## 1. Title

Soils, Land Use and Heat

# 2. Type

Inter-Divisional Symposium

# 3. Organizer(s) & Convener

Wolfgang Burghardt (Past Chair IUSS Division 3); FK of Biology, Soil University Duisburg-Essen, Universitaetsstr. 5, 45141 Essen, Technology. Germany.

E-mail: wolfgang.burghardt@uni-due.de

Tel: +492011833754

Meissner, Soil Physics, Lysimeter Ralph Dept. Station Falkenberg. Helmholtz Centre for Environmental Research – UFZ, Dorfstrasse 55, 39615 Falkenberg, Germany.

E-mail: ralph.meissner@ufz.de / http://www.ufz.de Tel: +49 391 810 9771/ fax +49 341 235 45 9771

Martin-Luther-University Halle-Wittenberg, Faculty of Natural Sciences III, Institute of Agricultural and Nutritional Sciences, Julius-Kühn-Str.23, 06112 Halle (Saale), Germany

#### 4. Rationale

Soils are important bodies for heat storage. They contribute essential to weather and climate conditions, global radiation, cooling effects in sealed urban areas, technical heat storage. Soils are also affected by heating from water and electricity supply lines.

# 5. Objectives

Particular soil water and soil air content but also diverse other soil properties and land use have an influence on soil heat storage and conductivity, and soil temperature. Local, regional and global Climate conditions influence them and are affected by them.

## 6. Description

There are already many data on soil temperature and soil heat, and their relationship to soil water content and other soil properties available. Often these data are by-products of other soil investigations, so for example of lysimeter investigations, field trials or agricultural weather stations. Results of investigations on the large complex of land use, soil heat and temperature relationships on local, regional and global scales should be presented on the symposium. The meaning for climate and the use of these findings are also content of the symposium on Soils, Land Use and Heat.







