

Publications

1. **Kartha, K.P.R.**, Mukhopadhyay B. and Field, R.A. Practical de-O-acylation reactions promoted by molecular sieves. *Carbohydr. Res.*, 339, 729-732, 2004.
2. Marsh, S.J., **Kartha, K.P.R.** and Field R.A. Observations on Iodine-promoted β -mannosylation. (Iodine and its interhalogen compounds: Versatile reagents in carbohydrate chemistry XV.) *SYNLETT*, 1376-1378, 2003.
3. Bickley, J., Cottrell, J.A., Ferguson, J.R., Field, R.A., Harding, J.R., Hughes, D.L., **Kartha, K.P.R.**, Law, J.L., Scheinmann, F. and Stachulski, A.V. Preparation, X-ray structure and reactivity of a stable glycosyl iodide. *Chem. Comm.*, 1266-1267, 2003.
4. Carvalho, I., Scheuerl, S.L., **Kartha, K.P.R.** and Field, R.A. Practical synthesis of the 2-acetamido-3,4,6-tri-O-acetyl-2-deoxy- β -D-glucosides of Fmoc-serine and Fmoc-threonine and their benzyl esters. *Carbohydr. Res.*, 338, 1039 - 1043, 2003.
5. Turnbull, W.B, Harrison, J.A., **Kartha, K.P.R.**, Schenkman, S. and Field R.A. Observations on chemical and enzymatic approaches to α -2,3-sialylated octyl β -lactoside. *Tetrahedron*, 58, 3207-3216, 2002.
6. **Kartha, K.P.R.**, Ballell, L., Bilke, J., McNeil, M. and Field, R.A. Iodine and its interhalogen compounds: Versatile reagents in carbohydrate chemistry XIV. Glycosylated amino acid synthesis. *J. Chem. Soc. Perkin Trans. 1*, 770-772, 2001.
7. **Kartha, K.P.R.**, Korkkinen, T.S., Marsh, S.J. and Field, R.A. Iodine and its interhalogen compounds: Versatile reagents in carbohydrate chemistry XIII. General activation of 'armed' glycosyl donors. *SYNLETT*, 260-262, 2001.
8. Harrison, J.A., **Kartha, K.P.R.**, Turnbull, W.B., Scheuerl, L.S., Naismith, J.N., Schenkman, S. and Field, R.A. Investigation of the substrate specificity of *Trypanosoma cruzi* trans-sialidase using systematically modified substrates and synthetic fragments of parasite glycans. *Bioorg. Med. Chem. Lett.*, 11, 141-144, 2001.
9. Cura, P., **Kartha, K.P.R.**, Aloui, M. and Field, R.A. Iodine and its interhalogen compounds: Versatile reagents in carbohydrate chemistry XII. Tuning promoter reactivity for thioglycoside activation. *SYNLETT*, 1279-1280, 2000.
10. **Kartha, K.P.R.**, Cura, P., Aloui, M., Readman, S.K., Rutherford, T.J. and Field, R.A. Iodine and its interhalogen compounds: Versatile reagents in carbohydrate chemistry XI. Observations on the activation of methyl thioglycosides by iodine and its interhalogen compounds. *Tetrahedron Asymmetry*, 11, 581-593, 2000.
11. Rutherford, T.J., **Kartha, K.P.R.**, Readman, S.K., Cura, P. and Field, R.A. Adaptation of an NMR signal suppression pulse sequence for the selective removal of benzylic methylene signals of benzyl ether-protected carbohydrates. (Iodine and its interhalogen compounds: Versatile reagents in carbohydrate chemistry X.) *Tetrahedron Lett.*, 40, 2025-2028, 1999.
12. **Kartha, K.P.R.** and Field, R.A. Iodine and its interhalogen compounds: Versatile reagents in carbohydrate chemistry IX. A mild and selective deprotection of *tert*-butyldimethylsilyl (TBDMS) ethers in the presence of various protecting groups using iodine monobromide. *SYNLETT*, 311-312, 1999.
13. **Kartha, K.P.R.**, Kiso, M., Hasegawa, A. and Jennings, H.J. Novel Selectivity in carbohydrate-reactions III. Selective deprotection of *p*-methoxybenzyl (PMBn) ethers of carbohydrates by tin(IV)chloride. *J. Carbohydr. Chem.*, 17 (4&5), 811-17, 1998.
14. **Kartha, K.P.R.** and Jennings, H.J. Novel selectivity in carbohydrate-reactions II. Selective 6-O-glycosylation of of a partially protected lactoside. *J. Carbohydr. Chem.*, 17 (4&5), 683-692, 1998.
15. **Kartha, K.P.R.** and Field, R.A. Iodine and its interhalogen compounds: Versatile reagents in carbohydrate chemistry VIII. A simple practical method for the preparation of glycosyl iodides from per-O-acetyl or other derivatives of

- carbohydrates. *Carbohydr. Lett.*, 3 (3), 179-186, 1998.
16. Brown, J.R., Kartha, K.P.R., Ferguson M.A.J. and Field R.A. Methyl 2-O- α -D-galactopyranosyl- α -D-mannopyranoside - coffee bean α -galactosidase sensitivity of a synthetic fragment of a *Trypanosoma brucei* GPI anchor. (Iodine and its interhalogen compounds: Versatile reagents in carbohydrate chemistry VII.) *Carbohydr. Lett.*, 3 (2), 97-100, 1998.
 17. Kartha, K.P.R. and Field, R.A. Iodine and its interhalogen compounds: Versatile reagents in carbohydrate chemistry V. Synthesis of 1,2-trans-linked 1-thioglycosides from per-O-acetylated glycoses. *J. Carbohydr. Chem.* 17, 693-702, 1998.
 18. Kartha, K.P.R. and Field, R.A. Glycosylation chemistry promoted by iodine monobromide: Efficient synthesis of glycosyl bromides from thioglycosides, and O-glycosides from 'disarmed' thioglycosides and glycosyl bromides. (Iodine and its interhalogen compounds: Versatile reagents in carbohydrate chemistry VI.) *Tetrahedron Lett.*, 38 (47), 8233-8236, 1997.
 19. Kartha, K.P.R. and Field, R.A. Iodine: a versatile reagent in carbohydrate chemistry IV. Per-O-acetylation, regioselective acylation and acetolysis. *Tetrahedron*, 53 (34), 11753-11766, 1997.
 20. Kartha, K.P.R., Aloui, M. and Field, R.A. Iodine: a versatile reagent in carbohydrate chemistry III. Efficient activation of glycosyl halides in combination with DDQ. *Tetrahedron Lett.*, 37 (48), 8807-8810, 1996.
 21. Kartha, K.P.R., Aloui, M. and Field, R.A. Iodine: a versatile reagent in carbohydrate chemistry II. Efficient chemospecific activation of thiomethyl glycosides. *Tetrahedron Lett.*, 37 (29), 5175-5178, 1996.
 22. Kartha, K.P.R., Kiso, M., Hasegawa, A. and Jennings, H.J. Simple and efficient strategy for making β -(1,6)-linked galactooligosaccharides using 'naked' galactopyranosides as acceptors. *J. Chem. Soc. Perkin Trans. 1*, 3023-3026, 1995.
 23. Kartha, K.P.R. and Jennings, H.J. A facile, one-step procedure for the conversion of 2-(trimethylsilyl)ethyl glycosides to their glycosyl chlorides. *Tetrahedron Lett.*, 31 (18), 2537-2540, 1990.
 24. Kartha, K.P.R. and Jennings, H.J. A simplified, one pot preparation of acetobromosugars from reducing sugars. *J. Carbohydr. Chem.*, 9 (5), 777-781, 1990.
 25. Kartha, K.P.R., Kiso, M. and Hasegawa, A. Synthetic Studies on sialoglycoconjugates 9: An efficient method for the selective acetolysis of 2-(trimethylsilyl)ethyl glycosides using ferric chloride in acetic anhydride. *J. Carbohydr. Chem.*, 8 (4), 675-679, 1989.
 26. Murase, T., Kartha, K.P.R., Kiso, M. and Hasegawa, A. Synthetic studies on sialoglycoconjugates 10: A facile *Carbohydr. Res.*, 195, 134-137, 1989.
 27. Murase, T., Kameyama, A., Kartha, K.P.R., Ishida, H., Kiso, M. and Hasegawa, A. Synthetic studies on sialoglycoconjugates 5: A facile regio- and stereoselective synthesis of ganglioside GM4 and its position isomer. *J. Carbohydr. Chem.*, 8 (2), 265-283, 1989.
 28. Kartha, K.P.R., Kameyama, A., Kiso, M. and Hasegawa, A. Synthetic studies toward gangliosides and their analogues: Synthesis of appropriately protected core oligosaccharides as construction blocks. (Synthetic studies on sialoglycoconjugates 2.) *J. Carbohydr. Chem.*, 8 (1), 145-158, 1989.
 29. Kartha, K.P.R. Iodine, a novel catalyst in carbohydrate reactions. Part I. O-isopropylideneation of carbohydrates. *Tetrahedron Letters*, 27 (29), 3415-3416, 1986.
 30. Kartha, K.P.R., Dasgupta, F., Singh, P.P., and Srivastava, H.C. Use of ferric chloride in carbohydrate reactions IV. Acetolysis of Benzyl ethers of sugars. *J. Carbohydr. Chem.*, 5 (3), 437-444, 1986.
 31. Kartha, K.P.R. and Srivastava, H.C. Reaction of epichlorohydrin with carbohydrate polymers. Part II. Starch- Reaction mechanism and

- physicochemical properties of modified starch. *Die Starke*, 37 (8), 297-306, 1985.
32. Kartha, K.P.R. and Srivastava, H.C. Reaction of epichlorohydrin with carbohydrate polymers. Part I. Starch- Chemical kinetics. *Die Starke*, 37 (8): 270-276, 1985.
 33. Maity, N.C., Kartha, K.P.R. and Srivastava, H.C. A synthetic durable antistatic agent for polyester fabric. *Colourage*, 31 (24), 11-12, 1984.
 34. Maity, N.C., Kartha, K.P.R. and Srivastava, H.C. Modification of shellac for textile applications. Synthesis and evaluation of shellac-ethylene glycol-maleic anhydride-phthalic anhydride condensate as an antistatic finish for polyester. *Ind. J. Text. Res.*, 10, 63-67, 1984.
 35. Maity, N.C., Kartha, K.P.R. and Srivastava, H.C. Modification of Shellac-II. Shellac grafted with acrylic monomers as water repellent finish for cotton fabrics. *ATIRA Tech. Dig.*, 18, 143-148, 1984.
 36. Maity, N.C., Kartha, K.P.R. and Srivastava, H.C. Modification of shellac-I. Grafting of shellac with 2-ethylhexyl acrylate. *ATIRA Tech. Dig.*, 16, 35-45, 1982.
 37. Dasgupta, F., Kartha, K.P.R., Pitke, P.M. and Singh, P.P. Use of ferric chloride-methanol reagent for the analysis of fatty acid composition of lipids. *Fette Seifen Anstrichmittel*, 83, 480-482, 1981.

Non-refereed

38. The development of a high through-put spectrophotometric assay to monitor *Trypanosoma cruzi* trans-sialidase. Harrison, J.A., Kartha, K.P.R., Smith, S.L., Naismith, J.H., Schenkman, S., and Field, R.A. *Biochem.Soc.Trans.*, 25, 424S, 1997.

Book Chapters

1. Kartha, K.P.R., Branched-chain Sugars. *Carbohydrate Chemistry, Specialist Periodical Reports, Volume 34, 2003, Chapter 14, pp 175-187, R.J. Ferrier, Senior Reporter, Royal Society of Chemistry, U.K.*
2. Kartha, K.P.R. and Field, R.A. Synthesis and Activation of Carbohydrate Donors: Thioglycosides and Sulfoxides. *Best Synthetic Methods, 2002, Chapter 4, pp 121-145, H.M.I. Osborn, Ed., Academic press, London.*
3. Kartha, K.P.R., Branched-chain Sugars. *Carbohydrate Chemistry, Specialist Periodical Reports, Volume 33, 2002, Chapter 14, pp 191-204, R.J. Ferrier, Senior Reporter, Royal Society of Chemistry, U.K.*
4. Kartha, K.P.R., Branched-chain Sugars. *Carbohydrate Chemistry, Specialist Periodical Reports, Volume 32, 2001, Chapter 14, pp 174-190, R.J. Ferrier, Senior Reporter, Royal Society of Chemistry, U.K.*
5. Kartha, K.P.R., Sugar Acids and Lactones. *Carbohydrate Chemistry, Specialist Periodical Reports, Volume 32, 2001, Chapter 16, pp 194-205, R.J. Ferrier, Senior Reporter, Royal Society of Chemistry, U.K.*
6. Kartha, K.P.R., Aloui, M., Cura, P., Marsh, S.J. and Field, R.A. Iodine a versatile reagent in carbohydrate chemistry: Activation of thioglycosides and glycosyl sulfoxides. *Advances in Sulfur Chemistry Volume 2, 2000, pp 37-56, Rayner, C.M. Ed., JAI press, U.S.A.*

Presentations at Conferences:

The above papers were also presented at various national (India/UK) and international (North America, Japan, Taiwan and Europe) conferences in the form of talks/posters (32 presentations). Please ask for details if interested.