

**Scientific Production**  
Prof. Dominique Armspach  
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● **Patents**

- [1] *Cyclodextrin-based compounds capable of forming inclusion complexes*  
D. Armspach, C. P. Moore, J. F. Stoddart, T. J. Wear, *Pat. Int. Appl.* WO **1993** 24,532.
- [2] *Aza-capped cyclodextrins and process of preparing them*  
D. Armspach, D. Matt, M. Jouffroy, *Eur. Pat. Appl.* **2018**, EP 3281957 A1 20180214.

● **Review Articles**

- [3] *Carborane-functionalized ligands for metallosupramolecular chemistry*  
D. Armspach, M. Cattalini, E. C. Constable, C. E. Housecroft, M. Neuburger, M. Zehnder, in *Advances in Boron Chemistry*, RSC Special Publication N°. 201, Cambridge, **1997**, p 297.
- [4] *Cyclodextrins*  
D. Armspach, G. Gattuso, R. Königer, J. F. Stoddart, in *Bioorganic Chemistry: Carbohydrates* (Ed.: S. M. Hecht), Oxford University Press, New York, **1999**, p. 458.
- [5] *Coordination chemistry and catalysis (with regard to calixarenes)*  
C. Wieser-Jeunesse, S. Steyer, D. Armspach, D. Matt, J. Harrowfield in *Calix 2001* (Eds: J. Vicens, Z. Asfari, J. M. Harrowfield, V. Böhmer), Kluwer Academic Publishers, Dordrecht, **2001**, p. 513.
- [6] *Capped Cyclodextrins*  
E. Engeldinger, D. Armspach, D. Matt, *Chem. Rev.* **2003**, 103, 4147-4174.
- [7] *Conical cavitands as second coordination spheres and protecting environments. Towards metal-centred, intra-cavity reactions*  
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C. Jeunesse, D. Armspach, D. Matt, *Chem. Commun.* **2005**, 5603-5614.
- [9] *BINOL-derived phosphoramidites in asymmetric hydrogenation: can the presence of a functionality in the amino group influence the catalytic outcome?*  
L. Eberhardt, D. Armspach, J. Harrowfield, D. Matt, *Chem. Soc. Rev.* **2008**, 37, 839-864.
- [10] *“Through-space” nuclear spin-spin couplings in ferrocenyl polyphosphanes and diphosphino cavitands: A new way of gathering structural information in constrained P(III) ligands by NMR*  
J.-C. Hierso, D. Armspach, D. Matt, *C. R. Chimie* **2009**, 12, 1002-1013.
- [11] *Methylated cyclodextrins as preorganisation platforms for the synthesis of multidentate chelating ligands aimed at transition metal coordination and industrially relevant catalysis*  
D. Armspach, D. Matt, *C. R. Chimie* **2011**, 14, 135-148.
- [12] *Metallated cavitands (calixarenes, resorcinarenes, cyclodextrins) with internal coordination sites*  
R. Gramage-Doria, D. Armspach, D. Matt, *Coord. Chem. Rev.* **2013**, 257, 776-816.
- [13] *Cyclodextrin and phosphorus(III): a versatile combination for coordination chemistry and catalysis*  
M. Jouffroy, D. Armspach, D. Matt, *Dalton Trans.* **2015**, 44, 12942-12969.
- [14] *Cavity-shaped ligands for asymmetric metal catalysis*  
Z. Kaya, E. Bentouhami, K. Pelzer, D. Armspach, *Coord. Chem. Rev.* **2021**, 445, 214066.

● **Publications**

- [15] *Oxidation of the triterpenic hopane skeleton by peracids*  
P. Bisseret, D. Armspach, S. Neunlist, M. Rohmer, *Tetrahedron Lett.* **1990**, 45, 6523-6526.
- [16] *The self-assembly of catenated cyclodextrins*  
D. Armspach, P. R. Ashton, C. P. Moore, N. Spencer, J. F. Stoddart, T. J. Wear, D. J. Williams, *Angew. Chem. Int. Ed.* **1993**, 32, 854-858.
- [17] *Cyclodextrins: 'linking lampshades'*  
D. Armspach, P. R. Ashton, N. Spencer, J. F. Stoddart, D. J. Williams, *Pestic. Sci.* **1994**, 41, 232-235.
- [18] *Catenated cyclodextrins*  
D. Armspach, P. R. Ashton, R. Ballardini, V. Balzani, A. Godi, C. P. Moore, L. Prodi, N. Spencer, J. F. Stoddart, M. S. Tolley, T. J. Wear, D. J. Williams, *Chem. Eur. J.* **1995**, 1, 33-55.
- [19] *Carboranyl cluster-functionalised ligands for metallosupramolecular chemistry*  
D. Armspach, E. C. Constable, C. E. Housecroft, M. Neuburger, M. Zehnder, *Supram. Chem.* **1996**, 7, 97-100.
- [20] *Cluster-functionalised ligands; metal-cluster interactions and nuclearity changes in carboranyl-2,2':6',2''-terpyridines*  
D. Armspach, E. C. Constable, C. E. Housecroft, M. Neuburger, M. Zehnder, *New J. Chem.* **1996**, 20, 331-335.
- [21] *Boron-rich metallodendrimers — mix-and-match assembly of multi-functional metallosupramolecules.*  
D. Armspach, M. Cattalini, E. C. Constable, C. E. Housecroft, D. Phillips, *Chem. Commun.* **1996**, 1823-1824.
- [22] *Bucky-ligands: fullerene-substituted oligopyridines for metallosupramolecular chemistry.*  
D. Armspach, E. C. Constable, F. Diederich, C. E. Housecroft, J.-F. Nierengarten, *Chem. Commun.* **1996**, 2009-2010.
- [23] *Carborane-functionalised 2,2':6',2''-terpyridine ligands for metallosupramolecular chemistry: Syntheses, complex formation, and the crystal and molecular structures of 4'-(ortho-carboranyl)-2,2':6',2''-terpyridine and 4'-(ortho-carboranylpropoxy)-2,2':6',2''-terpyridine.*  
D. Armspach, E. C. Constable, C. E. Housecroft, M. Neuburger, M. Zehnder, *J. Organometal. Chem.* **1998**, 550, 193-206.
- [24] *Bucky ligands: synthesis, ruthenium(II) complexes, and electrochemical properties*  
D. Armspach, E. C. Constable, F. Diederich, C. E. Housecroft, J.-F. Nierengarten, *Chem. Eur. J.* **1998**, 4, 723-733.
- [25] *The tris(4-tert-butylphenyl)methyl group: a bulky substituent for effective regioselective difunctionalisation of cyclomaltohexaose*  
D. Armspach, D. Matt, *Carbohydr. Res.* **1998**, 310, 129-133.
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D. Armspach, D. Matt, *Chem. Commun.* **1999**, 1073-1074.
- [27] *The first Ru(II) bipyridyl-capped cyclodextrin. Evidence of electron-transfer through the cavity*  
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- [29] *Dicobalt cluster functionalized 2,2':6',2''-terpyridines ligands and their ruthenium(II) complexes*

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D. Armspach, D. Matt, *Inorg. Chem.* **2001**, *40*, 3505-3509.
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E. Engeldinger, D. Armspach, D. Matt, *Angew. Chem. Int. Ed.* **2001**, *40*, 2526-2529.
- [32] *A cyclodextrin diphosphane as a first and second coordination sphere cavitand: Evidence for weak C—H $\cdots$ Cl—M hydrogen bonds within metal-capped cavities*  
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- [33] *Synthesis of large chelate rings with diphosphites built on a cyclodextrin scaffold. Unexpected formation of 1,2-phenylene-capped  $\alpha$ -cyclodextrins*  
E. Engeldinger, D. Armspach, D. Matt, L. Toupet, M. Wesolek, *C. R. Chimie* **2002**, *5*, 359-372.  
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- [34] *Selective tetrafunctionalisation of  $\alpha$ -cyclodextrin using the supertrityl protecting group - Synthesis of the first  $C_2$ -symmetric tetraphosphane based on a cavitand ( $\alpha$ -TEPHOS)*  
L. Poorters, D. Armspach, D. Matt, *Eur. J. Org. Chem.* **2003**, 1377-1381.
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- [36] *Cyclodextrin phosphanes as first and second coordination sphere cavitands*  
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L. Poorters, D. Armspach, E. Engeldinger, D. Matt, *Proceedings of the 12<sup>th</sup> International Cyclodextrin Symposium*, Montpellier, France, APGI, **2004**, 73-76.
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L. Poorters, D. Armspach, D. Matt, B. Benmerad, F. Balegroune, *Proceedings of the 12<sup>th</sup> International Cyclodextrin Symposium*, Montpellier, France, APGI, **2004**, 117-120.
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