

## CV for Jens Abildskov



### Degrees:

1999 PhD Technical University of Denmark; 1995 MSc Technical University of Denmark

### Positions:

2002-: Associate Professor. 1999: Assistant Professor.

### Research Area:

Applied Thermodynamics, Modeling Techniques for Physical Property Estimation, Separation Process Modeling.

### Distinctions and awards:

Championship Team, 3rd International Industrial Fluid Properties Simulation Challenge (IFPSC) (2006) (Category: State Conditions Transferability).

### Memberships of scientific committees, review, positions of trust (selected)

2002-: Member of EFCE Working Party on Education (EFCE WPE). 2013-: Member of EFCE Working Party on Fluid Separations (EFCE WPFS). Reviewer for De Nederlandse Organisatie voor Wetenschappelijk Onderzoek (NWO) (Eng.: Netherlands Organisation for Scientific Research) and peer reviewer for several international journals.

**ISI journal publications (WoS):** 67; **Citations:** >470; **H.index:** 12 (excluding self citations: 11); **Other publ.:** 6 popular/educational articles + 7 book chapters; **Patents accepted:** 0

**Books:** Vol.15-I, DECHEMA Chemistry Data Series, DECHEMA, Frankfurt am Main. ISBN: 3-89746-051-3. Vol.15-II, DECHEMA Chemistry Data Series, DECHEMA, Frankfurt am Main. ISBN: 3-89746-074-2.

### Supervision of PhDs, 2008 – present (ongoing or finished in 2008 or later):

4 ordinary PhDs finished 2008-2013. 4 ordinary PhD ongoing.

### Teaching and Education activities:

Process Control. Process Engineering Laboratory.

### Grants, 2008 – present (ongoing or finished in 2008 or later):

IP Bioproduction (NMP-2CF-2007-026515), EU-FP6, NABIIT DSF-project 2106-05-0004.

### Research collaboration with industry, 2008 – present:

Novozymes, DONG Energy, Biosystemer Aps., Proces Design A/S, CP Kelco, Inbicon A/S, Novo Nordisk, Haldor Topsoe, DECHEMA. 30+ members of CAPEC consortium has on-going access to products (in particular databases + property prediction methods incorporated into consortium software) derived from previous research projects.

### **Selected publications**

- Abildskov J., O'Connell J.P., 2003. "Prediction of Solubilities of Complex Chemicals I. Solutes in Different Solvents". *Ind. Eng. Chem. Res.*, 42: 516-527.
- Bak H., Thomas O.R.T., Abildskov J., 2007. "Lumped parameter model for prediction of initial breakthrough profiles for the chromatographic capture of antibodies from a complex feedstock", *Journal of Chromatography B*, 848: 131–141.
- Christensen S., Peters G.H., Hansen F.Y., O'Connell J.P., Abildskov J., 2007. "State Conditions Transferability of Vapor-Liquid Equilibria via Fluctuation Solution Theory with Correlation Function Integrals from Molecular Dynamics Simulation", *Fluid Phase Equilibria*, 260: 169-176.
- Satyanarayana K.C., Gani R., Abildskov J., 2007. "Polymer Property Modeling Using Grid Technology for Design of Structured Products", *Fluid Phase Equilibria*, 261: 58-63.
- Soni V., Abildskov J., Jonsson G., Gani R., 2008. "Modeling and analysis of vacuum membrane distillation for the recovery of volatile aroma compounds from black currant juice". *Journal of Membrane Science*, 320: 442–455.
- Abildskov J., Ellegaard M.D., O'Connell J.P., 2010. "Densities and Isothermal Compressibilities of Ionic Liquids - Modelling and Application", *Fluid Phase Equilibria*, 295: 215–229.
- Ellegaard M.D., Abildskov J., O'Connell J.P., 2010. "Molecular Thermodynamic Modeling for Mixed Solvent Solubility", *Ind. Eng. Chem. Res.*, 49: 11620–11632.
- Wedberg R., O'Connell J.P., Peters G.H., Abildskov J., 2011. "Pair Correlation Function Integrals: Computation and Use", *J. Chem. Phys.* 135(8): 084113.
- Wedberg R., Abildskov J., Peters G.H., 2012. "Protein dynamics in organic media at varying water activity studied by molecular dynamics simulation", *J. Phys. Chem. B*, 116: 2575–2585.
- Abildskov J., van Leeuwen M.B., Boeriu C.G., van den Broek L.A.M., 2013. "Computer-Aided Solvent Screening for Biocatalysis", *J. Mol. Cat. B: Enzymatic*, 85–86: 200–213.