

IUPAC Project Progress Report

Date: August 2007

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Project number: 2002-037-1-500

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

Report:

1. Current status of project:

We have continued to arrange data sheets to submit our manuscript to *J. Phys. Chem. Ref. Data*,

2. Progress relative to 'milestones':

Now, we re-evaluated the investigated solubility data, and it is difficult to make up the framework of the submitted paper to *J. Phys. Chem. Ref. Data*.

3. Difficulties encountered (or concerns):

It takes a more time to submit our results to *J. Phys. Chem. Ref. Data*, because we encounter some difficult. For example, (1) the number of data was too little to evaluate exactly, (2) the solubility values varies widely from experimental system to system, (3) 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.

4. Projected completion date (documents ready for external review):

We have reported the temporary evaluated data to Prof. Wolfgang Voigt at 12th ISSP at Freiburg. We would like to finish this project until the end of 2007 or 2008. Therefore, we would like to continue discussing the detail points on the evaluation of data with Prof. Voigt at Turin in order to submit the paper to *J. Phys. Chem. Ref. Data*.

5. Please list all of the intended outputs and the dissemination plan for this project (viz. articles, CD, conference presentations; etc.). These may have been expanded since project approval:

- 1) We have finished rechecking all of the data in the compiled sheets and in the evaluated sheets since last year (at Freiburg).
- 2) We have investigated the melting point of PCB isomers to elucidate which the system liquid-liquid or solid-liquid.
- 3) We are re-evaluating all of the compiled data.
When finished, results will be part of the Solubility Data Series.

6. If your project is within 6 months of completion, how do you plan to utilise any remaining budget for this project?

We haven't gotten any budget through the work. Therefore, if we can get some support for IUPAC, firstly we try to re-investigate the PCB aqueous data by using literature retrieval, and then we try to revise our sheets and re-evaluated the aqueous data set.

7. Work on this project may have identified new problems, issues, challenges, emerging topics, opportunities for related projects, etc. Please indicate these here so that the Division can follow up on them:

We hope for financial support heartily as above to push forward this project. The research environment in Japanese University becomes extremely bad, and it is difficult without the support now to push forward a project. Under these circumstances I would appreciate it very much if you would kindly give me financial support for my trip and computational license and fees.