



Graphical Abstracts/J. Fluorine Chem. 131 (2010) 661–664

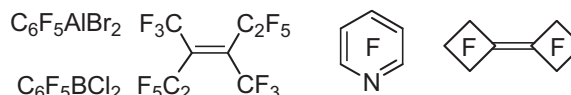
J. Fluorine Chem., 131 (2010) 665

Footsteps of a fluorine chemist

Richard D. Chambers

Department of Chemistry, University of Durham, South Road, Durham, DH1 3LE, UK

A review based on a Plenary Lecture presented at the Moissan Award Session, at the 19th International Symposium on Fluorine Chemistry, Jackson Hole, Wyoming, August, 2009.

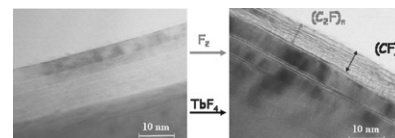


J. Fluorine Chem., 131 (2010) 676

New synthesis methods for fluorinated carbon nanofibres and applications

W. Zhang^a, L. Spinelle^{a,b}, M. Dubois^a, K. Guérin^a, H. Kharbache^c, F. Masin^c, A.P. Kharitonov^d, A. Hamwi^a, J. Brunet^b, C. Varenne^b, A. Pauly^b, P. Thomas^c, D. Himmel^e, J.L. Mansot^e^aClermont Université, UBP, Laboratoire des Matériaux Inorganiques (CNRS-UMR 6002), 24 Avenue des Landais, 63177 Aubière Cedex, France^bClermont Université, UBP, Laboratoire des Sciences des Matériaux Et d'Automatique (UMR CNRS 6602), 24 Avenue des Landais, 63177 Aubière Cedex, France^cMatière Condensée et Résonance Magnétique, Université Libre de Bruxelles, CP 232, Boulevard du Triomphe, B-1050 Bruxelles, Belgium^dInstitute of Energy Problems of Chemical Physics (Branch) of the Russian Academy of Sciences, Chernogolovka, Moscow Region, 142432, Russia^eFaculté des Sciences Exactes et Naturelles, Groupe de Technologie des Surfaces et Interfaces (GTSI), EA 2432, Université des Antilles et de la Guyane, 97159 Pointe Pitre Cedex, France

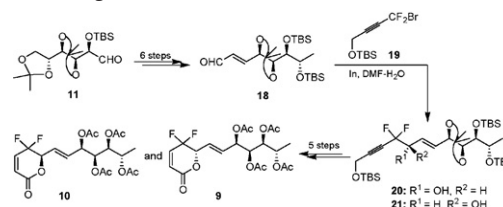
Different fluorination mechanisms using fluorinating agent or molecular fluorine.



J. Fluorine Chem., 131 (2010) 684

Synthesis of *gem*-difluoromethylenated analogues of anamarineJing Lin^a, Xiao-Long Qiu^b, Feng-Ling Qing^{a,b}^aCollege of Chemistry, Chemical Engineering and Biotechnology, Donghua University, 2999 North Renmin Lu, Shanghai 201620, China^bKey Laboratory of Organofluorine Chemistry, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, 345 Lingling Lu, Shanghai 200032, China

Practical synthesis of two *gem*-difluoromethylenated analogues of anamarine was described. The important synthetic steps included the preparation of the key intermediates **20–21** through the indium-mediated *gem*-difluoropropargylation of aldehyde **18** with the fluorine-containing building block **19** and efficient construction of α,β -unsaturated- δ -lactone scaffold via BAIB/TEMPO procedure.

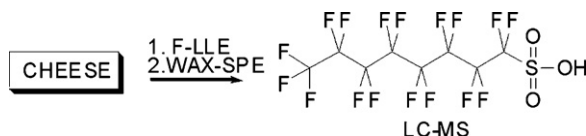


J. Fluorine Chem., 131 (2010) 691

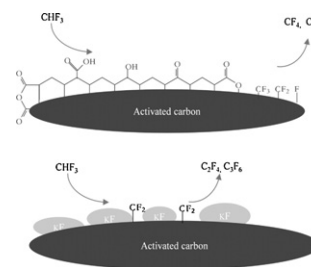
Extraction of perfluorinated compounds from food matrices using fluororous solvent partitioning

Victoria Adele Bailey^{a,b}, Don Clarke^a, Anne Routledge^b^aThe Food and Environment Research Agency, Sand Hutton, York YO41 1LZ, UK^bDepartment of Chemistry, University of York, Heslington, York YO10 5DD, UK

A novel sample extraction and cleanup procedure has been developed to measure PFOS in fat-containing samples. The extraction is based on fluororous liquid–liquid extraction (F-LLE) in a triphasic solvent system consisting of hybrid:fluororous:organic solvent (trifluoroethanol:perfluorohexane:dichloromethane-saturated with water).

*J. Fluorine Chem.*, 131 (2010) 698

Catalytic pyrolysis of CHF₃ over activated carbon and activated carbon supported potassium catalyst

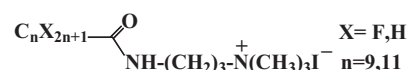
Wenfeng Han^a, Eric M. Kennedy^a, Huazhang Liu^b, Ying Li^b, Adesoji A. Adesina^c, John C. Mackie^a, Bogdan Z. Dlugogorski^a^aProcess Safety and Environment Protection Research Group, School of Engineering, The University of Newcastle, Callaghan, NSW 2308, Australia^bInstitute of Catalysis, State Key Laboratory Breeding Base of Green Chemistry–Synthesis Technology, Zhejiang University of Technology, Hangzhou 310032, PR China^cReactor Engineering and Technology Group, School of Chemical Sciences and Engineering, University of New South Wales, Sydney, New South Wales 2052, Australia*J. Fluorine Chem.*, 131 (2010) 704

Synthesis and comparative behaviour study of fluorocarbon and hydrocarbon cationic surfactants in aqueous media

Thi Huong Viet Ngo, Christine Damas, Régine Naejus, Robert Coudert

Parc Grandmont, 37200 Tours, France

New hydrocarbon and fluorocarbon cationic surfactants have been synthesized. Their aqueous solution behaviour has been investigated in relation to their structure by conductimetry and tensiometry.

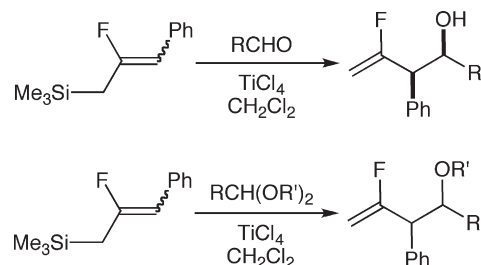
*J. Fluorine Chem.*, 131 (2010) 709

2-Fluoro-3-phenyl-allyltrimethylsilane: A new fluorinated reagent for Hosomi–Sakurai reaction

Tsuyoshi Hayashi, Yoshinosuke Usuki, Hideo Iio

Department of Material Science, Osaka City University, Sugimoto, Sumiyoshi, Osaka 558-8585, Japan

2-Fluoro-3-phenyl-allyltrimethylsilane, prepared from β -fluorinated allylic acetate via a π -allylpalladium intermediate, reacted with various aldehydes and acetals in the presence of TiCl_4 to afford the corresponding homoallyl alcohols and homoallyl ethers, respectively, in good to moderate yields.

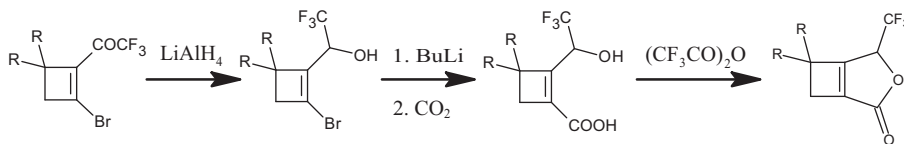


J. Fluorine Chem., 131 (2010) 714

1-Bromo-2-trifluoroacetylcyclobutenes as novel building blocks for the construction of trifluoromethyl substituted heterocycles. Part 1: Synthesis of 5-(trifluoromethyl)-2(5H)-furanones condensed with substituted cyclobutenes

Andrey B. Koldobskii, Nikolay P. Tsvetkov, Ekaterina V. Solodova, Valery N. Kalinini

A. N. Nesmeyanov Institute of Organoelement
Compounds, Russian Academy of Sciences, Vavilov
Str. 28, 119991 Moscow, Russian Federation

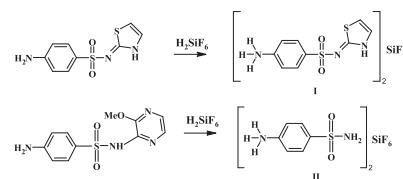


J. Fluorine Chem., 131 (2010) 719

Interaction of hexafluorosilicic acid with sulfa drugs. Bis(sulfathiazolium) hexafluorosilicate: Spectral data and crystal structure

Vladimir O. Gelmboldt^a, Eduard V. Ganin^b, Larisa V. Koroeva^c, Mark M. Botoshansky^d, Marina S. Fonari^e^aOdessa State Medical University of Ministry of Health of Ukraine, Valikhovskiy lane, 2, 65026, Odessa, Ukraine^bOdessa State Environmental University of Ministry of Education and Science of Ukraine, Lvovskaya str., 15, 65016, Odessa, Ukraine^cPhysico-Chemical Institute of Environment and Human Protection of Ministry of Education and Science of Ukraine and National Academy of Sciences of Ukraine, Preobrazhenskaya str., 3, 65082, Odessa, Ukraine^dSchulich Faculty of Chemistry, Technion-Israel Institute of Technology, Technion City, 32000 Haifa, Israel^eInstitute of Applied Physics, Academy of Sciences of Moldova, Academy str., 5, MD2028 Chisinau, Republic of Moldova

Interaction of hexafluorosilicic acid with sulfa drugs sulfathiazole (**stz**) and sulfalen (2-sulfanilamido-3-methoxypyrazine, **sl**) results in the crystalline salts of the compositions [**stzH**]₂[SiF₆] (**I**) and [4-H₂NO₂SPhNH₃]₂[SiF₆] (**II**). Complex **I** is characterized by IR, mass spectrometry data and single crystal X-ray diffraction. The formation of complex **II** is the result of degradation of sulfalen in acidic medium.



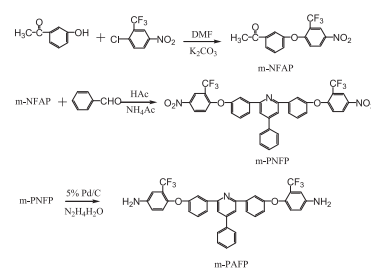
J. Fluorine Chem., 131 (2010) 724

Synthesis and characterization of soluble polyimides based on a new fluorinated diamine: 4-Phenyl-2,6-bis[3-(4'-amino-2'-trifluoromethylphenoxy) phenyl] pyridine

Tao Ma, Shujiang Zhang, Yanfeng Li, Fengchun Yang, Chenliang Gong, Jiujiang Zhao

State Key Laboratory of Applied Organic Chemistry, College of Chemistry and Chemical Engineering, Institute of
Biochemical Engineering & Environmental Technology, Lanzhou University, Lanzhou 730000, China

A series of fluorinated pyridine-bridged aromatic poly(ether-imide)s were prepared from a new kind of pyridine-containing aromatic diamine with various aromatic dianhydrides by two-step polycondensation method. The resulting polyimides exhibited good solubility in organic solvents, excellent thermal properties, and good mechanical properties, as well as low dielectric constants.



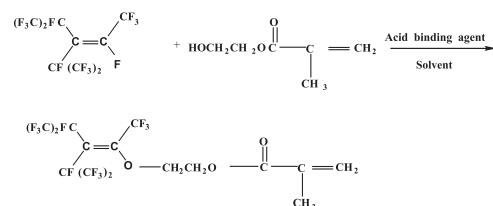
J. Fluorine Chem., 131 (2010) 731

Preparation and characterization of a novel fluorinated acrylate resin

Lijun Chen, Hongxin Shi, Hongke Wu, Juping Xiang

School of Chemical Engineering and Materials Science, Zhejiang University of Technology, No. 18
Chaowang Road, Hangzhou 310032, China

Using the intermediate perfluoro nonene and 2-hydroxyethyl methacrylate as the starting reactants, we would like to report the convenient method to synthesize a new fluorinated acrylate resin by the solution polymerization technique. The hydrophobicity of the acrylate resin is improved greatly when the fluorinated monomer is introduced to copolymerize with other monomers. Plausible reaction mechanism of synthesizing POMA is also given.



CF₃ radicals from triflic anhydride and collidine: Their trapping by a trimethylsilylenolether

Henri Rudler, Andrée Parlier, Charline Denneval, Patrick Herson

Institut Parisien de Chimie Moléculaire UMR CNRS 7201, Université Pierre et Marie Curie, CC 47, 4 place Jussieu 75252 Paris cedex 5, France

CF₃ radicals could be trapped by the (trimethylsilyl)enolether of acetophenone during the interaction of *s*-collidine with triflic anhydride.

