

List of Publications

Full Papers & Communications

*co-correspondence

85. N. P. Laha, Y. W. Dhir, R. F.H. Giehl, E. M. Schäfer, P. Gaugler, Z. H. Shishavan, H. Gulabani, H. Mao, N. Zheng, N. von Wirén, H. J. Jessen, A. Saiardi, S. Bhattacharjee, D. Laha, G. Schaaf
"ITPK1-Dependent Inositol Polyphosphates Regulate Auxin Responses in *Arabidopsis thaliana*."
bioRxiv **2020**
84. S. Hauke, T. Bittner, H. J. Jessen*, C. Schultz*
„Photo-releasable derivatives of inositol pyrophosphates.”
Method Enzymol. **2020**, *accepted*.
83. A. Ripp, J. Singh, H. J. Jessen
„Rapid Synthesis of Nucleoside Triphosphates and Analogues“
Curr. Protoc. Nucleic Acid Chem. **2020**, <https://doi.org/10.1002/cpnc.108>.
82. T. Bittner, C. Wittwer, S. Hauke, D. Wohlwend, S. Munding, A. K. Dutta, D. Bezold, T. Friedrich, C. Schultz*, H. J. Jessen*
“Photolysis of caged inositol-pyrophosphate InsP_8 directly modulates intracellular Ca^{2+} oscillations and controls C2AB domain localization.”
J. Am. Chem. Soc. **2020**, <https://doi.org/10.1021/jacs.0c01697>.
81. J. Deng, D. Bezold, H. J. Jessen, A. Walther
"Multiple Light Control Mechanisms in ATP-fueled Non-Equilibrium DNA Systems."
Angew. Chem. Int. Ed. **2020**, <https://doi.org/10.1002/anie.202003102>.
80. X. Li, C. Gu, S. Hostachy, S. Sahu, C. Wittwer, H. J. Jessen, D. Fiedler, H. Wang, S. B. Shears
"Control of XPR1-dependent cellular phosphate efflux by InsP_8 is an exemplar for functionally-exclusive inositol pyrophosphate signaling."
Proc. Natl. Acad. Sci. U S A **2020**, *117*, 3568-3574.
79. C. Azevedo, Y. Desfougeres, Y. Jiramongkol, H. Partington, S. Trakansuebkul, J. Singh, N. Steck, H. J. Jessen, A. Saiardi
“Development of a yeast model to study the contribution of vacuolar polyphosphate metabolism to lysine polyphosphorylation.”
J. Biol. Chem. **2020**, *295*, 1439-1451.
78. J. Singh, A. Ripp, T. M. Haas, D. Qiu, M. Keller, P. A. Wender, J. S. Siegel*, K. K. Baldrige*, H. J. Jessen*
„Synthesis of modified nucleoside oligophosphates simplified: Fast, pure, and protecting group free.”
J. Am. Chem. Soc. **2019**, *141*, 15013-15017.
S. Silverman: F1000Prime Recommendation.

77. J. Dong, G. Ma, L. Sui, M. Wei, V. Satheesh, R. Zhang, S. Ge, J. Li, T.-E. Zhang, C. Wittwer, H. J. Jessen, H. Zhang, G.-Y. An, D.-Y. Chao, D. Liu, M. Lei
„Inositol Pyrophosphate InsP_8 Acts as an Intracellular Phosphate Signal in Arabidopsis“
Mol. Plant **2019**, *12*, 1463-1473.
76. D. Laha, N. Parvin, A. Hofer, R. F. H. Giehl, N. Fernandez-Rebollo, N. von Wirén, A. Saiardi, H. J. Jessen, G. Schaaf
“Arabidopsis ITPK1 and ITPK2 have an Evolutionary Conserved Phytic Acid Kinase Activity.”
ACS Chem. Biol. **2019**, *14*, 2127-2133.
75. M. S. C. Wilson, H. J. Jessen, A. Saiardi
“The inositol hexakisphosphate kinases IP6K1 and -2 regulate human cellular phosphate homeostasis, including XPR1-mediated phosphate export.”
J. Biol. Chem. **2019**, *294*, 11597-11608.
74. W. Kim, E. Kim, H. Min, V. B. Eisenbeis, I. Pavlovic, A. K. Dutta, H. J. Jessen, S. Kim*, R. H. Seong*
“Inositol polyphosphates promote T cell-independent humoral immunity via the regulation of Bruton's tyrosine kinase.”
Proc. Natl. Acad. Sci. U S A **2019**, *116*, 12952-12957.
73. J. Zhu, K. Lau, R. K. Harmel, R. Puschmann, L. Broger, A. K. Dutta, H. J. Jessen, L. A. Hothorn, D. Fiedler, M. Hothorn
“Two bifunctional inositol pyrophosphate kinases/phosphatases control plant phosphate homeostasis.”
eLife **2019**, *8*, e43582.
72. Y. An, H. J. Jessen, H. Wang, S. Shears, D. Kireev
“Dynamics of Substrate Processing by PPIP5K2, a Versatile Catalytic Machine.”
Structure **2019**, *27*, 1022-1028.
71. T. M. Haas, P. Ebersperger, V. B. Eisenbeis, C. Nopper, T. Dürr, N. Jork, N. Steck, C. Jessen-Trefzer, H. J. Jessen
“Magic Spot Nucleotides: Tunable Target-specific Chemoenzymatic Synthesis.”
Chem. Commun. **2019**, *55*, 5339-5342.
70. A. K. Dutta, E. Choudhary, X. Wang, M. Záhorszka, M. Forbak, P. Lohner, H. J. Jessen, N. Agarwal, J. Korduláková, C. Jessen-Trefzer
“Trehalose-conjugation enhances toxicity of photosensitizers against mycobacteria.”
ACS Cent. Sci. **2019**, *5*, 644-650.
69. J. Singh, N. Steck, D. De, A. Hofer, A. Ripp, I. Captain, M. Keller, P. A. Wender, R. Bhandari, H. J. Jessen
“A Phosphoramidite Analog of Cyclotriphosphate Enables Iterative Polyphosphorylations.”
Angew. Chem. Int. Ed. **2019**, *58*, 3928-3933.

68. S. Hauke, A. K. Dutta, V. Eisenbeis, D. Bezold, T. Bittner, C. Wittwer, D. Thakor, I. Pavlovic, C. Schultz*, H. J. Jessen*
"Photolysis of cell-permeant caged inositol pyrophosphates controls oscillations of cytosolic calcium in a β -cell line"
Chem. Sci. **2019**, *10*, 2687-2692.
67. S. Mordhorst, J. Singh, M. K. F. Mohr, R. Hinkelmann, M. Keppler, H. J. Jessen*, J. N. Andexer*
"Several Polyphosphate Kinase 2 Enzymes Produce Adenosine 5'-Polyphosphates."
ChemBioChem **2019**, *20*, 1019-1022.
66. M. Duss, J. Vallooran, L. Salvati Manni, S. Handschin, R. Mezzenga, H. J. Jessen, E. Landau
"Palladium nanoparticles synthesized in, templated and supported by lipidic mesophases are efficient and tunable catalysts of Suzuki-Miyaura cross coupling reactions"
Langmuir **2019**, *35*, 120-127.
65. E. Potapenko, C. Cordeiro, G. Huang, M. Storey, C. Wittwer, A. K. Dutta, H. J. Jessen, V. J. Starai, R. Docampo
"5-Diphospho-Inositol Pentakisphosphate (5-IP₇) Regulates Phosphate Release from Acidocalcisomes of *Trypanosoma brucei* and Vacuoles of *Saccharomyces cerevisiae*"
J. Biol. Chem. **2018**, *293*, 19101-19112.
64. G. M. Fernandes-Cunha, C. McKinlay, J. Vargas, H. J. Jessen, R. Waymouth, P. A. Wender
"Delivery of Inorganic Polyphosphate into Cells using Amphipathic Oligocarbonate Transporters"
ACS Cent. Sci. **2018**, *4*, 1394–1402.
63. M. Ito, N. Fujii, C. Wittwer, A. Sasaki, M. Tanaka, T. Bittner, H. J. Jessen, A. Saiardi, S. Takizawa
"Hydrophilic interaction liquid chromatography-tandem mass spectrometry for the quantitative analysis of mammalian-derived inositol poly/pyrophosphates."
J. Chromatogr. A **2018**, *1573*, 87-97.
62. A.C. Puhl-Rubio, M.A. Stashko, H. Wang, P.B. Hardy, V. Tyagi, B. Li, X. Wang, D. Kireev, H.J. Jessen, S.V. Frye, S.B. Shears, K.H. Pearce
"Use of Protein Kinase-Focused Compound Libraries for the Discovery of New Inositol Phosphate Kinase Inhibitors."
SLAS Discov. **2018**, <https://doi.org/10.1177/2472555218775323>.
61. C. Azevedo, J. Singh, N. Steck, A. Hofer, T. Singh, H. J. Jessen*, A. Saiardi*
"Screening a protein array with synthetic biotinylated inorganic polyphosphate to define the human polyP-ome."
ACS Chem. Biol. **2018**, *13*, 1958-1963.
(selected for "ACS Editors' Choice")
60. H. Wang, C. Gu, R. Rolfes, H. J. Jessen, S. B. Shears
"Structural and biochemical characterization of Siw14: a protein-tyrosine phosphatase fold that metabolizes inositol pyrophosphates."
J. Biol. Chem. **2018**, *293*, 6905-6914.

59. V. S. Nair, C. Gu, A. K. Janoshazi, H. J. Jessen, H. Wang, S. B. Shears
"Inositol Pyrophosphate Synthesis by Diphosphoinositol Pentakisphosphate Kinase-1 is Regulated by Phosphatidylinositol(4,5)bisphosphate."
Biosci. Rep. **2018**, doi: 10.1042/BSR20171549
58. A. E. Parnell, S. Mordhorst, F. Kemper, M. Giurrandino, J. P. Prince, N. J. Schwarzer, A. Hofer, D. Wohlwend, H. J. Jessen, S. Gerhardt, O. Einsle, P. C. F. Oyston, J. N. Andexer*, P. L. Roach*
"Substrate Recognition and Mechanism Revealed by Ligand-Bound Polyphosphate Kinase 2 Structures."
Proc. Natl. Acad. Sci. U S A, **2018**, 115, 3350-3355.
57. M. Duss, L. Salvati Manni, L. Moser, S. Handschin, R. Mezzenga, H. J. Jessen, E. Landau
"Lipidic mesophases as novel nanoreactor scaffolds for organocatalysts: Heterogeneously catalyzed asymmetric aldol reactions in confined water."
ACS Appl. Mater. Interfaces, **2018**, 10, 5114–5124.
56. D. Blüher, D. Laha, S. Thieme, A. Hofer, L. Eschen-Lippold, A. Masch, G. Balcke, I. Pavlovic, O. Nagel, A. Schonsky, R. Hinkelmann, J. Wörner, N. Parvin, R. Greiner, S. Weber, A. Tissier, M. Schutkowski, J. Lee, H. J. Jessen*, G. Schaaf*, U. Bonas*
"A 1-Phytase Type III Effector Interferes with Plant Hormone Signaling."
Nature Commun. **2017**, 8, 2159.
(Highlighted in Nature Plants)
55. C. Gu, H-N. Nguyen, D. Ganini, Z. Chen, H. J. Jessen, Z. Gu, H. Wang, S. B. Shears
"Knockout of 5-InsP7 Kinase Activity Transforms the HCT116 Colon Cancer Cell line into a Hypermetabolic, Growth-Inhibited Phenotype."
Proc. Natl. Acad. Sci. U S A, **2017**, 114, 11968-11973.
54. R. Gerasimaite, I. Pavlovic, S. Capolicchio, A. Hofer, A. Schmidt, H. J. Jessen*, A. Mayer*
"Inositol pyrophosphate specificity of the SPX-dependent polyphosphate polymerase VTC."
ACS Chem. Biol. **2017**, 12, 648-653.
53. C. Gu, H.-N. Nguyen, A. Hofer, H. J. Jessen, X. Dai, H. Wang, S. B. Shears
"The Significance of the Bifunctional Kinase/Phosphatase Activities of PPIP5Ks for Coupling Inositol Pyrophosphate Cell-Signaling to Cellular Phosphate Homeostasis"
J. Biol. Chem. **2017**, 292, 4544-4555.
52. C. Gu, M. Wilson, H. J. Jessen, A. Saiardi, S. B. Shears
"Inositol Pyrophosphate Profiling of two HCT116 Cell Lines Uncovers Variation in InsP₈ Levels"
Plos ONE **2016**, 11, e0165286 - e0165286
51. Y. Desfougères, R. Gerasimaite, H. J. Jessen, A. Mayer
"Vtc5, a novel subunit of the vacuolar transporter chaperone complex, regulates polyphosphate synthesis and phosphate homeostasis in yeast."
J. Biol. Chem. **2016**, 291, 22262 – 22275

50. A. Hofer, E. Marques, N. Kieliger, S.-K. N. Gatter, S. Jordi, E. Ferrari, M. Hofmann, T. B. Fitzpatrick, M. O. Hottiger, H. J. Jessen
"Chemoselective Dimerization of Phosphates."
Org. Lett. **2016**, *18*, 3222-3225.
49. A. C. Müller, R. Giambruno, J. Weißer, P. Májek, A. Hofer, J. W. Bigenzahn, G. Superti-Furga, H. J. Jessen*, K. L. Bennett*
"Identifying Kinase Substrates via a Heavy ATP Kinase Assay and Quantitative Mass Spectrometry."
Sci. Rep. **2016**, *6*, 28107.
48. T.-S. Lee, J.-Y. Lee, J. W. Kyung, Y. Yang, S. J. Park, S. Lee, I. Pavlovic, B. Kong, Y. S. Jho, H. J. Jessen, D.-H. Kweon, Y.-K. Shin, S. H. Kim, T.-Y. Yoon, S. Kim
"Inositol Pyrophosphates Inhibit Synaptotagmin-Dependent Exocytosis."
Proc. Natl. Acad. Sci. U S A, **2016**, *113*, 8314-8319.
47. R. Wild, R. Gerasimaite, J. Jung, V. Truffault, I. Pavlovic, A. Schmidt, A. Saiardi, H. J. Jessen, Y. Poirier*, M. Hothorn*, A. Mayer*
"Control of eukaryotic phosphate homeostasis by inositol polyphosphate sensor domains."
Science **2016**, *352*, 986-990.
46. I. Pavlovic, D. T. Thakor, H. J. Jessen
"Synthesis of 2-Diphospho-*myo*-inositol 1,3,4,5,6-Pentakisphosphate and a Photocaged Analogue."
Org. Biomol. Chem. **2016**, *14*, 5559 – 5562.
45. I. Pavlovic, D. T. Thakor, J. R. Vargas, C. J. McKinlay, S. Hauke, P. Anstaett, R. C. Camuna, L. Bigler, G. Gasser, C. Schultz, P. A. Wender*, H. J. Jessen*
"Cellular delivery and photochemical release of a caged inositol-pyrophosphate induces PH-domain translocation in cellulose."
Nature Commun. **2016**, *7*, DOI:10.1038/ncomms10622.
44. H. Wang, V. Nair, A. Holland, S. Capolicchio, H. J. Jessen, M. Johnson, S. Shears
"Asp1 from *Schizosaccharomyces pombe* Binds a [2Fe-2S]²⁺ Cluster Which Inhibits Inositol Pyrophosphate 1-Phosphatase Activity"
Biochemistry **2015**, *54*, 6462-6474.
43. I. Pavlovic, D. T. Thakor, L. Bigler, M. S. C. Wilson, D. Laha, G. Schaaf, A. Saiardi, H. J. Jessen
"Pro-Metabolites of 5-diphospho-*myo*-inositol pentakisphosphate"
Angew. Chem. Int. Ed. **2015**, *54*, 9622-9626.
(Selected as "Hot Paper")
42. A. Hofer, G. S. Cremosnik, A. C. Müller, R. Giambruno, C. Trefzer, G. Superti-Furga, K. L. Bennett, H. J. Jessen
"A Modular Synthesis of Modified Phosphoanhydrides"
Chem. Eur. J. **2015**, *21*, 10116-10122
(Selected as "Very Important Paper")

41. M. Duss, S. Capolicchio, A. Linden, N. Ahmed, H. J. Jessen
“Desymmetrization of *myo*-Inositol Derivatives by Lanthanide Catalyzed Phosphitylation with C₂-Symmetric Phosphites.”
Bioorg. Med. Chem. **2015**, *23*, 2854-2861.
40. D. Laha, P. Johnen, C. Azevedo, M. Dynowski, M. Weiß, S. Capolicchio, T. Iven, M. Steenbergen, M. Freyer, P. Gaugler, M. K. F. de Campos, N. Zheng, I. Feussner, H. J. Jessen, S. C. M. Van Wees, A. Saiardi, G. Schaaf
“VIH2 controls biosynthesis of the Inositol Pyrophosphate InsP₈ and Regulates the Wound Response in *Arabidopsis thaliana*.”
Plant Cell **2015**, *27*, 1082-1097.
39. S. Capolicchio, H. Wang, D. T. Thakor, S. B. Shears, H. J. Jessen
“Synthesis of densely phosphorylated bis-1,5-diphospho-*myo*-inositol tetrakisphosphate and its enantiomer by bidirectional P-anhydride formation.”
Angew. Chem. Int. Ed. **2014**, *53*, 9508-9511.
(Highlighted in ChemBioChem)
38. M. Wu, L. S. Chong, S. Capolicchio, H. J. Jessen, A. C. Resnick, D. Fiedler
“Elucidating diphosphoinositol polyphosphate function with non-hydrolyzable analogues.”
Angew. Chem. Int. Ed. **2014**, *53*, 7192-7197.
37. G. S. Cremosnik, A. Hofer, H. J. Jessen
“Iterative Synthesis of Nucleoside Oligophosphates with Phosphoramidites.”
Angew. Chem. Int. Ed. **2014**, *53*, 286-289.
36. S. Benz, S. Nötzli, J. S. Siegel, D. Eberli, H. J. Jessen
“Controlled oxygen release from pyridone endoperoxides promotes cell survival under anoxic conditions.”
J. Med. Chem. **2013**, *56*, 10171-10182.
35. S. Capolicchio, D. T. Thakor, A. Linden, H. J. Jessen
“Synthesis of Unsymmetric Diphosphoinositol Polyphosphates.”
Angew. Chem. Int. Ed. **2013**, *52*, 6912-6916.
(Highlighted in Chimia and ChemBioChem)

Reviews & Perspectives & Conference Reports

34. D. Bezold, T. Dürr, J. Singh, H. J. Jessen
"Cyclotriphosphate: A Brief History, Recent Developments, and Perspectives in Synthesis"
Chem. Eur. J. **2020**, *26*, 2298-2308.
33. H. J. Jessen
“The Hitchhiker’s Guide to Organophosphate Chemistry.”
Synlett **2018**, *29*, 699-713.
32. H. J. Jessen
Editorial: Phosphate Labeling and Sensing in Chemical Biology
Topics Curr. Chem. **2017**, *375*.

31. A. Dutta, I. Captain, H. J. Jessen
“New Synthetic Methods for Phosphate Labeling”
Topics Curr. Chem. **2017**, *375*, 1-48.
30. S. Benz, S. Nötzli, J. S. Siegel, H. J. Jessen, D. Eberli
“Controlled Oxygen Release From Pyridone Endoperoxides For Urologic Tissue Engineering Applications”
J. Urol. **2014**, *171*, E217-E218.
29. A. Hofer, H. J. Jessen
“Iterative Oligophosphate Synthesis.”
GIT Laboratory Journal **2014**, *18*, 13-15.
28. H. J. Jessen, N. Ahmed, A. Hofer
“Phosphate Esters and Anhydrides – Recent Strategies Targeting Nature’s Favoured Modifications.”
Org. Biomol. Chem. **2014**, *12*, 3526-3530.
27. H. J. Jessen, S. Capolicchio, I. Pavlovic, D. T. Thakor
“Diphosphoinositol Polyphosphates: Polar Stars in Cell Signalling.”
Synlett **2014**, *25*, 1494-1498.
26. S. Kath-Schorr, H. J. Jessen
“16. Steinheimer Gespräche”
Nachrichten aus der Chemie **2013**.
25. F. Schoenebeck, H. J. Jessen
“The 48th EUCHEMS Conference on Stereochemistry (Bürgenstock Conference 2013).”
Chimia **2013**, *67*, 671.

Postdoctoral & Doctoral Studies

24. A. Chicca, R. Berg, H. J. Jessen, N. Marck, F. Schmid, P. Burch, J. Gertsch, K. Gademann
“Biological Evaluation of Pyridone Alkaloids on the Endocannabinoid System”
Bioorg. Med. Chem. **2017**, *25*, 6102-6114.
23. C. Meier, H. J. Jessen, T. Schulz, L. Weinschenk, J. Balzarini
“Nucleoside Diphosphate Prodrugs”
Curr. Med. Chem. **2015**, *22*, 3933-3950.
22. F. Schmid, M. Bernasconi, H. J. Jessen, A. Pfaltz, K. Gademann
“Catalytic Enantioselective Total Synthesis of (-) Pyridovericin.”
Synthesis **2014**, *46*, 864-870.
21. R. Liffert, J. Hoecker, C.K. Jana, T. M. Woods, P. Burch, H. J. Jessen, M. Neuburger, K. Gademann
“Withanolide A: Synthesis and Structural Requirements for Neurite Outgrowth.”
Chem. Sci. **2013**, *4*, 2851-2857.

20. F. Schmid, H. J. Jessen, P. Burch, K. Gademann
"Truncated Militarionone Fragments Identified by Total Chemical Synthesis Induce Neurite Outgrowth."
Med. Chem. Comm. **2013**, *4*, 135-139.
19. H. J. Jessen, A. Schumacher, F. Schmid, A. Pfaltz, K. Gademann
"Catalytic Enantioselective Total Synthesis of (+)-Torrubiellone C."
Org. Lett. **2011**, *13*, 4368-4370.
18. C. K. Jana, J. Hoecker, T. M. Woods, H. J. Jessen, M. Neuburger, K. Gademann
"Synthesis of Withanolide A, Biological Evaluation of its Neuritogenic Properties and Studies on Secretase Inhibition."
Angew. Chem. Int. Ed. **2011**, *50*, 8407-8411.
17. H. J. Jessen, A. Schumacher, T. Shaw, A. Pfaltz, K. Gademann
"A Unified Approach for the Stereoselective Synthesis of Pyridone Alkaloids and their Neuritogenic Activity."
Angew. Chem. Int. Ed. **2011**, *50*, 4222-4226.
16. H. J. Jessen, K. Gademann
"4-Hydroxy-2-Pyridone Alkaloids: Structures and Synthetic Approaches."
Nat. Prod. Rep. **2010**, *27*, 1168-1185.
15. H. J. Jessen, K. Gademann
"Total Synthesis of the Marine Alkaloid Palau'amine." (Highlight)
Angew. Chem. Int. Ed. **2010**, *49*, 2972-2974.
14. H. J. Jessen, D. Barbaras, M. Hamburger, K. Gademann; "Total Synthesis and Neuritotropic Activity of Farinosone C."
Org. Lett. **2009**, *11*, 3446-3449.
13. T. Schulz, H. J. Jessen, J. Balzarini, C. Meier
"Bioreversible Protection of Nucleosidediphosphates - Synthesis and Properties."
Antiviral Res. **2009**, *82*, A63.
12. H. J. Jessen, T. Schulz, J. Balzarini, C. Meier
"Bioreversible Protection of Nucleoside Diphosphates."
Angew. Chem. Int. Ed. **2008**, *47*, 8719-8722. (Highlighted in Welt online)
11. C. Meier, H. J. Jessen, J. Balzarini
"Nucleoside Diphosphate Prodrugs."
Nucleic Acids Symp. Ser. **2008**, *52*, 83-84.
10. H. J. Jessen, J. Balzarini, C. Meier
"Intracellular Trapping of *cycloSal*-Pronucleotides: Modification of Prodrugs with Amino Acid Esters."
J. Med. Chem. **2008**, *51*, 6592-6598.
9. C. Meier, H. Jessen, N. Gisch, J. Balzarini
"Enzyme-triggered *cycloSal*-Pronucleotides."
Antiviral Res. **2008**, *78*, A26.

8. H. J. Jessen, J. Balzarini, C. Meier
“Properties of Aminoacid Esters Linked to *cycloSal*-Pronucleotides.”
Antiviral Res. **2007**, *74*, A73.
7. H. J. Jessen, V. Tonn, C. Meier
“Intracellular Trapping of *cycloSal*-Pronucleotides by Enzymatic Cleavage.”
Nucleos. Nucleot. Nucl. **2007**, *26*, 827.
6. H. J. Jessen, W. Fendrich, C. Meier
“Synthesis and Properties of Fluorescent *cycloSal*-Nucleotides Based on the Pyrimidine Nucleoside m5K.”
Eur. J. Org. Chem. **2006**, 924-931.
5. C. Meier, C. Ducho, H. J. Jessen, D. Vukadinovic-Tenter, J. Balzarini
“Second Generation *cycloSal*-d4TMP Pronucleotides Bearing Esterase-Cleavable Sites - The Trapping-Concept.”
Eur. J. Org. Chem. **2006**, 197-206.
4. H. J. Jessen, W. Fendrich, T. Schulz, J. Balzarini, C. Meier
“Synthesis and Properties of Intrinsically Fluorescent *cycloSal*-Pronucleotides.”
Antiviral Res. **2006**, *70*, A60.
3. C. Meier, C. Ducho, H. J. Jessen, J. Balzarini
“Esterase-Cleavable *cycloSal*-Pronucleotides - The Trapping Concept.”
Coll. Czech. Chem. Commun. (Symp. Series) **2005**, 105-114.

Patents

2. H. J. Jessen, C. Meier; *International Patent* - Nr. PCT/DE2009/000550
1. H. J. Jessen, C. Meier; *German Patent* - Nr. DE 10 2008 020 633.4

Title and year of PhD thesis: “Studies on the intracellular release of nucleoside diphosphates”, 2008.