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- Født 4. december 1970 i Mønsted ved Viborg
- Viborg Katedralskole, matematisk-kemisk student 1990
- Indkaldt til Jydske Dragonregiment 1990
- Sergentskolen Sønderborg, udnævnt sergent 1991
- Gruppefører for motoriseret infanterigruppe 1991-92
- Hærens Officersskole 1992-1995, udnævnt Premierløjtnant 1995
- Ingeniør- og parkdelingsfører ved Jydske Ingeniørregiment 1995-1997
- Sagsbehandler ved Hærens Operative Kommando 1998
- Studerende ved kemi-molekylærbiologi på Århus Universitet 1998
- Ansæt til at lave kemishow 1999-2005
- Udnævnt kaptajn af reserven 2002
- Bachelor i kemi-molekylærbiologi 2003
- Specialestudie i kemi 2003-2005: "Syntese af metaloxider i superkritisk væske"
- Ansæt som forskningsassistent ved Aarhus Universitet 2005
- Ph.d.-studie 2005-2008 "Supercritical synthesis of complex nanomaterials"
- Ansæt på Kemisk Institut 2008 som "AC-TAP" (Undervisning og "Lab manager")
- Leder af laborantgruppen 2011
- Sikkerhedsleder 2010 -

## Publikationer

### Facile Synthesis of Brookite TiO<sub>2</sub> Nanoparticles

Mamakhel, M. A. H., Yu, J., Søndergaard-Pedersen, F. M., Hald, P. & Iversen, B. B., 11 dec. 2020, I: Chemical Communications. 56, 95, s. 15084-15087 4 s.

### 169 kemiske eksperimenter

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### A Novel Dual-Stage Hydrothermal Flow Reactor

Hellstern, H. C., Becker, J., Hald, P., Bremholm, M., Mamakhel, M. A. H. & Iversen, B. B., 2015. 1 s.

### Development of a Dual-Stage Continuous Flow Reactor for Hydrothermal Synthesis of Hybrid Nanoparticles

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### Øvelser til Uorganisk Materialekemi

Becker, J., Christiansen, T. L., Dalgaard, K. & Hald, P., 2015, Århus Universitet.

### Supercritical Flow Synthesis of TiO<sub>2</sub>

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### Solvothermal flow synthesis and PXRD study of the Pt<sub>1-x</sub>Ru<sub>x</sub> system

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### Solvothermal flow synthesis and PXRD study of the Pt<sub>1-x</sub>Ru<sub>x</sub> system

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### **The influence of crystallite size and crystallinity of anatase nanoparticles on the photo-degradation of phenol**

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### **Kemiske våben**

Hald, P., 2013, I: *Fysik-kemi*. 40, 5, s. 10-12 3 s.

### **Up-Scaled Supercritical Flow Synthesis of Hybrid Materials**

Hellstern, H. C., Becker, J., Hald, P., Bremholm, M. & Iversen, B. B., 2013. 1 s.

### **Glucose-assisted continuous flow synthesis of Bi<sub>2</sub>Te<sub>3</sub> nanoparticles in supercritical/near-critical water**

Mi, J., Jensen, T. N., Hald, P., Overgaard, J., Christensen, M. & Iversen, B. B., jul. 2012, I: *Journal of Supercritical Fluids*. 67, 0, s. 84-88 5 s.

### **Highly controlled crystallite size and crystallinity of pure and iron-doped anatase-TiO<sub>2</sub> nanocrystals by continuous flow supercritical synthesis**

Mi, J., Johnsen, S., Clausen, C., Hald, P., Lock, N., Sørensen, L. U. & Iversen, B. B., 2012, I: *Journal of Materials Research*. 28, 3, s. 333-339 7 s.

### **Mesoporous TiO<sub>2</sub> aggregate photoanode with high specific surface area and strong light scattering for dye-sensitized solar cells**

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### **Rapid green continuous flow supercritical synthesis of high performance Li<sub>4</sub>Ti<sub>5</sub>O<sub>12</sub> nanocrystals for Li ion battery applications**

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### **Biomolecule-Assisted Hydrothermal Synthesis and Self-Assembly of Bi<sub>2</sub>Te<sub>3</sub> Nanostring-Cluster Hierarchical Structure**

Mi, J., Lock, N., Sun, T., Christensen, M., Søndergaard, M., Hald, P., Hng, H. H., Ma, J. & Iversen, B. B., 2010, I: *A C S Nano*. 4, 5, s. 2523-2530 8 s.

### **Continuous flow supercritical water synthesis and crystallographic characterization of anisotropic boehmite nanoparticles**

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### **Formation and Growth of Bi<sub>2</sub>Te<sub>3</sub> in Biomolecule-Assisted Near-Critical Water: In Situ Synchrotron Radiation Study**

Mi, J., Christensen, M., Tyrsted, C., Jensen, K. O., Becker, J., Hald, P. & Iversen, B. B., 2010, I: *Journal of Physical Chemistry Part C: Nanomaterials and Interfaces*. 114, 28, s. 12133-12138

### **In-Situ Synchrotron Radiation Study of Formation and Growth of Crystalline CexZr1-xO<sub>2</sub> Nanoparticles Synthesized in Supercritical Water**

Tyrsted, C., Becker-Christensen, J., Hald, P., Bremholm, M., Pedersen, J. S., Chevallier, J., Cerenius, Y., Iversen, S. & Iversen, B. B., 2010, I: *Chemistry of Materials*. 22, s. 1814-1820 7 s.

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**Phase pure crystalline nanoparticles and a method of manufacturing thereof**

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**Supercritical synthesis of complex nano materials**

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**Critical Size of Crystalline ZrO<sub>2</sub> Nanoparticles Synthesized in Near- and Supercritical Water and Supercritical Isopropyl Alcohol**

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**Surfactant-free synthesis of nickel nanoparticles in near-critical water**

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**Comprehensive size characterisation of TiO<sub>2</sub> nanoparticles synthesized in supercritical propanol**

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**Supercritical Propanol-Water Synthesis and Comprehensive Size Characterisation of Highly Crystalline anatase TiO<sub>2</sub> Nanoparticles**

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