

Graphical abstracts

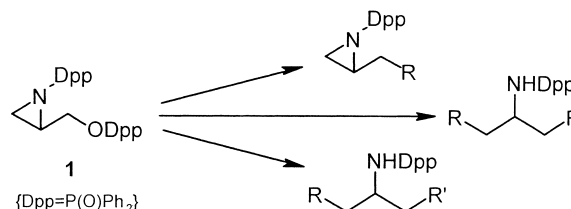
**Preparation and ring-opening reactions of *N,O*-bis(diphenylphosphinyl) hydroxymethylaziridine ('Di-Dpp')**

*Tetrahedron* 59 (2003) 3677

J. B. Sweeney<sup>a,\*</sup> and Alex A. Cantrill<sup>b</sup>

<sup>a</sup>*School of Chemistry, University of Reading, Whiteknights, Reading RG6 6AD, UK*

<sup>b</sup>*School of Chemistry, University of Bristol, Bristol BS8 1TS, UK*



**Low and high temperature bromination of exocyclic dienes: high temperature bromination. Part 16**

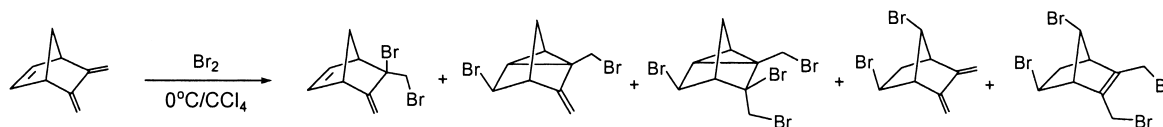
*Tetrahedron* 59 (2003) 3691

Nurhan Horasan (Kishali),<sup>a</sup> Yunus Kara,<sup>a</sup> Akin Azizoğlu<sup>b,c</sup> and Metin Balci<sup>b,\*</sup>

<sup>a</sup>*Department of Chemistry, Atatürk University, 25240 Erzurum, Turkey*

<sup>b</sup>*Department of Chemistry, Middle East Technical University, 06531 Ankara, Turkey*

<sup>c</sup>*Department of Chemistry, Balıkesir University, 10100 Balıkesir, Turkey*



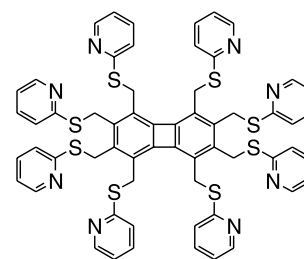
**Syntheses and X-ray crystal structures of poly(pyridylsulfanylmethyl)arenes: new multi-armed molecules**

*Tetrahedron* 59 (2003) 3701

David A. McMorran\* and Peter J. Steel

*Department of Chemistry, University of Canterbury, Christchurch, New Zealand*

The preparation and characterisation of seven new multi-armed molecules is reported. Each contains a number of pyridylsulfanylmethyl arms, appended to an arene core. X-Ray crystal structures of four of these are reported, including the structure of octakis(2-pyridylsulfanylmethyl)biphenylene, a rare example of a multi-armed molecule with a biphenylene core.

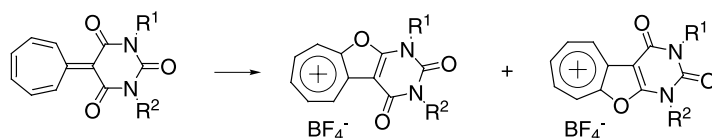


**Synthesis and properties of novel 5-(cyclohepta-2',4',6'-trienylidene)pyrimidine-2(1*H*),4(3*H*),6(5*H*)-triones: methodology for synthesizing cyclohepta[*b*]pyrimido[5,4-*d*]furan-8(7*H*),10(9*H*)-dionylium tetrafluoroborates**

*Tetrahedron* 59 (2003) 3709

Shin-ichi Naya and Makoto Nitta\*

*Department of Chemistry, School of Science and Engineering, Waseda University, Shinjuku-ku, Tokyo 169-8555, Japan*



**a:** R<sup>1</sup> = Me, R<sup>2</sup> = H;  
**b:** R<sup>1</sup> = Bu, R<sup>2</sup> = H;  
**c:** R<sup>1</sup> = Ph, R<sup>2</sup> = H;  
**d:** R<sup>1</sup> = R<sup>2</sup> = Me;  
**e:** R<sup>1</sup> = R<sup>2</sup> = Et;  
**f:** R<sup>1</sup> = R<sup>2</sup> = Ph

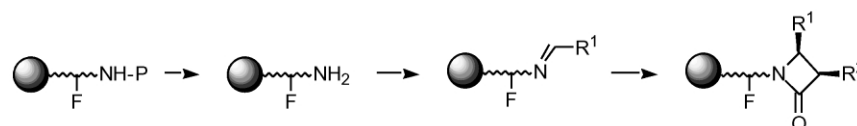
### Solid phase $\beta$ -lactams synthesis using the Staudinger reaction, monitored by $^{19}\text{F}$ NMR spectroscopy

*Tetrahedron* 59 (2003) 3719

Isabelle Le Roy,<sup>a</sup> Dominique Mouysset,<sup>a</sup> Serge Mignani,<sup>b</sup> Marc Vuilhorgne<sup>b</sup> and Lucien Stella<sup>a,\*</sup>

<sup>a</sup>Université d'Aix-Marseille III, Laboratoire de Chimie Moléculaire Organique, CNRS UMR 6517, 13397 Marseille Cedex 20, France

<sup>b</sup>Aventis Pharma S.A., Centre de Recherche de Paris, 13 Quai Jules Guesde, BP 14, 94403 Vitry sur Seine Cedex, France

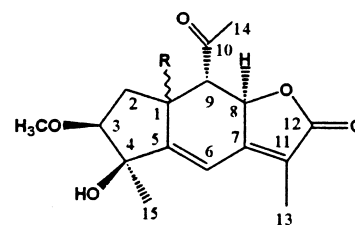


### Ligustolide A and B, two novel sesquiterpenes with rare skeletons and three 1,10-*seco*-guaianolide derivatives from *Achillea ligustica*

*Tetrahedron* 59 (2003) 3729

Ahmed A. Ahmed,<sup>\*</sup> Tamás Gáti, Taha A. Hussein, Aptahal T. Ali, Olga A. Tzakou, Maria A. Couladis, Tom J. Mabry and Gábor Tóth<sup>\*</sup>

Fractionation of the extract of *Achillea ligustica* afforded two novel sesquiterpene lactones with rare 5/6/5 skeletons, three 1,10-*seco*-guaianolides and a chlorine-containing sesquiterpene lactone as well as six known compounds, including two monoterpenes, two guaianolides, one eudesmane and one secocaryophyllene derivative. The structures of the compounds were elucidated by extensive application of one- and two-dimensional NMR spectroscopy.



1 R =  $\alpha$  OH  
2 R =  $\beta$  OH

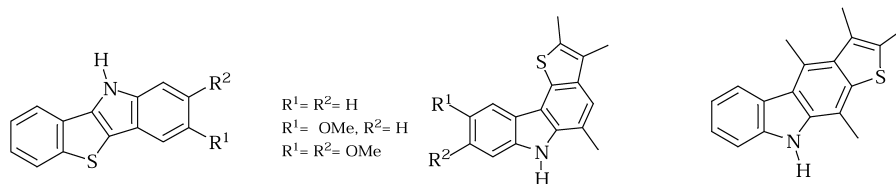
### Palladium-catalyzed amination and cyclization to heteroannellated indoles and carbazoles

*Tetrahedron* 59 (2003) 3737

Isabel C. F. R. Ferreira,<sup>a</sup> Maria-João R. P. Queiroz<sup>a,\*</sup> and Gilbert Kirsch<sup>b</sup>

<sup>a</sup>Departamento de Química, Campus de Gualtar, Universidade do Minho, 4710-057 Braga, Portugal

<sup>b</sup>Laboratoire d'Ingénierie Moléculaire et Biochimie Pharmacologique, Université de Metz Faculté des Sciences, Ile du Saulcy, 57045 Metz, France

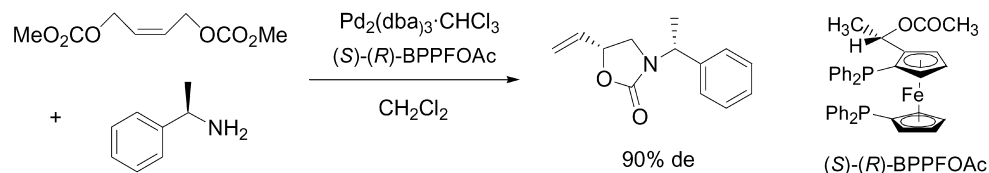


### A simple and easy access to 3-*N*-alkyl-5-vinylloxazolidinones mediated by palladium–phosphine catalysts

*Tetrahedron* 59 (2003) 3745

Shinji Tanimori,<sup>\*</sup> Ushio Inaba, Yoshihiro Kato and Mitsunori Kirihata

Department of Applied Biological Chemistry, Graduate School of Agriculture and Life Sciences, Osaka Prefecture University, 1-1 Gakuen-cho, Sakai, Osaka 599-5851, Japan

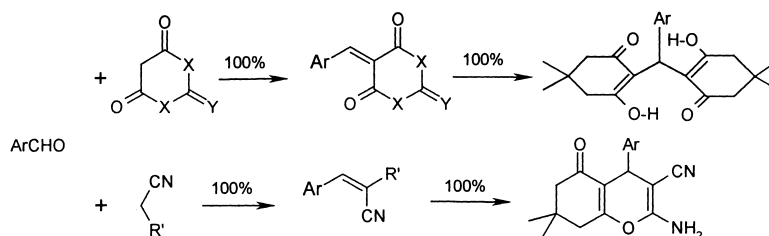


## Solvent-free Knoevenagel condensations and Michael additions in the solid state and in the melt with quantitative yield

*Tetrahedron* 59 (2003) 3753

Gerd Kaupp,\* M. Reza Naimi-Jamal and Jens Schmeyers

*Organic Chemistry I, University of Oldenburg, FB 9,  
P.O. Box 2503, D-26111 Oldenburg, Germany*



## Synthesis of nicotinonitrile derivatives as a new class of NLO materials

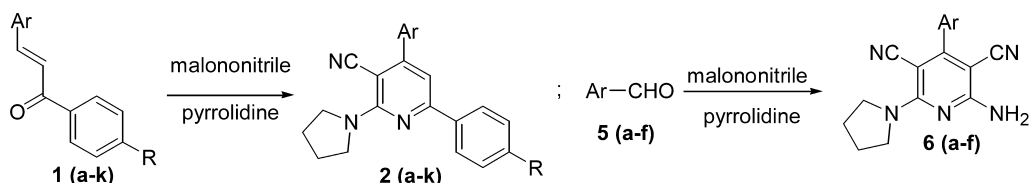
*Tetrahedron* 59 (2003) 3761

V. Raghukumar,<sup>a</sup> D. Thirumalai,<sup>a</sup> V. T. Ramakrishnan,<sup>a,\*</sup> V. Karunakara<sup>c</sup> and P. Ramamurthy<sup>b,c</sup>

<sup>a</sup>Department of Organic Chemistry, University of Madras, Guindy Campus, Chennai 600 025, India

<sup>b</sup>Department of Inorganic Chemistry, University of Madras, Guindy Campus, Chennai 600 025, India

<sup>c</sup>National Centre for Ultrafast Processes, University of Madras, Taramani Campus, Chennai 600 113, India

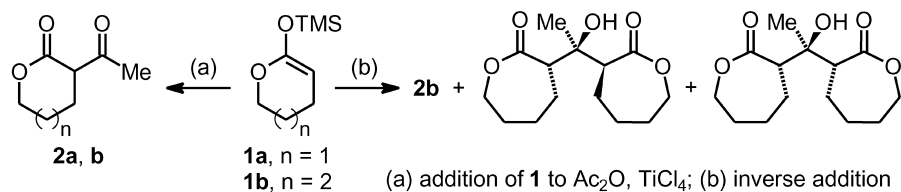


## Studies on the $\alpha$ -acetylation of $\delta$ -valerolactone and $\epsilon$ -caprolactone

*Tetrahedron* 59 (2003) 3769

Jens Christoffers,\* Heiko Oertling, Peter Fischer and Wolfgang Frey

*Institut für Organische Chemie, Universität Stuttgart, Pfaffenwaldring 55, D-70569 Stuttgart, Germany*



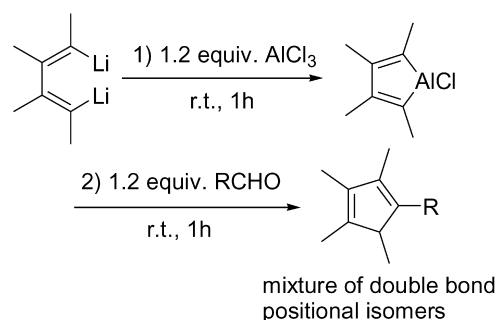
## Reaction of aluminacyclopentadienes with aldehydes affording cyclopentadiene derivatives

*Tetrahedron* 59 (2003) 3779

Hongyun Fang,<sup>a</sup> Changjia Zhao,<sup>a</sup> Guotao Li<sup>a</sup> and Zhenfeng Xi<sup>a,b,\*</sup>

<sup>a</sup>Key Laboratory of Bioorganic Chemistry and Molecular Engineering of Ministry of Education, College of Chemistry, Peking University, Beijing 100871, People's Republic of China

<sup>b</sup>State Key Laboratory of Organometallic Chemistry, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, Shanghai 200032, People's Republic of China



mixture of double bond positional isomers