

List of Publications: (in reverse chronological order)

157. Au(III) Halides/Phenylacetylene Catalyzed Glycosylations using 1-*O*-Acetyl Furanoses and Pyranose 1,2-Orthoesters as Glycosyl Donors
Asadulla Mallick, Yakkala Mallikharjunarao, Parasuraman Rajasekaran, Rashmi Roy, Y. D. Vankar
Eur. J. Org. Chem. **2016**, doi.org/10.1002/ejoc.201501245
156. Recent Developments in the Synthesis of 2-C-Branched and 1,2-Annulated Carbohydrates
Yashwant D. Vankar, Torsten Linker
Eur. J. Org. Chem. **2015**, 7633-7642.
155. AuCl₃ and AuCl₃-Phenylacetylene catalyzed glycosylations using glycosyl trichloroacetimidates
Rashmi Roy, A. K. Palanivel, A. Mallick, and Yashwant D. Vankar
Eur. J. Org. Chem. **2015**, 4000-4005.
154. Diastereoselective Overman rearrangement using L-ascorbic acid based allylic alcohol. Application in the Synthesis of (+)-1,2-di-*epi*-swainsonine and tetrahydroxypyrrolizidine
Parasuraman Rajasekaran, Alafia A. Ansari and Yashwant D. Vankar
Eur. J. Org. Chem. **2015**, 2902-2913.
153. Synthesis of Isofagomine–Pyrrolidine Hybrid Sugars and Analogues of (–)-Steviamine and (+)-Hyacinthacine C5 Using 1,3-Dipolar Cycloaddition Reactions
Rima Lahiri, Ashokkumar Palanivel, Sudhir A. Kulkarni, and Yashwant D. Vankar
J. Org. Chem. **2014**, 79, 10786-10800.
152. Gold(III)chloride-phenyl acetylene: A new catalyst-system for the Ferrier Rearrangement, and O-glycosylation of 1-O-acetyl sugars as glycosyl donors
Rashmi Roy, Parasuraman Rajasekaran, Asadulla Mallick and Yashwant D. Vankar
Eur. J. Org. Chem. **2014**, 5564-5573.
151. A Concise Synthesis of (2*R*,3*R*)-, (2*R*,3*S*)-3-Hydroxypipeolic Acids and Total Synthesis of (–)-Deoxoprosopinine and (+)-2-*epi*-Deoxoprosopinine from D-Glycals
Asadulla Mallick, Nitee Kumari, Rashmi Roy, Ashokkumar Palanivel and Yashwant D. Vankar
Eur. J. Org. Chem. **2014**, 5557-5563.
150. n-Tetrabutylammonium nitrate Suresh Dharuman and Yashwant D. Vankar
eEORS **2014** (In Press) (**A book chapter in “Encyclopedia in Organic Synthesis”**)
149. An easy route to synthetic Analogues of Radicamine B, Codonopsine and Codonopsinine from D-Mannitol
Suresh Dharuman, Ashok Kumar Palanivel and Yashwant D. Vankar
Org. Biomol. Chem. **2014**, 12, 4983-4998.
148. Synthesis and glycosidase inhibition study of 2-*C*-hydroxymethyl and 6-*C*-hydroxymethyl branched piperidines from D-glucose using ene-yne metathesis as a Key Step
Asadulla Mallick, and Yashwant D. Vankar *Eur. J. Org. Chem.* **2014**, 4155-4161.

147. N-Halosuccinimide/AgNO₃: Efficient reagent systems for one step synthesis of 2-halo glycals from glycals: Application in the synthesis of 2C-branched sugars via Heck coupling reactions
 Suresh Dharuman and Yashwant D. Vankar *Organic Letters* **2014**, *16*, 1172-1175.
146. Bicyclic hybrid sugars as glycosidase inhibitors: Synthesis and comparative study of inhibitory activities of fused oxa-oxa, oxa-aza and oxa-carbasugar hybrid molecules
 Alafia A. Ansari, Parasuraman Rajasekaran, M. Musawwer Khan, and Yashwant D. Vankar *J. Org. Chem.* **2014**, *79*, 1690-1699.
145. Synthesis of pyrrolidine iminosugars, (-)-lentiginosine, (-)-swainsonine and their 8a-epimers from D-Glycals
 Alafia A. Ansaria and Yashwant D. Vankar
RSC Advances **2014**, *4*, 12555 – 12567.
144. Ceric ammonium nitrate mediated efficient carbon-Ferrier rearrangement on glycals: Application in the synthesis of 2-deoxy-2-amino-C-glycoside.
 Alafia A. Ansari, Y. Suman Reddy and Yashwant D. Vankar
Beilstein J. Org. Chem. **2014**, *10*, 300-306.
143. Synthesis and Comparative Study of Homoisoagomines and Analogues as Glycosidase Inhibitors
 R. K. Basak and Yashwant D. Vankar *Eur. J. Org. Chem.* **2014**, 844–859.
142. Synthesis of Unnatural Indolizidines, Pyrrolizidine and C-alkyl Iminosugars from Sugar Derived Hemiaminals
 Rima Lahiri, Y. Suman Reddy, Sudhir A. Kulkarni and Yashwant D. Vankar
RSC Advances **2013**, *3*, 23242 – 23254.
141. Synthesis of isoagomine and a few new azasugars as glycosidase inhibitors from D-mannitol derived nitroolefins
 Rashmi Roy, Pavan K. Kancharla, Y. Suman Reddy, Anita Brar, Y. D. Vankar
Tetrahedron:Asymm **2013**, *24*, 1502-1513.
140. Synthesis of Dihydroxymethyl Dihydroxypyrrrolidines and Steviamine Analogues from C-2 Formyl Glycals
 Alafia A. Ansari and Yashwant D. Vankar
J. Org. Chem. **2013**, *78*, 9383-9395.
139. Synthesis of L-3-epi-isoagomine, its homo-, n-butyl and bicyclic analogues from D-glucose as glycosidase inhibitors
 Asadulla Mallick, A. P. John Pal, Yashwant D. Vankar
Tetrahedron Letters **2013**, *54*, 6549–6552.
138. Synthesis of 2-Nitroglycals from Glycals using “Tetrabutylammonium Nitrate–Trifluoroacetic anhydride–Triethylamine” Reagent System, and Base-Catalyzed Ferrier Rearrangement of Acetylated 2-Nitroglycals
 Suresh Dharuman, Preeti Gupta, Pavan K. Kancharla and Yashwant D. Vankar
J. Org. Chem. **2013**, *78*, 8442-8450.
137. Recent developments in design and synthesis of bicyclic azasugars, carbasugars and related molecules as glycosidase inhibitors
 Rima Lahiri, Alafia A. Ansari and Yashwant D. Vankar
Chem. Soc. Revs. **2013**, *42*, 5102-5118.

136. The carbon-Ferrier rearrangement: an approach towards the synthesis of C-glycosides
 Alafia Ali Ansari, Rima Lahiri and Yashwant D. Vankar
ARKIVOC **2013**, 316-362.
135. Functionalization of Glycals Leading to 2-Deoxy-O-glycosides, Aminosugars, Nitrosugars and Glycosidase Inhibitors: Our Experience
 Rima Lahiri, Suresh Dharuman, Yashwant D. Vankar
Chimia **2012**, 66, 905-912.
134. Palladium catalyzed improved regio and stereoselective O-glycosylation of D-glucal derived α - and β -vinyl oxiranes
 Y. Suman Reddy, Rima Lahiri, Yashwant D. Vankar
Eur. J. Org. Chem. **2012**, 4751-4761.
133. Synthesis of furan derivatives of cyclic β -amino acid cispentacins via intramolecular nitrile oxide cycloaddition
 Ranjan K. Basak, Suresh Dharuman, Yashwant D. Vankar
Tetrahedron Lett. **2012**, 41, 4283-4287.
132. $\text{HClO}_4 \cdot \text{SiO}_2$ mediated improved isomerisation of glycidic esters to α -hydroxy- β,γ -unsaturated esters: Application in the formal synthesis of (R)-Baclofen and β -phenyl GABA analogues
 Ranjan K. Basak, Suresh Dharuman, Y. Suman Reddy, Yashwant D. Vankar
Chemistry Lett. **2012**, 41, 325-327.
131. Aza-Claisen rearrangement on 2-C-hydroxymethyl glycals as a versatile strategy towards synthesis of isofagomine and related biologically important iminosugars
 Y. Suman Reddy, Pavan K Kancharla, Rashmi Roy and Yashwant D. Vankar
Org. Biomol. Chem. **2012**, 10, 2760-2773.
130. Total synthesis of (+)-pericosine B and (+)-pericosine C and their enantiomers by using the Baylis–Hillman reaction and ring-closing metathesis as key steps.
 Y. Suman Reddy, P. Kadigachalam, Ranjan K. Basak, A.P. John Pal, Yashwant D. Vankar *Tetrahedron Letters* **2012**, 53, 132-136.
129. Ceric Ammonium Nitrate-Catalyzed Azidation of 1,2-Anhydro Sugars: Application in the Synthesis of Structurally Diverse Sugar-Derived Morpholine 1,2,3-Triazoles and 1,4-Oxazin-2-ones. Y. Suman Reddy, A. P. John Pal, Preeti Gupta, Alafia A. Ansari, Yashwant D. Vankar
J. Org. Chem. **2011**, 76, 5972-5984.
128. Acetyl Chloride-Silver Nitrate-Acetonitrile: A Reagent System for the Synthesis of 2-Nitro-glycals and 2-Nitro-1-Acetamido Sugars from Glycals
 Pavan K. Kancharla, Y. Suman Reddy, Suresh Dharuman, Yashwant D. Vankar
J. Org. Chem. **2011**, 76, 5832–5837.
127. Synthesis of Aminocyclitols and Trihydroxylated Indolizidinone from a D-Mannitol-Derived Common Building Block
 Preeti Gupta, A. P. John Pal, Y. Suman Reddy, Yashwant D. Vankar
Eur. J. Org. Chem. **2011**, 1166-1175.
126. An improved method of ring closing metathesis in the presence of basic amines: application to the formal synthesis of (+)-lentiginosine and other piperidines and carbamino sugar analogs
 Rima Lahiri, Hari Prasad Kokatla, Yashwant D. Vankar
Tetrahedron Lett. **2011**, 52, 781-786.

125. Synthesis of sugar-derived spiroaminals via lactamization and metathesis reactions
A. P. John Pal, P. Kadigachalam, Asadulla Mallick, D. V. Ramana, and Yashwant D. Vankar
Org. Biomol. Chem. **2011**, *9*, 809-819.
124. (3S,4R,5R)-3-(2-Hydroxyethyl)piperidine-3,4,5-triol as an isofagomine analogue: synthesis and glycosidase inhibition study
Preeti Gupta, Suresh Dharuman, Yashwant D. Vankar *Tetrahedron:Asymm.* **2010**, *21*, 2966-2972.
123. Chemistry of 2-Nitroglycals: A One-Pot Three-Component Stereoselective Approach toward 2-C-Branched *O*-Galactosides Pavan K. Kancharla and Yashwant D. Vankar
J. Org. Chem. **2010**, *75*, 8457-8464.
122. Synthesis of Fused Oxa-Aza Spiro Sugars from D-Glucose Derived δ -Lactone as Glycosidase Inhibitors
A. P. John Pal, Preeti Gupta, Y. Suman Reddy and Yashwant D. Vankar
Eur. J. Org. Chem. **2010**, *6957*-6966.
121. Molecular iodine-promoted *N*- and *C*-glycosylation of 1-*C*-alkyl (or phenyl)-glycopyranoses
A. P. John Pal, Asadulla Mallick, Y. Suman Reddy and Yashwant D. Vankar
Tetrahedron Lett. **2010**, *51*, 6334-6337.
120. Synthesis of (-)-deoxoprosophylline, (+)-2-*epi*-deoxoprosopinine and synthesis of (2*R*, 3*R*), (2*R*, 3*S*)-3-hydroxypipolic acids from D-glycals
Hari Prasad Kokatla, Rima Lahiri, Pavan K. Kancharla, Venkata Ramana Doddi and Yashwant D. Vankar *J. Org. Chem.* **2010**, *75*, 4608-4611.
119. Synthesis of 1,4-dideoxy-1,4-imino-heptitol and 1,5-dideoxy-1,5-imino-octitols from D-xylose
Amit Kumar, Mohammed Abrar Alam, Shikha Rani and Yashwant D. Vankar
Carbohydrate Res. **2010**, *345*, 1142–1148.
118. Azidation of anomeric nitro sugars: Application in the synthesis of spiroaminals as glycosidase inhibitors A. P. John Pal and Yashwant D. Vankar
Tetrahedron Lett. **2010**, *51*, 2519-2524.
117. A concise route to (-)-Shikimic Acid and (-)-5-*epi*-Shikimic Acid, and their Enantiomers via Barbier Reaction and Ring-Closing Metathesis
Pavan K. Kancharla, Venkata Ramana Doddi, Hariprasad Kokatla and Yashwant D. Vankar *Tetrahedron Lett.* **2009**, *50*, 6951-6954.
116. Intramolecular ketonitrone-olefin cycloaddition reaction: Direct and stereocontrolled synthesis of nitrogenated quaternary centered aminocyclopentitols as galactosidase inhibitors
Y. Suman Reddy, P. Kadigachalam, Venkata Ramana Doddi and Yashwant D. Vankar
Tetrahedron Lett. **2009**, *50*, 5827-5830.
115. Regio- and stereocontrolled selective debenzylation and substitution reactions of C-2 formyl glycals. Application in the synthesis of constrained β -sugar amino acids
G. K. Rawal, Shikha Rani, Nitee Kumari, and Yashwant D. Vankar
J. Org. Chem. **2009**, *74*, 5349-5355.

114. Synthesis and glycosidase-inhibitory activity of novel polyhydroxylated quinolizidines derived from D-glycals.
 Nitee Kumari and Yashwant D. Vankar
Org. Biomol. Chem. **2009**, 7, 2104–2109.
113. Facile Aza-Claisen Rearrangement in Glycals: Application in the Synthesis of 1-Deoxy-L-iminosugars
 Preeti Gupta and Y. D. Vankar *Eur. J. Org. Chem.* **2009**, 1925–1933.
112. Synthesis of hybrids of 3-deoxy carbasugars with pyranoses (D-mannose and D-talose) as glycosidase inhibitors
 D. V. Ramana and Y. D. Vankar *Carbohydr. Research* **2009**, 344, 606-612.
111. Efficient and stereo-divergent syntheses of D- and L-fagomines and their analogs
 Nitee Kumari, B. Gopal Reddy and Y.D. Vankar
Eur. J. Org. Chem. **2009**, 160-169.
110. Synthesis of hybrids of D-glucose and D-galactose with pyrrolidine based imino sugars as glycosidase inhibitors
 D.V. Ramana, K. Hari Prasad, A. P. John Pal, Ranjan K. Basak and Y. D. Vankar
Eur. J. Org. Chem. **2008**, 5731-5739.
109. $\text{HClO}_4 \cdot \text{SiO}_2$ catalysed synthesis of alkyl 3-deoxy-hex-2-enopyranosides from 2-hydroxy glucal ester: Application in the synthesis of a *cis*-fused bicyclic ether and a 4-amino-C-glucoside
 Preeti Gupta, Nitee Kumari, Aditi Agarwal and Y. D. Vankar
Org. Biomol. Chem. **2008**, 6, 3948-3956
108. Total Synthesis of L-(+)-Swainsonine and other Indolizidine Azasugars from D-Glucose
 M. Abrar Alam, Amit Kumar and Y. D. Vankar
Eur. J. Org. Chem. **2008**, 4972-4980.
107. Total Synthesis of (+)-Lentiginosine from D-Glucose
 M. Abrar Alam and Y. D. Vankar *Tetrahedron Lett.* **2008**, 49, 5534-5536.
106. Stereoselective synthesis of muco-quercitol, (+)-gala-quercitol and 5-amino-5-deoxy-D-vibo-quercitol from D-mannitol
 D. V. Ramana, Amit Kumar and Y. D. Vankar *Tetrahedron* **2008**, 64, 9117-9122.
105. Mild and efficient chemoselective deprotection of anomeric *O*-methyl glycosides using trityl tetrafluoroborate
 Amit Kumar, D. V. Ramana and Y. D. Vankar *J. Org. Chem.* **2008**, 73, 5993-5995.
104. Stereoselective synthesis of safingol and its natural stereoisomer from D-glycal
 K. Hariprasad , Ram Sagar and Y. D. Vankar *Tetrahedron Lett.* **2008**, 49, 4728-4730.
103. 2-Nitroglycals as powerful glycosyl Donors: Application in the Synthesis of Biologically Important Molecules
 R. R. Schmidt and Y. D. Vankar *Acc. Chem. Res.* **2008**, 41, 1059-1073.
102. Synthesis of hybrids of D-glucose and D-galactose with 1-deoxynojirimycin Analogues Using Ring Closing Metathesis
 Amit Kumar, G. K. Rawal, Y. D. Vankar *Tetrahedron* **2008**, 64, 2379-2390.
101. New method for chloroamidation of olefins. Application in the synthesis of N-glycopeptides and anticancer agents
 G.K. Rawal, Amit Kumar, U. Tawar and Y. D. Vankar
Org. Lett. **2007**, 9, 5171

100. Synthesis of new pyrrolidine based imino sugars as glycosidase inhibitors.
D. V. Ramana and Y. D. Vankar *Eur. J. Org. Chem.* **2007**, 5583-5589.
99. Conversion of glycals to 1-azido-2-iodosugars using N-iodosuccinimide/Na₃
(or KI/Oxone[®]) reagent systems: Application in the synthesis of methyl N-acetyl- α -D-
lividosaminide
Shikha Rani, G. K. Rawal, K. P. Madhusudanan and Y. D. Vankar
Synthesis **2007**, 294
98. Synthesis of chiral non-proteinogenic 4,5-dihydroxy tetrahydropyran derived α -amino
acids from D-Mannitol
Anita Brar and Y. D. Vankar *Tetrahedron Lett.* **2006**, 47, 9035
97. Nafion-H mediated selective deprotection of terminal isopropylidene acetals and trityl
ethers. Application in the synthesis of a substituted piperidone
Shikha Rani, G. K. Rawal, Amit Kumar and Y. D. Vankar
Tetrahedron Lett. **2006**, 47, 9117-9120
96. Hybrid sugars as glycosidase inhibitors *en-route* to 2-deoxy 2-amino C-glycosyl amino
acids
K. Jayakanthan and Y. D. Vankar *Tetrahedron Lett.* **2006**, 47, 8667-8671
95. A one pot selective deprotective acetylation of benzyl ethers and OTBDMS ethers using
the BF₃.Et₂O-NaI-Ac₂O reagent system
Anita Brar and Y. D. Vankar *Tetrahedron Lett.* **2006**, 47, 5207
94. Ceric ammonium nitrate in carbohydrate chemistry
Aditi Agarwal and Y. D. Vankar *Proc. Ind. Nat. Sci. Acad.* **2005**, 71A, 309
93. Synthesis of Conformationally Constrained C-Glycosyl α - and β -Amino acids and Sugar
Carbamino sugar Hybrids *via* Diels-Alder Reaction
K. Jayakanthan and Yashwant D. Vankar *Org. Lett.* **2005**, 7, 5441-5444
92. Glycosyl trichloroacetylcarbamate: A new glycosyl donor for O-glycosylation
K. Jayakanthan and Yashwant D. Vankar
Carbohydrate Research **2005**, 340, 2688
91. Bi(OTf)₃ and SiO₂-Bi(OTf)₃ as Effective Catalysts for Ferrier Rearrangement
J. Lokesh Babu, Anakshi Khare and Yashwant D. Vankar
Molecules **2005**, 10, 884-892.
90. Selective deprotection of terminal isopropylidene acetals and trityl ethers using HClO₄
supported on silica gel
Aditi Agarwal and Yashwant D. Vankar *Carbohydrate Research* **2005**, 340, 1661
89. Synthesis of novel hybrids of D-galactose with 1-deoxynojirimycin analogues as
glycosidase inhibitors.
B. Gopal Reddy and Yashwant D. Vankar
Angewandte Chemie Int. Ed. **2005**, 44, 2001-2004
88. Protic acid (HClO₄ supported on silica gel) mediated synthesis of 2,3-unsaturated-O-
glucosides and a chiral furan diol from 2,3-glycals
Aditi Agarwal, Shikha Rani and Yashwant D. Vankar
J. Org. Chem. **2004**, 70, 6137.
87. Trimethylsilylnitrate-Trimethylsilylazide: A Novel Reagent System for the Synthesis of
2-Deoxy Glycosyl Azides from Glycals: Application in the Synthesis of 2-Deoxy-beta-N-
glycopeptides B. Gopal Reddy, K.P. Madhusudanan and Yashwant D. Vankar.
J. Org. Chem. **2004**, 70, 2630.

86. Trimethylsilylnitrate: A useful reagent for direct synthesis of 2-deoxy-*O*-glycosides from glycals
B. Gopal Reddy and Yashwant D. Vankar *ARKIVOC* **2004**, Part (viii), 12-19.
85. NaNO₂-Ceric Ammonium Nitrate Mediated Conversion of Acrylic Esters and Baylis-Hillman derived Acrylic Esters into corresponding β-Nitro Acrylic Esters
K. Jayakanthan, K.P. Madhusudanan and Yashwant D. Vankar
Tetrahedron **2004**, *60*, 397-403.
84. LaCl₃.7H₂O/NaI/Benzyl Alcohol: A novel reagent system for regioselective hydration of glycals: Application in the synthesis of 1,6-dideoxynojirimycin.
Shikha Rani, Aditi Agarwal and Yashwant D. Vankar
Tetrahedron Lett. **2003**, *44*, 5001.
83. A convenient synthesis of methyl *N*-acetyl-α-D-lividosaminide from D-glucal
B. Gopal Reddy and Yashwant D. Vankar *Tetrahedron Lett.* **2003**, *44*, 4765-4767.
82. An efficient one step dihydroxylation of 1,2-glycals with oxone in acetone.
Shikha Rani, Y.D. Vankar *Tetrahedron Lett.* **2003**, *44*, 907-909.
81. Selective Deprotection of tert.-Butyldimethylsilyl Ethers using Nafion--H/ Sodium Iodide (or Bromodimethylsulfonium Bromide) in Methanol
Shikha Rani, J. Lokesh Babu and Yashwant D. Vankar
Synth. Commun. **2003**, *33*, 4043.
80. Ytterbium triflate (and trimethylsilyl triflate) catalysed isomerisation of glycidic esters to α-hydroxy-β,γ-unsaturated esters and their conversion into cyclopentanoids using Johnson-Claisen rearrangement
R. Kumareswaran, S.P. Shahi, S. Rani, A. Gupta, K.P. Madhusudanan, Y.D. Vankar
ARKIVOC **2002**, *126-135*.
79. An easy route to 2-amino-β-C-glycosides via conjugate addition to 2-nitro glycals
K. Pachamuthu, A. Gupta, J. Das, R.R. Schmidt, Y.D. Vankar
Eur. J. Org. Chem. **2002**, (9), 1479-1483.
78. Ceric Ammonium Nitrate Catalyzed Tetrahydropyranylation of Alcohols and Synthesis of 2-Deoxy-*O*-Glycosides
K. Pachamuthu, Y.D. Vankar *J. Org. Chem.* **2001**, *66*, 7511-7513.
77. Nafion-H catalyzed Mukaiyama aldol condensations and hetero Diels-Alder reactions using aldehydes and imines. Part 15: Generals synthetic methods
B. Gopal Reddy, R. Kumareswaran, Y.D. Vankar
Tetrahedron Letters **2001**, *42*, 7493.
76. Short syntheses of (-)-Coniine and Pipecoline via ring closing metathesis.
K. Pachamuthu and Y.D. Vankar *J. Organomet. Chem.* **2001**, *624*, 359.
75. Preparation of 3-trifluoromethyl-2-cycloalkenones by the oxidative rearrangement of trifluoromethylated allylic alcohols with pyridinium chlorochromate
G.K. SuryaPrakash, E.C. Tongco, T. Mathew, Y.D. Vankar, G.A. Olah
J. Fluorine Chemistry **2000**, *101*, 199.
74. Indium Trichloride: A useful catalyst for Ionic Diels-Alder reaction.
B. Gopal Reddy, R. Kumareswaran, Y.D. Vankar
Tetrahedron Letters **2000**, *41*, 10333.
73. Nafion H mediated acetylation of alcohols.
R. Kumareswaran, K. Pachamuthu and Y.D. Vankar *Synlett* , **2000**, 1652.

72. Synthesis of C-2 methylene O- and C-glycosides and sugar derived α -methylenevalerolactones from C-2-actoxymethyl glycals.
A. Gupta and Y.D. Vankar *Tetrahedron* **2000**, *56*, 8525-8531.
71. Chemistry of glycosphingolipids-Carbohydrate molecules of biological significance.
Y.D. Vankar and R.R. Schmidt *Chemical Society Reviews* **2000**, 201.
70. Trimethylsilylnitrate-chromium trioxide and trimethylsilylnitrate-DMSO: novel reagent system for one step conversion of olefins into a-nitro ketones and cyclic ethers into lactones.
S. P. Shahi, A. Gupta, S. V. Pitre, M. V. Reddy, R. Kumareswaran and Y. D. Vankar, *J. Org. Chem.*, **1999**, *64*, 4509.
69. Nafion-H catalysed isomerisation of glycidic esters to α -hydroxy- β,γ -unsaturated esters: Application in the synthesis of a trifluoromethylated vinylic epoxide.
M. Hachoumy, T. Mathew, E.C. Tongco, Y.D. Vankar, G.K.S. Prakash, G.A. Olah *Synlett* **1999**, 363.
68. Zeolite (H-ZSM 5) catalysed regio and stereoselective reeducation of 2,3-epoxy alcohols to 1,2-diols and vinylic epoxides to homoallylic alcohols with sodium cyanoborohydride.
A. Gupta, and Y.D. Vankar *Tetrahedron Lett.* **1999**, *40*, 1369.
67. Studies in Lewis acid and LiClO₄ (or Nafion-H) catalysed ionic Diels-Alder reactions of chiral and achiral olefinic acetals respectively.
R. Kumareswaran, P.S. Vankar, M.V. Ram Reddy, R. Roy and Y.D. Vankar *Tetrahedron* **1999**, *55*, 1099.
66. Nef reaction of benzylic and secondary nitro compounds using bis(trimethylsilyl)peroxide.
S.P. Shahi and Y.D. Vankar *Synth. Commun.* **1999**, *29*, 4321.
65. Stereo and regioselective palladium catalysed reduction of Baylis-Hillman products.
K. Pachamuthu and Y.D. Vankar *Tetrahedron Lett.* **1998**, *39*, 5439.
64. Applications of trimethylsilyl halides-oxidants combinations in organic synthesis.
P.S. Vankar, M.V. Ram Reddy and Y.D. Vankar, *Org. Prep. Proc. Int.* **1998**, *30* (4), 373. [**Invited Review Article**]
63. Palladium catalysed reactions of Baylis-Hillman products: Synthesis of some useful intermediates.
R. Kumareswari and Y.D. Vankar *Synth. Commun.* **1998**, *28*, 2291.
62. Recent developments in ionic Diels-Alder reaction.
(An article in honour of Prof. Sukh Dev in a special issue of the journal)
R. Sanghi, P.S. Vankar, and Y.D. Vankar *J. Indian Chem. Soc.* **1998**, *75* 709.
61. Preparation, NMR and AB INITIO/IGLO/GIAO-MP₂ study of the elusive protonated fluoroformic acid and fluorocarbonyl carbocation.
G.A. Olah, A. Burichter, T. Mathew, Y.D. Vankar, G. Rasul, and G.K.S. Prakash *Angew. Chemie. Int. Ed. in Engl.* **1997**, *36*, 1871.
60. Palladium catalysed allylic substitution via *in situ* activation of allylic alcohols.
R. Kumareswari, and Y.D. Vankar *Tetrahedron Lett.*, **1997**, *38*, 8421.
59. Zeolite (H-ZSM-5) catalysed oxidation of alcohols with chromium trioxide.
S.V. Pitre, M.V. Ram Reddy and Y.D. Vankar *J. Chem. Res.* **1997**, 462.
58. Chlorotrimethylsilane catalysed acylation of alcohols.
R. Kumareswaran, A. Gupta, and Y.D. Vankar . *Synth. Commun.* **1997**, *27*, 277.

57. Acetoxyseleination of olefins with selenium dioxide-acetic anhydride reagent system.
 S.V. Pitre, M.V. Ram Reddy, Y.D. Vankar and K.P. Madhusudanan
Synth. Commun. **1997**, 27, 267.
56. Zeolite (H-ZSM-5) catalysed reduction of conjugated nitroolefins with sodium cyanoborohydride.
 A. Gupta, A. Haque and Y.D. Vankar
J. Chem. Soc., Chem. Commun. **1996**, 1653.
55. Synthesis of chiral vinylic epoxides and α -hydroxy- β,γ -unsaturated esters via (-)-menthol based auxiliary and enzymatic resolution respectively.
 P.S. Vankar, I. Bhattacharya and Y.D. Vankar
Tetrahedron:Asymmetry **1996**, 7, 1683.
54. Zeolite (H-ZSM-5) catalysed regioselective isomerisation of glycidic esters to α -hydroxy- β,γ -unsaturated esters.
 M.V. Ram Reddy, S.V. Pitre, I. Bhattacharya and Y.D. Vankar
Synlett **1996**, 241.
53. Palladium catalysed conversion of vinyl bromoallylic alcohols into corresponding vinylic aldehydes (or ketones) and oxidation of secondary alcohols to ketones.
 S.V. Pitre, P.S. Vankar and Y.D. Vankar *Tetrahedron* **1996**, 52, 12291.
52. A novel one pot synthesis of α -nitroketones from olefins using trimethylsilyl-nitrate-chromium trioxide reagent system.
 M.V. Ram Reddy, R. Kumareswaran and Y.D. Vankar
Tetrahedron Lett. **1995**, 36, 7149.
51. A one step conversion of olefins into α -azidoketones using azidotrimethylsilane-chromium trioxide.
 M.V. Ram Reddy, R. Kumareswaran and Y.D. Vankar
Tetrahedron Lett. **1995**, 36, 6751.
50. A novel one pot nitroacetamidation of olefins using ceric ammonium nitrate-sodium nitrate-acetonitrile reagent system.
 M.V. Ram Reddy, B. Mehrotra, and Y.D. Vankar
Tetrahedron Lett. **1995**, 36, 4861.
49. Reactions of 2-phenylthio-2-cycloalkenones and 2-[phenylthio(methyl)]-2-cycloalkenones: Synthesis of some useful chiral and achiral intermediates.
 Y.D. Vankar, , G. Kumaravel, , I. Bhattacharya, , P.S. Vankar, and K. Kaur,
Tetrahedron **1995**, 51, 4829.
48. Chiral acetals in organic synthesis. Regioselective synthesis of 2- and 3-hydroxy acetals from 2,3-olefinic acetals: Reinvestigation and further applications.
 Y.D. Vankar, N.C. Chaudhuri and M.V. Ram Reddy
Tetrahedron **1994**, 50, 11057.
47. A convenient synthesis of vinyl epoxides from glycidic esters via α -hydroxy- β,γ -unsaturated esters.
 I. Bhattacharya, K. Shah, P.S. Vankar and Y.D. Vankar
Synth. Commun. **1993**, 23, 2405.
46. Development of newer synthetic methodologies in organic synthesis.
 Y.D. Vankar
J. Indian Chem. Soc. **1992**, 67, 6 (Award Lecture)

45. Synthesis of β -O-glycosides using enol ether and imidate derived leaving groups. Emphasis on the use of nitrile as solvent.
 Y.D. Vankar, P.S. Vankar, M. Behrendt and R.R. Schmidt
Tetrahedron **1991**, 47, 9985.
44. Preparation of α -nitroepoxides: Preparation of useful intermediates via nucleophilic ring opening of α -nitroepoxides.
 Y.D. Vankar, K. Shah, A. Bawa and S.P. Singh
Tetrahedron **1991**, 47, 8883.
43. Facile conversion of tetrahydropyranylated alcohols to the corresponding bromides and iodides using metal halides and chlrottrimethylsilane (or boron trifluoride etherate).
 Y.D. Vankar and K. Shah *Tetrahedron Lett.* **1991**, 32, 1081.
42. Reactions of 2-nitro and 3-nitro olefinic acetals: Preparation of useful synthetic intermediates.
 Y.D. Vankar, G. Kumaravel and A. Bawa *Tetrahedron* **1991**, 47, 2027.
41. Synthesis of functionalised bicyclic α -methylene- γ -butyrolactones via radical cyclisation approach.
 Y.D. Vankar and N.C. Chaudhuri *Synth. Commun.* **1991**, 21, 885.
40. Preparation of H(3) isomerization of C(15)-substituted Deplanchine derivatives. Synthesis of Geissoschizol and Geissoschizine.
 E. Wenkert, M. Guo, M.J. Pestchanker, Y-J. Shi and Y.D. Vankar
J. Org. Chem. **1989**, 54, 1166.
39. A facile conversion of α -nitroepoxides into 1,2-diones and α -iodoketones.
 Y.D. Vankar, R.K. Saksena and A. Bawa *Chemistry Lett.* **1989**, 1241.
38. Regioselective isomerisation of glycidic esters with boron trifluoride ether (or chlorotrimethylsilane) into α -hydroxy- β , γ -unsaturated esters.
 Y.D. Vankar, N.C. Chaudhuri and P.S. Vankar *J. Chem. Res.* **1989**, 178.
37. Ritter reaction with cyclopropyl ketones and cyclopropyl alcohols: Synthesis of N-acyl- γ -keto and N-acylhomoallyl amines.
 Y.D. Vankar, G. Kumaravel and C.T. Rao *Synth. Commun.* **1989**, 19, 2181.
36. Regioselective redctions of 2,3-epoxy acetals with Zn-ClSiMe₃ and LiAlH₄: Convenient synthesis of 1,2- and 1,3-diones.
 Y.D. Vankar, N.C. Chaudhuri and C.T. Rao *Tetrahedron Lett.* **1987**, 28, 551.
35. Sodium iodide/ Chlorotrimethylsilane (boron trifluoride etherate) or zinc-chlorotrimethylsilane: Mild reagent systems for the conversion of enediones into 1,4-diketones.
 Y.D. Vankar, G. Kumaravel, N. Mukherjee and C.T. Rao
Synth. Commun. **1987**, 17, 181.
34. Carbon-carbon bond forming additions to 1-alkyl-3-acylpypidinium salts.
 E. Wenkert, E.C. Angell, J. Drexler, P.D.R. Moeller, J.St. Pyrek, Y. Shi, M. Sultana and Y.D. Vankar *J. Org. Chem.* **1986**, 51, 2995.
33. Palladium catalysed isomerisation of 2,3-epoxyalcohols to α - and β -hydroxy ketones.
 Y.D. Vankar, N.C. Chaudhuri and S.P. Singh *Synth. Commun.* **1986**, 16, 1621.
32. Palladium(0) catalysed isomerisation of α -nitroepoxides into 1,2-diketones.
 Y.D. Vankar and S.P. Singh *Chemistry Lett.* **1986**, 1939.
31. NaI/BF₃.Et₂O: A mild reagent for the conversion of benzylic and allylic alcohols into iodides and sulfoxides into sulfides.

- Y. D. Vankar and C.T. Rao *Tetrahedron Lett.* **1985**, 26, 2717.
30. Reaction of sulfoxides with nitriles in the presence of trifluoroacetic anhydride and trifluoroacetic acid: A case of Ritter reaction on Pummerer intermediate.
Y. D. Vankar and C.T. Rao *Tetrahedron* **1985**, 41, 3405.
29. A simple synthesis of 3-nitrocycloakenones and their acetals.
Y.D. Vankar and A. Bawa *Synth. Commun.* **1985**, 15, 1253.
28. Selective cleavage of benzyl ethers using boron trifluoride etherate-sodium iodide reagent system. Y. D. Vankar and C.T. Rao *J. Chem. Res.* **1985**, 232.
27. N-chlorosuccinimide/sodium iodide: A convenient source of N-iodosuccinimide.
Synthesis of α -iodocarbonyl compounds and trans-1,2-iodoacetates.
Y.D. Vankar and G. Kumaravel *Tetrahedron Lett.* **1984**, 25, 233.
26. Synthesis of 2H-1,3-benzothiazines via a modified Ritter reaction.
Y.D. Vankar and D.K. Thakur *Synthesis* **1983**, 223.
25. Zinc/Chlorotrimethylsilane: A novel reducing system for the conversion of epoxides into alcohols.
Y.D. Vankar, P.S.S. Arya and C.T. Rao *Synth. Commun.* **1983**, 13, 869.
24. Reduction of sulfoxides to sulfides by chlorosulfonyl isocyanate/sodium iodide.
K.S. Keshavamurthy, Y.D. Vankar and D.N. Dhar
Indian J. Chem. **1983**, 22B, 504.
23. Preparation of acid anhydrides, amides and esters using chlorosulfonyl isocyanate as a dehydrating agent.
K.S. Keshavamurthy, Y.D. Vankar and D.N. Dhar *Synthesis* **1982**, 506.
22. Reaction of benzenesulphenyl chloride with α,β -unsaturated compounds.
N.N. Bhongle, V.N. Gogte and Y.D. Vankar
Indian J. Chem. **1982**, 21B, 724.
21. A short synthesis of (\pm)-Yohimbine.
E. Wenkert, J.St. Pyrek, S. Uesato and Y.D. Vankar
J. Am. Chem. Soc. **1982**, 104, 2244.
20. Short syntheses of Hirsutine and Geissoschizine.
E. Wenkert, Y.D. Vankar and J.S. Yadav *J. Am. Chem. Soc.* **1980**, 102, 7971.
19. Improved transformation of nitro compounds into carbonyl compounds by hydrogen peroxide/potassium carbonate.
G.A. Olah, M. Arvanaghi, Y.D. Vankar and G.K.S.Prakash *Synthesis* **1980**, 662.
18. Deoxygenation of pyridine N-oxides with sodium iodide-trimethyl(ethyl)amine-/sulfur dioxide complexes.
G.A. Olah, M. Arvanaghi and Y.D. Vankar *Synthesis* **1980**, 660.
17. Reduction of α -haloketones with sodium iodide/chlorotrimethylsilane.
G.A. Olah, M. Arvanaghi and Y.D. Vankar *J. Org. Chem.* **1980**, 45, 3531.
16. Dimethyl sulfoxide/chlorosulfonyl isocyanate: An extremely mild reagent for oxidation of alcohols to carbonyl compounds.
G.A. Olah, Y.D. Vankar and M. Arvanaghi *Synthesis* **1980**, 141.
15. Mild fragmentative C-C bond cleavage of α -hydroxyketoximes with trifluoromethanesulfonic anhydride, trifluoroacetic anhydride or trifluoromethane sulfonyl chloride.
G.A. Olah, Y.D. Vankar and A.L. Berrier *Synthesis* **1980**, 45.

14. Deoxygenation of sulfoxides with sodium iodide/iodine/trimethyl(ethyl)amine-/sulfur dioxide or sodium iodide/pyridine/sulfur trioxide complexes. G.A. Olah, Y.D. Vankar and M. Arvanaghi *Synthesis* **1979**, 984.
13. Conversion of epoxides and enamines into α -haloketones using halodimethylsulfonium halides. G.A. Olah, Y.D. Vankar and M. Arvanaghi *Tetrahedron Lett.* **1979**, 3635.
12. Formic anhydride. G.A. Olah, Y.D. Vankar, M. Arvanaghi and J. Sommer *Angew. Chemie Int. Ed.* **1979**, 18, 614.
11. Oxidation of thiols to disulfides with bromodimethylsulfonium bromide. G.A. Olah, M. Arvanaghi and Y.D. Vankar *Synthesis* **1979**, 721.
10. Dethioacetalization with bromodimethylsulfonium bromide. G.A. Olah, Y.D. Vankar, M. Arvanaghi and G.K.S. Prakash *Synthesis* **1979**, 720.
9. Pyridinium polyhydrogen fluoride (30% pyridine-70% hydrogen fluoride), a convenient reagent organic fluorination reactions, G.A. Olah, J.T. Welch, Y.D. Vankar, M. Nojima, I. Kerekes and J.A. Olah *J. Org. Chem.* **1979**, 44, 3872.
8. Preparation of nitriles from amides and aldoximes with chlorosulfonyl isocyanate, an effective and mild dehydrating agent. G.A. Olah, Y.D. Vankar and A. Garcia-Luna *Synthesis* **1979**, 227.
7. Oxidative cleavage of ketoximes and tosylhydrazone with aqueous bromine. G.A. Olah, Y.D. Vankar and G.K.S. Prakash *Synthesis* **1979**, 113.
6. Reduction of α -haloketones with sodium iodide/trimethyl(ethyl)amine-sulfur dioxide or pyridine-sulfur trioxide complexes. G.A. Olah, Y.D. Vankar and A.P. Fung *Synthesis* **1979**, 59.
5. Novel conversion of primary aliphatic and arylaliphatic nitro compounds into nitriles with trimethyl (ethyl) amine-sulfur dioxide complexes or hexamethylphosphorous triamide. G.A. Olah, Y. D. Vankar and B.G.B. Gupta *Synthesis* **1979**, 36.
4. Preparation of nitriles via dehydration of aldoximes with trimethylamine-sulfur dioxide complex. G.A. Olah and Y. D. Vankar *Synthesis* **1978**, 702
3. Synthesis of 1,4-oxathian-2-one, 5-methyl-1,4-oxathian-2-one and 1,4-oxathiepan-2-one. D.I. Davies, L. Hughes, Y.D. Vankar and J.E. Baldwin *J. Chem. Soc. Perkin Trans. I* **1977**, 2476.
2. Tautomerism in 2-arylaminoethylene cycloalkenones. V.N. Gogte, C.I. Jose, A.G. Namjoshi, Y.D. Vankar and B.D. Tilak *Indian J. Chem.* **1977**, 15B, 778.
1. Synthesis of heterocyclic compounds: Tetrahydrophenanthridines, tetrahydro acridines and hydroxyacridines. Y. D. Vankar, V. N. Gogte and B. D.