

IUPAC Project Progress Report

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

Project number: 2002-044-1-500

Project Title: Solubility data related to industrial processes.
Carbon dioxide in aqueous non-electrolyte solutions.

Task Group Leader: Pirketta Scharlin

Starting date: September 16, 2002

Report:

1. Projected completion date (documents ready for external review):
January 2007, at the earliest.
2. Have the project objectives been modified during the last 6 months?
No
3. Please list the task group members involved in the work during the last 6 months.
Pirketta Scharlin, Alan Mather, Justin Salminen
4. Difficulties encountered (or concerns):
Evaluation and some data collection were delayed but we are making progress now.
From time to time, lack of time continues to be the biggest obstacle to a more rapid progress.
5. Please list the to-date results (outputs) of the project
Data up to 1988: around 300 data sheets were put into electronic form manually from the old paper versions and updated to meet the requirements of the *Journal of Physical and Chemical Reference Data*.
Literature survey was carried out for years 1989-2004. These data have been tabulated into electronic form.
About 380 data pages altogether are now in the required electronic format. The compiled data consist of 60 different solvent systems, including aqueous solutions of alcohols, ethers, ketones, carboxylic acids, sugars, and nitrogen containing organic compounds.
Recently we found 16 papers (1931-2001) not discovered in the previous literature search. 12 of these are currently being tabulated. 4 articles have not been available so far (two in Chinese journals).
Update for years 2005-2006 is being carried out.
6. Please list the dissemination events (viz. articles, CD, conference presentations; etc.)
Intended outputs: *Journal of Physical and Chemical Reference Data* and *IUPAC-NIST Solubility Database*.

Dissemination plan: Access to the information of the Solubility Data Series is provided to chemists through the specialist abstracting journals, principally Chemical Abstracts and to potential non-chemist users via the IUPAC and SSED web sites which are catalogued by various commercial search engines. Furthermore, the abstract of the respective *JPCRD* article will be published in *CI*, as recommended by the ACD officers.

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

8. 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.

Some Chinese papers impossible to be found. The help of ACD to get and translate these papers would be appreciated.