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Graphical Abstracts/J. Fluorine Chem. 131 (2010) 1263–1266

J. Fluorine Chem., 131 (2010) 1267

Fluorinated azines and benzazines containing oxygen or sulfur atoms

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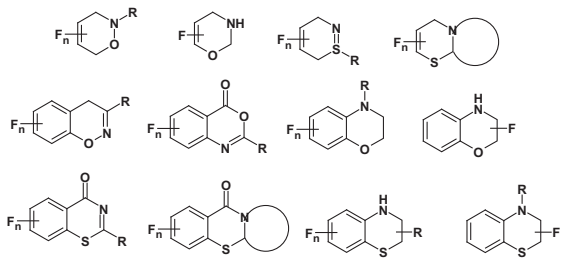

J. Fluorine Chem., 131 (2010) 1289

Reactions of α-imino ketones derived from arylglyoxals with (trifluoromethyl)trimethylsilane; a new route to β-amino-α-trifluoromethyl alcohols

Grzegorz Mloston[a], Emilia Obijalska[a], Agnieszka Tafelska-Kaczmarek[b], Marek Zaidlewicz[b]

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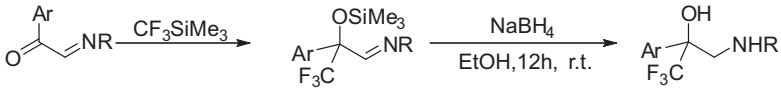
An efficient protocol for preparation of β-amino-α-trifluoromethyl alcohols based on the chemoselective addition of CF_3SiMe_3 to α-imino ketones, derived from arylglyoxals, is described.



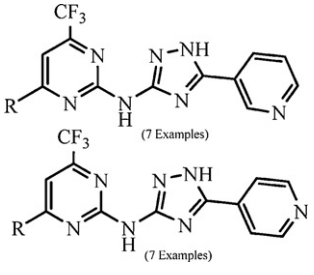
J. Fluorine Chem., 131 (2010) 1297

Convergent procedure for the synthesis of trifluoromethyl-containing *N*-(pyridinyl-triazolyl)pyrimidin-2-amines

Helio G. Bonacorso, Guilherme P. Bortolotto, Jussara Navarini, Liliane M.F. Porte, Carson W. Wiethan, Nilo Zanatta, Marcos A.P. Martins, Alex F.C. Flores

Núcleo de Química de Heterociclos (NUQUIMHE), Departamento de Química, Universidade Federal de Santa Maria, 97105-900 Santa Maria, RS, Brazil

The convergent synthesis of a novel series of fourteen 4-substituted *N*-(5-pyridinyl-1*H*-1,2,4-triazol-3-yl)-6-(trifluoromethyl)pyrimidin-2-amines, is reported.



doi:10.1016/S0022-1139(10)00272-1

J. Fluorine Chem., 131 (2010) 1302

Lability of the trifluoromethyl group of trifluoromethoxybenzenes under HF/Lewis acid conditions

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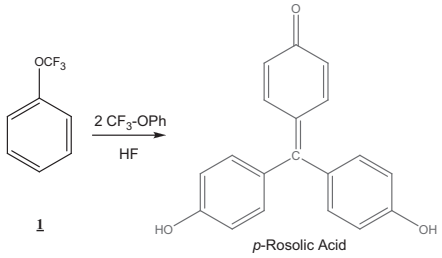
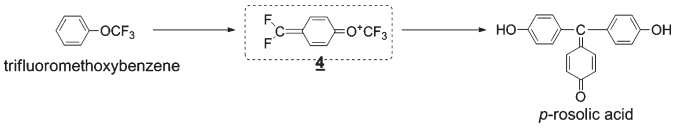


J. Fluorine Chem., 131 (2010) 1308

Ab initio study of the mechanism of the formation of *p*-rosolic acid from trifluoromethoxybenzene under HF/Lewis acid conditions

Randolph K. Belter[a], Cheri A. McFerrin[b]

[a]*Y-Not Chemical Consulting, Zachary, LA 70791, USA*
[b]*Dept. of Chemistry, Louisiana State University, Baton Rouge, LA 70803, USA*



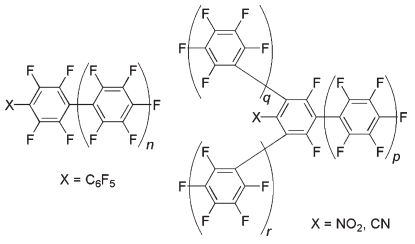
J. Fluorine Chem., 131 (2010) 1314

Formation of perfluorinated polyphenylenes by multiple pentafluorophenylation using $C_6F_5Si(CH_3)_3$

Masakazu Nishida, Yoshio Hayakawa, Taizo Ono

National Institute of Advanced Industrial Science and Technology (AIST), 2266-98 Shimoshidami, Moriyama-ku, Nagoya 463-8560, Japan

Successive multiple pentafluorophenylation easily occurred to provide perfluorinated *p*-phenylene and *m*-phenylene compounds by reactions of perfluoroarenes with $C_6F_5Si(CH_3)_3$.



J. Fluorine Chem., 131 (2010) 1322

Synthesis, structural and spectral properties of novel octakis (3,5-bis-trifluoromethyl-benzylthio) substituted porphyrazine derivatives

Didar Koçak, Ergün Gonca

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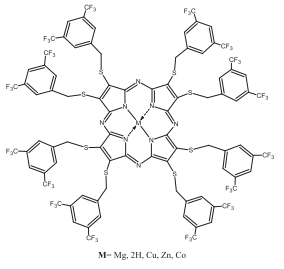
The synthesis, structural, spectroscopic and reactivity properties of a new 3,5-bis-(trifluoromethyl)benzylthio ligand and its metal free, Mg(II), Cu(II), Zn(II) and Co(II) porphyrazine complexes have been described.



J. Fluorine Chem., 131 (2010) 1327

Regiospecific nucleophilic substitution in 2,3,4,5,6-pentafluorobiphenyl as model compound for supramolecular systems. Theoretical study of transition states and energy profiles, evidence for tetrahedral S_N2 mechanism

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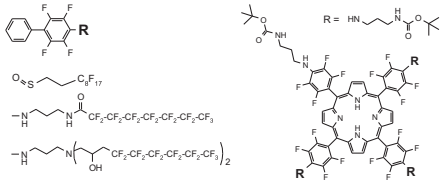

J. Fluorine Chem., 131 (2010) 1338

Synthesis of 2-(perfluoroalkyl)ethyl potassium sulfates based on perfluorinated Grignard reagents

Jana Paterová[a], Martin Skalický[a], Markéta Rybáčková[a], Magdalena Kvíčalová[b], Josef Cvačka[c], Jaroslav Kvíčala[a]

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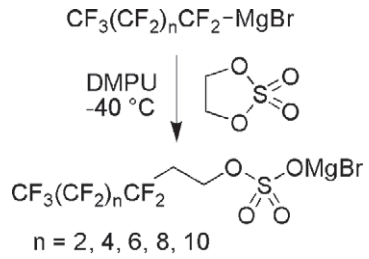
[c]*Institute of Organic Chemistry and Biochemistry, Academy of Sciences of the Czech Republic, v.v.i., Flemingovo nám. 2, 166 10 Prague 6, Czech Republic*

Perfluorinated Grignard reagents react with cyclic sulfate.



J. Fluorine Chem., 131 (2010) 1344

Stable *gem*-trifluoromethyl anionic σ-complexes based on 1,3,5-tris(sulfonyl)benzene derivatives and their transformations

Oksana M. Holovko-Kamoshenkova[a], Nataliia V. Kirij[a], Vladimir N. Boiko[a], Alexander B. Rozhenko[a,b], Yurii L. Yagupolskii[a]

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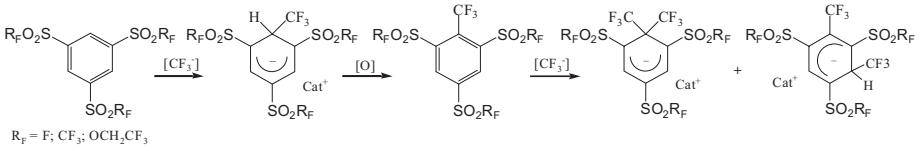
[b]*Fakultät für Chemie der Universität, Postfach 10 01 31, 33501 Bielefeld, Germany*



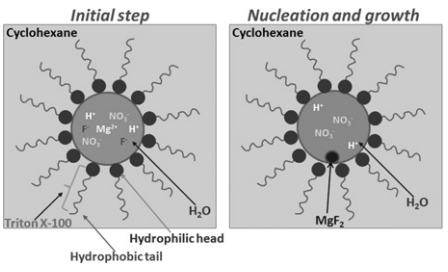
J. Fluorine Chem., 131 (2010) 1353

Synthesis and characterization of crystalline nanosized MgF_2 powder via microemulsion route

Ali Saberi, Zahra Negahdari, Sofiane Bouazza, Monika Willert-Porada

Chair of Materials Processing, Faculty of Engineering Science, University of Bayreuth, 95440 Bayreuth, Germany

►A spherical MgF_2 powder was synthesized via microemulsion route at 80 °C. ►The synthesized MgF_2 had crystallite size smaller than 11 nm. ►The BET-specific surface area of the synthesized MgF_2 was 190 m^2/g.

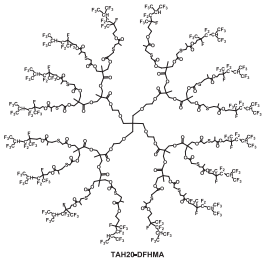


J. Fluorine Chem., 131 (2010) 1356

Fluorinated modification of hyperbranched polyesters used for improving the surface property of UV curing coatings

Hui Miao, Fenfen Bao, Liangliang Cheng, Wenfang Shi

CAS Key Laboratory of Soft Matter Chemistry, Department of Polymer Science and Engineering, University of Science and Technology of China, Jinzhai Road 96, Hefei, Anhui 230026, PR China



►Fluorinated hyperbranched polymers TAH*x*–HFBA and TAH*x*–DFHMA were synthesized. ►TAH20–DFHMA had the most efficient aggregation effect at the film surface. ►Fluorinated hyperbranched polymers showed better water and oil repellence.

J. Fluorine Chem., 131 (2010) 1362

Synthesis of novel α-CF_3-trifluoroalanine derivatives containing *N*-(diethoxyphosphoryl)difluoroacetyl group

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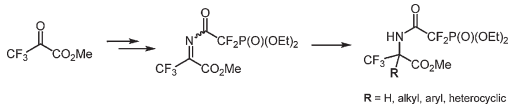


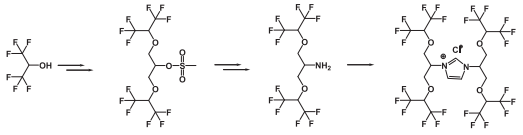
►Methyl trifluoropyruvate and (diethoxyphosphoryl)difluoroacetamide. ►Novel acyl imine with *N*-(diethoxyphosphoryl)difluoroacetyl. ►Trifluoroalanine derivatives with a *N*-(diethoxyphosphoryl)difluoroacetyl function. ►Alkylation and arylation of the acylimine. ►Friedel-Crafts electrophilic aminoalkylation of π-rich aromatics and heteroaromatics.

J. Fluorine Chem., 131 (2010) 1368

Greener fluorous chemistry: Convenient preparation of new types of 'CF_3-rich' secondary alkyl mesylates and their use for the synthesis of azides, amines, imidazoles and imidazolium salts

Anikó Nemes, László Tölgyesi, Andrea Bodor, József Rábai, Dénes Szabó

Institute of Chemistry, Eötvös Loránd University, P.O. Box 32, H-1518, Budapest 112, Hungary



►CF_3-rich fluorous ponytails were designed to replace perfluoroalkyl groups. ►Bis(polyfluoroalkoxymethyl)mesylates were synthesized as alkylating agents. ►Alkylating reactions yield fluorous azides and 1-(polyfluoroalkyl)imidazoles.

►1,3-Dialkylimidazolium salts were prepared by alkylating and ring formation. ►*F*-content depending physical data were determined and compared.

J. Fluorine Chem., 131 (2010) 1377

Lewis acid catalyst free synthesis of benzimidazoles and of formamidines in 1,1,1,3,3,3-hexafluoro-2-propanol

Samad Khaksar[a], Akbar Heydari[b], Mahmood Tajbakhsh[c], Seyed Mohammad Vahdat[a]

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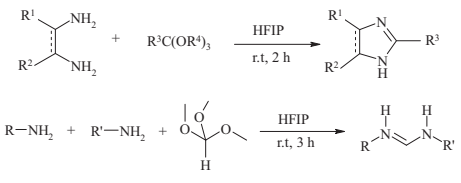
[b]*Chemistry Department, Tarbiat Modares University, P.O. Box 14115-175, Tehran, Iran*
[c]*Chemistry Department, Mazandaran University, Babolsar, Iran*



► Synthesis of benzimidazole and formamidine derivatives. ►Synthesis of unsymmetrical formamidine derivatives. ►Using hexafluoroisopropanol as a solvent. ►A new medium for activation of orthoesters. ►Ease of product isolation/purification by non-aqueous work-up.