Graphical abstracts

Structure control within poly(amidoamine) dendrimers: size, shape and regio-chemical mimicry of globular proteins

Tetrahedron 59 (2003) 3799

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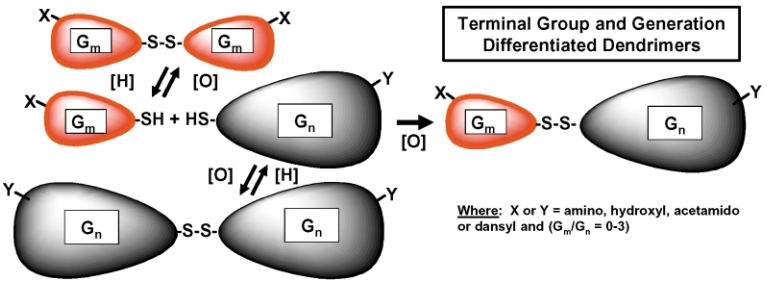

A new class of protein mimics: preparation and electrophoretic properties of polycationic β-alanine-based dendrimers

Tetrahedron 59 (2003) 3815

Hak-Fun Chow,[a,*] Tony K.-K. Mong,[a]
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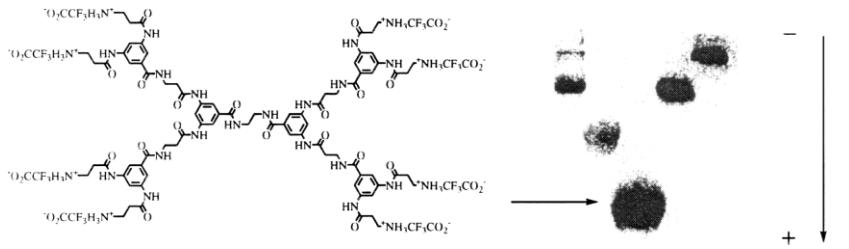

Dendrimers with tetrabenzoporphyrin cores: near infrared phosphors for in vivo oxygen imaging

Tetrahedron 59 (2003) 3821

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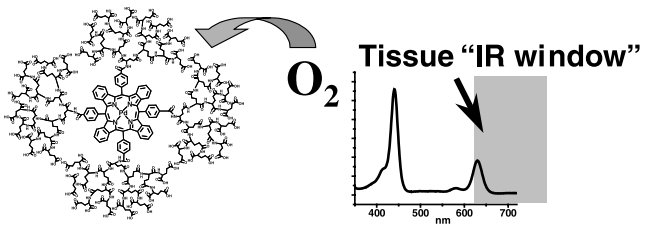

A fullerene core to probe dendritic shielding effects

Tetrahedron 59 (2003) 3833

Yannick Rio,[a] Gianluca Accorsi,[b] Hélène Nierengarten,[c] Cyril Bourgogne,[a]
Jean-Marc Strub,[c] Alain Van Dorsselaer,[c,*] Nicola Armaroli[b,*] and Jean-François Nierengarten[a,*]

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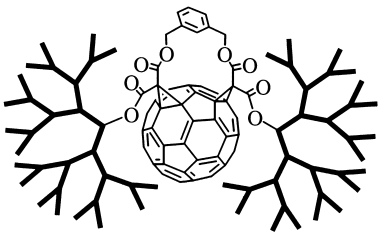
[c]*Laboratoire de Spectrométrie de Masse Bio-organique, Ecole de Chimie, Polymères et Matériaux (ECPM), Université Louis Pasteur and CNRS (UMR 7509), 67037 Strasbourg, France*



Dendrimers with a cyclam core. Absorption spectra, multiple luminescence, and effect of protonation

Tetrahedron 59 (2003) 3845

Christophe Saudan,[a] Vincenzo Balzani,[a,*] Paola Ceroni,[a] Marius Gorka,[b] Mauro Maestri,[a,*] Veronica Vicinelli[a] and Fritz Vögtle[b,*]

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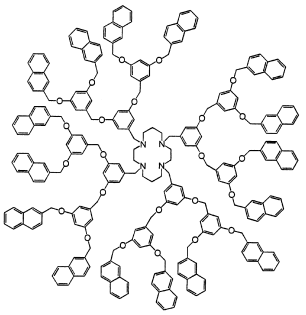
[b]*Kekulé-Institut für Organische Chemie und Biochemie der Universität Bonn, Gerhard-Domagk Strasse 1, D-53121 Bonn, Germany*

When cyclam (1,4,8,11-tetraazacyclotetradecane) is functionalised with naphthyl-terminated Frèchet-type drendrons, three different emission bands (naphthyl localized, excimer, and exciplex) are observed. The cyclam core can undergo mono- and di-protonation processes, which are accompanied by strong changes in the emission properties of the dendrimers.

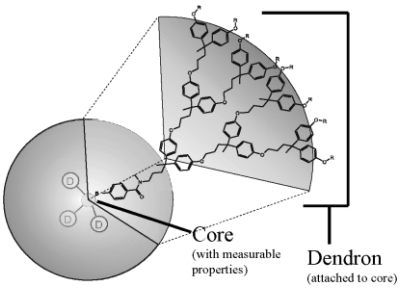


Dendritic encapsulation-roles of cores and branches

Tetrahedron 59 (2003) 3853

Tyson L. Chasse, Joshua C. Yohannan, Namjin Kim, Qun Li, Zemin Li and Christopher B. Gorman*

Department of Chemistry, North Carolina State University, Box 8204 Raleigh, NC 27695-8204, USA



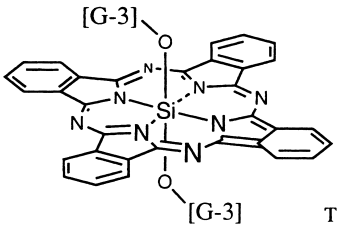
Phthalocyanine-centred and naphthalocyanine-centred aryl ether dendrimers with oligo-(ethyleneoxy) surface groups

Tetrahedron 59 (2003) 3863

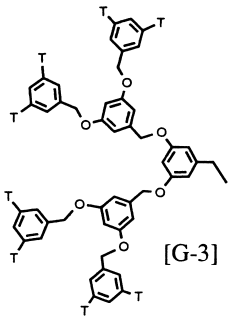
Matthew Brewis, Madeleine Helliwell and Neil B. McKeown*

Department of Chemistry, University of Manchester, Oxford Road, Manchester M13 9PL, UK

The synthesis of phthalocyanine-centred and naphthalocyanine-centred aryl ether dendrimers possessing oligo(ethyleneoxy) surface groups with solubility in polar protic solvents is described.



$T = O(CH_2CH_2O)_3CH_3$



Dendrimers as potential drug carriers; encapsulation of acidic hydrophobes within water soluble PAMAM derivatives

Tetrahedron 59 (2003) 3873

A. E. Beezer,[a] A. S. H. King,[b] I. K. Martin,[b] J. C. Mitchel,[a] L. J. Twyman[b,*] and C. F. Wain[b]

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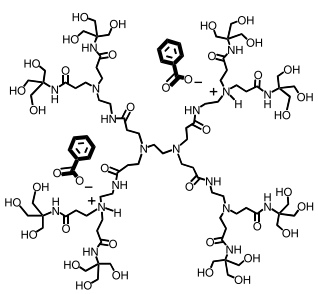
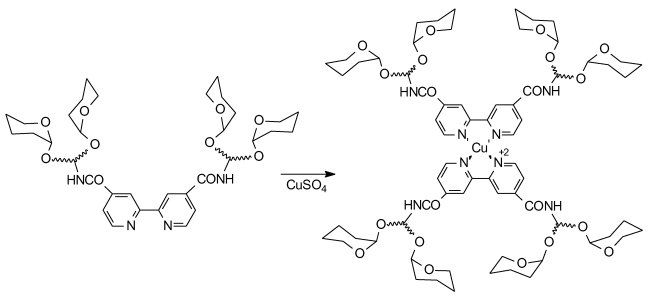


Cu(II)-Self-assembling bipyridyl-glycoclusters and dendrimers bearing the Tn-antigen cancer marker: syntheses and lectin binding properties

Tetrahedron 59 (2003) 3881

René Roy* and Jin Mi Kim

Departement of Chemistry and Biochemistry, Université du Québec à Montréal, P.O. Box 8888, Succ. Centre-Ville, Montreal, Que. Canada H3C 3P8



'Sugaring' carbosilane dendrimers via hydrosilylation

Tetrahedron 59 (2003) 3895

Mike M. K. Boysen and Thisbe K. Lindhorst*

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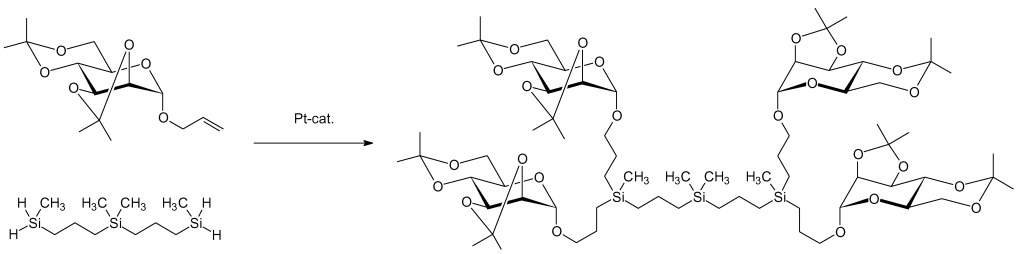

Synthesis and chiroptical properties of a new type of chiral depsipeptide dendrons

Tetrahedron 59 (2003) 3899

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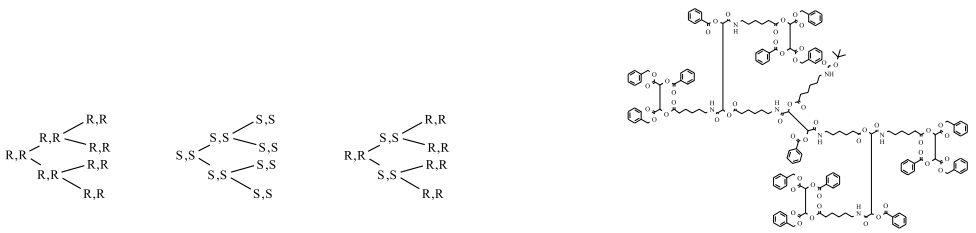

'Locking' dendrimer conformation through metal coordination

Tetrahedron 59 (2003) 3917

Mark R. Rauckhorst, Paul J. Wilson, Susan A. Hatcher, Christopher M. Hadad and Jon R. Parquette*

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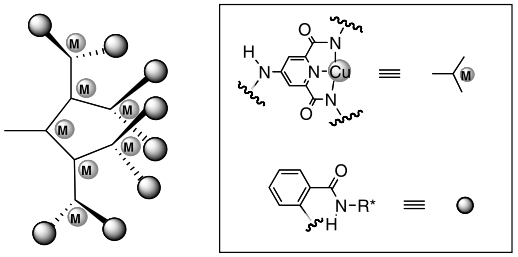
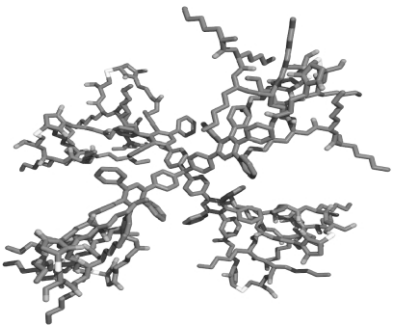


Peptide-functionalized polyphenylene dendrimers

Tetrahedron 59 (2003) 3925

Andreas Herrmann, Gueorgui Mihov, Guido W. M. Vandermeulen, Harm-Anton Klok and Klaus Müllen*

Max Planck Institute for Polymer Research, Ackermannweg 10, D-55128 Mainz, Germany



Synthesis of novel dendrimers containing pyrimidine units

Tetrahedron 59 (2003) 3937

Wouter Maes,[a] David B. Amabilino[b] and Wim Dehaen[a,*]

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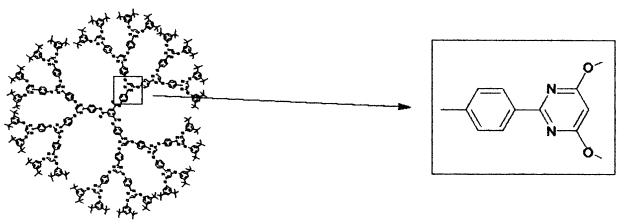
[b]*Institut de Ciència de Materials de Barcelona (CSIC), 08193 Bellaterra, Spain*

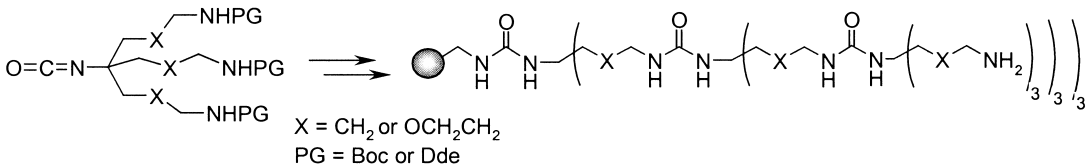


Solid-phase construction: high efficiency dendrimer synthesis using AB_3 isocyanate-type monomers

Tetrahedron 59 (2003) 3945

Sylvain Lebreton, Siew-Eng How, Monika Buchholz, Boon-Ek Yingyongnarongkul and Mark Bradley*

Department of Chemistry, University of Southampton, Southampton, Hampshire SO17 1BJ, UK



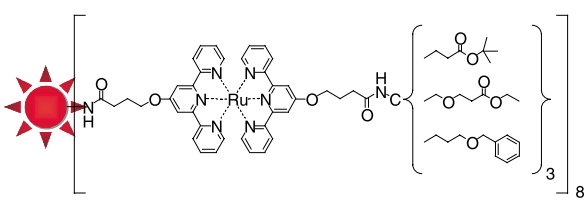
Metallodendrimers: homo- and heterogeneous tier construction by bis(2,2′:6′,2″-terpyridinyl)Ru(II) complex connectivity

Tetrahedron 59 (2003) 3955

George R. Newkome,* Kyung Soo Yoo, Seok-Ho Hwang and Charles N. Moorefield

Departments of Chemistry and Polymer Science, The University of Akron, Akron, OH 44325, USA

Heterogeneous surfaced dendrimers were constructed via a combinatorial-style, organometallic monomer attachment.



Surface, core, and structure modifications of phosphorus-containing dendrimers. Influence on the thermal stability

Tetrahedron 59 (2003) 3965

Cédric-Olivier Turrin,[a] Valérie Maraval,[a] Julien Leclaire,[a] Eric Dantras,[b] Colette Lacabanne,[b] Anne-Marie Caminade[a,*] and Jean-Pierre Majoral[a,*]

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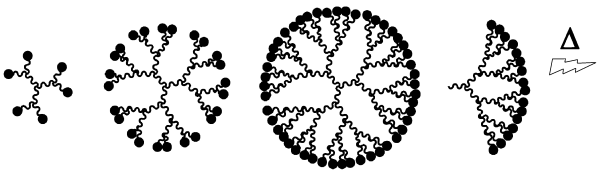
[b]*Laboratoire de Physique des Polymères, CIRIMAT, Université Paul Sabatier, 31062 Toulouse Cedex 4, France*



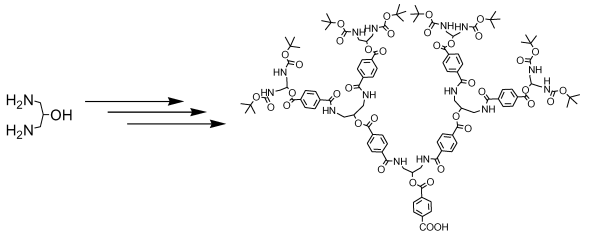
Synthesis and properties of polyaromatic dendrimers possessing a repetitive amide–ester coupling sequence

Tetrahedron 59 (2003) 3975

Barbara Romagnoli,[a] Peter R. Ashton,[b] Laurence M. Harwood,[a] Douglas Philp,[c] David W. Price,[a] Melanja H. Smith[c] and Wayne Hayes[a,*]

[a]*School of Chemistry, The University of Reading, Whiteknights, Reading, Berkshire RG6 6AD, UK*
[b]*School of Chemical Sciences, The University of Birmingham, Edgbaston, Birmingham B15 2TT, UK*
[c]*Centre for Biomolecular Sciences, School of Chemistry, University of St. Andrews, North Haugh, St. Andrews, Fife KY16 9ST, UK*

A series of novel polyaromatic dendrimers that feature *tris*-(2-ethylamino)amine as the central core unit has been synthesized up to the third generation by employing a convergent growth strategy.

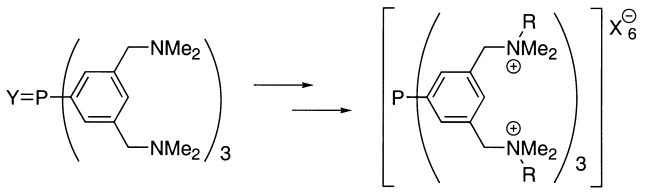


Design and synthesis of tris[bis(benzylammonium)-aryl]phosphines with bulky *meta*-substituents

Tetrahedron 59 (2003) 3989

Robert Kreiter, Robertus J. M. Klein Gebbink and Gerard van Koten*

Department of Metal-Mediated Synthesis, Debye Institute, Utrecht University, Padualaan 8, NL-3784 CH Utrecht, The Netherlands



Dendriphos

Supramolecular dendrimer chemistry: using dendritic crown ethers to reversibly generate functional assemblies

Tetrahedron 59 (2003) 3999

Graham M. Dykes and David K. Smith*

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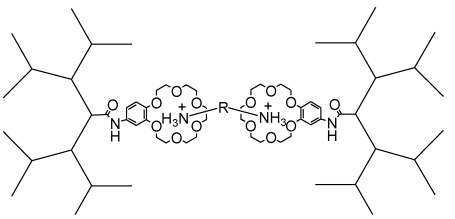
Using supramolecular chemistry, new dendritic supermolecules can be reversibly assembled and disassembled, with some of the assemblies exhibiting gel-phase materials properties.

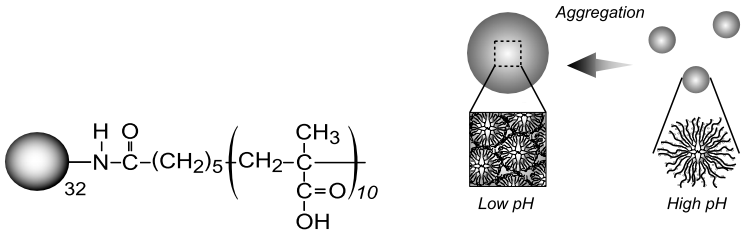


Aggregation properties of oligo(methacrylic acid)-shelled dendrimer and its microenvironment in aqueous solutions

Tetrahedron 59 (2003) 4011

Masazo Niwa,* Tetsuya Higashizaki and Nobuyuki Higashi*

Department of Molecular Science & Technology, Faculty of Engineering, Doshisha University, Kyo-tanabe, Kyoto 610-0321, Japan



Linear-dendritic nonionic poly(propylene oxide)–polyglycerol surfactants

Tetrahedron 59 (2003) 4017

Vladislav Istratov,[a] Holger Kautz,[a] Yong-Keun Kim,[b] Rolf Schubert[b] and Holger Frey[a,*]

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