *Robert Wegener*^b, *Dieter Klemp*^b

e-mail: giorgi.jibuti@tsu.ge

^a Department of Chemistry, Faculty of Exact and
Natural Sciences, Tbilisi State University,
0179 Tbilisi, Georgia

^b Forschungszentrum Juelich GmbH, IEK-8,
52425 Jülich Germany

Atmospheric contamination directly affects health and well being of humans, that's why constant monitoring of atmospheric contamination is necessary, but beside routine monitoring, it is very important to perform further research to pinpoint contamination sources and determine atmospheric photochemical regime, which then gives ability to model and forecast atmospheric changes.

Very good evaluation factor for atmospheric condition is local ozone production rate, because its depends on many factors, such as day and night time, weather, and more importantly on atmospheric contaminants such as nitrous oxides, carbon monoxide, and other volatile organic carbons.

VOS's where analyzed using GC-MS system, NO/NO₂ on chemiluminescence spectrometer, CH₄, CO, CO₂ where analyzed by CRDS spectrometer.

All analysis where performed in Jülich (Germany) Research Center, Institute of Energy And Climate IEK-8.