Peer-Reviewed Publications, Reviews and Book Chapters.

(Next REF outputs, thus far, 1 Structure (IF 5.6), 1 Angew (IF 11), Chem. Sci (IF 9.2), 1 ACS Cat (IF 9.3), 2 Chem Eur J (IF5.6); 1 Adv Synth Cat (IF 5.6).

1. (N-Heterocyclic Carbene)$_2$-Pd(0)-Catalyzed Silaboration of Internal and Terminal Alkynes: Scope and Mechanistic Studies. Ansell, M. B.; Spencer, J.* Navarro, O.* *ACS Catal*. **2016**, 6, 2192−2196. Si-B bonds can be stereoselectively added across alkynes, mechanistic studies show an oxidative addition of the Si-B bond to the Pd(0) catalyst.
2. Open Science, just accepted.
3. *A Poised Fragment Library Enables Rapid Synthetic Expansion Yielding the First Reported Inhibitors of PHIP(2), an Atypical Bromodomain*. Cox, O. B., Krojer, T.; Collins, P.; Monteiro, O.; Talon, R.; Bradley, A.; Fedorov, O.; Amin, J.; Marsden, B. D.; Spencer, J.; Von Delft, F.*; Brennan, P. E.* *Chem*. *Sci*. **2016**, *7*, 2322-2330. First examples of hits vs PHIP(2), a melanoma target, collaboration with SGC, Oxford.
4. *Isoskeletal Schiff Base Polynuclear Coordination Clusters: Synthetic and Theoretical Aspects*. Griffiths, K.; Dokorou, V. N.; Spencer, J.; Abdul-Sada, A.; Vargas, A.;* Kostakis, G. E. *CrystEngComm* **2016**, *18*, 704-713.
5. *Late Stage C-H Activation of a Privileged Scaffold*. *Synthesis of a Library of Benzodiazepines*. Khan, R.; Felix, R.; Kemmitt, P. D.; Coles, S. J.; Day, I. J.; Tizzard, G. J. Spencer, J.* *Adv*. *Synth*. *Catal*. **2016**, 358, 98-109. (IF=5.6); first paper from our EPSRC iCASE with AZ on the functionalization of benzodiazepines using Pd catalysis.
6. *A 8-Hydroxyquinoline-Cyclodextrin Conjugate as an Efficient Chelating Agent for Cobalt(II) and Nickel(II) in Neutral Aqueous Solution*. Sgarlata, C.; Oliveri*, V.; Spencer, J. *Eur*. *J*. *Inorg*. *Chem*. **2015**, 5886–5891. Another paper from our collaboration with our Italian colleagues, visit to Catania was funded by a RSC International Authors Grant. V. Oliveri spent 3 months of her PhD at Sussex in our group.
7. *Transient Protein States for the Design of Small-Molecule Stabilizers of Mutant p53*. Joerger, A. C.*; Bauer, M. R.; Wilcken, R.; Baud, M. G.; Harbrecht, H.; Exner, T. E.; Boeckler, F. M.; Spencer, J.; Fersht, A. R. *Structure*, **2015**, *23*, 2246–2255. (IF=5.6). Structural insight into plasticity of the p53 mutant, supported by cocrystal x-ray studies, funded by Worldwide Canc. Res. grant.
8. Use of a Camera to Monitor Reaction Stirring and Reagent Dissolution During a Reaction; A MIDA Boronate library Generation Study. Close, A. J.; Corden, V.; Kemmitt, P. D.;

Spencer, J.* 2015. http://www.cemmicrowave.co.uk/assets/cameramida-boronate---app-note.pdf. Application note, in conjunction with CEM microwaves on reaction monitoring in boronate ester synthesis.

9. *The Histone Deacetylase Inhibitor JAHA Down-regulates pERK and Global DNA Methylation in MDA-MB231 Breast Cancer Cells*. Librizzi, M.; Chiarelli, R.; Bosco, L.; Sansook, S.; Gascon, J.; Spencer, J.; Caradonna, F.; Luparello, C. *Materials*, **2015**, *8*, 7041–7047. Collaborative paper where Italian colleagues did cancer studies of our compounds.
10. *Bismuth coordination Networks Containing Deferiprone: Synthesis, Characterisation, Stability and Antibacterial Activity*. Burrows, A. D.*; Jurcic, M.; Mahon, M. F.; Pierrat, S.; Roffe, G. W.; Windle, H.; Spencer, J.* *Dalton Trans*. **2015**, *44*, 13814–13817. Collaborative venture between Bath, Dublin and Sussex on the use of novel inorganic materials for drug delivery prototypes. An ideal training opportunity for my PhD student, Gavin Roffe, to gain experience and transferable skills in the use of LC-MS and GC-MS (liquid/gas chromatrography) that have proven highly useful for his ensuing catalysis studies.
11. *Synthesis of an $(NHC)_2Pd(SiMe_3)_2$ (NHC = N-Heterocyclic Carbene) Complex. Catalytic, cis-Bis-Silylations of Internal Alkynes with Unactivated Disilanes*. Ansell, M. B.; Roberts, D. E.; Cloke, F. G. N.; Navarro, O.*; Spencer, J.* *Angew. Chem. Int. Ed. Engl.* **2015**, *54*, 5578 –5582. (IF=11.3; inside cover article). Funded by a Sussex DTG (from internal competitive funding), we demonstrate the catalytic activation of strong silicon-silicon bonds published in one of the leading chemistry journals.
12. *Cytotoxicity of the Urokinase-plasminogen Activator Inhibitor Carbamimidothioic acid (4-boronophenyl) Methyl Ester Hydrobromide (BC-11) on Triple-negative MDA-MB231 Breast Cancer Cells*. Longo, A.; Librizzi, M.; Chuckowree, I. S.; Baltus, C. B.; Spencer, J.; Luparello, C.* *Molecules*, **2015**, *20*, 9879-9889. Submitted article to this open access journal (I was the invited editor for this call for papers on boron chemistry); this article describes the use of a small molecular weight boronic acid enzyme inhibitor. Italian colleagues led the study.
13. *Thermal Analysis of Novel Biphenylamide Derivatives*. Owusu-Ware, S. K.; Cherry, A. J.; Baltus, C. B.; Spencer, J.; Antonijevic, M.* *J. Therm. Anal. Calorim.*, **2015**, *121*, 437-452. A study of the thermal properties of some molecules we synthesized at Greenwich. We provided the compounds but colleagues led the study.
14. *A Rapid Route for the Preparation of Pyrimido[5,4-d]- and Pyrido[3,2-d]oxazoles*. Lemaire, L.; Leleu-Chavain, N.; Tourteau, A.; Abdul-Sada, A.; Spencer, J.; Millet, R.*, *Tetrahedron Lett*. **2015**, *56*, 2448–2450. This describes the elaboration of a heterocycle

scaffold to afford new ring systems, led by French collaborators with our synthetic and writing input.

15. *The Nature of the Bonding in Symmetrical Pincer Palladacycles*. Boonseng, S.; Roffe, G. W.; Spencer, J.; Cox, H.* *Dalton Trans*. **2015**, *44*, 7570-7577. This is a collaborative venture with Dr Hazel Cox (Sussex) where we marry our synthetic chemistry (Gavin Roffe) with their theoretical expertise. Hazel led this study looking at the structures of our palladium complexes, to be followed by a joint paper on synthesis/theory/catalysis.
16. *Carbon dots (C-dots) from Cow Manure with Impressive Subcellular Selectivity Tuned by Simple Chemical Modification*. Barbosa, C.D. E. S.; Corrêa, J. R.; Medeiros, G. A.; Barreto, G.; Magalhães, K.; de Oliveira, A. L.; Spencer, J.; Rodrigues, M. O.; Neto, B. A. D.* *Chem. Eur. J.* **2015**, *21*, 5055-5060. (IF=5.8). Brazilian colleagues led the study. I helped with study design, writing of paper, of this project looking at imaging for cancer cell lines.
17. *Seizure Control by Derivatives of Medium Chain Fatty Acids Associated with the Ketogenic Diet Show Novel Branching-Point Structure for Enhanced Potency*. Chang, P.; Zuckermann, A.; Williams, S.; Close, A. J.; Cano-Jaimez, M.; McEvoy, J. P.; Spencer, J.; Walker, M. C.; Williams, R. S. B.* JPET, **2015**, *352 (1)*, 43-52. Royal Holloway colleagues led the study. Adam Close gained transferable skills and experience of tool compound synthesis at the start of his PhD. Paper provided preliminary data for an unsuccessful Epilepsy Charity grant application.
18. *Microwave-Mediated Synthesis of N-Methyliminodiacetic Acid (MIDA) Boronates*. Close, A. J.; Kemmitt, P.; Emmerson, M. K.; Spencer, J.* *Tetrahedron*, **2014**, *70*, 9125-9131.Novel "green" route to useful MIDA boronate synthons, some results gained from Adam Close's CASE placement at AZ.
19. *Synthesis of Hybrid Anticancer Agents Based on Kinase and Histone Deacetylase Inhibitors*. Patel, H.; Chuckowree, I.; Coxhead, P. Guille, M.; Wang, M.; Zuckerman, A.; Williams, R. S. B.; Librizzi, M.; Paranal, R. N.; Bradner, J. E.; Spencer, J.* *MedChemComm*. **2014**, *5*, 1829–1833.

Here, we show that SAHA, a HDAC inhibitor, can be successfully combined with a VEGFR-2 (kinase) inhibitor, affording a dual action hybrid. This study is underpinned by docking studies, biochemical and in vitro/in vivo assays and involved a number of external partners from Harvard, Portsmouth and Royal Holloway Universities. Irina Chuckowree, a former PhD/PDRA of mine, is now a Research Fellow at Sussex.

20. *X-ray Crystallographic Structure of 3-(Propan-2-ylidene)benzofuran-2(3H)-one*. Spencer, J.; Mendham, A. P.; Chowdhry, B. Z.; Palmer, R. A.*; Lisgarten, D. R.; Trost, B. M.;

Cramer, N.; Male, L.; Coles, S. J. *J. Pharm.Chem.*, **2014**, *3*, 44-49. Birkbeck colleagues led this study, I provided the compound and helped write the paper.

21. *Multifunctional 8-Hydroxyquinoline-Appended Cyclodextrins as New Inhibitors of Metal-Induced Protein Aggregation*. Oliveri, V.; Attanasio, F.; Puglisi, A.; Spencer, J.; Sgarlata, C.; Vecchio, G.* Chem. Eur. J., **2014**, 20, 8954-8964. (IF=5.8) (accepted as **back cover**). DOI: 10.1002/chem.201402690. Highlighted on the *ChemistryViews* website: *http://www.chemistryviews.org/details/ezine/6193781/Inhibiting_Protein_Aggregation.html*

G. Vecchio senior author. Valentina Oliviera spent 3 months here as a visiting scientist part of her PhD training when I had just started at Sussex synthesising novel CDs, then tested them back in Italy. Chemistry may be translatable to Niemann Pick C.

22. *Synthesis and Solid-State Characterisation of 4-Substituted Methylidene Oxindoles*. Tizzard, G. J., Coles, S. J., Edwards, M.; Oforbike Onyeabo, R.; Allen, M.; Spencer, J. *Chem. Central J.*, **2013**, 7, 182-191.

JS; one of the principal authors of the work, shared authorship. A structural study of oxindoles found in a number of kinase inhibitors. A MSc-project derived publication, always a fantastic way of rewarding junior researchers and motivating them to do future PhD studies.

23. *Incorporation by Coordination and Release of the Iron Chelator Drug Deferiprone from Zinc-Based Metal-Organic Frameworks*. Burrows, A. D.*; Jurcic, M.; Keenan, L. L.; Lane, R. A.; Mahon, M. F.; Warren, M. R.; Nowell, H.; Paradowski, M.; Spencer, J.* *Chem. Comm.* **2013**, 49, 11260-11262 (IF=6.3). HOT ARTICLE: http://blogs.rsc.org/cc/2013/11/21/hot-chemcomm-november/

A 50-50 synergic collaboration with ADB, a Metal-Organic Framework (MOF) expert, at Bath. We provide drug delivery, drug and disease knowledge (these are model systems for e.g. overcoming extensive drug metabolism or toxicity issues) as well as LC-MS stability studies. Selected as a hot article.

24. *New Cyclodextrin-Bearing 8-Hydroxyquinoline Ligands as Multifunctional Molecules*. Oliveri, V.*; Puglisi, A.; Viale, M.; Aiello, C.; Sgarlata, C.; Vecchio, G.; Clarke, J.; Milton, J.; Spencer, J.* *Chem. Eur. J.* **2013**, *19*, 13946-13955 (IF=5.8).

JS/VG 50-50 contributors. A pan-European collaboration where Valentina Oliveri carried out a 3 months study in our laboratory as part of her Italian PhD. The paper deals with oxidative stress and a potential "dual action" use of cyclodextrins (CDs) in controlling both cholesterol and metal levels in disease. This was one of the papers that alerted Niemann Pick Research Foundation of our work as such an approach could be used in the treatment of Niemann Pick C, Alzheimer's and related

pathologies. This was a "spin-off" project since the CD work was funded by Oxford Nanoporetech, who were coauthors on the paper.

25. *Small-Molecule Induced Reactivation of Mutant p53 in Cancer Cells*. Liu, X.; Wilcken, R.; Joerger, A.; Chuckowree, I.; Amin, J.; Spencer, J.; Fersht, A.* *Nucl. Ac. Res.* **2013**, 41, 6034-6044 (IF=8.2).

The Fersht group were protagonists of this work having world-leading biology and p53 expertise. We provided our bespoke in-house chemical library (under NDA) and several hits were found, notably a pyrazole "fragment." This laid the foundations for a successful AICR bid and shows that the stabilisation and rescue of p53 mutants can reactivate apoptosis. Previous studies were limited to a few biophysical experiments proving protein re-activation whereas the current study shows a proof-of-principle that such a rescue can lead to a number of cell-based events such as caspase activation, apoptosis, correct protein folding. I synthesised PK7242, one of the biological probes described herein, which was of a particular personal satisfaction and I suggested the kinase screen to rule of any off target effects.

26. *Synthesis of Oxindole-Based Bioorganometallic Kinase Inhibitors Incorporating One or More Ferrocene Groups*. Amin, J.; Chuckowree, I. S.; Wang, M.; Tizzard, G. J.; Coles, S. J.; Spencer, J. *Organometallics*, **2013**, *32*, 5818-5825.

JS principal author continuing a theme of modifying known drugs of bioactive compounds with 3-D metal complexes to target proteins involved in cancer.

27. A *Cyclodextrin-Capped Histone Deacetylase Inhibitor*, Amin, J.; Puglisi, A.; Clarke, Milton, J.; Wang, M. Paranal, R. M.; Bradner, J .E.; Spencer, J. *Bioorg. Med. Chem. Lett.* **2013**, *23*, 3346-3348.

JS supervisor of project. 2 PDRAs (JA, AP) were * authors; looking at a large "cap" in HDAC inhibitors (histone deacetylase) and effects on HDAC inhibition selectivity.

28. *Targeting Epidermal Growth Factor Receptor with Ferrocene-Based Kinase Inhibitors*. Amin, J.; Chuckowree, I.; Tizzard, G. J.; Coles, S. J.; Wang, M.; Bingham, J. P.; Hartley, J. A.; Spencer, J. *Organometallics* **2013**, *32*, 509-513.

JS principal author; again bioorganometallic kinase inhibitors aimed at using ferrocene bioisosteres and probing enzyme selectivity. A number of these papers were a result of a RSC Research Fund (£6K in total) which provided a number of key expensive consumables.

29. *Olefin Cross-metathesis/Suzuki-Miyaura Reactions on Vinylphenylboronic Acid Pinacol Esters*. Baltus, C. B,; Chuckowree, I. S.; Press, N. J.; Day, I. J.; Coles, S. J.; Tizzard, G. J.; Spencer, J.* *Tetrahedron Lett*. **2013**, *54*, 1211-1217.

JS principal author. Student (CB) had a CASE award with Novartis. Collaborative work with Iain Day (Sussex) and Novartis partners.

30. *Cytotoxic Effects of Jay Amin Hydroxamic Acid (JAHA), a Ferrocene-Based Class I Histone Deacetylase Inhibitor, on Triple-Negative MDA-MB231 Breast Cancer Cells*. Librizzi, M.; Longo, A.; Chiarelli, R.; Amin, J.; Spencer, J.; Luparello, C.* *Chem. Res. Tox.* **2012**, *25*, 2608-2616.

An Italian group contacted us in order to test our organometallic test compound, JAHA. This is mainly their contribution (ca. 80-20); we synthesised material, offered advice and helped write the paper and interpret the data.

31. *Synthesis of a Biphenyl Library for Studies of Hydrogen Bonding in the Solid State*. Baltus, C. B.; Press, N. J.; Antonijevic, M.D.; Tizzard, G. J.; Coles, S. J.; Spencer, J.* *Tetrahedron* **2012**, 68, 9272-9277.

JS (principal author); another paper from a collaborative CASE award with Greenwich and Novartis colleagues. Some of these analogues had unusual solid state structures and were examined in more detail.

32. *The Unexpected but Predictable Tetrazole Packing in Flexible 1-Benzyl-1H-Tetrazole*. Spencer, J.; Patel, H.; Deadman, J. J.; Palmer, R. A.*; Male, L.; Coles, S. J.; Uzoh, O. G.; Price, S. L. *CrystEngComm* **2012**, *14*, 6441-6446.

Collaborative project from a CASE award (Avexa, Melbourne). Crystallographer partners were main contributors; we synthesised the molecule and helped write the paper (JS, 20% contribution).

33. *Identification and Development of the 1,4-Benzodiazepin-2-one and Quinazoline-2,4-dione Scaffolds as Submicromolar Inhibitors of HAT*. Clark, R. L.; Clements, C. J.; Barrett, M. P.; Mackay, S. P.*; Rathnam , R. P.; Owusu-Dapaah, G.; Spencer, J.; Huggan, J. K. *Bioorg. Med. Chem.* **2012**, *20*, 6019-6033.

(JS 20%); we initiated a study with Strathclyde and this was the results of mainly their synthetic efforts. Paper looks at HAT (Sleeping Sickness) targets.

34. *Synthesis of a 1,3,5-Benzotriazepine-2,4-dione Based Library*. Chuckowree, I.*, Syed , M. A., Getti , G., Patel, A. P., Garner, H., Tizzard, G. J., Coles, S. J., Spencer, J.* *Tetrahedron Lett.* **2012**, *53*, 3607-3611.

(JS shared authorship with PDRA/ex-PhD I.C.); novel benzotriazepine (BZT) template is a "benzodiazepine equivalent" (bioisostere). We generated a number of patents at Greenwich on BZTs including clinical candidates for cancer. Hence, "repurposing" these compounds for potential alternative applications was vital.

Prior to Sussex papers

35. *Microwave-Assisted Synthesis of 6-Amino-β-Cyclodextrins*. Puglisi, A., Spencer, J., Clarke, J., Milton, J. *J*. *Incl*. *Phenom*. *Macrocycl*. *Chem*. **2012**, *73*, 475-478.
36. *Microwave-Mediated Suzuki–Miyaura Cross-Couplings of Thioether- and ortho-Substituted Methylphenylboronic Acid Esters*. Baltus, C. B.; Press, N. J.; Spencer, J. *Synlett* **2012**, *23*, 2477-2480.
37. *Click JAHAs: Conformationally Restricted Ferrocene-based Histone Deacetylase Inhibitors*. Spencer, J., Amin, J., Boddiboyena, R., Packham, G., Cavell, B. E., Syed Alwi, S. S., Paranal, R. M., Heightman, T. D., Wang, M., Marsden, B., Coxhead, P., Guille, M., Tizzard, G. J., Coles, S. J., and Bradner, J.E. *Med*. *Chem*. *Commun*. **2012**, *3*, 61-64.
38. *Microwave Mediated Synthesis and Manipulation of a 2-Substituted-5-Aminooxazole-4-Carbonitrile Library*. Spencer, J., Patel, H., Amin, J., Callear, S. K., Coles, S. J., Millet, R., Furman, C., Mansouri, R., Chavatte, P., Deadman, J. J., *Tetrahedron Lett*. **2012**, *53*, 1656-1659.
39. *Synthesis, Physicochemical Properties and Antioxidant Activity of Deferiprone-Cyclodextrin Conjugates and their Iron (III) Complexes*. Puglisi, A., Spencer, J., Oliveri, V., Vecchio, G., Kong, X., Clarke, J., Milton, J. *Dalton Trans*. **2012**, *41*, 2877-2883 (cover article).
40. *Size Does Matter*. *Sterically Demanding Metallocene-Substituted 3-Methylidene-Oxindoles Exhibit Poor Kinase Inhibitory Action*. Spencer, J., Amin, J., Coxhead, P., McGeehan, J., Richards, C. J., Tizzard, G. J., Coles , S. J., Bingham, J., Feng, L., Meggers, E., Guille, M. *Organometallics* **2011**, *30*, 3177-3181.
41. *Microwave Mediated Synthesis of an Arylboronate Library*, Spencer, J., Baltus, C., Patel, H., Press, N. J., Coles, S. J., Male, L. Callear, S. K. *ACS*. *Comb*. *Sci*. **2011**, *13*, 24-31.
42. *SAR And Structural Studies of Metal-Containing Substituted Methylene-1,3-Dihydro-2H-Indol-2-one;* Spencer, J., Amin, J., Callear, S. K., Tizzard, G. J., Coles S. J., Coxhead, P., Guille, M. *Metallomics* **2011**, *3*, 600-608 (**inside cover**).
43. *Synthesis and Biological Evaluation of 1,4-Benzodiazepin-2-ones with Antitrypanosomal Activity*; Spencer, J., Rathnam, R. P., Harvey, A. L., Clements , C. J., Clark, R. L., Barrett, M. P., Wong, P. E., Male, L., Coles, S. J., Mackay, S. P. *Bioorg*. *Med*. *Chem*. **2011**, *19*, 1802-1815.

44. *Synthesis and Biological Evaluation of JAHAs: Ferrocene-based Class I Histone Deacetylase Inhibitor*s; Spencer, J., Amin, J., Heightman, T., Packham, G., Paranal, R., Bradner, J.E., Tizzard G., Coles S.J. *ACS MedChem. Lett*. **2011**, *2*, 358-362.

45. *Synthesis of a (Piperazin-1-ylmethyl)biaryl Library via Microwave-Mediated Suzuki-Miyaura Cross-Couplings*. Spencer, J., Baltus, C. B., Press, N. J., Harrington, R. W., Clegg, W. *Tetrahedron Lett*. **2011**, 52, 3963-3968.

46. *Synthesis and Solid State Study of Pyridine and Pyrimidine-Based Fragment Libraries*. Spencer, J., Patel, H., Callear, S. K., Coles, S. J., Deadman, J. J. *Tetrahedron Lett*., **2011**, *52*, 5905-5909.

47. *Crystal Structures of Two Palladacycles from the C–H Activation of 2-(Thiophen-2-yl)pyridine;* Callear, S. K., Spencer, J., Patel, H., Deadman, J. J., Hursthouse, M. B. *J. Chem. Cryst*. **2011**, *41*, 523-527.

48. *X-ray Crystallographic Structure of the Cyclic Di-amino acid peptide: N,N'-Diacetyl-Cyclo(Gly-Gly)*; Mendham, A.P., Spencer, J., Chowdhry, B. Z., Dines, T.J., Mujahid , M., Palmer, R., Tizzard, G.J., Coles, S.J. *J. Chem. Cryst*. **2011**, *41*, 1323-1327.

49. *X-ray Crystallographic Structure and Absolute Configuration of the Cyclic Di-amino Acid Peptide: Cyclo(L-HomoCySH-L-HomoCySH);* Mendham, A.P., Spencer, J., Chowdhry, B.Z., Dines, T.J., Mujahid , M., Palmer, R., Tizzard, G. J., Coles, S. J. *J. Chem. Cryst*. **2011**, *41*, 1328-1334.

50. *Synthesis and X-ray Structural Analysis of the Knoevenagel Product of 1,3-Dihydro-2H-indol-2-one and 1,1'-Ferrocene-biscarboxaldehyde***.** Spencer, J., Nielsen, B. V., Thomas, M. J. K., Male, L.; Coles, S. J. *Acta. Cryst. C*. **2011**, *67*, 245-248.

51. *Synthesis and Enzymatic Evaluation of the Guanosine Analogue 2-Amino-6-mercapto-7-methylpurine Ribonucleoside (MESG). Insights into the Phosphorolysis Reaction Mechanism Based on the Blueprint Transition State: S_N1 or S_N2?*, Neto, B. A. D., Lapis, A. A. M., Netz, P. A., Spencer, J., Dias S. L. P., Tamborim, S. M., Basso, L. M., Santos, D. S., Dupont, J., *J. Braz. Chem*. **2010**, *21*, 151-161.

52. *Seven 3-Methylidene-1,3-Dihydro-2H-indol-2-ones Related to the Multiple Receptor Tyrosine Kinase Inhibitor Sunitinib,* Spencer, J., Chowdhry, B. Z., Hamid, S., Male, L., Mendham, A. P., Coles, S. J., Hursthouse, M. B., *Acta Cryst*. **2010**, *C*66, 71-78 (**cover article**).

53. *Structural and Biological Investigation of Ferrocene-Substituted 3-Methylidene-1,3-dihydro-2H-indol-2-ones,* Spencer, J., Mendham, A. P., Kotha, A. K., Richardson, S. C. W., Hillard, E.,

Jaouen, G., Vessières, A., Male, M., Hursthouse, M. B. *Dalton Trans*. **2009**, 918-921 (**cover article**).

54. *Synthesis of a 1,4-Benzodiazepine Containing Palladacycle with in Vitro Anticancer and Cathepsin B Activity*, Spencer, J., Rathnam, R. P., Motukuri, M., Kotha, A. K., Richardson, S. C. W., Hazrati, A., Hartley, J. A., Male, L., Hursthouse, M. B., *Dalton Trans*. **2009**, 4299-4303.
55. *Excellent Correlation Between Cathepsin B Inhibition and Cytotoxicity for a Series of Palladacycles*, Spencer, J., Casini, A., Rathnam, R., Pfeffer, M., Callear, S., Hursthouse, M. B., Dyson, P. J. *Dalton Trans*. **2009**, 10731-10735.
56. *Achiral, Selective CCK_2 Receptor Antagonists Based on a 1,3,5-Benzotriazepine-2,4-dione Template*, Spencer, J., McDonald, I. M., Gaffen, J., Griffin, E., Harper, E. A., Linney, I. D., Roberts, S. P., Shaxted, M. E., Bashall, A., Adatia, T. *Bioorg*. *Med*. *Chem*. **2008**, *16*, 2974-2983.
57. *C-H Activations on a 1H-1,4-Benzodiazepin-2(3H)-One Template*, Spencer, J., Chowdhry, B. Z., Mallet, A. I., Rathnam, R. P., Adatia, T., Bashall, A., Rominger, F. *Tetrahedron* **2008**, *64*, 6082-6089.
58. *Microwave Mediated Reduction of Heterocycle and Fluorine containing Nitroaromatics with $Mo(CO)_6$ & DBU*, Spencer, J., Patel, H., Rathnam, R.P., Nazira, A, *Tetrahedron* **2008**, *64*, 10195-10200.
59. *Synthesis of Cycloruthenated Compounds as Potential Anticancer Agents,* Leyva, L., Sirlin, C., Rubio, L., Franco, C., Le Lagadec, R., Spencer, J., Bischoff, P., Gaiddon, C., Loeffler, J. P., Pfeffer, M., *Eur*. *J*. *Inorg*. *Chem*. **2007**, *19*, 3055-3066.
60. *Optimisation of 1,3,4-Benzotriazepine-Based CCK_2 Antagonists To Obtain Potent, Orally-Active Inhibitors Of Gastrin-Mediated Gastric Acid Secretion*, McDonald, I. M., Black, J. W., Buck, I. M., Dunstone, D. J., Griffin, E. P., Harper, E. A., Hull, R. A. D., Kalindjian, S. B., Lilley, E. J., Linney, I. D., Pether, M. J., Roberts, S. P., Shaxted, M. E., Spencer, J., Steel, K. I. M., Sykes, D. A., Walker, M. K., Watt, G. F., Wright, L., Wright, P. T., Xun, W. *J*. *Med*. *Chem*. **2007**,*50*, 3101-3112.
61. *Molybdenum Hexacarbonyl & DBU Reduction of Nitro Compounds Under Microwave Irradiation*, Spencer, J., Nazira, A., Patel, H., Rathnam, R. P., Verma, J. *Synlett*, **2007**, 2557-2558.
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