Steffen Bähring
Institut for Fysik, Kemi og Farmaci
Kemi og Farmaci
SDU Climate Cluster
**E-mail:** sbahring@sdu.dk
**Telefon:** +4565508406

## Publikationer

**Supramolecular recognition within a nanosized “Buckytrap” that exhibits substantial photoconductivity**
Sen, S., Ishiwari, F., Kaur, R., Ishida, M., Ray, D., Kikuchi, K., Mori, T., Bähring, S., Lynch, V. M., Saeki, A., Guldi, D. M., Sessler, J. L. & Jana, A., 2023, I: Journal of the American Chemical Society. 145, 2, s. 1031-1039

**Solvent-Controlled Self-Assembled Oligopyrrolic Receptor**
Wang, F., Larsen, M. C., Bähring, S., Ishida, M., Furuta, H. & Jana, A., 2021, I: Molecules. 26, 6, 13 s., 1771.

**Ratiometric turn-on fluorophore displacement ensembles for nitroaromatic explosives detection**
Lee, J. Y., Root, H. D., Ali, R., An, W., Lynch, V. M., Bähring, S., Kim, I. S., Sessler, J. L. & Park, J. S., 18. nov. 2020, I: Journal of the American Chemical Society. 142, 46, s. 19579-19587

**Condition-Dependent Coordination and Peroxidase Activity of Hemin-Aβ Complexes**
Bacchella, C., Brewster, J. T., Bähring, S., Dell’Acqua, S., Root, H. D., Thiabaud, G. D., Reuther, J. F., Monzani, E., Sessler, J. L. & Casella, L., 30. okt. 2020, I: Molecules. 25, 21, 13 s., 5044.

**Semiconducting Supramolecular Organic Frameworks Assembled from a Near-Infrared Fluorescent Macrocyclic Probe and Fullerenes**
Kaur, R., Sen, S., Larsen, M. C., Tavares, L., Kjelstrup-Hansen, J., Ishida, M., Zieleniewska, A., Lynch, V. M., Bähring, S., Guldi, D. M., Sessler, J. L. & Jana, A., 1. jul. 2020, I: Journal of the American Chemical Society. 142, 26, s. 11497-11505

**Self-Assembled Cagelike Receptor That Binds Biologically Relevant Dicarboxylic Acids via Proton-Coupled Anion Recognition**
Wang, F., Sen, S., Chen, C., Bähring, S., Lei, C., Duan, Z., Zhang, Z., Sessler, J. L. & Jana, A., 2020, I: Journal of the American Chemical Society. 142, 4, s. 1987-1994

**Tetrathiafulvalene-calix[4]pyrrole: a versatile synthetic receptor for electron-deficient planar and spherical guests**
Bähring, S., Root, H. D., Sessler, J. L. & Jeppesen, J. O., 14. mar. 2019, I: Organic & Biomolecular Chemistry. 17, 10, s. 2594-2613

**Functionalised tetrathiafulvalene- (TTF-) macrocycles: recent trends in applied supramolecular chemistry**
Jana, A., Bähring, S., Ishida, M., Goeb, S., Canevet, D., Sallé, M., Jeppesen, J. O. & Sessler, J. L., 7. aug. 2018, I: Chemical Society Reviews. 47, 15, s. 5614-5645

**Very Strong Binding for a Neutral Calix[4]pyrrole Receptor Displaying Positive Allosteric Binding**
Duedal, T., Nielsen, K., Olsen, G., Burgdorf Guldager Rasmussen, C., Kongsted, J., Levillain, E., Breton, T., Miyazaki, E., Takimiya, K., Bähring, S. & Jeppesen, J. O., 17. feb. 2017, I: Journal of Organic Chemistry. 82, 4, s. 2123–2128

**A Bis-Calix[4]pyrrole Enzyme Mimic that Constrains Two Oxoanions in Close Proximity**
He, Q., Kelliher, M., Bähring, S., Lynch, V. M. & Sessler, J., 2017, I: Journal of the American Chemical Society. 139, 21, s. 7140–7143

**Enhanced detection of explosives by turn-on resonance Raman upon host-guest complexation in solution and the solid state**
Witlicki, E. H., Bähring, S., Johnsen, C., Solano, M. V., Nielsen, K. A., Silverstein, D. W., Marlatt, C. W., Jensen, L., Jeppesen, J. O. & Flood, A. H., 2017, I: Chemical Communications. 53, 79, s. 10918-10921 4 s.

**Ionic manipulation of charge-transfer and photodynamics of [60]fullerene confined in pyrrolo-tetrathiafulvalene cage**
Bähring, S., Larsen, K. R., Supur, M., Nielsen, K. A., Poulsen, T., Ohkubo, K., Marlatt, C. W., Miyazaki, E., Takimiya, K., Flood, A. H., Fukuzumi, S. & Jeppesen, J. O., 2017, I: Chemical Communications. 53, 71, s. 9898-9901

**Tetrathiafulvalene- (TTF-) Derived Oligopyrrolic Macrocycles**
Jana, A., Ishida, M., Park, J. S., Bähring, S., Jeppesen, J. O. & Sessler, J., 2017, I: Chemical Reviews. 117, 4, s. 2641–2710

**Cover Profile: Design and Sensing Properties of a Self-Assembled Supramolecular Oligomer**
Bähring, S., Martin-Gomis, L., Olsen, G., Nielsen, K., Kim, D. S., Duedal, T., Sastre-Santos, A., Jeppesen, J. O. & Sessler, J., 2016, I: Chemistry - A European Journal. 22, 6, s. 1869 1 s.

**Design and Sensing Properties of a Self-Assembled Supramolecular Oligomer**
Bähring, S., Gomis, L. M., Olsen, G., Nielsen, K., Kim, D. S., Duedal, T., Sastre-Santos, A., Jeppesen, J. O. & Sessler, J. L., 2016, I: Chemistry - A European Journal. 22, 6, s. 1958–1967

**Design and Sensing Properties of a Self-Assembled Supramolecular Oligomer (Chem. Eur. J. 6/2016)**
Bähring, S., Martín-Gomis, L., Olsen, G., Nielsen, K., Kim, D. S., Duedal, T., Sastre-Santos, Á., Jeppesen, J. O. & Sessler, J. L., 2016, 1 s.

**Functionalized Calixpyrroles: Building Blocks for Self-Assembly**
Vargas-Zúñiga, G., Sessler, J. & Bähring, S., 2016, *Calixarenes and Beyond.* Neri, P., Sessler, J. & Wang, M-X. (red.). Switzerland: Springer, s. 285-333

**Use of solvent to regulate the degree of polymerisation in weakly associated supramolecular oligomers**
Bähring, S., Kim, D. S., Duedal, T., Lynch, V. M., Nielsen, K. A., Jeppesen, J. O. & Sessler, J. L., 2014, I: Chemical Communications. 50, 41, s. 5497-5499

**π-Extended tetrathiafulvalene BODIPY (ex-TTF-BODIPY): A redox switched "on-off-on" electrochromic system with two near-infrared fluorescent outputs**
Bill, N. L., Lim, J. M., Davis, C. M., Bähring, S., Jeppesen, J. O., Kim, D. & Sessler, J. L., 2014, I: Chemical Communications. 50, 51, s. 6758-6761

**Coordination-Driven Switching of a Preorganized and Cooperative Calix(4)pyrrole Receptor**
Bähring, S., Olsen, G., Stein, P. C., Kongsted, J. & Nielsen, K. A., 2013, I: Chemistry - A European Journal. 19, 8, s. 2768-2775

**Molekylære sensorer**
Bähring, S., 2013, Syddansk Universitet. Det Naturvidenskabelige Fakultet.

**Porphyrins Fused with Strongly Electron-Donating 1,3-Dithiol-2- ylidene Moieties: Redox Control by Metal Cation Complexation and Anion Binding**
Bill, N. L., Ishida, M., Bähring, S., Lim, J. M., Lee, S., Davis, C. M., Lynch, V. M., Nielsen, K. A., Jeppesen, J. O., Ohkubo, K., Fukuzumi, S., Kim, D. & Sessler, J. L., 2013, I: Journal of the American Chemical Society. 135, 29, s. 10852−10862

**Acid/Base Controllable Molecular Recognition**
Nielsen, K., Bähring, S. & Jeppesen, J. O., 2011, I: Chemistry - A European Journal. 17, 39, s. 11001-11007 7 s.

**A Novel TetraTTF-calix[4]pyrrole Ouroborand for Explosive Detection**
Bähring, S. & Nielsen, K., 7. jun. 2010. 1 s.

**A Novel TetraTTF-calix[4]pyrrole Ouroborand for Explosive Detection**
Bähring, S. & Nielsen, K., 25. maj 2010.

## Aktiviteter

### Organic & Biomolecular Chemistry (Tidsskrift)
Steffen Bähring (Peer reviewer), Harrison D. Root (Peer reviewer), Jonathan L. Sessler (Peer reviewer) & Jan Oskar Jeppesen (Peer reviewer)
8. feb. 2019

### TetraTTF-Calix[4]pyrrole: A Biomimmetic Receptor for Anions, Fullerenes and Electron-Deficient Planar Guests
Steffen Bähring (Underviser)
10. jun. 2017

### Journal of the American Chemical Society (Tidsskrift)
Qing He (Peer reviewer), Michael Kelliher (Peer reviewer), Steffen Bähring (Peer reviewer), Vincent M. Lynch (Peer reviewer) & Jonathan L. Sessler (Peer reviewer)
11. maj 2017

### Thinface: Workshop on lifetime and stability of hybrid and organic devices
Steffen Bähring (Deltager)
21. apr. 2016 → 22. apr. 2016

### Chemistry - A European Journal (Tidsskrift)
Steffen Bähring (Peer reviewer), Gunnar Olsen (Peer reviewer), Paul C. Stein (Peer reviewer), Jacob Kongsted (Peer reviewer) & Kent Nielsen (Peer reviewer)
7. jan. 2013

### 5th International Symposium on Macrocyclic and Supramolecular Chemistry
Steffen Bähring (Deltager)
6. jul. 2010 → 10. jul. 2010

### Fourth BIMORE Summer School
Steffen Bähring (Deltager)
21. jun. 2010 → 26. jun. 2010

## Projekter

### Danmarks Frie Forskningsfond - Teknologi og Produktion - Extended-Tetrathiafulvalene-Porphyrin Donor Materials for Organic
Bähring, S.
01/09/2020 → 30/09/2023

### Porphyrin materials for OPV applications
Greenbank, W., Madsen, M. & Bähring, S.
19/02/2019 → 31/05/2019

### Uddannelses- og Forskningsministeriet – FTP- Development of New Tetrathiafulvalene-based Donor Constructs Utilizing Supramolecular Electron Transfer Processes - Towards Organic Photovoltaics
Bähring, S.
01/01/2016 → 30/09/2018

## Undervisning og vejledning

### Dithiafulvene-porphyrin conjugates for Dye-Sensitized Solar Cells

Steffen Bähring
01/09/2019 → 01/08/2020

**Functionalization of the meso−phenyl position of extended tetrathiafulvalene porphyrin for the development of functional materials such as metal−organic frameworks (MOFs)**

Steffen Bähring
01/09/2018 → 31/01/2019

**Further development and optimization of degradable microspheres**

Steffen Bähring
01/09/2019 → 01/08/2020

**Increasing the Pi-conjugation of exTTF Porphyrin with Benzothiadiazole for the Application of Bulk Heterojunction Solar Cells**

Steffen Bähring
01/02/2019 → 31/07/2019

**Increasing the Pi-conjugation of exTTF Porphyrin with Diketopyrrolopyrrole for the Application of Bulk Heterojunction Solar Cells**

Steffen Bähring
01/02/2019 → 31/07/2019

**Ke510: Organic chemical analysis and separation**

Steffen Bähring
31/10/2018 → 05/12/2018

**Ke510: Organic Chemical Analysis and Separation**

Steffen Bähring
22/10/2020 → 30/11/2020

**Ke510: Organic Chemical Analysis and Separation**

Steffen Bähring
15/10/2019 → 29/11/2019

**Ke518: Advanced Organic Synthesis**

Steffen Bähring
25/03/2020 → 15/05/2020

**KE542: Introduction to chemistry - research and application**

Michael Petersen, Steffen Bähring &
01/09/2020 → 19/11/2021

**Ke814: Advanced Organic Synthesis**

Steffen Bähring
25/03/2020 → 15/05/2020

**KE814: Advanced organic synthesis**

Steffen Bähring
01/04/2019 → 31/05/2019

### Ke822: Organic Chemical Analysis and Separation

Steffen Bähring
09/11/2020 → 24/11/2020

### Synthesis and development of an extended tetrathiafulvalene donor macrocycle

Steffen Bähring
01/09/2018 → 31/01/2019

### Synthesis and development of improved tetrathiafulvalene donor molecules

Steffen Bähring
01/02/2018 → 31/05/2018

### Synthesis and investigation of 1,3-dithiole-functionalized heterotriangulenium

Steffen Bähring
01/02/2019 → 31/05/2019

### Synthesis of tetrakis(tetrathiafulvalene)-calix[4]pyrrole with merhyl-substituents

Steffen Bähring
01/02/2018 → 31/05/2018