

Tetrahedron: Asymmetry Vol. 16, No. 3, 2005

Contents

COMMUNICATION

The first asymmetric addition of organogallium to aldehydes catalyzed by chiral titanium catalystspp 605–608Zhenya Dai, Chengjian Zhu,* Minghua Yang, Yunfa Zheng and Yi Pan*pp 605–608



The asymmetric addition of trialkylgallium to aldehydes was realized using chiral titanium catalyst with ees up to 84%.

ARTICLES

Polymer-supported chiral phosphinooxathiane ligands for palladium-catalyzed pp 609-614 asymmetric allylations Hiroto Nakano,* Kouichi Takahashi, Yuri Suzuki and Reiko Fujita Ligands 1a-c Nι $Nu = CH(CO_2Me)_2$ [PdCl(η³-C₃H₅)]₂ NHCH2C6H5 Phthalimide Nu b: R = PS-Et-Gel-MB-CO Nu = CH(CO₂Me)₂: 22%, 96% ee c: R = Tenta NHCH₂C₆H₅: 90%, 99% ee Pha 1a-c

Polymer-supported phosphinooxathianes 1a-c were synthesized easily and applied to Pd-catalyzed asymmetric allylic alkylation and amination. Enantiomeric excesses of up to 99% were obtained using 1a.

Thermolysin catalyses the synthesis of cyclodextrin esters in DMSO

Ninfa Rangel Pedersen, Janni Brogaard Kristensen, Guy Bauw, Bart Jan Ravoo, Raphael Darcy, Kim Lambertsen Larsen and Lars Haastrup Pedersen*



Heptakis(2-O-decanoyl)- β -cyclodextrin was synthesised from native β -cyclodextrin and vinyl decanoate in a one-step reaction catalysed by thermolysin in DMSO. The regioselectivity was directed primarily at the C-2 position but depended on the chain length of the acyl donor.

First synthesis of 4,5-O-isopropylidene-6-thio-D-galactono-1,6-lactone as a precursor of D-galactothioseptanose

pp 623-627

Ludovic Chaveriat, Imane Stasik,* Gilles Demailly and Daniel Beaupère



Enzymatic resolution of *N***-protected-β**³**-amino methyl esters, using lipase B from** *Candida antarctica* **pp 629–634** Patricia Flores-Sánchez, Jaime Escalante* and Edmundo Castillo



Synthesis, NMR conformational studies and host-guest behaviour of new (+)-tartaric acid derivatives

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pp 641-645

Sacha Legrand, Hannu Luukinen, Roland Isaksson, Ilkka Kilpeläinen, Mikael Lindström, Ian A. Nicholls and C. Rikard Unelius*



Preparation of enantiopure inherently chiral calix[5]arenes Shao-Yong Li, Qi-Yu Zheng, Chuan-Feng Chen^{*} and Zhi-Tang Huang^{*}



A simple catalytic route to naproxen

Sanjeev Kumar and Uma Ramachandran*

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Asymmetric synthesis of α -sulfinylphosphonates in the thiolane series

Piotr Kielbasinski,* Piotr Lyzwa, Marian Mikolajczyk, Mihaela Gulea,* Margareth Lemarié and Serge Masson



The influence of solvent choice, acid activation and surfactant addition on the hydrolytic kinetic resolution (HKR) of terminal epoxides

Sven Aerts, Anita Buekenhoudt, Herman Weyten, Ivo F. J. Vankelecom^{*} and Pierre A. Jacobs



Several factors influencing the HKR of terminal epoxides are investigated. These factors include: solvent choice for the homogeneous reaction, acid activation of the catalyst and surfactant use in the solvent-free reaction.

Boron trifluoride etherate-assisted ring opening of ethylene oxide by a chiral organolithium: enantioselective synthesis of (R)-N-Boc-2-(2-hydroxyethyl)pyrrolidine Xiaohu Deng and Neelakandha S. Mani^{*} pp 661-664

 $\begin{array}{c|c} & s-\text{BuLi, (-)-Sparteine,} \\ & & Et_2O, -78 \,^{\circ}\text{C}, 4 \, h \\ & & & \\ Boc \\ 2 & & BF_3 \cdot Et_2O, -78 \,^{\circ}\text{C}, 2 \, h \\ \end{array} \begin{array}{c} & & & \\ & & N \\ & & & & \\ & &$

Asymmetric synthesis of both enantiomers of esters and γ -lactones from optically active 1-chlorovinyl *p*-tolyl sulfoxides and lithium ester enolates with the formation of a tertiary or a quaternary carbon stereogenic center at the β -position

Shimpei Sugiyama and Tsuyoshi Satoh*



Stereocontrolled intramolecular *meta*-arene–alkene photocycloaddition reactions using chiral tethers: efficiency of the tether derived from 2,4-pentanediol Takashi Sugimura,* Akiko Yamasaki and Tadashi Okuyama

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Wen-Jian Shi, Jian-Hua Xie and Qi-Lin Zhou*



Asymmetric hydrogenation of chiral vinyloxazaborolidines under ambient conditions Soya Gamsey, Kelly DeLaTorre and Bakthan Singaram^{*}

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Synthesis of β -adrenergic blockers (*R*)-(-)-nifenalol and (*S*)-(+)-sotalol via a highly efficient resolution pp 717–725 of a bromohydrin precursor

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Chiral C_2 -symmetric ligands containing two binaphthyl units linked by 2,2'-bipyridyl bridge in asymmetric catalysis

Xiao-Li Bai, Chuan-Qing Kang, Xu-Dong Liu and Lian-Xun Gao*



 $\begin{array}{c} \operatorname{Galf} \underbrace{15}_{\beta} & \operatorname{Galf} \underbrace{16}_{\beta} & \operatorname{Galf} \underbrace{15}_{\beta} & \operatorname{Galf} \longrightarrow \operatorname{ODodecyl} \\ 1 & \alpha & 1 \\ \operatorname{Galp} & \operatorname{Galp} \end{array}$

First synthesis of 5,6-branched galacto-hexasaccharide, the dimer of the trisaccharide repeating unit of the cell-wall galactans of *Bifidobacterium catenulatum* YIT 4016 Guohua Zhang, Mingkun Fu and Jun Ning*

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Kaoru Fuji and Takeo Kawabata*

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