

## Publication List

### Single Authored Book

D. O'Hagan

*'The Polyketide Metabolites'* published September 1991 by Ellis Horwood Ltd, Chichester.

### Papers in Peer Reviewed Journals (Chronological)

1. D. O'Hagan, J.A. Robinson and D.L. Turner  
Biosynthesis of the Macrolide Antibiotic Tylosin. Origin of the Oxygen Atoms of Tylosin.  
*J.C.S. Chem. Commun.*, 1983, 1337-1340.
2. D. Gani, D. O'Hagan, K. Reynolds and J.A. Robinson  
Biosynthesis of the Polyether Antibiotic Monensin-A. Stereochemical Aspects of the Incorporation and Metabolism of Isobutyrate.  
*J.C.S. Chem. Commun.*, 1985, 1002-1004.
3. K. Reynolds, D. O'Hagan, D. Gani and J.A. Robinson  
Butyrate Metabolism in Streptomycetes. Characterisation of an Intramolecular Vicinal Interchange Rearrangement Linking Iso-butyrate and *n*-Butyrate in *Streptomyces cinnamonensis*.  
*J.C.S. Perkin Trans. 1*, 1988, 3195-3207.
4. D. O'Hagan  
Structural and Stereochemical Homology between the Macrolide and Polyether Antibiotics.  
*Tetrahedron*, 1988, **44**, 1691-1696.
5. R.D. Chambers, R. Jaouhari and D. O'Hagan  
Synthesis of a Difluoromethylenephosphonate Analogue of Glycerol-3-Phosphate. A Substrate for NADH Linked G-3-P Dehydrogenase.  
*J.C.S. Chem. Commun.*, 1988, 1169-1170.
6. D. O'Hagan  
The Polyether and Macrolide Antibiotics. Biogenetic Analysis and Structural Correlations.  
*Nat. Prod. Rep.*, 1989, **6**, 205-219.
7. D. O'Hagan  
Preparation of Monofluorocarboxylic Acids Using N,N-Diethyl-1,1,2,3,3,3-Hexafluoropropylamine.  
*J. Fluorine Chem.*, 1989, **43**, 371-377.
8. R.D. Chambers, R. Jaouhari and D. O'Hagan  
Fluorine in Enzyme Chemistry: Part 1. Synthesis of Difluoromethylenephosphonate Derivatives as Phosphate Mimics.  
*J. Fluorine Chem.*, 1989, **44**, 275-284.
9. R.D. Chambers, R. Jaouhari and D. O'Hagan  
Fluorine in Enzyme Chemistry: Part 2. The Preparation of Difluoromethylenephosphonate Analogues of Glycolytic Phosphates. Approaching an Isosteric and Isoelectronic Phosphate Mimic.  
*Tetrahedron*, 1989, **45**, 5101-5108.
10. P. Zhou, D. O'Hagan, U. Mocek, Z. Zeng, L-D. Yuen, T. Frenzel, C.J. Unkefer, J.M. Beale and H.G. Floss  
Biosynthesis of the Antibiotic Thiostrepton. Methylation of Tryptophan in the Formation of the Quinaldic Acid Moiety by Transfer of the Methionine Methyl Group with Net Retention of Configuration.  
*J. Am. Chem. Soc.*, 1989, **111**, 7274-7276.
11. D. O'Hagan  
Evolution of the Polyketide Metabolites.  
*Chem. Br.*, 1990, **26**, 246-250.

12. R.D. Chambers, D. O'Hagan, R.B. Lamont and S.C. Jain  
The Difluoromethylenephosphonate Moiety as a Phosphate Mimic: X-ray Structure of 2-Amino-1,1-difluorophosphonic Acid.  
*J. Chem. Soc. Chem. Commun.*, 1990, 1053-1054.
13. D.B. Harper, J.T. Hamilton and D. O'Hagan  
Identification *Threo*-18-Fluorodihydroxystearic Acid: A Novel  $\omega$ -Fluorinated Fatty Acid from *Dichapetalum toxicarium* Seeds.  
*Tetrahedron Letts.*, 1990, **31**, 7661-7662.
14. R.J. Cox and D. O'Hagan  
Synthesis of Isotopically Labelled 3-Amino-2-Phenylpropionic Acid and its Role as a Precursor in the Biosynthesis of Tenellin and Tropic Acid.  
*J. Chem. Soc. Perkin Trans. I*, 1991, 2537-2540.
15. J.J.M. Meyer and D. O'Hagan  
Conversion of Fluoropyruvate to Fluoroacetate by *Dichapetalum cymosum*.  
*Phytochemistry*, 1992, **31**, 499-501.
16. J.J.M. Meyer and D. O'Hagan  
The Biosynthesis of Fluoroacetate in *D. cymosum* (Hook) Engl. The Conversion of 3-Fluoropyruvate to Fluoroacetate in a Cell Free Extract.  
*Phytochemistry*, 1992, **31**, 2699-2701.
17. D. O'Hagan and N. A. Zaidi  
Hydrolytic Resolution of Tertiary Acetylenic Acetate Esters with the Lipase From *Candida cylindracea*.  
*J. Chem. Soc. Perkin. Trans. I.*, 1992, 947-948.
18. D. O'Hagan, S.V. Rogers, G.R. Duffin and R.L. Edwards  
Biosynthesis of the Fungal Polyketide, Cubenic Acid from *Xylaria cubensis*  
*Tetrahedron Letts.*, 1992, **33**, 5585-5588.
19. J.J.M. Meyer and D. O'Hagan  
The Rare Fluorinated Natural Products  
*Chem. Br.*, 1992, **28**, 785-788.
20. D. O'Hagan  
Biosynthesis of The Polyketide Metabolites  
*Nat. Prod. Reports*, 1992, **9**, 447-480.
21. V.F. Hogan, D. O'Hagan and J. Sanvoisin  
Rate Enhancement of the *Candida cylindracea* Lipase Catalysed Transesterifications in Organic Solvents: Enzymatic Reactions Below Zero.  
*Ind. J. Chem Section (B).*, 1992, **31**, 883-885.
22. U. Mocek, J. M. Beale, T. Frenzel, D. R. Houck, D. O'Hagan, R. Tsuchiya, L-D Yuen, Z-P Zeng, P. Zhou and H. G. Floss  
Amino Acid Modification in the Biosynthesis of Thiopeptide Antibiotics, p77-89, in *Frontiers and New Horizons In Amino Acid Research*, Ed. K. Takai, Elsevier, Tokyo, 1992.
23. D. O'Hagan, R. Perry, J.M. Lock, J.J.M. Meyer, L. Dasaradhi, J.T.G. Hamilton and D.B. Harper\*  
The Identification of Exceptionally High Levels of Monofluoroacetate in *Dichapetalum braunii* from Southeastern Tanzania.  
*Phytochemistry*, 1993, **33**, 1043-1046
24. D. Bailey, D. O'Hagan, U. Dyer and R.B. Lamont  
Preparation of Highly Enantiopure Pyridylethanol by Bakers' Yeast Reductions.  
*Tetrahedron Asymmetry*, 1993, **4**, 1255-1258.

25. D. O'Hagan  
The Biosynthesis of the Fatty acid and Polyketide Metabolites.  
*Nat. Prod. Reports*, 1993, **6**, 593-624.
26. O. Casher, D. O'Hagan, C.A. Rosenkranz, H.S. Rzepa and N.A. Zaidi  
Electronic Effects in  $\pi$ -Facial Selective Epoxidation of 1-Phenyl-1-trifluoromethyl-2-propene-1-ol.  
*J. Chem. Soc. Chem. Commun.*, 1993, 1337-1340.
27. D. O'Hagan, N.A. Zaidi and R.B. Lamont  
The Synthesis of (*R*)- $\gamma$ -Phenyl- $\gamma$ -(trifluoromethyl)-butyrolactone and (*2R,3S*)-1,1,1-Trifluoro-2-methoxy-2-phenyl-3,4-epoxybutane in Homochiral Forms.  
*Tetrahedron Asymmetry*, 1993, **4**, 1703-1708.
28. L. Dasaradhi and D. O'Hagan  
The effect of aryl fluorines in a lipase resolution.  
*Bio & Med. Chem. Letts.*, 1993, **3**, 1655-1658.
29. U. Mocek, Z. Zeng, D. O'Hagan, P. Zhou, L-D G. Fan, J. M. Beale and H. G. Floss  
Biosynthesis of the Modified Peptide Antibiotic Thiostrepton in *Streptomyces azureus* and *S. streptomyces laurentii*.  
*J. Am. Chem. Soc.*, 1993, **115**, 7992-8001.
30. D. O'Hagan and N. A. Zaidi  
Polymerisation of 10-Hydroxydecanoic Acid With the Lipase From *Candida cylindracea*.  
*J. Chem. Soc. Perkin Trans. I.*, 1993, 2389-2390.
31. D. O'Hagan and H. S. Rzepa  
The Stereoelectronic Influence of Fluorine in Enzyme Resolutions of  $\alpha$ -Fluoro Esters  
*J. Chem. Soc. Perkin Trans. 2.*, 1994, 3-4.
32. D. B. Harper and D. O'Hagan  
The Fluorinated Natural Products  
*Nat. Prod. Reports*, 1994, **11**, 123-134.
33. D. O'Hagan\* and N. A. Zaidi  
A Comparison of the Properties of Methacrylate Polymers Derived From Racemic and Homochiral Monomers Containing a Trifluoromethyl Group at a Tertiary Stereogenic Centre.  
*Makromol. Chem., Macromol. Symp.* 1994, **82**, 57-60.
34. N.C.J.E. Chesters, D. O'Hagan and R. J. Robins  
The Biosynthesis of Tropic Acid In Plants. Evidence for the Direct Rearrangement of 3-Phenyllactate to Tropate.  
*J. Chem. Soc. Perkin Trans., I*, 1994, 1159-1162.
35. D. O'Hagan and N. A. Zaidi  
The Resolution of  $\alpha$ -Acetylene- Acetate Esters by the Lipase from *Candida cylindracea*.  
*Tetrahedron Asymmetry*, 1994, **5**, 1111-1118.
36. D. O'Hagan and N. A. Zaidi  
Enzyme Catalysed Condensation Polymerisation (ECCP) of 11-Hydroxyundecanoic acid With the Lipase From *Candida cylindracea*.  
*Polymer*, 1994, **35**, 3577-3578.
37. D. O'Hagan, J. White and D. A. Jones  
Efficient Routes To Isotopically Labelled Epichlorohydrins ((Chloromethyl) oxiranes).  
*J. Labelled Compd. Radiopharm.*, 1994, **34**, 871-880.
38. D. O'Hagan, S. V. Rogers, K. A Reynolds and G. R. Duffin  
The Incorporation of Thymine and  $\beta$ -Aminoisobutyrate into the Polyether Antibiotic, Monensin-A.  
*J. Chem. Soc. Chem. Commun.*, 1994, 1577-1578.

39. D. O'Hagan and H. S. Rzepa  
Stereospecific Control of the Citrate Synthase Mediated Synthesis of (2*R*,3*R*) 3-Fluorocitrate by the Relative Stabilities of the Intermediate Fluoroenolates.  
*J. Chem. Soc. Chem. Commun.*, 1994, 2029-2030.
40. J. A. K. Howard, A. S. Bastanov, D. O'Hagan and J. White  
3-Chloro and 3-Bromo-2-oxopropyl *p*-toluenesulfonate.  
*Acta Crystallographica Section C.*, 1994, C50, 1825-1828.
41. D. O'Hagan,  
Biosynthesis of the Polyketide Metabolites.  
*Nat. Prod. Rep.*, 1995, **12**, 1-32.
42. R. J. Robins, N. C. J. E. Chesters, D. O'Hagan, A. J. Parr, N. J. Walton and J. G. Woolley.  
The Biosynthesis of Hyoscyamine: The Process by Which Littorine Rearranges to Hyoscyamine.  
*J. Chem. Soc. Perkin. Trans. 1.*, 1995, 481-485.
43. L. Dasaradhi, D. O'Hagan, M. C. Petty and C. Pearson  
The Synthesis and Characterisation of Selectively Fluorinated Stearic Acids (Octadecanoic Acids) and Their Tristearins: The Effect of Introducing One and Two Fluorine Atoms Into a Hydrocarbon Chain.  
*J. Chem. Soc. Perkin Trans 2.*, 1995, 221-225.
44. N. C. J. E. Chesters, D. O'Hagan and R. J. Robins  
The Biosynthesis of Tropic Acid: The (R)-D-Phenyllactyl Moiety is Processed by the Mutase Involved in Hyoscyamine Biosynthesis in *Datura stramonium*.  
*J. Chem. Soc., Chem. Commun.*, 1995, 127-128.
45. N. C. J. E. Chesters, D. O'Hagan, R. J. Robins, A. Kastle and H. G. Floss  
The Biosynthesis of Tropic Acid: The Stereochemical Course of the Mutase Involved in Hyoscyamine Biosynthesis in *Datura stramonium*.  
*J. Chem. Soc., Chem. Commun.*, 1995, 129-130.
46. M. Hübel and D. O'Hagan  
Synthesis of Trifluoromethyl-Containing Monomers for the Preparation of Piezoelectric Polymers.  
*Liebigs Ann.*, 1995, 583-585.
47. K. A. Reid, J. T. G. Hamilton, R. D. Bowden, D. O'Hagan, Lakkaraju Dasaradhi, M. R. Amin and D. B. Harper  
Biosynthesis of Fluorinated Secondary Metabolites by *Streptomyces cattleya*.  
*Microbiology*, 1995, **141**, 1385-1393.
48. J. Nieschalk and D. O'Hagan  
Monofluorophosphonates as Phosphate Mimics in Bioorganic Chemistry: A Comparative Study of CH<sub>2</sub>-, CHF- and CF<sub>2</sub>- Phosphonate Analogues of *sn*-Glycerol-3-phosphate as Substrates for *sn*-Glycerol-3-phosphate Dehydrogenase.  
*J. Chem. Soc. Chem. Commun.*, 1995, 719-720.
49. A. Stabel, L. Dasaradhi, D. O'Hagan and J. P. Rabe  
Scanning Tunneling Microscopy Imaging of Single Fluorine Atom Substitution in Stearic Acid  
*Langmuir*, 1995, **11**, 1427-1430.
50. J. A. K. Howard, D. O'Hagan, N. A. Pitchford and N. A. Zaidi  
The Solid State Structure of the 34-Membered Macrocyclic Diolide of 16-Hydroxyhexadecanoic Acid, Formed by Porcine Pancreatic Lipase Mediated Cyclisation in Hexane.  
*J. Chem. Res(S)*., 1995, 427.
51. D. O'Hagan, S. V. Rogers, G. R. Duffin and K. A. Reynolds

- The Biosynthesis of Monensin-A: Thymine,  $\beta$ -Aminoisobutyrate and Methacrylate Metabolism in *Streptomyces cinnamomensis*.  
*J. Antibiotics*, 1995, **48**, 1280-1287.
52. D O'Hagan, C. F. Bridge, K. K. Wallace, and K. A. Reynolds  
Kinetic and Stereoelectronic Effects of a Fluorine Substituent on the Reaction Catalyzed by an NADPH-Dependent 1-Cyclohexenylcarbonyl-CoA Reductase.  
*J. Chem. Soc., Chem. Commun.*, 1995, 2329-2330.
53. J. Nieschalk, A. S Batsanov, D. O'Hagan and J. A K Howard  
Synthesis of Monofluoro- and Difluoro- methylenephosphonate Analogues of *sn*-Glycerol-3-phosphate as Substrates for Glycerol-3-Phosphate Dehydrogenase and the X-Ray Structure of the Fluoromethylenephosphonate Moiety.  
*Tetrahedron*, 1996, **52**, 165-176.
54. N. Reineke, N. A. Zaidi, M. Mitra, D. O'Hagan, A. S. Batsanov, J. A. K. Howard and D. Y. Naumov  
A One Step Photocatalytic Synthesis of 2-(Trifluoromethyl)butyrolactones.  
*J. Chem. Soc. Perkin Trans. I*, 1996, 147-150.
55. M. Mitra and D. O'Hagan  
The Synthesis of a Homochiral Methacrylate Macromonomer by Polymerisation of (*R*)- or (*S*)- Methyl  $\beta$ -hydroxyisobutyrate  
*Polymer Bulletin*, 1996, **36**, 311-316.
56. N. C J E Chesters, K. Walker, D. O'Hagan and H. G. Floss  
The Biosynthesis of Tropic Acid: A Reevaluation of the Stereochemical Course of the Conversion of Phenyllactate to Tropate in *Datura Stramonium*.  
*J. Am. Chem. Soc.*, 1996, **118**, 925-926.
57. M. D'Alpaos, D. Favretto, D. O'Hagan\*, J. Nieschalk and P. Traldi  
FAB Mass Spectrometry of Mono- and Di- fluorophosphonate Analogues of Glycerol-3-phosphate.  
*Rapid Commun., Mass Spec.*, 1996, **10**, 1291-1294.
58. J. A. K. Howard, V. J. Hoy, D. O'Hagan and G. T. Smith  
How Good is Fluorine as a Hydrogen Bond Acceptor?  
*Tetrahedron*, 1996, **52**, 12613-12622.
59. A. Keeney, J. Nieschalk and D. O'Hagan  
The Synthesis of  $\alpha$ -Monofluorovinylphosphonates by a Peterson Type Olefination Reaction.  
*J. Fluorine Chem.*, 1996, **80**, 59-62.
60. David J. Bailey, David O'Hagan and Mustafa Tavasli  
A Short Synthesis of (*S*)-2-(Diphenylmethyl)pyrrolidine a Chiral Solvating Agent for NMR Analysis.  
*Tetrahedron Asymmetry*, 1997, **8**, 149-153.
61. C. F. Bridge and D. O'Hagan  
The Synthesis of  $\alpha$ -Fluoroketones by 1,4-Additions of Monofluorinated Enamines to Michael Acceptors,  
*J. Fluorine Chem.*, 1997, **82**, 21-24.
62. H. S. Rzepa and D. O'Hagan  
Some Aspects of Fluorine in Bioorganic Chemistry, (Feature Article),  
*Chem. Comm.*, 1997, 645-652.
63. T. Daniell, D. O'Hagan and R. Edwards  
Alfalfa Cell Cultures Treated With Fungal Elicitor Accumulate Flavone Metabolites Rather Than Isoflavones in the Presence of the Methylation Inhibitor Tubericidin.  
*Phytochemistry*, 1997, **44**, 285-291.
64. Simon J. Borwick, Judith A. K. Howard, Christian W. Lehmann and David O'Hagan,

- 2-Fluoroethanone,1-(4-bromophenyl)-(2,4-dinitrophenyl)hydrazone Contains a Particularly Short Fluorine Hydrogen Bond.  
*Acta Cryst. C* , 1997, **C53**, 124-126.
65. Nicola C J E Chesters and David O'Hagan,  
The Biosynthesis of the Fungal Metabolite, Piliiformic Acid (2-hexylidene-3-methylsuccinic acid).  
*J. Chem. Soc., Perkin Trans. 1.*, 1997, 827-834.
66. John T.G. Hamilton, Muhammad R. Amin, David B. Harper and David O'Hagan.  
The Biosynthesis of Fluoroacetate and 4-Fluorothreonine by *Streptomyces cattleya*. Glycine and Pyruvate as Precursors.  
*Chem. Comm.*, 1997, 797-798.
67. Jens Nieschalk, John T G Hamilton, Cormac D Murphy, David B Harper and David O'Hagan  
The Biosynthesis of Fluoroacetate and 4-Fluorothreonine by *Streptomyces cattleya*. The Stereochemical Processing of Glycerol.  
*Chem. Comm.*, 1997, 799-800.
68. Jens Nieschalk and David O'Hagan  
A Short Synthesis of (*1S*, *2R*)- and (*1R*, *2R*)- [1-<sup>2</sup>H]-Glycerols  
*Tetrahedron Asymmetry*, 1997, **8**, 2325-2330.
69. Muhammad R Amin, David. B. Harper, Janet M Moloney, Cormac D Murphy, Judith A K Howard and David O'Hagan,  
A Short Highly Stereospecific Synthesis of the Fluorinated Natural product 4-(*2S*, *3S*)-Fluorothreonine  
*Chem. Comm.*, 1997, 1471-1472.
70. David O'Hagan,  
Pyrrole, Pyrrolidine, Pyridine, Piperidine, Azepine and Tropane Alkaloids  
*Nat. Prod. Rep.*, 1997, **14**, 637 - 651.
71. John T. G. Hamilton, Cormac D Murphy, Muhammad R Amin, David O'Hagan and David B Harper,  
Exploring the Biosynthetic Origin of Fluoroacetate and 4-Fluorothreonine  
*J. Chem. Soc. Perkin Trans. 1.*, 1998, 759-767.
72. Helen Culceth, Jens Fuchser, Steven J Moss, Jens Nieschalk and David O'Hagan  
Evidence for an Octanoate Synthase Operating During the Biosynthesis of Piliiformic Acid in *Poronia piliiformis*  
*Tetrahedron Letters*, 1998, **39**, 1949-1952.
73. Chi W Wong, John T. G. Hamilton, David O'Hagan and Richard J. Robins.  
Tropic Acid Biosynthesis: The Incorporation of (RS)-phenyl-[2-<sup>18</sup>O, <sup>2</sup>H]-lactate into Littorine and Hyoscyamine in *Datura stramonium*  
*Chem. Commun.*, 1998, 1045 - 1046.
74. David O'Hagan and Richard J Robins  
Tropic Acid Ester Biosynthesis in *Datura stramonium* and Related Species  
*Chem. Soc. Rev.*, 1998, **27**, 207 - 212.
75. M. Caragh Moore, Russell J Cox, Gordon R Duffin and David O'Hagan  
Synthesis and Evaluation of a Putative Acyl Tetramic Acid Intermediate in Tenellin Biosynthesis in *Beauveria bassiana*. A New Role for Tyrosine.  
*Tetrahedron* , 1998, **54**, 9195 - 9206.
76. David O'Hagan, Itsumaro Kumadaki, Michael Petty, Hiroaki Takaya and Christopher Pearson,  
Synthesis and Langmuir Isotherms of Difluorostearic Acids.  
*J. Fluorine Chem.*, 1998, **90**, 133-138.
77. Jens Nieschalk and David O'Hagan.  
Synthesis of 6-Fluoro-D-olivose (2,6-Dideoxy-6-fluoro-D-*arabino*-hexopyranose)

- J. Fluorine Chem.*, 1998, **91**, 159 - 163.
78. Ioannis Zabetakis, Robert Edwards, John T. G. Hamilton and David O'Hagan,  
The Biosynthetic Relationship Between Littorine and Hyoscyamine in Transformed Root Cultures of *Datura stramonium*,  
*Plant Cell Reports*, 1998, **18**, 341-345.
79. David O'Hagan and Adam H. Parker  
Enzyme mediated polyester synthesis with the lipase from *Candida rugosa*. Preparation of an enantiomerically enriched polymer from an A-B monomer.  
*Polymer Bulletin*, 1998, **41**, 519 - 524.
80. Muhammad R Amin, David B Harper and David O'Hagan  
The Biosynthesis of fluorinated natural products by *Streptomyces cattleya*. Deuterium exchange into the fluorometabolites from the medium.  
*J. Labelled Compounds and Radiopharms.*, 1998, **41**, 1045-1048.
81. Ioannis Zabetakis, Robert Edwards and David O'Hagan,  
Elicitation of Tropane Alkaloid Biosynthesis in Transformed Root Cultures of *Datura stramonium*;  
Methyl Jasmonate Selectively Inhibits the Biosynthesis of Tropine Precursors.  
*Phytochemistry*, 1999, **50**, 53-56.
82. Daniel J. Fowler, John T. G. Hamilton, Andrew J. Humphrey and David O'Hagan,  
Plant Terpene Biosynthesis. The Biosynthesis of Linalyl Acetate in *Mentha Citrata*.  
*Tetrahedron Lett.*, 1999, **40**, 3803 - 3806.
83. David O'Hagan and Mustafa Tavasli  
A Short Synthesis of (S)- $\alpha$ -(Diphenylmethyl)alkyl Amines from Amino Acids  
*Tetrahedron Asymmetry*, 1999, **10**, 1189 - 1192.
84. David O'Hagan, Richard J. Robins\*, Marina Wilson, Chi W. Wong, Mike Berry and Ioannis Zabetakis  
Fluorinated Tropane Alkaloids Generated by Directed Biosynthesis in Transformed Root Cultures of *Datura Stramonium*,  
*J. Chem. Soc., Perkin Trans. 1.*, 1999, 2117 - 2120.
85. David O'Hagan and David B. Harper  
Fluorine containing natural products  
*J. Fluorine Chem.*, 1999, **100**, 125 - 131.
86. Denis Bouvet and David O'Hagan  
The Synthesis of 1-Fluoro- and 1,1-difluoro- Analogues of 1-Deoxy-D-Xylulose  
*Tetrahedron*, 1999, **55**, 10481 - 10486.
87. John W. Banks, Andreei S Batsanov, Judith A. K. Howard, David O'Hagan, Henry S. Rzepa and Sonsoles Martin-Santamaria,  
The Preferred Conformation of  $\alpha$ -Fluoroamides.  
*J. Chem. Soc., Perkin Trans., 2.*, 1999, 2409 - 2051.
88. Mustafa Tavasli, David O'Hagan, Andrei S Batsanov, Graham R. Foxon, Robert F. Halliwell and Judith A. K. Howard  
The Synthesis, Conformation and Antimuscarinic Properties of Ketone Analogues of Tropane Esters,  
*J. Chem. Soc., Perkin Trans., 1.*, 1999, 3455 - 3462
89. Daniel J Fowler, John T. G. Hamilton, Andrew J. Humphrey and David O'Hagan  
The Biosynthesis of Plant Terpenes via the Non Mevalonate Pathway,  
*Chem. Listy, Symposia*, 1999, **93**, S1 - S69.
90. Rebecca J. M. Goss, Jens Fuchser and David O'Hagan,

- Biosynthesis of longianone from *Xylaria longiana*. A metabolite with a biosynthetic relationship to patulin.  
*Chem. Commun.*, 1999, 2255 - 2256.
91. John W Banks and David O'Hagan  
The Enzymatic Resolution of an  $\alpha$ -Fluoroamide by an Acylase.  
*J. Fluorine Chem.*, 2000, **102**, 235-238.
92. Rosa Duran-Patron, David O'Hagan, John G. T. Hamilton and Chi W. Wong,  
Biosynthetic studies on the tropane ring system of the tropane alkaloids from *Datura stramonium*.  
*Phytochemistry*, 2000, **53**, 777-784.
93. David O'Hagan\*, Clair Bilton, Judith A. K. Howard, Lee Knight and David J. Tozer,  
The preferred conformation of N- $\beta$ -fluoroethylamides. Observation of the fluorine amide gauche effect.  
*J. Chem. Soc., Perkin Trans. 2.*, 2000, 605 - 607.
94. Martina Runge, David O'Hagan and Guenter Haufe,  
Lipase-catalysed polymerisation of fluorinated lactones and fluorinated hydroxycarboxylic Acids.  
*J. Polymer Sci. A-Polymer. Chem.*, 2000, **38**, 2004-2012.
95. David O'Hagan, Frederique Royer and Mustafa Tavasli  
A synthesis of (*S*)- $\alpha$ -(Fluorodiphenylmethyl)alkylamines by HF/pyridine treatment of 4-alkyl-5,5-diphenyl-oxazolidinones.  
*Tetrahedron Asymmetry*, 2000,**11**, 2033-2036.
96. David O'Hagan  
Pyrrole, pyrrolidine, pyridine, piperidine and tropane alkaloids,  
*Natural Product Reports*, 2000, **17**, 435 - 446.
97. Steven J Moss, Cormac D. Murphy, John T. G. Hamilton, W. Colin McRoberts, David O'Hagan,  
Christoph Schaffrath and D. B. Harper  
Fluoroacetaldehyde: a precursor of both fluoroacetate and 4-fluorothreonine in *Streptomyces cattleya*.  
*Chem. Comm.*, 2000, 2281.
98. Andrei S. Batsanov, Judith A. K. Howard, David O'Hagan and Mustafa Tavasli  
1-(1,3-Dithane-2-yl)-2-phenylethanone,  
*Acta Cryst.*, 2000, **C56**, e567 – e568.
99. Andrei S. Batsanov, Judith A. K. Howard, David O'Hagan and Mustafa Tavasli  
3 $\alpha$ -Tosyloxymethyltropane(N<sup>8</sup>-B)borane,  
*Acta Cryst.*, 2000, **C56**, e512 – e513.
100. Cormac D Murphy, Steven J Moss and David O'Hagan  
Isolation of an aldehyde dehydrogenase involved in the oxidation of fluoroacetaldehyde to fluoroacetate in *Streptomyces cattleya*.  
*Applied and Environmental Microbiol.*, 2001, **67**, 4919 - 4921.
101. David O'Hagan and Graham Sandford,  
The taming of fluorine.  
*Chem Br.*, 2001, 37 (19), 32 - 35.
102. Andrew Humphrey and David O'Hagan  
Tropane Alkaloid Biosynthesis (Millenium Review)  
*Natural Product Reports*, 2001, **18**, 494 - 502.
103. Christoph Schaffrath, Cormac D Murphy, John T. G. Hamilton, David O'Hagan  
Biosynthesis of fluoroacetate and 4-fluorothreonine in *Streptomyces cattleya*. Incorporation of oxygen-18 from [2-<sup>2</sup>H, 2-<sup>18</sup>O]-glycerol and the role of serine metabolites in fluoroacetaldehyde biosynthesis. *J. C. S. Perkin Trans., I*, 2001, 3100 - 3105.



- 104 Christoph Schaffrath, Cormac D Murphy, and David O'Hagan  
Identification of a PLP-Dependent Threonine Transaldolase  
*Angew Chem, Int. Ed.*, 2001, **40**, 4479 – 4481.
105. Stephen Patterson and David O'Hagan  
Isotopically labelled tropane alkaloids. The synthesis of (*RS*)-[3',3'-<sup>2</sup>H<sub>2</sub>]- and (*RS*)-[1'-<sup>13</sup>C, 3', 3'-<sup>2</sup>H<sub>2</sub>]-  
hyoscyamines for metabolism studies in plants.  
*J. Label Compds., Radiopharm.*, 2002, **45**, 191 - 198.
- 106 Marcello Nicoletti, David O'Hagan, Alexandra M Z Slawin  
The Asymmetric Bischler-Napieralski reaction: Preparation of 1,3,4-trisubstituted 1,2,3,4-  
tetrahydroisoquinolines.  
*J. Chem. Soc. Perkin Trans. 1*, 2002, 116 - 121.
- 107 David O Hagan, Christoph Schaffrath, Stephen L Cobb, John T. G. Hamilton and Cormac D Murphy  
Enzyme catalysed organofluorine synthesis.  
*Nature*, 2002, 416, 279.
- 108 Mustafa Tavasli, Jacques Courtieu, Rebecca J. M. Goss, Abdelkrim Meddour\*, David O'Hagan  
Extreme enantiomeric discrimination of fluoroalkanes using deuterium NMR in chiral liquid crystalline  
media.  
*Chem. Commun*, 2002, 844 -845.
- 109 Mustafa Tavasli, Michael Petty, Christopher Pearson, David O'Hagan  
The fluorine gauche effect. Langmuir isotherms report the relative conformational stability of (±)-  
*erythro*- and (±)-*threo*-9,10-difluorostearic acids.  
*Chem. Commun*, 2002, 1226 – 1227.
- 110 David O'Hagan and Stephen Patterson,  
Biosynthetic studies on the tropane alkaloid hyoscyamine in *Datura stramonium*; hyoscyamine is  
stable *in vivo* and is not derived from littorine via a vicinal interchange process.  
*Phytochemistry*, 2002, **61**, 323-329.
- 111 Petr Beier and David O'Hagan  
Enantiomeric partitioning using fluorous biphasic methodology for lipase-mediated esterifications.  
*Chem. Comm.*, 2002, 1680 – 1681.
- 112 Christoph Schaffrath, Steven L Cobb and David O'Hagan  
Cell-free biosynthesis of fluoroacetate and 4-fluorothreonine in *Streptomyces cattleya*  
*Angew. Chemie.*, 2002, **41**, 3193 - 3195
- 113 David O'Hagan, Rebecca J. M. Goss, Abdelkrim Meddour and Jacques Courtieu,  
An assay for the enantiomeric analysis of [<sup>2</sup>H<sub>1</sub>]-fluoroacetic acid: Insight into the Stereochemical  
course of fluorination during fluorometabolite biosynthesis in *Streptomyces cattleya*.  
*J. Am. Chem. Soc.*, 2003, **125**, 379 – 387.
- 113 Cormac D. Murphy, Christoph Schaffrath and David O'Hagan  
Fluorinated Natural Products: The Biosynthesis of Fluoroacetate and 4-Fluorothreonine in  
*Streptomyces cattleya*.  
*Chemosphere*, 2003, 52, 455-461.
- 115 The C-F bond as a tool in the conformational control of amides  
Caroline R. S. Briggs, David O'Hagan, Judith A. K. Howard, and Dmitrii S Yufit  
*J. Fluorine Chem.*, 2003, **119**, 9-13.
- 116 David B Harper, David O'Hagan and Cormac B Murphy,  
Fluorinated Natural products: Occurrence and Biosynthesis,  
*Handbook of Environmental Chem.*, 2003, **3(P)**, 141 – 169.

- 117 Ian Cummins, David O'Hagan, Istvan Jablonkai, David J. Cole, Alain Hehn, Danièle Werck-Reichardt and Robert Edwards,  
Cloning, characterization and regulation of a family of phi class glutathione transferases from wheat.  
*Plant Mol. Biol.*, 2003, **52**, 591 – 603.
- 118 Christoph Schaffrath, Hai Deng and David O'Hagan  
Isolation and characterisation of 5'-fluorodeoxyadenosine synthetase, a fluorination enzyme from *Streptomyces cattleya*.  
*FEBS Letts.*, 2003, **547**, 111-114.
- 119 Changjiang Dong, Hai Deng, Mark Dorward, Christoph Schaffrath, David O'Hagan and James H Naismith.  
Crystallization and X-ray diffraction of the 5'-fluoro-5'-deoxyadenosine synthetase, a fluorination enzyme from *Streptomyces cattleya*.  
*Acta Crystallographic Section D*, 2003, **D59**, 2292.
- \*120. Laurent Martarello, Christoph Schaffrath, Hai Deng, Antony D Gee Andrew Lockhart and David O'Hagan  
The First Enzymatic Method for C-<sup>18</sup>F bond formation: The synthesis of 5'-[<sup>18</sup>F]-Fluoro-5'-Deoxyadenosine for Imaging with PET.  
*J. Label Compds., Radiopharm.*, 2003, **46**, 1181 – 1189.
121. Caroline R S Briggs, David O'Hagan, Henry S Rzepa and Alexandra M Z Slawin  
Solid state and theoretical evaluation of  $\beta$ -fluoroethyl esters indicate a fluorine ester *gauche* effect.  
*J. Fluorine Chem.*, 2004, **125**, 19-25.
- 122 Caroline RS Briggs, Mark J Allen, David O'Hagan David J. Tozer Alexandra M. Z. Slawin, Andrés E Goeta and Judith A. K. Howard  
The observation of a large *gauche* preference when 2-fluoroethylamine and 2-fluoroethanol become protonated.  
*Org. Biomol. Chem.*, 2004, **2**, 732 - 740.
- 123 Changjiang Dong, Fung Lu Huang, Hai Deng, Christoph Schaffrath, Jonathan B. Spencer, David O'Hagan & James H. Naismith  
Crystal structure and mechanism of a bacterial fluorinating enzyme.  
*Nature*, 2004, **427**, 561 – 565.
- 124 Steven L Cobb Hai Deng, John T. G. Hamilton, Ryan P McGlinchey and David O'Hagan  
Identification of 5-fluoro-5-deoxy-D-ribose-1-phosphate as an intermediate in fluorometabolite biosynthesis in *Streptomyces cattleya*.  
*Chem Commun*, 2004, 592-593.
- 125 Cosimo Cadicamo, Jacques Courtieu, Hai Deng, Abdelkrim Meddour, David O'Hagan,  
The stereochemical course of the fluorination enzyme in *Streptomyces cattleya* operates with an inversion of configuration consistent with an S<sub>N</sub>2 reaction mechanism.  
*ChemBioChem*, 2004, **5**, 685 - 690.
- 126 Kenny Tenza, Julian Northen, David O'Hagan and Alexandra M. Z. Slawin,  
The role of fluorine in directing alkylation reactions via lithium chelation.  
*J. Fluorine Chem.*, 2004, **125**, 1779-1790.
- 127 Petr Beier, David O'Hagan and Alexandra M Z Slawin  
Lipase mediated preparation of the enantiomers of 3,3,3-trifluoro-2-methylpropanoic acid,  
*Tetrahedron Asymmetry*, 2004, **15**, 2447 - 2449.
- 128 Ian Shepperson, Silvio Quici, Gianluca Pozzi, Marcello Nicoletti, and David O'Hagan  
C<sub>2</sub>-Symmetric Fluorous Diamines and Diimines as Ligands for Metal-Catalysed Asymmetric Cyclopropanation of Styrene.  
*Eur. J. Organic Chem.*, 2004, **22**, 4545 - 4551 (front cover).

- 129 D. O'Hagan, H. Deng and C. Schaffrath  
Fluorometabolite biosynthesis and the identification of a fluorination enzyme.  
*Nat. Prod. Rep.*, 2004, **21**, 773 - 784
- 130 Petr Beier, David O'Hagan, Christopher Pearson, Michael C. Petty and Alexandra M. Z. Slawin.  
The structure and properties of hybrid fluorous-hydrocarbon fatty acids ,  
*J. Fluorine Chemistry*, 2005, **126**, 673 - 682.
- 131 Marcello Nicoletti, David O'Hagan and Alexandra M Z Slawin  
 $\alpha,\beta,\gamma$ -Trifluoroalkanes: A stereoselective synthesis placing three vicinal fluorines along a hydrocarbon chain.  
*J. Am. Chem. Soc.*, 2005, **127**, 482-483.
- 132 Martin Schueler, David O'Hagan and Alexandra M. Z. Slawin,  
The vicinal F-C-C-F motif as a tool for influencing peptide conformation.  
*Chem Commun* 2005, 4324 – 4326.
- 133 Steven L Cobb, Hai Deng, John T. G. Hamilton, Ryan McGlinchey, David O'Hagan and Christoph Schaffrath,  
The identification of 5-fluoro-5deoxyinosine (5'-FDI) as a shunt product in cell free extracts of *Streptomyces cattleya*.  
*Bioorganic Chem.*, 2005, **33**, 393 - 401.
- 134 Hans Martin Senn, David O'Hagan, and Walter Thiel,  
Insight Into Enzymatic C-F Bond Formation from QM and QM/MM Calculations  
*J. Am. Chem. Soc.*, 2005, **127**, 13643 – 13655.
- 135 Kenny Tenza, Julian S Northen, David O'Hagan and Alexandra M. Z. Slawin,  
Stereoselective  $\alpha$ -fluoroamide and  $\alpha$ -fluoro- $\gamma$ -lactone synthesis by an asymmetric aza-Claisen rearrangement.  
*Beilstein J Org. Chem.*, 2005, **1**, 13.
- 136 S. Varfolomeyev, E Efremenko, I Beletskava, I Bertini, G. M. Blackburn, A Bogdanov, R Cunin, J Eichler, I Galaey, V Gladyeshev, D O'Hagan, T Haertle, J Jarv, A Karyakin, I Kurochkin, M Micolajczyk, V Poroikov, I Sakharov, F Spener, N Voyer, J Wild,  
Postgenome chemistry,  
*Pure Appl. Chem.*, 2005, **77**, 1641 – 1654.
- 137 Hai Deng, Steven L. Cobb, Andrew McEwan, Ryan P. McGlinchey, James H. Naismith, David O'Hagan, David A Robinson and Jonathan B Spencer  
The fluorinase from *Streptomyces cattleya* is also a chlorinase.  
*Angew Chemie*, 2006, **45**, 759 – 762.
- 138 Chukwuemeka Isanbor and David O'Hagan,  
Fluorine in Medicinal Chemistry: Anticancer Agents  
*J. Fluorine Chemistry*, 2006, **127**, 303 –319.
- 139 Hai Deng, Steven L. Cobb, Antony D Gee, Andrew Lockhart, Laurent Martarello, Ryan P. McGlinchey, David O'Hagan, and Mayca Onega  
Fluorinase mediated C-<sup>18</sup>F bond formation, an enzymatic tool for PET labelling  
*Chem. Commun*, 2006, 652 – 654.
- 140 Steven L. Cobb, Hai Deng , Andrew R McEwan, James H. Naismith, David O'Hagan, David A Robinson.  
Substrate specificity in enzymatic fluorination. The fluorinase from *Streptomyces cattleya* accepts 2'-deoxyadenosine substrates,  
*Org. Biomol. Chem.*, 2006, **4**, 1458-1460.
- 141 Fanglu Huang, Stephen F Haydock, Dieter Spiteller, Tatiana Mironenko, Tsung-Lin Li, David O'Hagan, Peter F Leadlay and Jonathan B Spencer,

- Characterisation of a locus involved in fluorometabolite biosynthesis in *Streptomyces cattleya*,  
*Chem & Biol*, 2006, **13**, 475 - 484.
- 142 Natalie E. J. Gooseman, David O'Hagan, Alexandra M. Z. Slawin, Andrew M Teale, David J Tozer  
and Robert J. Young  
The intramolecular  $\beta$ -fluorine $\cdots$ ammonium interaction in 4- and 8-membered rings  
*Chem Commun* 2006, 3190-3192.
- 143 David O'Hagan,  
Recent developments on the fluorinase from *Streptomyces cattleya*.  
*J. Fluorine chemistry*, 2006, **127**, 1479-1483.
- 144 David O'Hagan, Henry S. Rzepa, Martin Schüler and Alexandra M. Z. Slawin.  
The vicinal difluoro motif. The synthesis and conformation of *erythro*- and *threo*- diastereoisomers of 1,2-difluorodiphenylethanes,  
2,3-difluorosuccinic acids and their derivatives.  
*Beilstein J. Org. Chem.*, 2006, **2**, 19.
- 145 Luke Hunter, David O'Hagan and Alexandra M. Z. Slawin  
Enantioselective synthesis of an all-syn-four vicinal fluorine motif  
*J. Am. Chem. Soc.*, 2006, **128**, 16422 – 16423.
- 146 Mayca Onega, Ryan P McGlinchey, Hai Deng, John T Hamilton, D. O'Hagan.  
The identification of (3*R*, 4*S*)-5-fluoro-5-deoxy-D-ribose-1-phosphate as an intermediate in  
fluorometabolite biosynthesis in *Streptomyces cattleya*.  
*Bioorganic Chem.*, 2007, **35**, 375 - 385.
- 147 Natalie E. J. Gooseman, David O'Hagan, Michael J. G. Peach, Alexandra M. Z. Slawin, David J.  
Tozer, and Robert J. Young  
An electrostatic *gauche* effect in  $\beta$ -fluoro- and  $\beta$ -hydroxy- N- ethylpyridinium cations.  
*Angew. Chemie. Int. Ed.*, 2007, **46**, 5904 - 5908.
- 148 Samson N Patole, Christopher J Baddeley, David O'Hagan and Neville V Richardson, F. Zerbetto, L A  
Zotti , G Teobaldi and Werner A Hofer  
Self assembly of semi-fluorinated n-alkanethiols on {111}-oriented Au investigated with STM  
experiment and theory.  
*J. Chem. Phys.*, 2007, **127**, 024702.
- 149 Vincent A. Brunet, David O'Hagan and Alexandra M. Z. Slawin.  
Titanium mediated asymmetric aldol condensations with  $\alpha$ -fluoropropionamide enolates.  
*J. Fluorine Chemistry*, 2007, **128**, 1271 - 1279.
- 150 Luke Hunter, Alexandra M. Z. Slawin, Peer Kirsch and David O'Hagan  
Synthesis and conformation of multi-vicinal fluoroalkane diastereoisomer  
*Angew. Chemie, Int Ed.*, 2007, **46**, 7887 - 7890.
- 151 Xiaofeng Zhu, David A. Robinson, Andrew R. McEwan, David O'Hagan, James H Naismith,  
The mechanism of the enzymatic fluorination in *Streptomyces cattleya*,  
*J. Am. Chem. Soc.*, 2007, **129** , 14597 -14604.
- 152 Gildas Deniau, Alexandra M. Z. Slawin, Thomas Lebl, Fatima Chorki, Jon P. Issberner, T van Mourik, Judith M.  
Heygate, Jeremy. J. Lambert Keith T. Sillar, and David O'Hagan  
Synthesis, conformation and biological evaluation of the enantiomers of 3-fluoro- $\gamma$ -aminobutyric acid ((*R*)- and  
(*S*)- 3F-GABA). An analogue of the neurotransmitter, GABA.  
*ChemBioChem*, 2007, **8**, 2265 - 2274.
153. Marcello Nicoletti, Matthias Bremer, Peer Kirsch, David O'Hagan.  
Liquid crystals carrying stereodefined vicinal difluoro- and trifluoro- alkyl motifs.

- Chem. Commun.*, 2007, 5075 - 5077.
154. Nelly Bonnet, David O'Hagan and Georg Hähner  
Ionic strength mediated hydrophobic force switching of CF<sub>3</sub> terminated ethylglycol self-assembled monolayers (SAM's) on gold.  
*Chem Commun* 2007, 5066 - 5068.
155. Michael Clift, Haitao Ji, Gildas P Deniau, David O'Hagan, Richard B. Silverman,  
The enantiomers of 4-amino-3-fluorobutanoic acid as substrates for  $\gamma$ -aminobutyric acid aminotransferase. Conformational probes for GABA binding.  
*Biochemistry* 2007, **46**, 13819 - 13828.
156. David O'Hagan  
Understanding organofluorine chemistry. An introduction to the C-F bond.  
*Chem. Soc. Rev.*, 2008, **37**, 308 - 319.
157. Vincent Brunet, David O'Hagan  
Catalytic asymmetric fluorination comes of age  
*Angew. Chemie. Int. Ed.*, 2008, **47**, 1179 - 1182.
158. Gildas Deniau, Keith T. Sillar and David O'Hagan  
Synthesis of fluorinated analogues of the neurosteroid GABA<sub>A</sub> receptor antagonist, 17-PA.  
*J. Fluorine Chem.*, 2008, **129**, 881-887.
159. Hai Deng, Catherine H. Botting, John T.G. Hamilton, Rupert J. M. Russell, David O'Hagan  
S-Adenosyl-L-methionine:hydroxide adenosyltransferase: A SAM enzyme.  
*Angew. Chemie. Int. Ed.*, 2008, **47**, 5357 - 5361.
160. Luke Hunter, Peer Kirsch, John T. G. Hamilton and David O'Hagan  
The multi-vicinal fluoroalkane motif: An examination of 2,3,4,5-tetrafluorohexane stereoisomers.  
*Org. Biomol. Chem.*, 2008, **6**, 3105 - 3108.
161. Luke Hunter and David O'Hagan  
Multi-vicinal fluoroalkanes: a new class of organofluorine compounds  
*Org. Biomol. Chem.*, 2008, **6**, 2843 - 2848
162. Samson Patole, Christopher J. Baddeley, David O'Hagan, Neville V. Richardson,  
Reversible exchange of self assembled monolayers of semi fluorinated n-alkanethiols and n-alkanethiols on Au/mica surfaces  
*J. Phys. Chem.*, 2008, **112**, 13997 - 14000
163. Hai Deng and David O'Hagan  
The fluorinase the chlorinase and the duf-62 enzymes  
*Curr. Op. Chem. Biol.*, 2008, **12**, 582 - 592.
164. Gildas Deniau, Thomas Moraux, David O'Hagan and Alexandra M.Z. Slawin  
An efficient synthesis of (R)- and (S)- 2-(aminomethyl)piperidine dihydrochloride  
*Tetrahedron Asymmetry*, 2008, **19**, 2330 - 2333.
165. Margit Winkler, Juozas Domarkas, Lutz F. Schweiger and David O'Hagan  
Fluorinase coupled enzymatic base swaps generate 5'-deoxy-5'-fluoronucleosides from fluoride ion: Synthesis of [<sup>18</sup>F]-5'-deoxy-5'-fluorouridines  
*Angew. Chemie. Int. Ed.*, 2008, **47**, 10141 - 10143.
166. Hai Deng, Stuart M Cross, Ryan P McGlinchey, Jack Hamilton and David O'Hagan  
*In vitro* reconstituted biotransformation of 4-fluorothreonine from fluoride ion: Application of the fluorinase.  
*Chem & Biol.*, 2008, **15**, 1268 -1276.
167. Samson Patole, Christopher Baddeley, Martin Schueler, David O'Hagan, Neville Richardson

- The driving forces underlying the formation of chiral domains of fluorinated diacids on graphite  
*Langmuir*, 2009, **25**, 1412 - 1416.
- 168 Margit Winkler, Hesham A. Khairy, Thomas Moraux, Roderick H. Scott, Alexandra M. Z. Slawin and David O'Hagan  
Synthesis and vanilloid receptor (TRPV1) activity of the enantiomers of alpha-fluorinated capsaicin.  
*ChemBioChem*, 2009, **10**, 823 - 828.
169. Stefano Bresciani, David O'Hagan and Alexandra M. Z. Slawin,  
A regio- and stereo- isomeric study of allylic alcohol fluorination with a range of reagents.  
*J. Fluorine Chem.*, 2009, **130**, 537-543.
- 170 Luke Hunter, Peer Kirsch, Alexandra M. Z. Slawin and David O'Hagan  
Synthesis and structure of a multivincinal hexafluoroalkane stereoisomers  
*Angew. Chemie. Int. Ed.*, 2009, **48**, 5457 - 5460.
- 171 Mayca Onega, Margit Winkler and David O'Hagan  
The fluorinase: A tool for the synthesis of fluorine-18 labelled sugars and nucleosides for positron emission tomography,  
*Future. Med. Chem.*, 2009, **1**, 865 - 873
- 172 Pitak Nasomjai, David O'Hagan and Alexandra M Z Slawin  
Synthesis of phosphonate and phosphonate analogues of ribose-1-phosphates.  
*Beilstein J. Org. Chem.*, 2009, **5**, 37.
- 173 Pitak Nasomjai, Darwin W Reed, David J Tozer , Michael JG Peach, Alexandra MZ Slawin, Patrick S Covello and David O'Hagan  
Mechanistic insights into the cytochrome P450-mediated oxidation and rearrangement of litorine in tropane alkaloid biosynthesis.  
*ChemBioChem*, 2009, **10**, 2382 - 2393
- 174 Hai Deng, Stephen McMahon, Alessandra S. Eustáquio, Bradley S Moore, James H. Naismith, David O'Hagan  
Mechanistic insights into water activation in SAM hydroxide adenosyltransferase (duf-62).  
*ChemBioChem*, 2009, **10**, 2455 - 2459.
- 175 Daniel Farran, Alexandra M. Z. Slawin, Peer Kirsch, David O'Hagan,  
Diastereoselective Synthesis of Multivincinal 2,3,4,5,6-Pentafluoroheptanes  
*J. Org. Chem.*, 2009, **74**, 7168-7171.
- 176 Vincent A. Brunet, Alexandra M. Z. Slawin and David O'Hagan  
Three step synthesis of single diastereoisomers of the vicinal trifluoro motif.  
*Beilstein J. Org. Chem.*, 2009, **5**, 61.
- 177 Mayca Onega, Juozas Domarkas, Hai Deng, Lutz F. Schweiger, Timothy A. D. Smith, Andrew E. Welch, Christoph Plisson, Antony D. Gee and David O'Hagan.  
An enzymatic route to 5-deoxy-5-[<sup>18</sup>F]-fluoro-D-ribose, a [<sup>18</sup>F]-fluorinated sugar for PET imaging.  
*Chem. Commun.*, 2010, 139 - 141
- 178 David Y. Buissonneaud, Tanja van Mourik, David O'Hagan  
A DFT study on the origin of the fluorine *gauche effect* in substituted fluoroethanes  
*Tetrahedron*, 2010, **66**, 2196 - 2202.
- 179 Nelly Bonnet, David O'Hagan, and Georg Hähner  
Protein adsorption onto CF<sub>3</sub>-terminated oligo(ethylene glycol) containing self-assembled monolayers (SAMs): The influence of ionic strength and electrostatic forces,  
*Phys. Chem. Chem. Phys.*, 2010, **12**, 4367 - 4374.
- 180 Alessandra S. Eustáquio, David O'Hagan, and Bradley S. Moore

- Engineering Fluorometabolite Production: Fluorinase Expression in *Salinispora tropica* Yields Fluorosalinoporamide.  
*J. Nat. Prod.*, 2010, **73**, 378 – 382.
- 181 D. O'Hagan, G. Launay, A. M. Z. Slawin  
Prins fluorination cyclisations: Preparation of 4-fluoro- pyran and piperidine heterocycles.  
*Beilstein J. Org. Chem.*, 2010, **6**, 41.
- 182 J. W. Schmidberger A. B. James, R. Edwards, J. H. Naismith, D. O'Hagan  
Halomethane biosynthesis: Structure of a SAM-dependent halide methyltransferase from *Arabidopsis thaliana*,  
*Angew. Chemie. Int. Ed.*, 2010, **49**, 3646 – 3648.
- 183 D. O'Hagan, D. Lloyd  
The iconic curly arrow  
*Chem. World*, 2010, **7**, 54-57.
184. David O'Hagan and Jason Schmidberger  
Enzymes that catalyse S<sub>N</sub>2 reaction mechanisms  
*Nat. Prod. Reports.*, 2010, **27**, 900-918.
- 185 D. O'Hagan  
Fluorine in healthcare: Organofluorine containing blockbuster drugs  
*J. Fluorine Chem.*, 2010, **131**, 1071 - 1081.
- 186 S. Bresciani, T. Lebl, A. M. Z. Slawin, D. O'Hagan  
Fluorosugars: Synthesis of the 2,3,4-trifluoro-2,3,4-trideoxy hexose analogues of D-glucose and D-altrose and assessment of their erythrocyte transmembrane transport.  
*Chem. Commun.*, 2010, 5434 – 5436.
- 187 Stefano Bresciani and David O'Hagan  
Stereospecific benzylic dehydroxyfluorination reactions using Bio's TMS-amine additive approach with challenging substrates.  
*Tetrahedron Letts.*, 2010, **51**, 5795 – 5797.
- 188 Xiang-Guo Li, Juozas Domarkas, David O'Hagan  
Fluorinase mediated chemoenzymatic synthesis of [<sup>18</sup>F]-fluoroacetate for PET studies  
*Chem Commun.*, 2010, **46**, 7819 – 7821.
- 189 Nancy Campbell, Daniel L. Smith, Anthony P. Reszka, Stephen Neidle and David O'Hagan  
β-Fluorination of peripheral pyrrolidines attached to acridine ligands affects their interactions with G-quadruplex DNA.  
*Org. Biomol. Chem.*, 2011, **9**, 1328 -1331.
- 190 David O'Hagan  
3-Fluoro-γ-aminobutyric acid (3F-GABA) enantiomers. Exploring the conformation of GABA binding to GABA<sub>A</sub> receptor and GABA aminotransferase.  
*Future. Med. Chem.*, 2011, **3**, 189 - 195.
- 191 David O'Hagan, Alexandra M. Z. Slawin, Vaclav Jurcik  
Single enantiomer synthesis of α-(trifluoromethyl)-β -lactam  
*Beilstein J. Org. Chem.* 2011, **7**, 759-766
192. David O'Hagan and Nawaf Al-Maharik  
Organofluorine Chemistry: Deoxy- and Dehydroxy- fluorination Reagents for C-F Bond Synthesis  
*Aldrich Chemica Acta*, 2011, **44**, 65-75.
193. Izumi Yamamoto, Gildas P. Deniau, Navnath Gavande, Mary Chebib, Graham A.R. Johnston, David O'Hagan.

- Agonist responses of (*R*)- and (*S*)-3-fluoro- $\gamma$ -aminobutyric acids suggest an enantiomeric fold for GABA binding to GABA<sub>A</sub> receptors.  
*Chem Commun.*, 2011, **47**, 7956 - 7958.
194. Alastair J Durie, Alexandra M. Z. Slawin, Tomas Lebl, Peer Kirsch, David O'Hagan  
Synthesis and structure of all-*syn* 1,2,3,4-tetrafluorocyclohexane.  
*Chem Commun.*, 2011, **47**, 8265 - 8267.
195. Maciej Skibinski, Yi Wang, Alexandra M. Z. Slawin, Tomas Lebl, Peer Kirsch and David O'Hagan.  
Alicyclic ring structure: Conformational influence of the CF<sub>2</sub> group in cyclododecanes  
*Angewandte Chemie Int. Ed.*, 2011, **50**, 10581 - 10584.
196. Matheus P. Freitas, Michael Bühl and David O'Hagan  
1,2-Difluoroethane: The angular dependence on <sup>1</sup>J<sub>CF</sub> coupling constants is independent of hyperconjugation  
*Chem Commun.*, 2012, **48**, 2433 - 2435.
197. David O'Hagan, Yi Wang, Maciej Skibinski and Alexandra M. Z. Slawin.  
The influence of the difluoromethylene group (CF<sub>2</sub>) on the conformation and properties of selected organic compounds  
*J. Pure. Appl. Chem*, 2012, **84**, 1587 - 1595.
198. Matheus P. Freitas, Michael Bühl, David O'Hagan, Rodrigo A. Cormanich, Cláudio F. Tormena  
Stereolectronic interactions and the one-bond C-F coupling constant in sevoflurane  
*J. Phys. Chem. A*, 2012, **116**, 1677–1682.
199. Qingzhi Zhang, K. Saki Raheem, Nigel P. Botting, Alexandra M.Z Slawin, Colin D. Kay and David O'Hagan.  
Flavonoid metabolism: The synthesis of phenolic glucuronides and sulfates as candidate metabolites for bioactivity studies of dietary flavonoids.  
*Tetrahedron*, 2012, **68**, 4194-4201.
200. Kwan K J Chan and David O'Hagan  
The rare fluorinated natural products and biotechnological prospects for fluorine enzymology.  
*Methods Enzymol.*, 2012, **516**, 219-235.
201. Xiang-Guo Li, Sergio Dall'Angelo, Lutz F. Schweiger, Matteo Zanda, David O'Hagan  
[<sup>18</sup>F]-5-Fluoro-5-deoxyribose, an efficient peptide bioconjugation ligand for positron emission tomography (PET) imaging.  
*Chem. Commun.*, 2012, **48**, 5247 - 5249.
202. David O'Hagan  
Organofluorine chemistry: Synthesis and conformation of vicinal fluoromethylene motifs  
*J. Org. Chem.*, 2012, **77**, 3689–3699.
203. Poh Wai Chia, Matthew R. Livesey, Alexandra M. Z. Slawin Tanja van Mourik, David J. A. Wyllie  
David O'Hagan  
3-Fluoro-N-methyl-D-aspartic acid (3F-NMDA) stereoisomers as conformational probes for exploring agonist binding at the NMDA site of the glutamate receptor  
*Chem. Eur. J.*, 2012, **18**, 8813-8819.
204. Chunhua Zhao, Zixin Deng; Hong-Yu Ou; Ryan P McGlinchey, David O'Hagan,  
Insights into fluorometabolite biosynthesis in *Streptomyces cattleya* DSM46488 through knockout mutants,  
*Bioorganic. Chem.*, 2012, **44**, 1-7.
205. Yi Wang, Peer Kirsch, Thomas Lebl, Alexandra M. Z. Slawin, David O'Hagan  
The preferred conformation of *erythro*- and *threo*-1,2-difluorocyclododecanes



- Beilstein J. Org. Chem.*, 2012, **8**, 1271- 1278.
- 206 Malgorzata Adamkiewicz, Tony O'Hara, David O'Hagan, Georg Hähner  
A vapor phase deposition of self-assembled monolayers: Vinyl-terminated films of volatile silanes on silicon oxide substrates.  
*Thin Solid Films.*, 2012, **520**, 6719 - 6723.
- 207 Alastair J. Durie, Alexandra M. Z. Slawin, Tomas Lebl, Peer Kirsch and David O'Hagan.  
Fluorocyclohexanes: Synthesis and structure of all-*syn*-1,2,4,5-tetrafluorocyclohexane  
*Chem Commun*, 2012, **48**, 9643-9645
- 208 Poh Wai Chia, Sarah C. Brennan, Alexandra M. S. Slawin, Daniela Riccardi and David O'Hagan  
Allosteric agonists of the calcium receptor (CaR): Fluorine and SF<sub>5</sub> analogues of cinacalcet,  
*Org. Biomol. Chem.*, 2012, **10**, 7922 - 7927.
- 209 Alastair J. Durie, Alexandra M. Z. Slawin, Tomas Lebl and David O'Hagan  
The synthesis of η-1,2,3,4,5,6-hexafluorocyclohexane (benzene hexafluoride) from benzene  
*Angew. Chemie Int. Ed.*, 2012, **51**, 10086 - 10088.
- 210 Daniel L. Smith, Alexandra M. Z. Slawin and David O'Hagan  
Fluorine in peptides: The synthesis of α-fluoro-β-aminodipeptides by direct deoxofluorination/rearrangement of *N*-seryl dipeptides.  
*Helv. Chim. Acta.*, 2012, **95**, 2331- 2347.
- 211 Poh Wai Chia, Davide Bello, Alexandra M. Z. Slawin and David O'Hagan  
Fluorinated 5- and 7- membered carbocycle motifs by reaction of difluorocarbene with acetylene ethers.  
*Chem Commun.*, 2013, **49**, 2189 - 2191.
- 212 Sergio Dall'Angelo, Nouchali Bandaranayaka, Albert D. Windhorst, Danielle J. Vugts, Dion van der Born, Mayca Omega, Lutz F. Schweiger, Matteo Zanda, David O'Hagan  
Tumour imaging by positron emission tomography using fluorinase generated 5-[<sup>18</sup>F]fluoro-5-deoxyribose as a novel tracer.  
*Nuclear Med. Biol.*, 2013, **40**, 464-470.
- 213 K. K. Jason Chan, Stephen Thompson and David O'Hagan  
The mechanisms of radical SAM/cobalamin methylations. An evolving working hypothesis.  
*ChemBioChem.*, 2013, **14**, 675 – 677.
- 214 Rudy Wadoux, Xiaowei Lin, Neil Keddie and David O'Hagan  
Chiral fluoroacetate: Synthesis of (*R*)- and (*S*)- [<sup>2</sup>H<sub>1</sub>]-fluoroacetate in high enantiopurity  
*Tetrahedron Asymmetry*, 2013, **214**, 719-723.
- 215 Sergio Dall'Angelo, Qingzhi Zhang, Ian Fleming, Monica Piras, Lutz F. Schweiger, David O' Hagan, Matteo Zanda.  
Efficient Bioconjugation of 5-Fluoro-5-Deoxy-Ribose (FDR) to RGD Peptides for Positron Emission Tomography (PET) Imaging of α<sub>v</sub>β<sub>3</sub> Integrin Receptor  
*Org. Biomol. Chem.*, 2013, **11**, 4551 - 4558.
- 216 Andrew Nortcliffe, Nigel P. Botting, David O'Hagan  
Novel Amino Acids: Synthesis of furoxan and sydnonimine containing amino acids and peptides as potential nitric oxide releasing motifs.  
*Org. Biomol. Chem.*, 2013, **11**, 4657 – 4671.
- 217 Michael J. Corr and David O'Hagan  
Fluorosugars: An improved synthesis of the 2,3,4-trideoxy-2,3,4-trifluoro hexose analogue of D-Glucose  
*J. Fluorine Chem.*, 2013, **155**, 72-77.
- 218 Cesar A. Urbina-Blanco†, Maciej Skibiński‡, David O'Hagan and Steven P. Nolan

- Accelerating Influence of the *gem*-Difluoromethylene Group in a Ring-Closing Olefin Metathesis reaction.  
*Chem Commun.*, 2013, **49**, 7201 – 7203.
- 219 Maciej Skibiński, César A. Urbina-Blanco, Alexandra M. Z. Slawin, Steven P. Nolan, David O'Hagan  
Synthesis and structure of large difluoromethylene containing alicycles by ring closing metathesis (RCM).  
*Org. Biomol. Chem*, 2013, **11**, 8209 – 8213.
220. Yi Wang, Ricardo Callejo, Alexandra M. Z. Slawin, David O'Hagan,  
The difluoromethylene (CF<sub>2</sub>) group in aliphatic chains: Synthesis and conformational preference of palmitic acids and nonadecane containing CF<sub>2</sub> groups.  
*Beilstein. J. Org. Chem.*, 2014, **10**, 18–25.
- 221 Hai Deng, Long Ma, Nouchali Bandaranayaka, Zhiwei Qin, Greg Mann, Kwaku Kyeremeh, Yi Yu, Thomas Shepherd, James H Naismith, David O'Hagan,  
Identification of fluorinases from *Streptomyces sp. MA37*, *Nocardia brasiliensis* and *Actinoplanes sp. N902-109* by gene mining.  
*ChemBioChem*, 2014, **15**, 364-368.
- 222 Andrew Nortcliffe, Alexander G. Ekstrom, James Black, James A. Ross, Fouad K. Habib, Nigel P. Botting, and David O'Hagan.  
Synthesis and biological evaluation of nitric oxide-donating analogues of sulindac for prostate cancer treatment.  
*Bior. Med. Chem. Letts.*, 2014, **22**, 756-761.
- 223 Amy Weeks, Neil Keddie, Rudy Wadoux, David O'Hagan, Michelle Chang,  
Molecular recognition of fluorine impacts substrate selectivity in the fluoroacetyl-CoA thioesterase FIK.  
*Biochemistry*, 2014, **53**, 2053-2063.
- 224 Alastair J. Durie, Tomoya Fujiwara, Rodrigo Cormanich, Michael Bühl, Alexandra M. Z. Slawin and David O'Hagan  
All-*cis*-1,2,4,5 tetrafluoro-3-phenylcyclohexane, a polar cyclohexane motif.  
*Chem. Eur. J.*, 2014, **20**, 6259-6263.
- 225 Rodrigo A. Cormanich,<sup>a</sup>Alastair Durie, Ragnar Björnsson, Roberto Rittner, David O'Hagan and Michael Bühl  
Density functional study of interactions between fluorinated cyclohexanes and arenes,  
*Helv. Chimica. Acta*, 2014, **97**, 797-807.
- 226 Nawaf Al-Maharik, Peer Kirsch, Alexandra M. Z. Slawin, David O'Hagan  
The influence of vicinal *threo*-difluorination on electro-optic and mesogenic properties of propyleneoxy-linked nematic liquid crystals.  
*Tetrahedron*, 2014, **70**, 4626–4630.
- 227 Malgorzata Adamkiewicz, David O'Hagan, and Georg Hähner,  
bis-(Trifluoromethyl)methylene addition to vinyl-terminated SAMs: A gas phase C-C bond forming reaction on a surface.  
*Langmuir*, 2014, **30**, 5422–5428.
- 228 Mohammed Salah Ayoup, David B. Cordes, Alexandra M. Z. Slawin and David O'Hagan  
Total synthesis of a reported fluorometabolite from *Streptomyces sp.* TC1 indicates an incorrect assignment. The isolated compound did not contain fluorine.  
*J. Nat. Prod.*, 2014, **77**, 1249-1251.
229. Stephen Thompson, Qingzhi Zhang, Mayca Onega, Stephen McMahon, Ian Fleming, Sharon Ashworth, James H. Naismith, Jan Passchier, David O'Hagan

- 'A localised tolerance in the substrate specificity of the fluorinase enables 'last step' [<sup>18</sup>F]-fluorination of a RGD peptide under ambient aqueous conditions'  
*Angewandte Chemie, Int. Ed.*, 2014, **53**, 8913-8918.
230. Sheng Huang, Long Ma, Ming Him Tong, Yi Yu, David O'Hagan and Hai Deng  
Fluoroacetate biosynthesis from the marine-derived bacterium *Streptomyces xinghaiensis* NRRL B-24674.  
*Org. Biomol. Chem.*, 2014, **12**, 4828-4831.
- 231 Successful fluorine-containing herbicide agrochemicals  
Tomoya Fujiwara and David O'Hagan,  
*J. Fluorine Chem.*, 2014, **167**, 16-29.
- 232 Stepwise preparation of all-*cis* 1,3,4-trifluoro-2-phenylcyclohexane, avoiding a phenonium intermediate  
Alastair J. Durie Tomoya Fujiwara, Nawaf Al-Maharik, Alexandra M. Z. Slawin and David O'Hagan,  
*J. Org Chem.*, 2014, **79**, 8228-8233.
- 233 Rodrigo Cormanich, Roberto Rittner, David O'Hagan, Michael Buehl,  
Analysis of CF $\cdots$ FC Interactions on Cyclohexane and Naphthalene Frameworks  
*J. Physical Chem.*, 2014, 118, 7901-7910.
- 234 Andrew Nortcliffe, Ian N. Fleming, Nigel P. Botting, David O'Hagan.  
Synthesis and anticancer properties of RGD peptides conjugated to nitric oxide releasing functional groups and abiraterone.  
*Tetrahedron*, 2014, 70, 8343-8347.
- 235 Organic chemistry on surfaces: Direct cyclopropanation by dihalocarbene addition to vinyl terminated self-assembled monolayers (SAMs)  
Malgorzata Adamkiewicz, David O'Hagan, Georg Hähner,  
*Beilstein J. Org Chem.*, 2014, **10**, 2897-2902.
- 236 Davide Bello, Rodrigo A. Cormanich, and David O'Hagan,  
Fluorovinyl thioethers as putative steric and electronic thioester enolate mimetics: Chemoselective HF addition to acetylene thioethers.  
*Australian J. Chem.*, 2015, **68**, 72-79.
- 237 Enzymatic fluorination and biotechnological developments of the fluorinase  
David O'Hagan and Hai Deng  
*Chem. Rev.*, 2015, **115**, 634-649.
- 238 Nathan Absalom, Izumi Yamamoto, David O'Hagan, Luke Hunter and Mary Chebib  
Probing the mode of neurotransmitter binding to GABA receptors using selectively fluorinated GABA analogues.  
*Australian J. Chem.*, 2015, **68**, 23-30.
- 239 Long Ma, Axel Bartholome, Ming Him Tong, Zhiwei Qin, Yi Yu, Thomas Shepherd, Kwaku Kyeremeh, Hai Deng and David O'Hagan  
Identification of a fluorometabolite from *Streptomyces* sp. MA37: (2R,3S,4S)-5-Fluoro-2,3,4-trihydroxypentanoic acid.  
*Chem. Sci.*, 2015, **6**, 1414 – 1419.
- 240 Fady Nahra, Scott R Patrick, Davide Bello, Marcel Brill, Alan Obled, David B. Cordes, Alexandra M. Z. Slawin, David O'Hagan, Steven P. Nolan,  
Hydrofluorination of alkynes catalysed by gold bifluorides,  
*ChemCatChem* 2015, **7**, 240-244.
241. Neil S. Keddie, Alexandra M. Z. Slawin, Tomas Lebl, Douglas Philp, David O'Hagan  
All-*cis* 1,2,3,4,5,6-hexafluorocyclohexane is a facially polarised cyclohexane motif  
*Nature Chemistry*, 2015, 7, 483-488.

242. Mohammed Salah Ayoup, David B. Cordes, Alexandra M. Z. Slawin and David O'Hagan  
Fluorine containing amino acids: Synthesis and peptide coupling of amino acids containing the all-cis tetrafluorocyclohexyl motif.  
*Org. Biomol. Chem.*, 2015, **13**, 5621 – 5624.
243. Jessica L. di Gesso, Jason S. Kerr, Qingzhi Zhang, K. Saki Raheem, S. Krishna Yalamanchili, David O'Hagan, Colin D. Kay and Maria A. O'Connell.  
Flavonoid metabolites reduce tumour necrosis factor- $\alpha$  secretion to a greater extent than their precursor compounds in human THP-1 monocytes  
*Mol. Nutr. Food Res.*, 2015, **59**, 1143-1154.
244. S. Thompson, M. Onega, S. Ashworth I.N. Fleming, J. Passchier, D. O'Hagan  
A two-step fluorinase enzyme mediated  $^{18}\text{F}$  labelling of an RGD peptide for positron emission tomography.  
*Chem Commun*, 2015, **51**, 13542 - 13545
245. Tetiana Bykova, Nawaf Al-Maharik, Alexandra M. Z. Slawin, David O'Hagan  
Synthesis of selectively fluorinated cyclohexanes: The observation of phenonium rearrangements during deoxyfluorination reactions on cyclohexane rings with a vicinal phenyl substituent.  
*J. Fluorine Chem.*, 2015, **179**, 188 – 192.
246. Davide Bello and David O'Hagan  
Lewis Acid-promoted hydrofluorination of alkynyl sulfides to generate  $\alpha$ -fluorovinyl thioethers  
*Beilstein J. Org. Chem.*, 2015, **11**, 1902-1909.
247. Rodrigo A. Cormanich, Neil Keddie, Roberto Rittner, David O'Hagan and Michael Bühl  
Particularly strong C-H $\cdots$  $\pi$  interactions between benzene and all-cis 1,2,3,4,5,6-hexafluorocyclohexane.  
*Phys.Chem.Chem.Phys.*, 2015, **44**, 29475-29478.
248. Mohammed Salah Ayoup, David B. Cordes, Alexandra M. Z. Slawin, David O'Hagan  
Selectively fluorinated cyclohexane building blocks: Derivatives of carbonylated all-cis 3-phenyl-1,2,4,5- tetrafluorocyclohexane.  
*Beilstein J. Org. Chem.*, 2015, **11**, 2671–2676.
249. Rodrigo A. Cormanich, Roberto Rittner, David O'Hagan and Michael Bühl,  
Inter- and intramolecular  $\text{CF}\cdots\text{C}=\text{O}$  interactions on aliphatic and cyclohexane carbonyl derivatives  
*J. Comput. Chem.*, 2016, **64**, 37-41.
250. Stephen Thompson, Stephen A McMahon, James H Naismith, David O'Hagan  
Exploration of a potential difluoromethyl-nucleoside substrate with the fluorinase enzyme.  
*Bioorg. Chem.*, 2016, **64**, 37-41.
251. Michael J. Corr, Rodrigo A. Cormanich, Cortney N. von Hahmann, Michael Bühl, Alexandra M. Z. Slawin and David O'Hagan  
Fluorine in fragrances: Exploring the difluoromethylene ( $\text{CF}_2$ ) group as a conformational constraint in macrocyclic musk lactones.  
*Org. Biol. Chem.*, 2016, **14**, 211 - 219.
252. Tetiana Bykova, Nawaf Al-Maharik, Alexandra M. Z. Slawin, David O'Hagan  
Multicomponent reactions of methyl substituted all *cis*-tetrafluorocyclohexane aldehydes  
*Org. Biomol. Chem.*, 2016, **14**, 1117 - 1123.
253. David O'Hagan and Robert J Young  
Accurate lipophilicity (LogP) measurements inform on subtle stereoelectronic effects in fluorine chemistry.  
*Angew. Chemie. Int. Ed.*, 2016, **55**, 3858 – 3860.
254. Stephen Thompson, Ian N. Fleming, David O'Hagan,

- Enzymatic transhalogenation of dendritic RGD peptide constructs with the fluorinase,  
*Org. Biol. Chem.*, 2016, **14**, 3120 - 3129.
255. Emily F. Warner, Qingzhi Zhang, K. Saki Raheem, David O'Hagan, Maria A. O'Connell, Colin D. Kay.  
Common phenolic metabolites of flavonoids, but not their unmetabolized precursor structures, reduce the secretion of vascular cellular adhesion molecules by human endothelial cells.  
*J. Nutr.*, 2016, **146**, 465-473.
- 256 Zeguo Fang, Nawaf Al-Muharik, Alexandra M. Z. Slawin, Michael Bühl, David O'Hagan  
Polar alicyclic rings: Synthesis and structure of all *cis*-1,2,3,4-tetrafluorocyclopentane.  
*Chem Commun*, 2016, **52**, 5116 - 5119.
- 257 Ricardo Callejo, Michael J. Corr, Mingyan Yang, Mingan A. Wang, David B. Cordes, Alexandra M. Z. Slawin, David O'Hagan  
Fluorinated Musk Fragrances: The CF<sub>2</sub> Group as a Conformational Bias Influencing the Odour of Civetone and (R)-Muscone,  
*Chem Eur. J.*, 2016, **22**, 8137 -8151.
- 258 Blake E. Ziegler, Michael Lecours, Rick A. Marta, Joshua Featherstone, Eric Fillion, W. Scott Hopkins, Vincent Steinmetz, Neil S. Keddie, David O'Hagan, Terrance B. McMahon.  
Janus Face Aspect of All-*cis* 1,2,3,4,5,6-Hexafluorocyclohexane Dictates Remarkable Anion and Cation Interactions In the Gas Phase.  
*J. Am. Chem. Soc.*, 2016, **138**, 7460 -7463
- 259 Qingzhi Zhang, Sergio Dall'Angelo, Ian N. Fleming, Lutz F. Schweiger, Matteo Zanda, David O'Hagan  
Last-step enzymatic [<sup>18</sup>F]-fluorination of cysteine-tethered RGD peptides using modified Barbas linkers.  
*Chem Eur. J.*, 2016, **22**, 10998 – 11004.
- 260 Nawaf Al-Maharik, Peer Kirsch, Alexandra M. Z. Slawin, David B. Cordes, David O'Hagan,  
Fluorinated liquid crystals: Evaluation of selectively fluorinated facially polarised cyclohexyl motifs for liquid crystal applications.  
*Org. Biomol. Chem.*, 2016 **14**, 9974-9980.
- 261 Matthew J. Jones, Ricardo Callejo, Alexandra M. Z. Slawin, Michael Bühl and David O'Hagan,  
Organofluorine chemistry: Difluoromethylene motifs spaced 1,3 to each other imparts facial polarity to a cyclohexane ring.  
*Beilstein J. Org. Chem.*, 2016, **12**, 2823-2827.
- 262 Axel Bartholomé, Jeffrey E. Janso, Usa Reilly and David O'Hagan.  
Fluorometabolite biosynthesis: Isotopically labelled glycerol incorporations into the antibiotic nucleocidin in *Streptomyces calvus*.  
*Org. Biol. Chem.*, 2017, **15**, 61 – 64.
- 263 Michael J. Lecours, Rick A. Marta, Vincent Steinmetz, Neil Keddie, Eric Fillion, David O'Hagan, Terrance B. McMahon, W. Scott Hopkins,  
The Interaction of B<sub>12</sub>F<sub>12</sub><sup>2-</sup> with all-*cis* 1,2,3,4,5,6-hexafluorocyclohexane in the gas phase.  
*J. Phys. Chem. Letts.*, 2017, **8**, 109–113.
- 264 Tetiana Bykova, Nawaf Al-Maharik, Alexandra M. Z. Slawin and David O'Hagan  
Fluorinated cyclohexanes: Synthesis of amine building blocks of the all-*cis* 2,3,5,6-tetrafluorocyclohexylamine motif  
*Beilstein J. Org. Chem.*, 2017, **13**, 728-733.
- 265 Emily F. Warner, Michael J. Smith, Qingzhi Zhang, K. Saki Raheem, David O'Hagan, Maria A. O'Connell and Colin D. Kay  
Signatures of anthocyanin metabolites identified in humans inhibit biomarkers of vascular inflammation in cultured human endothelial cells.

- Mol. Nutr. Food Res.*, 2017, **61**, 1700053.
- 266 Rodrigo. A. Cormanich, David O'Hagan and Michael Bühl  
Hyperconjugation is the source of helicity in perfluorinated nalkanes  
*Angew. Chemie. Int. Ed.*, 2017, **129**, 7975 - 7978.
- 267 Mohd Abdul Fatah Abdul Manan, David B. Cordes, Alexandra M. Z. Slawin, Michael Bühl, Vivian W. Y. Liao, Han. C. Chua, Mary Chebib and David O'Hagan.  
The synthesis and evaluation of fluoro-, trifluoromethyl, and iodo- muscimols as GABA agonists.  
*Chemistry Eur. J.* 2017, **23**, 10848–10852.
- 268 Joshua Clark and David O'Hagan  
Strategies for radiolabelling antibody, antibody fragments and affibodies with fluorine-18 as tracers for positron emission tomography.  
*J. Fluorine Chem.*, 2017, **203**, 31 - 46.
- 269 Phillip T. Lowe, Sergio Dall'Angelo, Thea Mulder-Krieger, Adriaan P. IJzerman, Matteo Zanda and David O'Hagan,  
A novel class of fluorinated A<sub>2A</sub> adenosine receptor agonist with application to last step enzymatic [<sup>18</sup>F]fluorination for PET imaging,  
*ChemBioChem.*, 2017, **18**, 2156 – 2164.
- 270 Xuan Feng, Nawaf Al Maharik, Axel Bartholomé, Jeffrey E. Janso, Usa Reilly and David O'Hagan.  
Incorporation of [<sup>2</sup>H<sub>1</sub>]-(*1R,2R*)- and [<sup>2</sup>H<sub>1</sub>]-(*1S,2R*)- glycerols into the antibiotic nucleocidin in *Streptomyces calvus*.  
*Org. Biomol. Chem.*, 2017, **15**, 8006–8008.
- 271 Neil S. Keddie, Pier Alexandre Champagne, Justine Desroches, Jean-François Paquin and David O'Hagan,  
Stereochemical outcomes of C–F activation reactions of benzyl fluoride  
*Beilstein J. Org. Chem.*, 2018, **14**, 106 - 113.
- 272 Ren Tomita, Nawaf Al-Maharik, Andrea Rodil, Michael Bühl, and David O'Hagan  
Synthesis of aryl- $\alpha,\alpha$ -difluoroethyl thioethers a novel structure motif in organic chemistry, and extending to aryl  $\alpha,\alpha$ -difluoro oxyethers.  
*Org. Biomol. Chem.*, 2018, **16**, 1113–1117.
- 273 Andrea Rodil, Stefano Bosisio, Mohammed Salah Ayoup, Laura Quinn, David B. Cordes, Alexandra M. Z. Slawin, Cormac D. Murphy, Julien Michel and David O'Hagan  
Metabolism and hydrophilicity of the polarised 'Janus face' all-cis tetrafluorocyclohexyl ring, a candidate motif for drug discovery.  
*Chem. Sci.*, 2018, **9**, 3023 – 3028.
- 274 Lucky Ahmed, Yuetian Zhang, Eric Block, Michael Buehl, Michael J. Corr, Rodrigo A. Cormanich Sivaji Gundala, Hiroaki Matsunami, David O'Hagan, Mehmet Ozbil, Yi Pan, Sivakumar Sekharan, Nicholas Ten, Mingan Wang, Mingyan Yang, Qingzhi Zhang, Ruina Zhang, Victor S. Batista, and Hanyi Zhuang.  
Molecular mechanism of activation of human musk receptors OR5AN1 and OR1A1 by (R)-muscone and diverse other musk-smelling compounds.  
*Proc. Nat. Acad. Sci.*, 2018, **115**, E3950-E3958.
- 275 D. O'Hagan  
An enzymatic method for C-<sup>18</sup>F bond formation for PET  
*J. Label. Compd.. Radiopharm.*, 2018, **61**, 461-462.
- 276 Tetiana Bykova, Nawaf Al-Maharik, Alexandra M. Z. Slawin, Michael Bühl, Tomas Lebl, David O'Hagan.  
Benzylic functionalisation of phenyl all *cis*-2, 3, 5, 6 -tetrafluoro -cyclohexane provides access to new organo-fluorine building blocks.

- Chem. Eur. J.*, 2018, **24**, 13290 - 13296.
- 277 Connor J. Thomson, Qingzhi Zhang, Nawaf Al-Maharik, Michael Buehl, David B. Cordes, Alexandra M. Z. Slawin and David O'Hagan  
Fluorinated cyclopropanes: Synthesis and chemistry of the aryl  $\alpha,\beta,\beta$ -trifluorocyclopropane motif.  
*Chem. Commun.*, 2018, **54**, 8415 – 8418.
- 278 Phillip T. Lowe, Sergio Dall'Angelo, Andrew Devine, Matteo Zanda, David O'Hagan  
Enzymatic fluorination of biotin and tetrazine bioconjugates for pre-targeting approaches to PET imaging.  
*ChemBioChem*, 2018, **19**, 1969-1978.
- 279 M. A. Fatah. Abdul Manan, David B. Cordes, Alexander. M. Z. Slawin David O'Hagan,  
One-pot synthesis of unsymmetrical diaryliodonium tetrafluoroborate salts bearing an isoxazole moiety from aryl borinic acids.  
*Int. J. Eng. Tech.*, 2018, **7 (4.14)**, 158 -162. (Special Issue)
- 280 Davide Bello, Maria Grazia Rubanu, Nouchali Bandaranayaka, Jan. P. Götze, Michael Bühl, David O'Hagan  
Acetyl coenzyme A analogues as rationally designed inhibitors of citrate synthase.  
*ChemBioChem*, 2019, **20**, 1174-1182.
- 281 David O'Hagan and R. A. Aitken,  
The St Andrews periodic table  
*Chem. World*, 2019, **16 (2)**, 68-69.
- 282 Phillip T. Lowe, Sergio Dall'Angelo, Ian N. Fleming, Monica Piras, Matteo Zanda and David O'Hagan  
Enzymatic radiosynthesis of a  $^{18}\text{F}$ -Glu-Ureido-Lys-based ligand for the prostate-specific membrane antigen (PSMA).  
*Org. Biomol. Chem.*, 2019, **17**, 1480 – 1486
- 283 Qingzhi Zhang, Charlotte S. Teschers, Ricardo Callejo, Mingyan Yang, Mingan Wang, Peter J. Silk, Krista Ryall, Lucas E. Roscoe, David B Cordes, Alexandra M. Z. Slawin, David O'Hagan.  
Fluorine in pheromones: Synthesis of fluorinated 12-dodecanolides as Emerald Ash Borer pheromone mimetics  
*Tetrahedron*, 2019, **7**, 2917-2922.
- 284 Andrea Rodil, Alexandra M. Z. Slawin, Nawaf Al-Maharik, Ren Tomita, David O'Hagan  
Fluorine containing substituents: metabolism of the  $\alpha,\alpha$ -difluoroethyl thioether motif,  
*Beilstein J. Org. Chem.*, 2019, **15**, 1441-1447.
- 285 Phillip T. Lowe, Steven L. Cobb and David O'Hagan  
An enzymatic Finkelstein reaction: Fluorinase catalyses direct halogen exchange.  
*Org. Biomol. Chem.*, 2019, **17**, 7493 - 7496.
- 286 Zeguo Fang, David B. Cordes, Alexandra M. Z. Slawin and David O'Hagan  
Fluorine containing cyclopropanes: Synthesis of aryl substituted all-*cis* 1,2,3-trifluorocyclopropanes, a facially polar motif.  
*Chem. Commun.*, 2019, **55**, 10539 – 10542.
- 287 Xuan Feng, Davide Bello, Phillip T. Lowe, Joshua Clark and David O'Hagan  
Two 3'-O-  $\beta$ -glucosylated nucleoside fluorometabolites related to nucleocidin in *Streptomyces calvus*.  
*Chem Sci.*, 2019, **10**, 9501 - 9505.
- 288 Zeguo Fang, Roscoe Z. Gillatt, Alexandra M. Z. Slawin, David B. Cordes, Cameron L. Carpenter-Warren, David O'Hagan  
Unexpected  $\alpha,\alpha'$ -difluoroethers from Ag(I)F and N-bromosuccinimide reactions of dibenzo[a,e]cyclooctatetraene.  
*Chem. Commun.*, 2019, **55**, 14295 – 14298.

- 289 Phillip T. Lowe and David O'Hagan,  
A role for fluorine in flavours, fragrances and pheromones?  
*J. Fluorine Chem.*, 2020, **230**, 109420.
- 290 Nawaf Al-Maharik, David B. Cordes, Alexandra M. Z. Slawin, Michael Bühl and David O'Hagan,  
Probing the helical integrity of multivincinal all-*syn*-fluoro alkanes.  
*Org. Biomol. Chem.*, 2020, **18**, 878 – 887.
- 291 Konstantinos Markakis, Phillip T. Lowe, Liam Davison-Gates, David O'Hagan, Susan J. Rosser and Alistair Elfick,  
An engineered *E. coli* strain for direct in vivo fluorination.  
*ChemBioChem*, 2020, **21**, 1856-1860.
- 292 Polar organofluorine substituents: Placing fluorines along alkyl chains and around alicyclic rings  
David O'Hagan,  
*Chem. Eur. J.*, 2020, **26**, 7981-7997.
- 293 Zeguo Fang, Nawaf Al-Maharik, Peer Kirsch, Matthias Bremer, Alexandra M. Z. Slawin, David O'Hagan  
Synthesis of organic liquid crystal containing selectively fluorinated cyclopropanes  
*Beilstein J. Org. Chem.*, 2020, **16**, 674-680.
- 294 B. A. Piscelli, W. Sanders, C. Yu, N. Al Maharik, T. Lebl, R. A. Cormanich, D. O'Hagan,  
Fluorine induced pseudo-anomeric effects in methoxycyclohexanes through electrostatic 1,3-diaxial interactions.  
*Chem. Eur. J.*, 2020, **26**, 11989-11994.
- 295 Cihang Yu, Agnes Kütt, Gerd-Volker Röschenhaler, Tomas Lebl, David B. Cordes, Alexandra M. Z. Slawin, Michael Bühl, David O'Hagan  
Janus face all-*cis* 1,2,4,5-tetrakis(trifluoromethyl)- and all-*cis* 1,2,3,4,5,6-hexakis(trifluoromethyl)-cyclohexanes.  
*Angewandte Chemie. Int. Ed.*, 2020, **59**, 19905 –19909.
- 296 Jianlin Han, Attila Márió Remete, Luca S. Dobson, Lorand Kiss, Kunisuke Izawa, Hiroki Moriwaki, Vadim A. Soloshonok, David O'Hagan,  
Next generation organofluorine containing blockbuster drugs  
*J. Fluorine Chem.*, 2020, **239**, 109639
- 297 Patricia Calero, Daniel C. Volke, Phillip T. Lowe, Charlotte H. Gotfredsen, David O'Hagan, Pablo I. Nikel  
A fluoride-responsive genetic circuit enables *in vivo* biofluorination in engineered *Pseudomonas putida*  
*Nature Commun.*, 2020, **11**, 5045.
- 298 Xuan Feng, Davide Bello and David O'Hagan  
Isolation of 5'-O-sulfamyladenosine and related 3'-O- $\beta$ -glucosylated adenosines from the nucleocidin producer *Streptomyces calvus*.  
*RSC Advances*, 2021, **11**, 5291–5294.
- 299 Manuele Musolino, Ian N. Fleming, Lutz F. Schweiger, David O'Hagan, Sergio Dall'Angelo, Matteo Zanda.  
Synthesis, radiosynthesis and *in vitro* studies on novel hypoxia PET tracers incorporating [<sup>18</sup>F]FDR  
*Eur. J. Org. Chem.*, 2021, 1429 – 1439.
- 300 Bruno A. Piscelli, David O'Hagan, and Rodrigo A. Cormanich  
The contribution of non-classical CH<sub>ax</sub>...OC hydrogen bonds to the anomeric effect in fluoro and oxamethoxycyclohexanes  
*PhysChemChemPhys*, 2021, **23**, 5845 – 5851.



- 301 Shigeyuki Yamada, Masato Morita, Yizhou Wang, Qingzhi Zhang, David O'Hagan, Tomohiro Agou, Hiroki Fukumoto, Toshio Kubota, Mitsuo Hara, Tsutomu Konno  
Effect of fluoroalkyl-substituent in bistolane-based photoluminescence liquid crystals on their physical behaviour.  
*Crystals*, 2021, **11**, 450.
- 302 Joshua L. Clark, Alaric Taylor, Ailsa Geddis, Rifahath M. Neyyappadath, Bruno A. Piscelli, Cihang Yu, David B. Cordes, Alexandra M. Z. Slawin, Rodrigo A. Cormanich, Stefan Guldin, David O'Hagan  
Supramolecular packing of alkyl substituted Janus face all-*cis* 2,3,4,5,6-pentafluorocyclohexyl motifs.  
*Chem. Sci.*, 2021, **12**, xxxx <https://doi.org/10.1039/D1SC02130C>