

IUPAC Project Progress Report

Date : December 2005 ; Period: July 2005 – February 2006

Project Number: 2002-037-1-500

Project Title: Solubility data of compounds relevant to human health. Solubility of halogenated aromatic hydrocarbons

Task Group Leader: Masakazu Makino and Ayako Goto

Starting Date: 2002

Report:

1. Project completion date (documents ready for external review):
2007 (expected date).

2. Have the project objectives been modified during the last 6 months?

Especially none. The project objectives have been as follows;

Objective: This volume contains solubility data of halogenated derivatives of aromatic and polyaromatic hydrocarbons because they have been widely used as heat transfer fluids, organic diluents, plasticizers, fire retardants, pesticides, and some waxes, etc.. Furthermore, it has been recently pointed out that some of them or their related compounds, both synthetic and natural origin, are detected from the environment, and that they can seriously interfere with sexual development and reproductive function. Therefore, their solubility data are useful to elucidate the movement and persistence in the environment and to estimate the hazard or risk of them.

3. Please list the task group members involved in the work during 6 months.

MASAKAZU MAKINO**, AYAKO GOTO*, RENSUKE GOTO***

*School of Administration and Informatics, University of Shizuoka, 52-1 Yada, Suruga-ku, Shizuoka-shi, Japan, 422-8526;

e-mail, gotoa@momo1.u-shizuoka-ken.ac.jp

**Institute of Environmental Science, University of Shizuoka.

e-mail; makinom@sea.u-shizuoka-ken.ac.jp

*** University of Shizuoka (a professor emeritus).

4. Difficulties encountered (or concerns)

Almost all difficulties were discussed with Prof. W. Voigt in Portoroz, Slovenia (Aug. 2005). For example, the number of data investigated until today was too small to evaluate them on the basis of statistical methods. In addition to this, the value tended to depend largely upon respective experimental systems. On the other hand, it was found that the aqueous solubility data should be separated into two categories, liquid-liquid and solid-liquid system, because the melting point of some PCB is near room temperature.

5. Please list the to-date results (outputs) of the project.

6. Please list the dissemination events (viz. articles, CD, conference presentations; etc.)

7. If your project is within 6 months of completion,...

8. Work on this project may have identified new problem...