ARKIVOC Volume 2007 Part (xiv): General Papers

1. Unusual reactivity of thiosemicarbazides towards 2,3-diphenylcyclopropenone: synthesis of new pyridazinethiones and 1,2,4-triazolo[4,3-b]pyridazinethiones (07-2383JP)

Ashraf A. Aly, Alaa A. Hassan, Mohsen A.-M. Gomaa and Essmat M. El-Sheref

Full Text: PDF (248K)

pp. 1 - 11

received Jan 28 2007; accepted Mar 22 2007; published Apr 1 2007;

2. A new total synthesis of natural isocoumarin, thunberginol B (07-2559BP)

Ghulam Qadeer, Nasim Hasan Rama and Syed Jabbar Hussain Shah

Full Text: PDF (191K)

pp. 12 - 19

received Jun 5 2007; accepted Jul 12 2007; published Jul 20 2007;

3. A convenient method for the synthesis of hydroxymethyl and carboxaldehyde derivatives of 3,5-diphenyl-4*H*-pyran-4-one (07-2525BP)

Reza Teimuri-Mofrad and Fatemeh Abrishami

Full Text: PDF (227K)

pp. 20 - 26

received May 16 2007; accepted Jul 12 2007; published Jul 20 2007;

4. Gallium(III) chloride: an efficient catalyst for facile preparation of *gem*-diacetates from aldehydes

(07-2543CP)

Sanjay Kumar, Anil Saini and Jagir S. Sandhu

Full Text: PDF (218K)

pp. 27 - 33

R—CHO +
$$Ac_2O$$
 $\frac{5 \text{ mol } \% \text{ GaCl}_3}{\text{CH}_2\text{Cl}_2, \text{ r.t.}}$ R—OAc or solvent free, r.t. 2

R = aryl, alkyl, heteroaryl $R = aryl, alkyl, heteroaryl$

received May 27 2007; accepted Jul 13 2007; published Jul 22 2007;

5. A facile one pot synthesis of bisphosphonic acids and their sodium salts from nitriles (07-2297KP)

Divvela V. N. Srinivasa Rao, Ramesh Dandala, Racha Lenin, Meenakshisunderam Sivakumaran, Sripelly Shivashankar and Andra Naidu

Full Text: PDF (160K)

pp. 34 - 38

$$R-CN \xrightarrow{\begin{array}{c} 1. \text{ aq. CH}_3\text{SO}_2\text{OH} \\ 2. \text{ PCI}_3 \text{ / H}_2\text{O} \end{array}} \xrightarrow{\begin{array}{c} \text{OH} \\ \text{O}=\text{P}-\text{OH} \\ \text{R}-\text{C}-\text{OH} \\ \text{O}=\text{P}-\text{OH} \\ \text{OH} \end{array}$$

received Dec 7 2006; accepted Jul 2 2007; published Jul 26 2007;

6. P₂O₅/SiO₂ as an efficient, mild, and heterogeneous catalytic system for the condensation of indoles with carbonyl compounds under solvent-free conditions (07-2560CP)

Alireza Hasaninejad, Abdolkarim Zare, Hashem Sharghi, Khodabakhsh Niknam and Mohsen Shekouhy Full Text: PDF (250K)

pp. 39 - 50

$$X + R^{1} R^{2} = \frac{P_{2}O_{6}/SiO_{2}}{\text{rt, Solvent-free}}$$

$$X = H, Me \quad R^{1} = Aryl, Alkyl \quad R^{2} = H, Aryl, Alkyl \quad 72-95\%$$

received Jun 4 2007; accepted Jul 18 2007; published Jul 26 2007;

7. Synthesis and antimicrobial activity of Mannich bases of isatin and its derivatives with 2-[(2,6-dichlorophenyl)amino]phenylacetic acid (07-2496LP)

V. Ravichandran, S. Mohan and K. Suresh Kumar

Full Text: PDF (181K)

pp. 51 - 57

received May 4 2007; accepted Jul 23 2007; published Jul 30 2007;

8. Synthesis and anticonvulsant activity of clubbed thiazolidinoneÂ-barbituric acid and thiazolidinoneÂ-triazole derivatives (07-2492HP)

Mahendra R. Shiradkar, Mangesh Ghodake, Kailash G. Bothara, Shashikant V. Bhandari, Ana Nikalje, Kalyan Chakravarthy Akula, Nisheeth C. Desai and Prashant J. Burange

Full Text: PDF (271K)

pp. 58 - 74

received May 3 2007; accepted Jul 24 2007; published Jul 31 2007;

9. Quantum chemical studies on tautomerism, isomerism and deprotonation of some 5(6)-substituted benzimidazole-2-thiones (07-2574UP)

C. Öğretir, İ. İ. Öztürk and N.F. Tay

Full Text: PDF (361K)

pp. 75 - 99

$$X \xrightarrow{\text{II}} S = X \xrightarrow{\text{II}} SR^2 = X \xrightarrow{\text{II}} SR^2$$

thione form thiol forms

parent molecules: R¹=R²=H model molecules: R¹=CH₃ R²=H or R¹=H R²=CH₃

received Jun 11 2007; accepted Aug 3 2007; published Aug 13 2007;

10. Synthesis and bioactivity of some new 2-substituted-3,4-dihydro-1-(9*H*- carbazol-4-yloxy)methyl-3-[2-(2-methoxyphenoxy)ethyl]-1,3,2 λ^5 -oxazaphosphole 2-oxides, sulfides and selenides (07-2583UP)

K. Srinivasulu, M. Anil Kumar, C. Naga Raju and C. Suresh Reddy

Full Text: PDF (267K)

pp. 100 - 109

received Jun 14 2007; accepted Aug 2 2007; published Aug 13 2007;

11. Bisheterocycles: Synthesis of some novel **1,2,3**-triazolyl oxadiazole and **4(3H)**-quinazolinones *via* azide cycloaddition reaction (07-2388MP)

A. Komaraiah, K. Ramakrishna, B. Sailu and P. S. N. Reddy

Full Text: PDF (238K)

pp. 110 - 116

received Feb 15 2007; accepted Aug 9 2007; published Aug 22 2007;

12. Synthesis and antimicrobial activity of metal complexes from 2- $(1^{\hat{A}'}/2^{\hat{A}'}-hydroxynaphthyl)$ benzoxazoles (07-2444MP)

Anil Kumar and Devinder Kumar

Full Text: PDF (209K)

pp. 117 - 125

received Mar 28 2007; accepted Aug 7 2007; published Aug 22 2007;

13. Phosphine ligand and base-free, Pd- catalyzed oxidative cross-coupling reaction of arylboronic acids with arylmercuric acetates (07-2599JP)

Lourdusamy Emmanuvel and Arumugam Sudalai

Full Text: PDF (226K)

pp. 126 - 133

received Jun 19 2007; accepted Aug 8 2007; published Aug 22 2007;

14. Chemoselective reduction of aldehydes and ketones to alcohols using boron tri-isopropoxide, B(O-*i*-Pr)₃ and boron tri-secondary butoxide, B(O-s-Bu)₃ as catalysts (07-2581HP)

Burcu Uysal and Birsen S. Buyuktas

Full Text: PDF (202K)

pp. 134 - 140

received Jun 14 2007; accepted Aug 14 2007; published Aug 23 2007;

15. Topological modeling of antimycobacterial activity of 3-formyl rifamycin SV derivatives (07-2360MP)

Omar Deeb, Jyoti Singh, R.G. Varma and Padmakar V. Khadikar

Full Text: PDF (246K)

pp. 141 - 162

The paper describes topological modeling of antimycobacterial activity of 3-formyl rifamycin SV derivatives using a large series of molecular vis-à-vis topological descriptors. For the set of 53 derivatives of 3-formyl rifamycin SV no one variable model is possible, however, in multiparametric regression excellent model is obtained for modeling the activity. The results are discussed using variety of statistical parameters.

received Jan 29 2007; accepted Aug 17 2007; published Aug 27 2007;

16. Mass spectrometric analysis of epimeric $3\alpha/3\beta$ functionalized steroids (07-2431AP)

Susana S. Ramos, LuÃs Ramalho, Mafalda Costa, Adriano Teixeira, Paulo Almeida and M. Céu Costa Full Text: PDF (267K)

pp. 163 - 171

received Mar 18 2007; accepted Aug 15 2007; published Aug 27 2007;

17. 2-(2,4-Difluorophenyl)-1,3-bis(1,2,4-triazol-1-yl)propan-2-ol derivatives: synthesis, antifungal evaluation and QSAR studies by Hansch analysis (07-2532JP)

Ruchita Ohlan, Sucheta Ohlan, Vikramjeet Judge, Rakesh Narang, Munish Ahuja and Balasubramanian Narasimhan

Full Text: PDF (265K)

pp. 172 - 184

received May 19 2007; accepted Aug 15 2007; published Aug 30 2007;

18. Studies on the Baylis-Hillman reaction of pyrazolecarbaldehydes under the influence of DABCO: positional effect on the reactivity of the formyl group (07-2552MP)

Somnath Nag, Virender Singh and Sanjay Batra

Full Text: PDF (296K)

pp. 185 - 203

Rate of reactivity for Baylis-Hillman reaction

received Jun 1 2007; accepted Aug 21 2007; published Aug 30 2007;

19. QSAR study of novel **1,1,3**-trioxo[**1,2,4**]-thiadiazine (TTDs) analogues as potent anti-HIV agents (07-2509AP)

V. Ravichandran, V. K. Mourya and R. K. Agrawal

Full Text: PDF (176K)

pp. 204 - 212

received May 10 2007; accepted Aug 21 2007; published Aug 30 2007;

20. A facile synthesis of 3-aryl-2-mercaptoacrylic acid under microwave irradiation (07-2541AP)

Jian-Feng Zhou, Feng-Xia Zhu, Hui-Qin Zhu and Yu-Lan Zhu

Full Text: PDF (194K)

pp. 213 - 217

received May 3 2007; accepted Aug 21 2007; published Sep 2 2007;

21. Synthesis of some novel fluorinated 4-thiazolidinones containing amide linkages and their antimicrobial screening (07-2585UP)

Tejaskumar J. Shah and Vikas A. Desai

Full Text: PDF (224K)

pp. 218 - 228

A series of 4-thiazolidinones 5a-e, 6a-e, 7a-e have been synthesized

received Jun 15 2007; accepted Aug 21 2007; published Sep 2 2007;

22. Nucleophilic reactions of 1-substituted-2,5-dithiobiureas with chlorinated benzo- and naphthoquinones as well as (1,3-dioxo-2,3-dihydro-1(*H*)-inden-2-ylidene)propanedinitrile (07-2577DP) Alaa A. Hassan, Ashraf A. Aly and Essmat M. El-Sheref

Full Text: PDF (252K)

pp. 229 - 244

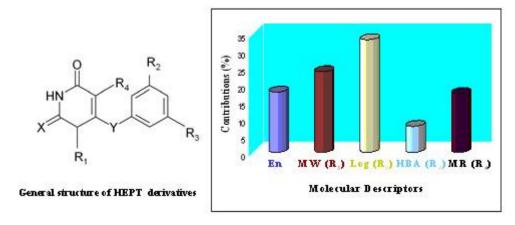
received Jun 11 2007; accepted Aug 17 2007; published Sep 6 2007;

23. Exploring QSAR of non-nucleoside reverse transcriptase inhibitors by artificial neural networks: **HEPT derivatives** (07-2438AP)

Mohamed Zahouily, Jamila Rakik, Mohamed Lazar, Moulay A. Bahlaoui, Ahmed Rayadh and Najia Komiha

Full Text: PDF (333K)

pp. 245 - 256



received Mar 24 2007; accepted Aug 15 2007; published Sep 6 2007;

24. Synthesis of new potential ligands for metal complex wires: 2-pyridinmethyl-{4-[(2-pyridinylmethylimino)-methyl]-benzylidene}amines (07-2624LP)

Taibi Ben Hadda, Maria Daoudi, Sanae Aloui, Najib Ben Larbi, Abdelali Kerbal and Abraham Jalbout

Full Text: PDF (290K)

pp. 257 - 265

received Jun 28 2007; accepted Aug 15 2007; published Sep 6 2007;

25. *p*-TsOH catalysed KSF solid supported Michael addition with substituted isoxazoles and their reductive cyclisation to isoxazolo[4,5-*b*]azepines (07-2443KP)

E. Rajanarendar, P. Ramesh, E. Kalyan Rao and G. Mohan

Full Text: PDF (209K)

pp. 266 - 275

$$\begin{array}{c|c}
NO_2 & O & R^2 \\
N & O & R^2
\end{array}$$

$$\begin{array}{c|c}
ACC_2/M_2OH & NH_2 & O & R^2 \\
N & O & R^2
\end{array}$$

$$\begin{array}{c|c}
R^2 & ACC_2/M_2OH & R^2
\end{array}$$

$$\begin{array}{c|c}
R^2 & ACC_2/M_2OH & R^2
\end{array}$$

$$\begin{array}{c|c}
R^2 & ACC_2/M_2OH & R^2
\end{array}$$

$$\begin{array}{c|c}
R^2 & ACC_2/M_2OH & R^2
\end{array}$$

$$\begin{array}{c|c}
R^2 & ACC_2/M_2OH & R^2
\end{array}$$

$$\begin{array}{c|c}
R^2 & ACC_2/M_2OH & R^2
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$$\begin{array}{c|c}
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\end{array}$$

$$\begin{array}{c|c}
R^2 & ACC_2/M_2OH & R^2
\end{array}$$

received Mar 27 2007; accepted Aug 15 2007; published Sep 6 2007;

26. Synthesis and antitubercular activity of spiroheterocycles: 2,2Â',4Â',5Â'-tetra-substituted-1,2,2',4'-tetrahydro-4*H*-spiro[isoquinoline-3,3'-pyrazol]-4-ones (07-2649CP)

Taibi Ben Hadda, Badri Rahima, Abdelali Kerbal, Bouchra Filali Baba, Mehmet Akkurt, Gilles Demailly and Mohammed Benazza

Full Text: PDF (339K)

pp. 276 - 288

received Jul 14 2007; accepted Aug 8 2007; published Sep 6 2007;

27. Antibacterial organotin(IV) compounds, their synthesis and spectral characterization (07-2633DP)

Hidayat Hussain, Viqar Uddin Ahmad, Ivan Robert Green, Karsten Krohn, Javid Hussain and Amin Badshah

Full Text: PDF (243K)

pp. 289 - 299

received Jul 8 2007; accepted Sep 5 2007; published Sep 21 2007;

28. Synthesis and antimicrobial activity of novel (3a,S)-1-(aminoacid ester)-3a,4-dihydro-3H-1 λ ⁵-[1,3,2] oxazaphospholo[3,4- α]indol-1-oxides (07-2613UP)

A.Uma Ravi Sankar, B. Siva Kumar, M. Veera Narayana Reddy, B. Haribabu and C. Naga Raju

Full Text: PDF (227K)

pp. 300 - 308

received Jun 24 2007; accepted Aug 21 2007; published Sep 25 2007;

29. Theoretical studies on the structure of [(1-aza-2-benzimidazol-2-ylprop-1-enyl)amino]aminomethane-1-thione (07-2491EP)

M. Poyraz, H. Berber and C. Ogretir

Full Text: PDF (272K)

pp. 309 - 321

received May 2 2007; accepted Aug 29 2007; published Sep 25 2007;

30. Improved preparation of racemic **1,2,3,6,7,8,11,12,13**-nonamethoxy-**10,15**-dihydro-5*H*-tribenzo[*a,d,g*]cyclononene (07-2590CP)

Yongliang Ding, Bogang Li and Guolin Zhang

Full Text: PDF (207K)

pp. 322 - 326

$$H_3CO$$
 OCH_3 $OCH_$

received Jun 18 2007; accepted Sep 5 2007; published Oct 3 2007;