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## Employment

### Academic Assistant

Department of Biochemistry and Molecular Biology  
University of Southern Denmark  
Odense M  
15. May 2021 → present

### Software Developer

EmaZys Technologies ApS  
Vejle, Denmark  
1. Jan 2012 → 1. Jan 2015

### Teaching assistant

University of Southern Denmark  
Odense, Denmark  
1. Jan 2005 → 1. Jan 2007

### IT assistant

Odense Bys Museer  
Odense, Denmark  
1. Jan 1997 → 1. Jan 2006

## Publications

### Modeling the Energy Landscape of Side Reactions in the Cytochrome $bc_1$ Complex

Husen, P. & Solov'yov, I. A., May 2021, In: *Frontiers in Chemistry*. 9, 14 p., 643796.

### Inhibition Mechanism of Antimalarial Drugs Targeting the Cytochrome $bc_1$ Complex

Jacobsen, L., Husen, P. & Solov'Yov, I. A., 2021, In: *Journal of Chemical Information and Modeling*. 61, 3, p. 1334–1345

### Introducing VIKING: A Novel Online Platform for Multiscale Modeling

Korol, V., Husen, P., Sjulstok, E., Nielsen, C., Friis, I., Frederiksen, A., Salo, A. B. & Solov'Yov, I. A., 2020, In: *ACS Omega*. 5, 2, p. 1254-1260 7 p.

### Molecular Oxygen Binding in the Mitochondrial Electron Transfer Flavoprotein

Husen, P., Nielsen, C., Martino, C. F. & Solov'yov, I. A., 25. Nov 2019, In: *Journal of Chemical Information and Modeling*. 59, 11, p. 4868-4879

### Automated, parallel mass spectrometry imaging and structural identification of lipids

Ellis, S. R., Paine, M. R. L., Eijkel, G. B., Pauling, J. K., Husen, P., Jervelund, M. W., Hermansson, M., Ejsing, C. S. & Heeren, R. M. A., 2018, In: *Nature Methods*. 15, 7, p. 515-518

### Charge Transfer at the Qo-Site of the Cytochrome $bc_1$ Complex Leads to Superoxide Production

Bøgh Salo, A., Husen, P. & Solov'yov, I. A., 2017, In: *Journal of Physical Chemistry Part B: Condensed Matter, Materials, Surfaces, Interfaces & Biophysical*. 121, 8, p. 1771–1782

**Mutations at the Qo-Site of the Cytochrome bc<sub>1</sub> Complex Strongly Affect Oxygen Binding**

Husen, P. & Solov'yov, I. A., 2017, In: The Journal of Physical Chemistry Part B. 121, 15, p. 3308–3317

**Spontaneous Binding of Molecular Oxygen at the Qo-Site of the bc<sub>1</sub> Complex Could Stimulate Superoxide Formation**

Husen, P. & Solov'yov, I. A., 4. Aug 2016, In: American Chemical Society. Journal. 138, 37, p. 12150-12158

**Lipid informatics: From a mass spectrum to interactomics**

Ejsing, C. S., Husen, P. J. & Tarasov, K., 2016, *Lipidomics, technologies and applications*. Ekroos, K. (ed.). Wiley, p. 147-174

**Preparing giant unilamellar vesicles (GUVs) of complex lipid mixtures on demand: Mixing small unilamellar vesicles of compositionally heterogeneous mixtures**

Bhartia, T., Husen, P. J., Brewer, J. R., Bagatolli, L., Hansen, P. L., Ipsen, J. H. & Mouritsen, O. G., 2015, In: B B A - Biomembranes. 1848, 12, p. 3175-3180 6 p.

**Fluid domain patterns in free-standing membranes captured on a solid support**

Bhartia, T., Husen, P. R., Ipsen, J. H., Bagatolli, L. & Simonsen, A. C., 2014, In: B B A - Biomembranes. 1838, 10, p. 2503-2510

**Analysis of Lipid Experiments (ALEX): A Software Framework for Analysis of High-Resolution Shotgun Lipidomics Data**

Husen, P., Tarasov, K., Katafiasz, M., Sokol, E., Vogt, J., Baumgart, J., Nitsch, R., Ekroos, K. & Ejsing, C. S., 2013, In: PLOS ONE. 8, 11, p. e79736

**A method for analysis of lipid vesicle domain structure from confocal image data**

Husen, P. R., Fidorra, M., Hartel, S., Bagatolli, L. & Ipsen, J. H., 2012, In: European Biophysics Journal. 41, 2, p. 161-175

**Morphometric image analysis of giant vesicles: a new tool for quantitative thermodynamics studies of phase-separation in lipid membranes**

Husen, P. R., Arriaga, L., Monroy, F., Ipsen, J. H. & Bagatolli, L., 2012, In: Biophysical Journal. 103, 11, p. 2304-2310

**Physical characterization of membrane domains**

Husen, P. R., 2011, Syddansk Universitet. Det Naturvidenskabelige Fakultet.