

• PUBLICATIONS

Total 123 publications. Independent publications are listed below:

123. Sokolnicki, T., Alharbi, M.M., van Ingen, Y., Rahim, S., Pramanik, M., Roldan, A., Walkowiak,* J., **Melen,* R.L.**, "Reactivity of a series of triaryl borates, B(OAr^x)₃, in hydroboration catalysis", *Dalton Trans.*, 2023, **52**, 16118.
Cited: 0
URL: <https://pubs.rsc.org/en/content/articlelanding/2023/dt/d3dt03333c>
122. Pahar, S., Górecka, A., Richards,* E., **Melen,* R.L.**, "Flourishing reactivities of isocyanates and isothiocyanates using group 13 elements", *CRPS*, 2023, **4**, 101745.
Cited: 0
URL: <https://www.sciencedirect.com/science/article/pii/S2666386423005908>
121. Pramanik, M., Guerzoni, M. G., Richards, E., **Melen,* R.L.**, "Recent advances in asymmetric catalysis using p-block elements", *Angew. Chem. Int. Ed.*, 2023, e202316461.
Cited: 0
URL: <https://onlinelibrary.wiley.com/doi/10.1002/anie.202316461>
120. Khan, M. N., van Ingen, Y., Boruah, T., McLauchlan, A., Wirth,* T., **Melen,* R. L.**, "Advances in CO₂ activation by frustrated Lewis pairs: from stoichiometric to catalytic reactions", *Chem. Sci.*, 2023, **14**, 13661.
Cited: 0
URL: <https://pubs.rsc.org/en/content/articlelanding/2023/SC/D3SC03907B>
119. Boruah, T., **Melen,* R.L.**, Wirth,* T., "Isodesmic metathesis chemistry: A novel way to recycle P(V)", *Chem Catalysis.*, 2023, **3**, 100731.
Cited: 0
URL: [https://www.cell.com/chem-catalysis/pdf/S2667-1093\(23\)00277-4.pdf](https://www.cell.com/chem-catalysis/pdf/S2667-1093(23)00277-4.pdf)
118. Paramanik, M., **Melen,* R.L.**, "Frustrated radical pairs in selective functionalization of inert aliphatic C–H bonds", *Chem.*, 2023, **9**, 2060.
Cited: 0
URL: <https://www.sciencedirect.com/science/article/abs/pii/S2451929423003637>
117. van der Zee, L., Pahar, S., Richards,* E., **Melen,* R.L.**, Slootweg, J.C., "Insights into single-electron transfer processes in frustrated Lewis pair chemistry and related donor-acceptor systems in main group chemistry", *Chem Rev.*, 2023, **123**, 9653.
Cited: 2
URL: <https://pubs.acs.org/doi/full/10.1021/acs.chemrev.3c00217>
116. Pramanik, M., **Melen,* R.L.**, "Activation of diazo compounds by fluorinated triarylborane catalysts", *Synthesis*, 2023, **55**, 3906.
Cited: 0
URL: <https://www.thieme-connect.com/products/ejournals/abstract/10.1055/a-2118-3046>
115. Gillions, J.P., Elsherbeni, S.A., Winfrey, L., Yun, L., **Melen,* R.L.**, Morrill,* L.C., Pulis,* A.P., "Recent advances in catalysis using organoborane mediated hydride abstraction", *Synlett*, 2023, **34**, 2117.
Cited: 0
URL: <https://www.thieme-connect.de/products/ejournals/abstract/10.1055/a-2111-9629>
114. Alotaibi, N., Babaahmadi, R., Pramanik, M., Kaehler, T., Dasgupta, A., Richards, E., Ariafard, A., Wirth, T., **Melen,* R.L.**, "B(3,4,5-F₃H₂C₆)₃ Lewis acid-catalysed C3-allylation of indoles", *Dalton Trans.*, 2023, **52**, 5039.

Cited: 0

URL: <https://pubs.rsc.org/en/content/articlelanding/2023/DT/D3DT00745F>

113. Ali, R., Babaahmadi, R., Didsbury, M., Stephens, R., **Melen, R.L.**, Wirth, * T., "Flow Electrochemistry for the *N*-nitrosation of secondary amines", *Chem. Eur. J.*, 2023, **29**, e202300957.
Cited: 0
URL: <https://chemistry-europe.onlinelibrary.wiley.com/doi/10.1002/chem.202300957>
112. Pramanik, M., **Melen,* R.L.**, "Metal-free routes from carbon monoxide to ketenes", *Chem*, 2023, **9**, 263.
Cited: 0
URL: <https://www.sciencedirect.com/science/article/abs/pii/S2451929423000384>
111. Alharbi, M.A., van Ingen, Y., Roldan, A., Kaehler,* T., **Melen,* R.L.**, "Synthesis and Lewis acidity of fluorinated triaryl borates", *Dalton Trans.*, 2023, **52**, 1820.
Cited: 0
URL: <https://pubs.rsc.org/en/content/articlelanding/2023/dt/d2dt04095f>
110. Stefkova, K., Guerzoni, M.G., van Ingen, Y., Richards,* E., **Melen,* R.L.**, "B(C₆F₅)₃ catalyzed diastereoselective and divergent reactions of vinyl diazo esters with nitrones: synthesis of highly functionalized diazo compounds", *Org. Lett.*, 2023, **25**, 500.
Cited: 0
URL: <https://pubs.acs.org/doi/10.1021/acs.orglett.2c04198>
109. Richards,* E., **Melen,* R.L.**, "Carbenium catalysis toward β-carbolines", *Chem Catalysis*, 2023, **3**, 100511.
Cited: 0
URL: <https://www.sciencedirect.com/science/article/abs/pii/S2667109323000076>
108. Kustiana, B.A., **Melen, R.L.**, Morrill,* L.C., "One-pot synthesis of styrene derivatives from allyl silanes via B(C₆F₅)₃-catalyzed isomerization-Hiyama coupling", *Org. Lett.*, 2022, **24**, 8694.
Cited: 1
URL: <https://pubs.acs.org/doi/10.1021/acs.orglett.2c03584>
107. Inoue,* S., **Melen,* R.L.**, Harder,* S., "Main group catalysis", *Eur. J. Inorg. Chem.*, 2022, e202200414.
Cited: 1
URL: <https://chemistry-europe.onlinelibrary.wiley.com/doi/epdf/10.1002/ejic.202200414>
106. Guerzoni, M.G., Dasgupta, A., Richards, E., **Melen,* R.L.**, "Enantioselective applications of frustrated Lewis pairs in organic synthesis", *Chem Catalysis*, 2022, **2**, 2865.
Cited: 1
URL: [https://www.cell.com/chem-catalysis/pdf/S2667-1093\(22\)00497-3.pdf](https://www.cell.com/chem-catalysis/pdf/S2667-1093(22)00497-3.pdf)
105. Kustiana, B.A., Elsherbeni, S.A., Linford-Wood, T.G., **Melen, R.L.**, Grayson, M.N., Morrill,* L.C., "B(C₆F₅)₃-catalyzed *E*-selective isomerization of alkenes", *Chem. Eur. J.*, 2022, **28**, e202202454.
Cited: 2
URL: <https://chemistry-europe.onlinelibrary.wiley.com/doi/full/10.1002/chem.202202454>
104. Dasgupta, A. Guerzoni, M.G., Alotaibi, N., van Ingen, Y., Farshadfar, K., Richards,* E., Ariaifard,* A., **Melen,* R.L.**, "Chemo- and regio-selective amidation of indoles with isocyanates using borane Lewis acids", *Catal. Sci. Technol.*, 2022, **12**, 5982.
Cited: 0
URL: <https://pubs.rsc.org/en/content/articlelanding/2022/cy/d2cy01441f>

103. Kuveke,* R.E.H., Barwise, L., van Ingen, Y., Vashisth, K., Roberts, N., Chitnis,* S.S., Dutton,* J.L., Martin,* C.D., **Melen,* R.L.**, "An international study evaluating elemental analysis", *ACS Cent. Sci.*, 2022, **8**, 855.
Cited: 9
URL: <https://pubs.acs.org/doi/10.1021/acscentsci.2c00325>
- Highlighted in: Proctor, S., Lovera, S., Tomich, A., Lavallo, V., "Searching for the truth: elemental analysis—a powerful but often poorly executed technique", *ACS Cent. Sci.*, 2022, **8**, 874.
- Highlighted in: Katsnelson, A. "Chemists debate the value of elemental analysis: the technique for confirming a product's purity raises practical and ethical issues", *ACS Cent. Sci.*, 2022, **8**, 1569.
- Cardiff University News Article "Unrealistic journal requirement for chemical purity of samples": <https://www.cardiff.ac.uk/news/view/2634994-unrealistic-journal-requirement-for-chemical-purity-of-samples>
- Chemistry World Highlight by Chitnis,* S.S., Dutton,* J.L., Martin,* C.D., **Melen,* R.L.**, "Are elemental analysis guidelines appropriate?": <https://www.chemistryworld.com/elemental-analysis/100908.tag>
- Chemistry World Highlight by Atkinson, V. "First publisher abandons impractical elemental analysis standard as journals eye next move": <https://www.chemistryworld.com/news/first-publisher-abandons-impractical-elemental-analysis-standard-as-journals-eye-next-move/4017596.article>
- In the pipeline by Lowe, D. "Combustion analysis: that voodoo that we do": <https://www.science.org/content/blog-post/combustion-analysis-voodoo-we-do>
102. Guerzoni, M., van Ingen, Y., **Melen,* R.L.**, "Recent applications of fluorinated arylborane derivatives", *J. Organomet. Chem.*, 2022, **78**, 133 (invited).
Cited: 1
URL: <https://www.sciencedirect.com/science/article/pii/S0065305522000107?via%3Dihub>
101. Dasgupta, A., van Ingen, Y., Guerzoni, M., Farshadfar, K., Rawson, J.M., Richards,* E., Ariaifard,* A., **Melen,* R.L.**, "Lewis acid assisted Brønsted acid catalysed decarbonylation of isocyanates: a combined DFT and experimental study", *Chem. Eur. J.*, 2022, **28**, e202201422.
Cited: 1
URL: <https://chemistry-europe.onlinelibrary.wiley.com/doi/10.1002/chem.202201422>
100. Kaehler, T., Lorenz, J., Ould, D.M.C., Engl, D., Santi, M., Gierlichs, L., Wirth, T., **Melen,* R.L.**, "Borane promoted aryl transfer reaction for the synthesis of α -aryl functionalised β -hydroxy and β -keto esters", *Org. Biomol. Chem.*, 2022, **20**, 4298.
Cited: 0
URL: <https://pubs.rsc.org/en/content/articlelanding/2022/ob/d2ob00643j#!divCitation>
99. Walkowiak,* J., Szyling, J., Franczyk, A., **Melen,* R.L.**, "Hydroelementation of diynes", *Chem. Soc. Rev.*, 2022, **51**, 869. Front cover.
Cited: 19
URL: <https://pubs.rsc.org/en/content/articlelanding/2022/CS/D1CS00485A>
98. Dasgupta,* A., **Melen,* R.L.**, "Shared success - s-block cooperativity toward triazoles", *Chem Catalysis*, 2021, **1**, 1158.
Cited: 0

URL: <https://www.sciencedirect.com/science/article/pii/S2667109321002852?via%3Dihub>

97. Babaahmadi, R., Dasgupta, A., Hyland, C.J.T., Yates, B.F., **Melen,* R.L.**, Ariafard,* A., "Understanding the influence of donor-acceptor diazo compounds on the catalyst efficiency of $B(C_6F_5)_3$ towards carbene formation", *Chem. Eur. J.*, 2022, **28**, e202104376.

Cited: 5

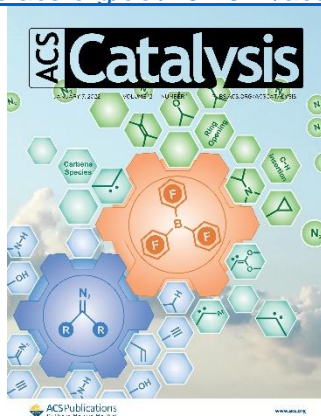
URL: <https://chemistry-europe.onlinelibrary.wiley.com/doi/10.1002/chem.202104376>

96. Dasgupta, A., Richards, E., **Melen,* R.L.**, "Triarylborane catalyzed carbene transfer reactions using diazo precursors", *ACS Catalysis*, 2022, **12**, 442.

Cited: 21

URL: <https://pubs.acs.org/doi/10.1021/acscatal.1c04746>

Cover image:



95. Dasgupta, A., Pahar, S., Babaahmadi R., Gierlichs, L., Yates, B.F., Ariafard,* A., **Melen,* R.L.**, "Borane catalyzed selective diazo cross-coupling towards pyrazoles", *Adv. Synth. Catal.* 2022, **364**, 773.

Cited: 6

URL: <https://onlinelibrary.wiley.com/doi/10.1002/adsc.202101312>

94. Dasgupta, A., Thiehoff, C., Newman, P.D., Wirth,* T., **Melen,* R.L.**, "Reactions promoted by hypervalent iodine reagents and boron Lewis acids", *Org. Biomol. Chem.*, 2021, **19**, 4852.

Cited: 24

URL: <https://pubs.rsc.org/en/content/articlelanding/2021/ob/d1ob00740h>

93. Kaehler, T., **Melen,* R.L.**, "Comparative study of fluorinated triarylboranes and their borane counterparts", *CRPS*, 2021, **2**, 100595.

Cited: 3

URL: [https://www.cell.com/cell-reports-physical-science/fulltext/S2666-3864\(21\)00310-6](https://www.cell.com/cell-reports-physical-science/fulltext/S2666-3864(21)00310-6)

92. Dasgupta, A., Babaahmadi, R., Pahar, S., Stefkova, K., Gierlichs, L., Yates, B.F., Ariafard, A.,* **Melen, R.L.***, "Tris(pentafluorophenyl)borane-catalyzed carbenium ion generation and autocatalytic pyrazole synthesis – a computational and experimental study", *Angew. Chem. Int. Ed.*, 2021, **46**, 24395; "Tris(pentafluorophenyl)boran-katalysierte Erzeugung von Carbenium-Ionen und autokatalytische Pyrazol-Synthese – eine theoretische und experimentelle Studie", *Angew. Chem.*, 2021, **60**, 24395.

Cited: 11

URL: <https://onlinelibrary.wiley.com/doi/10.1002/anie.202109744>

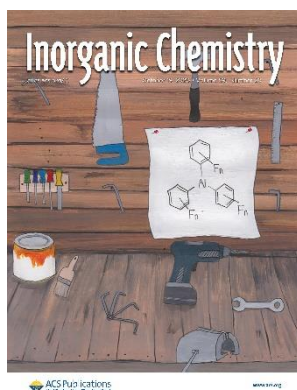
91. Stefkova, K., Heard, M.J., Dasgupta, A., **Melen,* R.L.**, "Borane catalysed cyclopropanation of arylacetylenes", *Chem. Commun.*, 2021, **57**, 6736.

Cited: 16

URL: <https://pubs.rsc.org/en/content/articlelanding/2021/CC/D1CC01856F>

90. Dasgupta, A., Stefkova, K., Babaahmadi, B., Yates, B.F., Buurma, N.J., Richards, E., Ariaifard, A., **Melen,* R.L.**, "Site selective C_{sp3}-C_{sp} / C_{sp3}-C_{sp2} cross coupling reactions using frustrated Lewis pairs", *J. Am. Chem. Soc.*, 2021, **143**, 4451.
Cited: 18
URL: <https://pubs.acs.org/doi/10.1021/jacs.1c01622>
Cardiff University News Article "Single or double? Understanding chemical reactivity of non-metal systems": <https://www.cardiff.ac.uk/news/view/2502992-single-or-double-understanding-chemical-reactivity-of-non-metal-systems>
C&EN news article by Krietsch Boerner, L. "Chemists untangle metal-free C-C coupling reactions": <https://cen.acs.org/synthesis/catalysis/Chemists-untangle-metal-free-CC/99/i10>
89. Heard, M., Stefkova, K., van Ingen, Y., **Melen,* R.L.**, "Frustrated Lewis pairs in organic synthesis", in *Comprehensive Organometallic Chemistry IV*, 2022, **11**, 563.
URL: <https://www.sciencedirect.com/science/article/pii/B978012820206700041X?via%3Dihub>
88. Gazis, T.A., Carden, J.L., Alharbi, M.M., **Melen,* R.L.**, "Triarylboranes in the activation of azo containing compounds", *EIBC*, 2021, doi.org/10.1002/9781119951438.eibc2780.
URL: <https://onlinelibrary.wiley.com/doi/10.1002/9781119951438.eibc2780>
87. Stefkova, K., Carden, J.L., **Melen,* R.L.**, "Frustrated Lewis Pairs in Catalysis", in *Comprehensive Inorganic Chemistry III*, 2023, 315.
URL: <https://www.sciencedirect.com/science/article/pii/B978012823144900011X?via%3Dihub>
86. Basak, S., Winfrey, L., Kustiana, B.A., **Melen,* R.L.**, Morrill,* L.C., Pulis,* A.P., "Electron deficient borane-mediated hydride abstraction in amines: stoichiometric and catalytic processes", *Chem. Soc. Rev.*, 2021, **50**, 3720.
Cited: 34
URL: <https://pubs.rsc.org/en/content/articlelanding/2021/CS/D0CS00531B#!divAbstract>
85. Dasgupta, A., Richards,* E., **Melen,* R.L.**, "Frustrated radical pairs: insights from EPR spectroscopy", *Angew. Chem. Int. Ed.*, 2021, **60**, 53.
Cited: 31
URL: <https://onlinelibrary.wiley.com/doi/10.1002/anie.202010633>
84. Dasgupta, A., Babaahmadi, R., Slater, B., Yates, B.F., Ariaifard, A., **Melen,* R.L.**, "Borane-catalyzed stereoselective C-H insertion, cyclopropanation, and ring-opening reactions", *CHEM*, 2020, **6**, 2364.
Cited: 55
URL: <https://www.sciencedirect.com/science/article/pii/S2451929420303168?via%3Dihub>
Highlighted in: Darmandeh, H., Gessner,* G.H., "Selective B(C₆F₅)₃-Catalyzed Reactions of α -Diazoesters with Heterocycles and Alkenes", *Chem*, 2020, **6**, 2129.
Cardiff University News Article "Exciting breakthrough could reduce both cost and toxicity of making medicines": <https://www.cardiff.ac.uk/news/view/2421439-exciting-breakthrough-could-reduce-both-cost-and-toxicity-of-making-medicines>
83. Dasgupta, A., Stefkova, K., Babaahmadi, B., Gierlichs, L.J., Ariaifard,* A., **Melen,* R.L.**, "Triarylborane-catalysed alkenylation reaction of aryl esters with diazo compounds", *Angew. Chem. Int. Ed.*, 2020, **59**, 15492; "Triarylboran-katalysierte Alkenylierungen von Arylestern mit Diazoverbindungen", *Angew. Chem.*, 2020, **132**, 15621.
Cited: 27
URL: <https://onlinelibrary.wiley.com/doi/10.1002/anie.202007176>
82. Ould, D.M.C., Carden, J.L., Page, R., **Melen,* R.L.**, "Synthesis and reactivity of fluorinated triaryl aluminum complexes", *Inorg. Chem.*, 2020, **59**, 14891.
Cited: 10
URL: <https://pubs.acs.org/doi/10.1021/acs.inorgchem.0c01076>

Cover image:



81. Nori, V., Dasgupta, A., Babaahmadi, R., Carlone, A., Ariaifard, A., **Melen,* R.L.**, "Triarylborane catalysed N-alkylation of amines with aryl esters", *Cat. Sci. Tech.*, 2020, **10**, 7523.
Cited: 5
URL: <https://pubs.rsc.org/en/content/articlelanding/2020/CY/D0CY01339K#!divAbstract>
80. Ould, D.M.C., **Melen,* R.L.**, "Diazaphospholene and diazaarsolene derived homogeneous catalysis", *Chem. Eur. J.*, 2020, **26**, 9835.
Cited: 15
URL: <https://chemistry-europe.onlinelibrary.wiley.com/doi/10.1002/chem.202001734>
79. Basak, S., Alvarez-Montoya, A., Winfrey, L., **Melen,* R.L.**, Morrill,* L.C., Pulis,* A.P., "B(C₆F₅)₃-catalyzed direct C3 alkylation of indoles and oxindoles", *ACS Catalysis*, 2020, **10**, 4835.
Cited: 45
URL: <https://pubs.acs.org/doi/10.1021/acscatal.0c01141>
78. Gazis, T.A., Willcox,* D., **Melen,* R.L.**, "Lewis acidic boranes in frustrated Lewis pair chemistry", In: *Frustrated Lewis Pairs.*, Vol. 2. Molecular Catalysis, Springer, 2020, 209.
URL: https://link.springer.com/chapter/10.1007%2F978-3-030-58888-5_6
77. Sharma, G., Newman, P.D., **Melen, R.L.**, Platts,* J.A., "Computational design of an intramolecular frustrated Lewis pair catalyst for enantioselective hydrogenation", *Journal of Theoretical and Computational Chemistry*, 2020, **19**, 2050009.
Cited: 0
URL: <https://www.worldscientific.com/doi/abs/10.1142/S0219633620500091>
76. Willcox, D., Carden, J.L., Ruddy, A.J., Newman, P.D., **Melen,* R.L.**, "Asymmetric ketone hydroboration catalyzed by alkali metal complexes derived from BINOL ligands", *Dalton Trans.*, 2020, **49**, 2417.
Cited: 11
URL: <https://pubs.rsc.org/en/content/articlelanding/2020/DT/D0DT00232A#!divAbstract>
75. Carden, J.L., Dasgupta, A., **Melen,* R.L.**, "Halogenated triarylboranes: synthesis, properties and applications in catalysis", *Chem. Soc. Rev.*, 2020, **49**, 1706.
Cited: 78
URL: <https://pubs.rsc.org/en/content/articlelanding/2020/CS/C9CS00769E#!divAbstract>

Cover image:



Downloaded research from Doctor Rebecca Melen's laboratory, School of Chemistry, Cardiff University, Wales, United Kingdom.

Hydrogenated boron/boranes: synthesis, properties and applications in catalysis

Herein, we look over the popular (hydrogenated boron) (HCB) and the other hydrogenated boranes.

To this understanding, having the Lewis acidity of boranes can lead to improved reactions, borane synthesis and their cutting-edge catalysis.

As featured in:

Chem Soc Rev

Chem Soc Rev

Chem Soc Rev

Chem Soc Rev

Chem Soc Rev

Chem Soc Rev

Chem Soc Rev

Chem Soc Rev

Chem Soc Rev

Chem Soc Rev



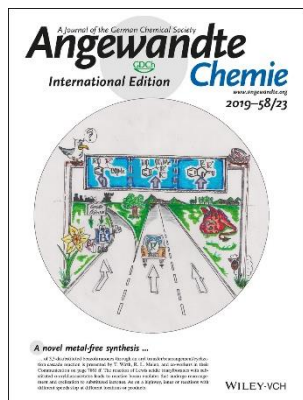
rsc.li/chem-soc-rev

74. Gazis, T.A., Mohajeri Thaker, B.A.J., Willcox, D., Ould, D.M.C., Wenz, J., Rawson, J.M., Hill, M.S., Wirth, T., **Melen,* R.L.**, "1,3-Carboboration of iodonium ylides", *Chem. Commun.*, 2020, **56**, 3345.
Cited: 8
URL: <https://pubs.rsc.org/en/content/articlelanding/2020/CC/C9CC08749D#!divAbstract>
73. Soltani, Y., Dasgupta, A., Gazis, T.A., Ould, D.M.C., Richards, E., Slater, B., Stefkova, K., Vladimirov, V.Y., Wilkins, L.C., Willcox, D., **Melen,* R.L.**, "Radical reactivity of frustrated Lewis pairs with diaryl esters", *CRPS*, 2020, **1**, 100016.
Cited: 26
URL: <https://www.sciencedirect.com/science/article/pii/S2666386420300035?via%3Dihub>
Number 1 most read paper of the journal.
Highlighted in: Hill,* M.S., "A Radical FLP Approach to C–C Coupling", *Chem*, 2020, **6**, 550.
Cardiff University News Article "Scientists discover novel reactivity of non-metals":
<https://www.cardiff.ac.uk/news/view/1760570-scientists-discover-novel-reactivity-of-non-metals>
72. Stefkova, K., Gierlichs, L.J., Willcox,* D., **Melen,* R.L.**, "Borocations in catalysis", *EIBC*, 2020, 10.1002/9781119951438.eibc2641.
Cited: 1
URL: <https://onlinelibrary.wiley.com/doi/abs/10.1002/9781119951438.eibc2641>
71. Ould, D.M.C., Tran, T.T.P., Rawson,* J.M., **Melen,* R.L.**, "Structure-property-reactivity studies on dithiaphospholes", *Dalton Trans.*, 2019, **48**, 16922.
Cited: 8
URL: <https://pubs.rsc.org/en/content/articlelanding/2019/DT/C9DT03577J#!divAbstract/>
70. Willcox, D., **Melen,* R.L.**, "Borane-catalyzed heterocycle synthesis", *Trends in Chemistry*, 2019, **1**, 625.
Cited: 4
URL: <https://www.sciencedirect.com/science/article/pii/S2589597419301571?via%3Dihub>
69. Gazis, T.A., Dasgupta, A., Hill, M.S., Rawson, J.M., Wirth, T., **Melen,* R.L.**, "Reactions of hydrazones and hydrazides with Lewis acidic boranes", *Dalton Trans.* 2019, **48**, 12391.
Cited: 3
URL: <https://pubs.rsc.org/en/content/articlelanding/2019/DT/C9DT01359H#!divAbstract>
68. Willcox, D., **Melen,* R.L.**, "Illuminating Lewis acidity strength", *CHEM*, 2019, **5**, 1362.
Cited: 7
URL: <https://www.sciencedirect.com/science/article/pii/S2451929419301597?via%3Dihub>

67. Santi, M., Ould, D.M.C., Wenz, J., Soltani, Y., **Melen,* R.L.**, Wirth,* T., “Metal-free tandem rearrangement/ lactonization: Access to 3,3-disubstituted benzofuran-2-(3*H*)-ones”, *Angew. Chem. Int. Ed.*, 2019, **58**, 7861; “Metallfreie Tandem-Umlagerung/Lactonisierung: Zugang zu 3,3-disubstituierten Benzofuran-2-(3*H*)-onen”, *Angew. Chem.*, 2019, **131**, 7943.
Cited: 40

URL: <https://onlinelibrary.wiley.com/doi/full/10.1002/anie.201902985>

Cover image:



66. **Melen,* R.L.**, “Frontiers in molecular p-block chemistry: from structure to reactivity”, *Science*, 2019, **363**, 479.
Cited: 140
URL: <https://science.sciencemag.org/content/363/6426/479>
65. Zhu, D., LaFortune, J.H.W., **Melen,* R.L.**, Stephan,* D.W., “Electrophilic boron carboxylate and phosphinate complexes”, *Dalton Trans.*, 2019, **48**, 2038.
Cited: 1
URL: <https://pubs.rsc.org/en/content/articlelanding/2019/DT/C8DT04818E#!divAbstract>
64. Carden, J.L., Gierlich, L.J., Wass, D.F., Browne, D.L., **Melen,* R.L.**, “Unlocking the catalytic potential of tris(3,4,5-trifluorophenyl)borane with microwave irradiation”, *Chem. Commun.*, 2019, **55**, 318.
Cited: 42
URL: <https://pubs.rsc.org/en/content/articlelanding/2019/CC/C8CC09459D#!divAbstract>
63. Khan, I., Reed-Berendt, B.G., **Melen,* R.L.**, Morrill,* L.C., “FLP-catalyzed transfer hydrogenation of silyl enol ethers”, *Angew. Chem. Int. Ed.*, 2018, **57**, 12356.
Cited: 37
URL: <https://onlinelibrary.wiley.com/doi/full/10.1002/anie.201808800>
62. Soltani, Y., Adams, S.J., Börger, J., Wilkins, L.C., Newman, P.D., Pope,* S.J.A., **Melen,* R.L.**, “Synthesis and photophysical properties of imine borane adducts towards vapochromic materials”, *Dalton Trans.*, 2018, **47**, 12656.
Cited: 11
URL: <https://pubs.rsc.org/en/content/articlelanding/2018/DT/C8DT03019G#!divAbstract>
61. Ould, D.M.C., **Melen,* R.L.**, “Arsenic catalysis: Hydroboration of aldehydes using a benzo-fused diaza-benzyloxy-arsole”, *Chem. Eur. J.*, 2018, **24**, 15201.
Cited: 26
URL: <https://chemistry-europe.onlinelibrary.wiley.com/doi/full/10.1002/chem.201803508>
60. Schneider, C., LaFortune, J.H.W., **Melen,* R.L.**, Stephan,* D.W., “Lewis and Brønsted basicity of phosphine-diazomethane derivatives”, *Dalton Trans.*, 2018, **47**, 12742.
Cited: 10
URL: <https://pubs.rsc.org/en/content/articlelanding/2018/DT/C8DT02420K#!divAbstract>

59. Hokamp, T., Mollari, L., Wilkins, L.C., **Melen, R.L.**, Wirth,* T., "Alternative strategies with iodine: fast access to previously inaccessible iodine(III) compounds", *Angew. Chem. Int. Ed.*, 2018, **57**, 8306; "Alternative Strategien mit Iod: schneller Zugang zu bisher unzugänglichen Iod(III)-Verbindungen", *Angew. Chem.*, 2018, **130**, 8438.
Cited: 21
URL: <https://onlinelibrary.wiley.com/doi/full/10.1002/anie.201804642>
58. Wilkins, L.C., Soltani, Y., Lawson, J.L., Slater, B., **Melen,* R.L.**, "Divergent elementoboration: 1,3-haloboration versus 1,1-carboboration of propargyl esters", *Chem. Eur. J.*, 2018, **24**, 7364.
Cited: 6
URL: <https://chemistry-europe.onlinelibrary.wiley.com/doi/full/10.1002/chem.201801493>
57. Ruddy, A.J., Ould, D.M.C., Newman, P.D., **Melen,* R.L.**, "Push and pull: the potential role of boron in N₂ activation", *Dalton Trans.*, 2018, **47**, 10377.
Cited: 22
URL: <https://pubs.rsc.org/en/content/articlelanding/2018/DT/C8DT01168K#!divAbstract>
56. **Melen,* R.L.**, "A step closer to metal-free dinitrogen activation: a new chapter in the chemistry of frustrated Lewis pairs", *Angew. Chem. Int. Ed.*, 2018, **57**, 880; "Metallfreie Stickstoffaktivierung: Ein neues Kapitel in der Chemie frustrierter Lewis-Paare", *Angew. Chem.*, 2018, **130**, 890.
Cited: 71
URL: <https://onlinelibrary.wiley.com/doi/full/10.1002/anie.201711945>
55. Soltani, Y., Wilkins, L.C., **Melen,* R.L.**, "A comparative assessment of modern cyclization methods of substituted alkynyl esters, ethers, and acids", *Synlett*, 2018, **29**, 1 (**invited**).
Cited: 4
URL: <https://www.thieme-connect.de/products/ejournals/abstract/10.1055/s-0036-1591862>
54. Khan, I., Manzotti, M., Tizzard, G.J., Coles, S.J., **Melen,* R.L.**, Morrill,* L.C., "Frustrated Lewis pair (FLP)-catalyzed hydrogenation of aza-Morita-Baylis-Hillman adducts and sequential organo-FLP catalysis", *ACS Catalysis*, 2017, **7**, 7748.
Cited: 28
URL: <https://pubs.acs.org/doi/10.1021/acscatal.7b03077>
53. Wilkins, L.C., **Melen, R.L.**, Platts, J.A., Newman,* P.D., "Amidine functionalized phosphines: tuneable ligands for transition metals", *Dalton Trans.*, 2017, **46**, 14234.
Cited: 7
URL: <https://pubs.rsc.org/en/content/articlelanding/2017/DT/C7DT03343E#!divAbstract>
52. Ould, D.M.C., Rigby, A.C., Wilkins, L.C., Adams, S.J., Platts, J.A., Pope, S.J.A., Richards, E., **Melen,* R.L.**, "Investigations into the photophysical and electronic properties of pnictoles and Their pnictenium counterparts", *Organometallics*, 2018, **37**, 712 (**invited**).
Cited: 26
URL: <https://pubs.acs.org/doi/10.1021/acs.organomet.7b00564>
51. Tran, T.T.-P., Ould, D.M.C., Wilkins, L.C., Wright,* D.S., **Melen,* R.L.**, Rawson,* J.M., "Supramolecular aggregation in dithia-arsoles: chlorides, cations and N-centred paddlewheels", *CrystEngComm*, 2017, **19**, 4696.
Cited: 9
URL: <https://pubs.rsc.org/en/content/articlelanding/2017/CE/C7CE01117B#!divAbstract>
50. Soltani, Y., Wilkins, L.C., **Melen,* R.L.**, "Stoichiometric and catalytic C–C and C–H bond formation with B(C₆F₅)₃ via cationic intermediates", *Angew. Chem. Int. Ed.*, 2017, **56**,

- 11995; "Stöchiometrische und katalytische C–C- und C–H-Bindungsbildung mit B(C₆F₅)₃ über kationische Zwischenstufen", *Angew. Chem.*, 2017, **129**, 12157.
Cited: 40
URL: <https://onlinelibrary.wiley.com/doi/full/10.1002/anie.201704789>
49. Lawson, J.R., Wilkins, L.C., **Melen,* R.L.**, "Tris(2,4,6-trifluorophenyl)borane: an efficient hydroboration catalyst", *Chem. Eur. J.*, 2017, **23**, 10997.
Cited: 97
URL: <https://chemistry-europe.onlinelibrary.wiley.com/doi/full/10.1002/chem.201703109>
48. Yin, Q., Soltani, Y., **Melen,* R.L.**, Oestreich,* M., "BAR^F₃-catalyzed imine hydroboration with pinacolborane not requiring the assistance of an additional Lewis base", *Organometallics*, 2017, **36**, 2381.
Cited: 59
URL: <https://pubs.acs.org/doi/10.1021/acs.organomet.7b00381>
47. Wilkins, L.C., Howard, J.H., Burger, S., Frenzel-Beyme, L., Browne,* D.L., **Melen,* R.L.**, "Exploring multistep continuous-flow hydrosilylation reactions catalyzed by tris(pentafluorophenyl)borane", *Adv. Synth. Catal.*, 2017, **359**, 2580. Designated a **Very Important Paper**.
Cited: 11
URL: <https://onlinelibrary.wiley.com/doi/full/10.1002/adsc.201700349>
46. Wilkins, L.C., **Melen,* R.L.**, "Small molecule activation with frustrated Lewis pairs", *Encyclopedia of Inorganic and Bioinorganic Chemistry*, Wiley, 2017, pp. 1–24.
Cited: 3
URL: <https://onlinelibrary.wiley.com/doi/abs/10.1002/9781119951438.eibc2520>
45. Lawson, J.R., **Melen,* R.L.**, "Recent developments and applications of Lewis acidic boron reagents", In: Fairlamb, I., Lynam, J.M., Patmore, N. J and Elliott, P. eds. *Organometallic Chemistry*, Vol. 41. *Royal Society of Chemistry*, pp. 1–27 (**invited**).
URL: <https://pubs.rsc.org/en/content/chapter/9781782626923-00001/978-1-78262-692-3>
44. Wilkins, L.C., Santi, N., Luk, L.Y.P., **Melen,* R.L.**, "Reactions of biologically inspired hydride sources with B(C₆F₅)₃", *Phil. Trans. R. Soc. A*, 2017, **375**, 20170009 (**invited**).
Cited: 6
URL: <https://royalsocietypublishing.org/doi/10.1098/rsta.2017.0009>
43. Lawson, J.R., **Melen,* R.L.**, "Tris(pentafluorophenyl)borane and beyond: modern advances in borylation chemistry", *Inorg. Chem.*, 2017, **56**, 8627 (**invited**).
Cited: 162
URL: <https://pubs.acs.org/doi/10.1021/acs.inorgchem.6b02911>
42. **Melen,* R.L.**, Less, R.J., Pask, C.M., Rawson,* J.M., "Structural studies of perfluoroaryldiselenadiazolyl radicals: insights into dithiadiazolyl chemistry", *Inorg. Chem.*, 2016, **55**, 11747.
Cited: 26
URL: <https://pubs.acs.org/doi/10.1021/acs.inorgchem.6b01771>
41. Lawson, J.R., Wilkins, L.C., Andre, M., Richards, E., Ali, M.N., Platts, J.A., **Melen,* R.L.**, "Synthesis and reactivity of N,N'-1,4-diazabutadiene derived borocations", *Dalton Trans.*, 2016, **45**, 16177.
Cited: 6
URL: <https://pubs.rsc.org/en/content/articlelanding/2016/DT/C6DT03360A#!divAbstract>
40. Wilkins, L.C., Lawson, J.R., Wieneke, P., Rominger, F., Hashmi, A.S.K., Hansmann, M.M., **Melen,* R.L.**, "The propargyl rearrangement to functionalised allyl-boron and borocation compounds", *Chem. Eur. J.*, 2016, **22**, 14618.

- Cited: 20
URL: <https://chemistry-europe.onlinelibrary.wiley.com/doi/full/10.1002/chem.201602719>
39. Wilkins, L.C., Günther, B.A.R., Walther, M., Lawson, J.R., Wirth, T., **Melen,* R.L.**, "Contrasting frustrated Lewis pair reactivity with selenium- and boron-based Lewis acids", *Angew. Chem. Int. Ed.*, 2016, **55**, 11292; "Gegensätzliche Reaktivität frustrierter Lewis-Paare mit Selen- und Bor-basierten Lewis-Säuren", *Angew. Chem.*, 2016, **128**, 11462.
Cited: 30
URL: <https://onlinelibrary.wiley.com/doi/full/10.1002/anie.201605239>
38. Lam, J., Günther, B.A.R., Farrell, J.M., Eisenberger, P., Bestvater, B.P., Newman, P.D., **Melen,* R.L.**, Crudden,* C.M., Stephan,* D.W., "Chiral carbene–borane adducts: precursors for borenium catalysts for asymmetric FLP hydrogenations", *Dalton. Trans.*, 2016, **45**, 15303.
Cited: 64
URL: <https://pubs.rsc.org/en/content/articlelanding/2016/DT/C6DT02202B#!divAbstract>
37. Wilkins, L.C., **Melen,* R.L.**, "Enantioselective main group catalysis: modern catalysts for organic transformations", *Coord. Chem. Rev.*, 2016, **324**, 123.
Cited: 80
URL: <https://www.sciencedirect.com/science/article/pii/S0010854516302326?via%3Dihub>
36. **Melen,* R.L.**, "Dehydrocoupling routes to element-element bonds catalysed by main group compounds", *Chem. Soc. Rev.*, 2016, **45**, 775 (**invited, back cover**).
Cited: 89
URL: <https://pubs.rsc.org/en/content/articlelanding/2016/CS/C5CS00521C#!divAbstract>
35. Wilkins, L.C., Hamilton, H.B., Kariuki, B.M., Hashmi, A.S.K., Hansmann, M.M., **Melen,* R.L.**, "Lewis acid-base 1,2-addition reactions: synthesis of pyrylium borates from enynoate precursors", *Dalton Trans.* 2016, **45**, 5929 (**invited**).
Cited: 19
URL: <https://pubs.rsc.org/en/content/articlelanding/2016/DT/C5DT03340C#!divAbstract>
34. Hansmann,* M.M., **Melen, R.L.**, Rudolph, M., Rominger, F., Wadepohl, H., Stephan,* D.W., Hashmi,* A.S.K., "Cyclopropanation/carboboration reactions of enynes with B(C₆F₅)₃", *J. Am. Chem. Soc.*, 2015, **137**, 15469.
Cited: 73
URL: <https://pubs.acs.org/doi/10.1021/jacs.5b09311>
33. Wilkins, L.C., Wieneke, P., Newman, P.D., Rominger, F., Hashmi, A.S.K., Hansmann,* M.M., **Melen,* R.L.**, "Pathways to functionalized heterocycles: propargyl rearrangement using B(C₆F₅)₃", *Organometallics*, 2015, **34**, 5298.
Cited: 26
URL: <https://pubs.acs.org/doi/10.1021/acs.organomet.5b00753>
32. **Melen,* R.L.**, Wilkins, L.C., Kariuki, B.M., Wadepohl, H., Gade, L.H., Hashmi, A.S.K., Stephan, D.W., Hansmann,* M.M., "Diverging pathways in the activation of allenes with Lewis acids and bases: addition, 1,2-carboboration, and cyclization", *Organometallics*, 2015, **34**, 4127.
Cited: 40
URL: <https://pubs.acs.org/doi/10.1021/acs.organomet.5b00546>
31. **Melen, R.L.**, Stephan,* D.S., "Cycloaddition reactions of (C₆F₅)₂BN₃ with dialkyl acetylenedicarboxylates", *Dalton Trans.*, 2015, **44**, 5045.
Cited: 6
URL: <https://pubs.rsc.org/en/content/articlelanding/2015/DT/C5DT00316D#!divAbstract>

30. Bähr, A., Ollegott, K., Wilkins, L.C., Kariuki, B.M., **Melen,* R.L.**, “ σ - versus π -activation of alkynyl benzoates using $B(C_6F_5)_3$ ”, *Molecules*, 2015, **20**, 4530 (**invited**).
Cited: 6
URL: <https://www.mdpi.com/1420-3049/20/3/4530>
29. **Melen,* R.L.**, Gade,* L.H., “New chemistry with anionic NNN pincer ligands”, *The Privileged Pincer-Metal Platform: Coordination Chemistry & Applications*, ed. G. van Koten and R.A. Gossage. 2015, Volume 54 of the series *Topics in Organometallic Chemistry*, pp 179–208.
Cited: 18
URL: https://link.springer.com/chapter/10.1007%2F3418_2015_114
28. **Melen,* R.L.**, Simmonds, H.R., Wadepohl, H., Gade, L.H., Wood, P.T., Wright,* D.S., “Formation of an unusual bis(diguanidinate) ligand via nucleophilic attack of a guanidinate onto a carbodiimide”, *Aus. J. Chem.*, 2014, **67**, 1030 (**invited**).
Cited: 8
URL: <https://www.publish.csiro.au/ch/CH14170>
27. **Melen,* R.L.**, “Applications of pentafluorophenyl boron reagents in the synthesis of heterocyclic and aromatic compounds”, *Chem. Commun.*, 2014, **50**, 1161 (**invited**).
Cited: 85
URL: <https://pubs.rsc.org/en/content/articlelanding/2014/CC/C3CC48036D#!divAbstract>
26. **Melen,* R.L.**, “Applications and reactivity trends of homoleptic p-block metal amido reagents”, *Dalton Trans.*, 2013, **42**, 16449 (**invited**).
Cited: 6
URL: <https://pubs.rsc.org/en/content/articlelanding/2013/DT/c3dt52472h#!divCitation>
25. **Melen,* R.L.**, Rawson,* J.M., “Structural variations on an electron precise theme: Rationalising the structures of main group cages”, *Coord. Chem. Rev.*, 2013, **257**, 1232.
Cited: 2
URL: <https://www.sciencedirect.com/science/article/pii/S0010854512002883?via%3Dihub>

Other articles (not peer reviewed)

24. **Melen,* R.L.**, Stephan,* D.W., “Main group transformations”, *Dalton Trans.*, 2016, **45**, 5879.
URL: <https://pubs.rsc.org/en/content/articlelanding/2016/DT/C6DT90027E#!divAbstract>
23. **Melen,* R.L.**, Grubbs, R.H. “Q&A: The bond shifter”, *Nature*, 2013, **502**, S56.
URL: <https://www.nature.com/articles/502S56a>

• INDEPENDENT CONFERENCE PRESENTATIONS AND INVITED LECTURES

Presentations since independence (152):

- 2023** Invited lecture, EuChemS Highlighting Organic Chemistry in The UK, 24th November 2023, Online.
- 2023** Invited plenary speaker, 13th Paul Walden symposium, 14th–15th September 2023, Riga, Latvia.
- 2023** RSC award lecture, 23rd June 2023, University of Manchester, Manchester, UK.
- 2023** Invited talk, 7th UK-Japan Conference on Sustainable Catalysis, 17th–18th April, University of Oxford, UK.

- 2023** Invited talk, ACS National Meeting, Harry Gray Award for Creative Work in Inorganic Chemistry by a Young Investigator: Symposium in Honor of Robert Gilliard, 26th–30th March 2023, Indianapolis, USA.
- 2023** Invited plenary speaker, International Conference On Phosphorus, Boron and Silicon – PBSi, 22nd–24th March 2023, Berlin, Germany.
- 2023** RSC award lecture, 16th March 2023, Trinity College Dublin, Dublin, Ireland.
- 2023** Invited lecture, 1st March 2023, University of Liverpool, Liverpool, UK.
- 2023** Invited talk, International Conference on Main Group Synthesis and Catalysis (ICMGSC) 2023, 9th–12th February 2023, IISER Thiruvananthapuram, India.
- 2023** Invited virtual lecture, 13th January 2023, Lancaster University, Lancaster, UK.
- 2022** Invited talk, Singapore International Chemistry Conference (SICC-11), 11th–14th December 2022, Singapore.
- 2022** Invited University Seminar, 25th November 2022, Aix-Marseille Université, Marseille, France.
- 2022** Invited virtual lecture, 22nd November 2022, Adam Mickiewicz University, Poznan, Poland.
- 2022** Invited talk, Southeast Regional Meeting of the American Chemical Society on Unusual Structure and Reactivity of Inorganic Molecules, 19th–22nd October 2022, San Juan, Puerto Rico.
- 2022** Invited talk, ACS National Meeting, F. Albert Cotton Award in Synthetic Inorganic Chemistry: Symposium in honour of Douglas Stephan, 21st–25th August 2022, Chicago, USA.
- 2022** Virtual talk, Cardiff University - Nanjing Tech University 2022 Chemistry Summer School, 28th–21st July, Cardiff University, Cardiff, UK.
- 2022** Invited talk, TECS CDT Summer Conference 2022, 20th–21st July 2022, Bristol, UK.
- 2022** Talk, Canadian Chemistry Conference and Exhibition, 13th–17th June 2022, Calgary, Canada.
- 2022** Invited talk, Canada - UK Joint Symposium on Coordination Chemistry, 30th May–1st June 2022, St Andrews, UK.
- 2022** Invited talk, 4th Small Molecule Activation Conference, 16th–19th May 2022, Cancun, Mexico.
- 2022** Invited talk, RSC – IISER Desktop Seminar with Dalton Transactions, 11th–12th May 2022, Online.
- 2022** Invited poster, 55th Bürgenstock Conference, 1st–5th May 2022, Brunnen, Switzerland.
- 2022** Invited talk, stereoselective alkene functionalizations, Beilstein Organic Chemistry Symposium, 26th–28th April 2022, Rüdeshheim, Germany.
- 2022** Invited lecture, 12th April 2022, University of Alicante, Spain.
- 2022** Keynote speaker, 29th–31st March 2022, Cutting-edge in Homogeneous Catalysis conference Leipzig, Germany.
- 2022** Invited speaker, 14th–16th March, CRC 1349 winter school 2022, Berlin, Germany.
- 2022** Invited virtual lecture, 13th March 2022, Tel Aviv University, Israel.
- 2022** Invited talk, 10th March 2022, *Chem. Eur. J.* Early Career Advisory Board Virtual Event.
- 2022** Invited virtual lecture, 17th February 2022, Indian Institute of Technology Guwahati, India.
- 2022** Invited lecture, 10th February 2022, Adam Mickiewicz University, Poznan, Poland.
- 2022** Keynote lecture, The 8th UK Catalysis Conference, 5th–7th January 2022, Loughborough, UK.
- 2021** Invited virtual lecture, unusual structure and reactivity in the main group: from fundamental to functional materials, The International Chemical Congress of Pacific Basin Societies 2021, 15th–21st December 2021.
- 2021** Invited virtual lecture, new challenges in energy chemistry symposium, The International Chemical Congress of Pacific Basin Societies 2021, 15th–21st December 2021.
- 2021** University Seminar, 1st November 2021, University of Amsterdam, Netherlands.
- 2021** Invited speaker, Joliot-Curie Conference, 8th–9th September 2021, Virtual Conference.
- 2021** Invited speaker, ACS Fall 2021 National Meeting & Exposition, 22nd–26th August 2021, virtual seminar as part of the Organometallics Distinguished Author Award Lectureship symposium.
- 2021** Invited virtual speaker, UK Catalysis Hub Summer Conference, EDI Event, 20th–21st July 2021, Harwell Campus, Oxfordshire, UK.
- 2021** Plenary lecture, Dalton 2021 Virtual Meeting, June 29th–1st July.
- 2021** JSP fellowship, e-Bürgenstock conference, May 6th 2021 (Poster).

- 2021** Invited virtual lecture, 14th April 2021, University of Potsdam, Germany.
- 2020** Invited virtual lecture, 11th Phosphorus chemistry seminar, 29st October 2020.
- 2020** Invited virtual lecture, 21st October 2020, University of Central Florida, USA.
- 2020** ZDSC, DUT and Cardiff CCI virtual symposium, 20th October 2020.
- 2020** Invited lecture, virtual Chem/Reaxys symposium on organic synthesis, 17th–18th October 2020.
- 2020** Invited virtual lecture, 15th October 2020, Imperial College London, UK.
- 2020** Invited lecture, 7th October 2020, University of Münster, Germany.
- 2020** Virtual Conference on Chemistry and its Applications (VCCA-2020), 1st–31st August 2020.
- 2020** LOGIC 2020, online symposium, 18th–24th May 2020.
- 2020** Main Group Seminar Series, Online symposium, 2nd April, UK.
- 2020** Invited lecture, 29th January 2020, University of Kent, UK.
- 2020** Invited lecture, PARACAT Winter School on Catalysis, 13th–17th January 2020, Cardiff, UK.
- 2019** Invited lecture, keynote speaker, IC19, December 15th–19th 2019, Wollongong, Australia.
- 2019** Invited lecture, 20th National Organic Symposium Trust Organic Chemistry Conference (NOST-OCC), 4th–7th December 2019, Ananta, Udaipur, India.
- 2019** Invited lecture, 5th November 2019, University of Birmingham, UK.
- 2019** Invited lecture, 30th October 2019, University of Leeds, UK.
- 2019** RSC award lecture, 16th October 2019, University of Nottingham, UK.
- 2019** Invited lecture, 25th September 2019, University of St Andrews, UK.
- 2019** Invited lecture, RSC Southern Dalton Meeting, 18th September 2019, University of Oxford, UK.
- 2019** Lecture, 20th August 2019, University of Toronto, Canada.
- 2019** Lecture, 15th August 2019, Laval University, Canada.
- 2019** Invited lecture, 6th EOC Symposium, July 13th–14th 2019, Nankai University, Tianjin, China.
- 2019** Invited lecture, keynote speaker, Euroboron Conference, 24th–27th July 2019, Montpellier, France.
- 2019** Invited lecture, 21st June 2019, University of Toulouse, France.
- 2019** Invited lecture, CASE 2019, April 14th–16th 2019, X'ian, China.
- 2019** Invited lecture, 29th March 2019, University of Sheffield, UK.
- 2019** Invited lecture, 5th March 2019, Evotec, Abingdon, Oxfordshire, UK.
- 2019** Invited lecture, Advances in Organocatalysis Symposium, 25th February 2019, London, UK.
- 2019** Invited lecture, 8th February 2019, University of Madras, Chennai, India.
- 2019** Invited lecture, 13th RSC-CRSI joint Symposium, 7th February 2019, CSIR Central Leather Research Institute, Chennai, Raipur, India.
- 2019** Invited lecture, VIT-RSC joint symposium, 5th February 2019, Vellore Institute of Technology, India.
- 2019** Invited lecture, 1st February 2019, IIT Ropar, India.
- 2019** Invited lecture, 31st January 2019, Deenbandhu Chhotu Ram University of Science and Technology, Murthal, India.
- 2019** Invited lecture, 30th January 2019, Dyal Singh College, Karnal, India.
- 2019** Invited lecture, 16th January 2019, University of Leicester, UK.
- 2019** Invited lecture, Heterocyclic and Synthesis Group's annual January Meeting, 11th January 2019, Institute of Cancer Research, London, UK.
- 2018** International Conference On Phosphorus, Boron and Silicon (PBSi), December 10th–12th 2018, Barcelona, Spain.
- 2018** Invited lecture, 6th December 2018, University of Amsterdam, Netherlands.
- 2018** Invited lecture, CHAINS Conference, 5th December 2018, Eindhoven, Netherlands.
- 2018** Invited Lecture, GSK Emerging Academics Symposium, 25th October 2018, Stevenage, UK.
- 2018** Invited lecture, RSC-India Symposium, 26th September 2018, Manchester, UK.
- 2018** Meeting of Inorganic Chemists Recently Appointed (MICRA), September 10th–12th 2018, Cardiff, UK.
- 2018** Invited lecture, ICC2018: Post-Conference, August 7th–8th 2018, Oita, Japan.
- 2018** Invited lecture, ICC2018: Post-Conference in Fukuoka, August 5th–7th 2018, Fukuoka, Japan.
- 2018** Invited lecture, 43rd International Conference on Coordination Chemistry, July 30th–August 4th 2018, Sendai, Japan.

- 2018 26th July 2018, Nagoya University, Japan.
- 2018 Invited lecture, 5th July 2018, Laval University, Canada.
- 2018 Invited lecture, Organometallics Gordon Research Conference, June 8th–13th 2018, Newport, RI, USA.
- 2018 Invited lecture, Boron in the Americas (BORAM), June 26th–30th 2018, Boston College, Boston, USA.
- 2018 Invited lecture, Early Career Investigators Symposium, 101st Canadian Chemistry Conference and Exhibition, June 2018, Edmonton, Canada.
- 2018 23rd May 2018, University of Calgary, Canada.
- 2018 Invited lecture, April 30th–May 1st 2018, 3rd Japan/UK joint symposium in coordination chemistry, University of St. Andrews, UK.
- 2018 Invited lecture, 20th April 2018, Imperial College London, UK.
- 2018 Humboldt Colloquium, April 15th–17th 2018, University of Oxford, UK.
- 2018 Invited lecture, 23rd January 2018, University of Birmingham, UK.
- 2018 Invited lecture, 12th January 2018, Queen Mary University of London, UK.
- 2017 Invited lecture, 29th November 2017, University College London, UK.
- 2017 Invited lecture, High Achievers Dinner, Keynote speaker, 23rd September 2017, Trent College, UK.
- 2017 Invited plenary lecture, Dalton Younger Members Event, September 2017, Bath, UK.
- 2017 Invited lecture, 15th August 2017, University of Bern, Switzerland.
- 2017 Invited lecture, Main Group Transformations and Catalysis Symposium, 100th Canadian Chemistry Conference and Exhibition, June 2017, Toronto, Canada.
- 2017 Boron in Modern Organic Synthesis and Catalysis Symposium, 100th Canadian Chemistry Conference and Exhibition, June 2017, Toronto, Canada.
- 2017 Invited lecture, 12th April 2017, University of East Anglia, UK.
- 2017 Invited lecture, 21st March 2017, RWTH Aachen University, Germany.
- 2017 Invited lecture, 21st February 2017, Bath University, UK.
- 2017 Invited lecture, McCamley Lecture, 1st February 2017, University of York, UK.
- 2017 Invited lecture, 24th January 2017, York University, Toronto, Canada.
- 2016 Invited lecture, SCI Review lecture, 1st December 2016, London, UK.
- 2016 Invited lecture, 11th October 2016, University of Oxford, UK.
- 2016 Invited lecture, 25th August 2016, TU Berlin, Germany.
- 2016 Invited lecture, 21st July 2016, Bielefeld, Germany.
- 2016 Boron in the Americas (BORAM), June 25th–28th 2016, Queen's University, Kingston, Canada.
- 2016 Invited lecture, main group symposium, 24th June 2016, University of Toronto, Canada.
- 2016 Invited lecture, 99th Canadian Chemistry Conference and Exhibition, Advances in Main Group Chemistry Symposium, June 5th–9th 2016, Halifax, Canada.
- 2016 99th Canadian Chemistry Conference and Exhibition, General Organic Symposium, June 5th–9th 2016, Halifax, Canada.
- 2016 Invited lecture, 8th March 2016, Humboldt University Berlin.
- 2016 Clara Immerwahr Award lecture, 12th February 2016, Berlin, Germany.
- 2016 Invited lecture, 3rd February 2016, University of Leicester, UK.
- 2016 Invited lecture, 27th January 2016, Belfast University, UK.
- 2016 Invited lecture, RSC Organic Division South-West Regional Meeting, 13th January 2016, University of Southampton, UK.
- 2015 Invited lecture, The International Chemical Congress of Pacific Basin Societies, Lewis Acid/Base Pair Chemistry in Molecular Transformations Symposium, December 15th–20th 2015, Honolulu, Hawaii, USA.
- 2015 The International Chemical Congress of Pacific Basin Societies, Catalysis and Energy Storage symposium, December 15th–20th 2015, Honolulu, Hawaii, USA.
- 2015 Invited lecture, 25th November 2015, Goethe-Universität Frankfurt am Main, Germany.
- 2015 Invited lecture, 24th November 2015, Heidelberg, Germany.
- 2015 Invited lecture, 23rd November 2015, KIT, Karlsruhe, Germany.
- 2015 Gregynog Synthesis Meeting, September 9th–11th 2015, Newtown, Powys, Wales, UK.
- 2015 IRIS 14 meeting, July 26th–31st 2015, Regensburg, Germany.
- 2015 Invited lecture, 26th June 2015, Brock University, St. Catharines, Canada.

- 2015** Invited lecture, 25th June 2015, University of Toronto, Toronto, Canada.
- 2015** invited lecture, 19th June 2015, McGill University, Montreal, Canada.
- 2015** 98th Canadian Chemistry Conference and Exhibition, June 13th–17th 2015, Ottawa, Canada.
- 2015** Invited lecture, 98th Canadian Chemistry Conference and Exhibition, RSC-UK Symposium, June 13th–17th 2015, Ottawa, Canada.
- 2015** EPSRC Dial-a-Molecule and Beyond the Molecule: Directed Assembly Grand Challenge Network Event, May 19th–20th 2015, Leeds, UK.
- 2015** Invited lecture, Cardiff Chemistry Conference, May 11th–12th 2015, Cardiff University, UK.
- 2015** Invited lecture, Southern Dalton Meeting, 20th–21st April 2015, University of Sussex, UK.
- 2015** Dial-a-Molecule Meeting: Catalytic Sustainability in the Future, 13th February 2015, Manchester, UK.
- 2014** Meeting of Inorganic Chemists Recently Appointed (MICRA), 10th–12th September 2014, Huddersfield, UK.
- 2014** Lecture, IMEBORON conference, 24th–28th August 2014, Prague, Czech Republic.
- 2014** Lecture, IMEBORON conference, 24th–28th August 2014, Prague, Czech Republic.
- 2014** Lecture, 23rd June 2014, University of Tübingen, Germany.
- 2014** Award lecture, 21st–26th June 2014, Euroscience Open Forum (ESOF), Copenhagen, Denmark.
- 2014** Lecture, 10th June 2014, University of Guelph, Canada.
- 2014** Lecture, 11th June 2014, University of Windsor, Canada.
- 2014** Invited lecture, 97th Canadian Chemistry Conference and Exhibition, invited lecture (Main Group Symposium), 1st–5th June 2014, Vancouver, Canada.
- 2014** Invited lecture, 16th May 2014, University of St Andrews, UK.
- 2014** Invited lecture, 6th May 2014, University of Cardiff, UK.
- 2014** Award lecture, 24th April 2014, University of Durham, UK.
- 2014** Award lecture, 23rd April 2014, University of Strathclyde, UK.
- 2014** Award lecture, 21st April 2014, University of Bristol, UK.
- 2014** Award lecture, Dalton 2014, 15th –17th April 2014, University of Warwick, UK.
- 2014** Lecture, Network Meeting of the Alexander von Humboldt Foundation, April 2014, Berlin, Germany.
- 2014** Invited lecture, 12th February 2014, University of Heidelberg, Germany.
- 2014** 3 minute presentation, A.T. Kearney Scholarship, Falling Walls Conference, 8th November 2013, Berlin, Germany.
- 2014** Lecture, Annual Meeting of the RSC Main Group Chemistry Interest Group, 27th September 2013, University of Oxford, UK.
- 2014** Invited lecture, 29th August 2013, University of Cambridge, UK.
- 2014** Invited lecture, 22nd August 2013, University of Manchester, UK.