

***Contribution of Anke Kovar-Panskus to the TRAIPOS WG-TPT meeting in Cambridge, 25.02.2000:***

A sensitivity study in the wind tunnel has been conducted to improve a modelling technique which enables the estimation of the effects of car-produced-turbulence in small-scale wind tunnel models. The experiments were based on a former modelling technique (Brilon et al., 1987, Rastetter, 1997, Kastner-Klein, 1998) in which several parameters were varied to investigate their dependencies.

With means of concentration and turbulence measurements as well as laserlightsheet visualisation some weak points of this former solution could be detected. The reasons for the differences could be given and means were shown to improve the modelling technique itself.

The results gained so far, which will be presented within this working-group, show the derivation of a new design-rule for the modelling of C-I-T.

**Kastner-Klein, P., R. Berkowicz, A. Rastetter, E.J. Plate, 1998:**

“Modelling of Vehicle Induced Turbulence in Air Pollution Studies for Streets”, Paper presented at 5th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, 18-21 May 1998, Rhodes, Greece

**Rastetter, A., 1997:**

“Experimentelle Untersuchung in einem atmosphärischen Grenzschichtwindkanal über den Einfluß von Kfz-erzeugter Turbulenz auf die Schadstoffausbreitung in Straßenschluchten”, Diplomarbeit am Institut für Hydrologie und Wasserwirtschaft, Universität Karlsruhe

**Brilon, W., H.J. Niemann, E. Romberg, 1987:**

“Windkanaluntersuchungen zur Ausbreitung von Abgasen an Autobahnen”, Sonderdruck aus STRASSENVERKEHRSTECHNIK 31, Nr. 4, S. 122-133