

Graphical Abstracts/J. Fluorine Chem. 125 (2004) 1–5

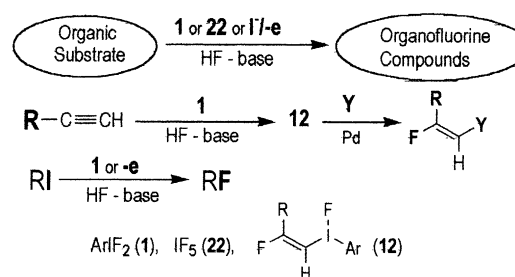
J. Fluorine Chem., **125** (2004) 7

Advances in the preparation of organofluorine compounds involving iodine and/or iodo-compounds

Norihiko Yoneda

Graduate School of Engineering, Hokkaido University, Sapporo 060-8628, Japan

Stereo- and/or regioselective synthesis of organofluorine compounds will be discussed employing **1**, **22** and **12**, and electrochemical fluorination procedures involving iodo-compounds.



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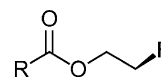
Solid state and theoretical evaluation of β -fluoroethyl esters indicate a fluorine-ester *gauche* effect

Caroline R.S. Briggs^a, David O'Hagan^a, Henry S. Rzepa^b, Alexandra M.Z. Slawin^a

^a*School of Chemistry and Centre for Biomolecular Sciences, University of St Andrews, Purdie Building, North Haugh, St Andrews KY16 9ST, UK*

^b*Department of Chemistry, Imperial College London, SW7 2AY, London, UK*

β -fluoroethyl esters display a fluorine-ester *gauche* effect.

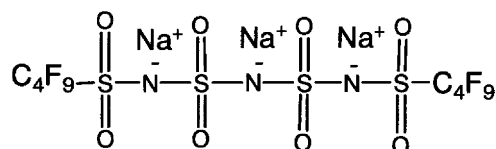


J. Fluorine Chem., **125** (2004) 27

Synthesis and characterization of a novel electrolyte based on bis[(perfluoroalkyl)sulfonyl]triimide trianion

Jin Nie, Xiaoyong Li, Dafan Liu, Rong Luo, Liqiong Wang

Department of Chemistry, Huazhong University of Science and Technology, Wuhan 430074, Hubei, PR China



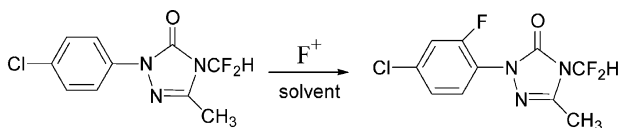
J. Fluorine Chem., **125** (2004) 33

Selective fluorination of an aryl triazolinone herbicide intermediate

Robert G. Syvret^a, William J. Casteel Jr.^a, G. Sankar Lal^a, Jaidev S. Goudar^b

^a*Air Products and Chemicals, Inc., Allentown, PA 18195, USA*

^b*FMC Corporation, Princeton, NJ 08543, USA*



(F⁺ = F₂/N₂, XeF₂, (CF₃SO₂)₂NF, Selectfluor, CF₂(OF)₂, CF₃OF, CH₃C(O)OF, and CF₃C(O)OF)

J. Fluorine Chem., **125** (2004) 37

New acrylate systems: derivatives of β-SF₅-acrylic acid

R.W. Winter, R. Dodean, L. Holmes, G.L. Gard

Department of Chemistry, Portland State University, Portland, OR 97207-0751, USA

New derivatives of acrylic acid containing the SF₅-group in the acid moiety were synthesized and characterized.



Pentafluorosulfur (SF₅) Acrylates

J. Fluorine Chem., **125** (2004) 43

Alternative statistical and theoretical analysis of fluotophilicity

Pablo R. Duchowicz, Francisco M. Fernández, Eduardo A. Castro

INIFTA, Departamento de Química, Facultad de Ciencias Exactas, Universidad Nacional de La Plata, Diag. 113 y 64, Suc. 4, Casilla de Correo 16, La Plata 1900, Argentina

We present quantitative structure–property relationships for the partition of 99 organic compounds between organic and fluorinated solvents.

The approach consists of straightforward multivariate regression using the simplest topological molecular descriptors.

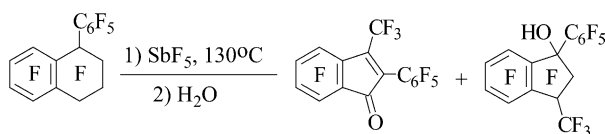
$$\ln P = \sum_{\substack{\text{atoms} \\ \text{bonds}}} c_j D_j$$

J. Fluorine Chem., **125** (2004) 49

The alicyclic ring contraction of perfluoro-1-phenyltetralin in reaction with antimony pentafluoride

Vladimir R. Sinyakov, Tatyana V. Mezhenkova, Victor M. Karpov, Vyacheslav E. Platonov

N.N. Vorozhtsov Novosibirsk Institute of Organic Chemistry, Novosibirsk 630090, Russia



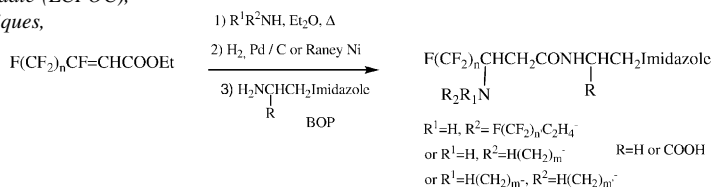
J. Fluorine Chem., **125** (2004) 55

Efficient synthesis of new perfluorinated or hybrid amphiphilic surfactants

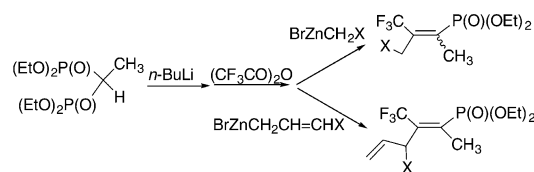
Sedat Cosgun, Christine Gérardin-Charbonnier, Jacques Amos, Claude Selve

UMR 7565, Laboratoire de Chimie-Physique Organique et Colloïdale (LCPOC),
Université Henri Poincaré Nancy I, Faculté des Sciences et Techniques,
BP 239, 54506 Vandoeuvre-lès-Nancy, France

A very simple method for the preparation of dialkyl or trialkylchain amphiphilic perfluorinated analogues of peptidamines with or without perhydrogenated chain.

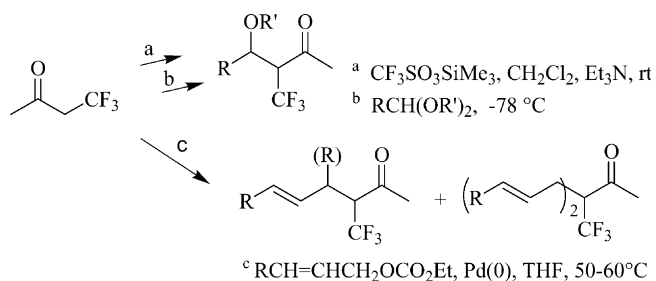
*J. Fluorine Chem.*, **125** (2004) 63Stereoselective synthesis of trifluoromethylated vinyl- and dienylphosphonates with γ -alkoxycarbonyl moiety

Yanchang Shen, Ping Li

State Key Laboratory of Organometallic Chemistry, Shanghai Institute of Organic
Chemistry, Chinese Academy of Sciences, 354 Fenglin Lu, Shanghai 200032, ChinaTrifluoromethylated vinyl- and dienylphosphonates with γ -alkoxycarbonyl moiety have been synthesized via sequential transformations of bisphosphonates in 68–76% (three steps) yields with *Z*-isomers exclusively or predominantly.*J. Fluorine Chem.*, **125** (2004) 67

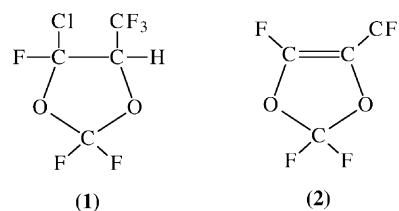
Synthetic applications of the carbanion generated from 4,4,4-trifluorobutan-2-one

Tsuneyoshi Tominaga, Kouji Nishi, Tomoya Kitazume

Graduate School of Bioscience and Biotechnology,
Tokyo Institute of Technology, 4259 Nagatsuta,
Midori-ku Yokohama 226-8501, Japan*J. Fluorine Chem.*, **125** (2004) 73Perfluoro-4-methyl-1,3-dioxole: a new monomer for high- T_g amorphous fluoropolymers

Antonio Russo, Walter Navarrini

Solvay Solexis, R & D Centre, V.le Lombardia 20, 20021 Bollate (MI), Italy

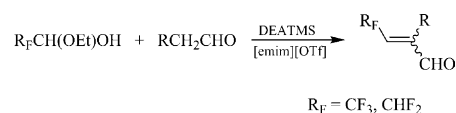
The synthesis and characterization of the new compounds 4-chloro-5-trifluoromethyl-2,2,4-trifluoro-1,3-dioxolane (**1**) and perfluoro-4-methyl-1,3-dioxole (**2**), together with a new synthetic route for the preparation of the precursor $\text{CF}_3\text{-CH}=\text{CFCl}$ are reported. Fluorinated 1,3-dioxoles monomers, are of remarkable interest for the preparation of a new class of high- T_g amorphous fluoroplastics.

J. Fluorine Chem., **125** (2004) 79

One step synthesis of 2-substituted 3-tri-(or di-)fluoromethyl-2-propenals in an ionic liquid

Tomoya Kitazume, Hirokatsu Nagura, Shinichi Koguchi

Graduate School of Bioscience and Biotechnology, Tokyo Institute of Technology, 4259 Nagatsuta, Midori-ku Yokohama 226-8501, Japan

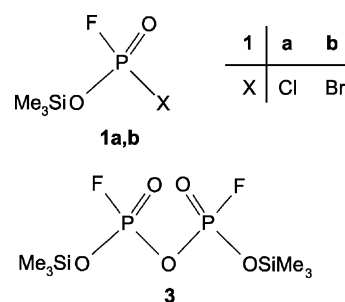
*J. Fluorine Chem.*, **125** (2004) 83

Synthesis and characterisation of trimethylsilyl phosphorohalidates: $\text{Me}_3\text{SiOP}(\text{O})\text{FX}$ ($\text{X} = \text{Cl}, \text{Br}$) and $(\text{Me}_3\text{SiO})_2\text{P}_2\text{O}_3\text{F}_2$

Pavel Rovnaník, Miloš Černík

Department of Inorganic Chemistry, Faculty of Science, Masaryk University, Kotlářská 2, Brno 61137, Czech Republic

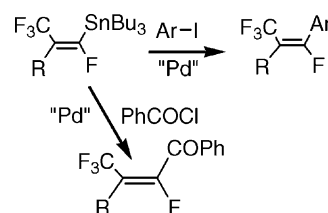
Three new trimethylsilyl esters of halogenophosphoric acids have been synthesised as potential precursors of fluorohalogenophosphate groups.

*J. Fluorine Chem.*, **125** (2004) 91

Stille cross-coupling reaction of polyfluorovinylstannanes Stereospecific synthesis of polyfluoro-alkenes and $-\alpha,\beta$ -unsaturated ketones

Yanchang Shen, Guoping Wang

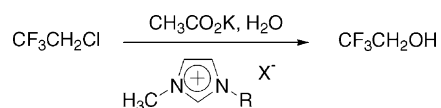
State Key Laboratory of Organometallic Chemistry, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, 354 Fenglin Lu, Shanghai 200032, China

*J. Fluorine Chem.*, **125** (2004) 95

Imidazolium salt assisted hydrolysis of 1-chloro-2,2,2-trifluoroethane

Hyunjoo Lee, Kyung Hwan Kim, Honggon Kim, Sang Deuk Lee, Hoon Sik Kim

Reaction Media Research Center, Korea Institute of Science and Technology, 39-1 Hawolkgodong, Seoul 136-791, South Korea



R = methyl, ethyl, butyl

X = Cl, BF_4 , PF_6 , OAc, OTf

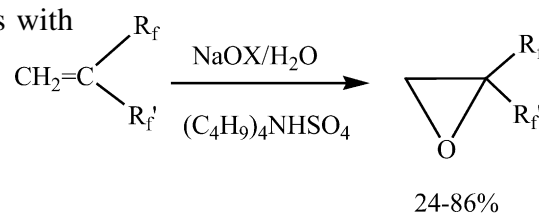
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New partially fluorinated epoxides by oxidation of olefins with sodium hypohalites under phase transfer catalysis

Viacheslav A. Petrov^a, Will J. Marshall^a, Carl. G. Krespan^a,
Victor F. Cherstkov^b, Era A. Avetisian^b

^aDuPont Central Research and Development, Experimental Station, P.O. Box 80328
Wilmington, DE 19880-0328, USA

^bINEOS RAN, ul. Vavilova 28, Moscow 117813, Russian Federation



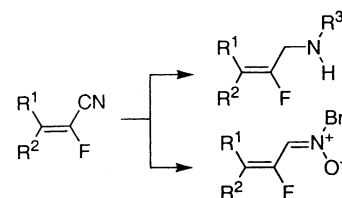
$\text{R}_f, \text{R}_f' = \text{CF}_3, \text{C}_2\text{F}_5, \text{C}(\text{CF}_2\text{X})_2\text{OH},$
 $\text{C}(\text{O})\text{OC}(\text{CH}_3)_3;$
 $\text{X} = \text{Cl or Br}$

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α -Fluoroacrylonitriles: Horner–Wittig synthesis and conversion into 2-fluoroallylamines and C-(1-fluorovinyl)nitrones

Jan Hein van Steenis, Adrianus M.C.H. van den Nieuwendijk,
Arne van der Gen

Gorlaeus Laboratories, Leiden Institute of Chemistry, Leiden University,
P.O. Box 9502, NL-2300 RA Leiden, The Netherlands

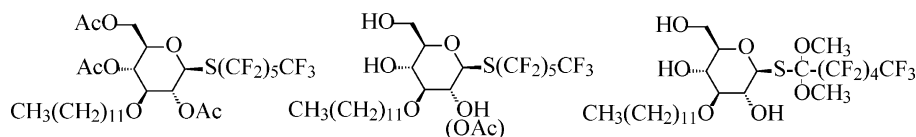
*J. Fluorine Chem.*, **125** (2004) 119

Organofluorine compounds and fluorinating agents

Part 31. Mixed alkyl-perfluoroalkyl substituted monosaccharide derivatives

Dirk Schwäbisch, Martin Hein, Ralf Miethchen

Department of Organic Chemistry, Fachbereich Chemie, Universität Rostock, Albert-Einstein-Strasse 3a,
Rostock D-18051, Germany

*J. Fluorine Chem.*, **125** (2004) 125

α -Trifluoroacetyl- δ -valerolactone: synthesis, acyl-lactone rearrangement and unexpected easy decarboxylation of the rearranged product

Dmitri V. Sevenard, Enno Lork

Institute of Inorganic & Physical Chemistry, University of Bremen, Leobener Strasse, 28334 Bremen, Germany

