

## Graphical Abstracts/J. Fluorine Chem. 124 (2003) v–ix

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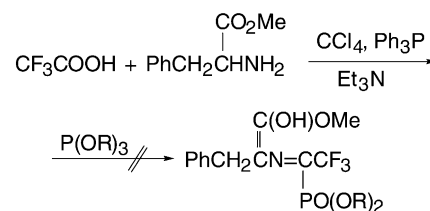
### The 1-*N*-(methoxycarbonyl-2-phenylethyl)imino-2,2,2-trifluoroethanephosphonate systems are not stable enols of carboxylic esters

Jinhua Song<sup>a</sup>, Hiroshi Yamataka<sup>b</sup>, Zvi Rappoport<sup>a</sup>

<sup>a</sup>*Department of Organic Chemistry and the Minerva Center for Computational Quantum Chemistry, The Hebrew University, Jerusalem 91904, Israel*

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The claim that 1-*N*-(1-methoxycarbonyl-2-phenylethyl)imino-2,2,2-trifluoroethane phosphonates **2** exist as their stable enols of carboxylic esters tautomers, was refuted on three grounds, reexamination of NMR spectra, experimental results, and B3LYP calculations.



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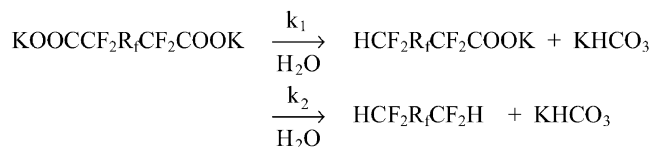
### A study of the thermal decarboxylation of three perfluoropolyether salts

G. Marchionni<sup>a</sup>, S. Petricci<sup>a</sup>, G. Spataro<sup>a</sup>, G. Pezzin<sup>b</sup>

<sup>a</sup>*Solvay Solexis R & T, viale Lombardia 20, 20021 Bollate, Milan, Italy*

<sup>b</sup>*Department of Physical Chemistry, University of Padova, Padova, Italy*

The thermal decarboxylation of  $\text{KOCCF}_2\text{-R}_f\text{-CF}_2\text{COOK}$ ,  $\text{R}_f = \text{-O-}, \text{-OCF}_2\text{O-}, \text{-OCF}_2\text{CF}_2\text{O-}$ , has been investigated and the products and kinetics of the main reactions have been defined. The experimental data showed that the two consecutive decarboxylation reactions have similar rate constants and activation energies.



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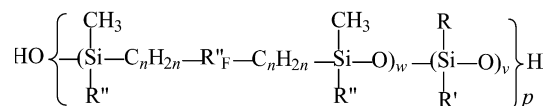
### Poly-silafluoroalkyleneoligosiloxanes: a class of fluoroelastomers with low glass transition temperature

Bernard Boutevin, Gerardo Caporiccio, Francine Guida-Pietrasanta, Amédée Ratsimihety

<sup>a</sup>*Laboratoire de Chimie Macromoléculaire, UMR-CNRS 5076, ENSCM,*

*8 Rue de l'École Normale, 34296 Montpellier Cedex 5, France*

Synthesis of unsaturated poly-silafluoroalkyleneoligosiloxanes which, after crosslinking, gave elastomeric materials characterized by good flexibility at low temperature, glass transition temperature below  $-45^\circ\text{C}$  and good thermooxidative stability, over  $250^\circ\text{C}$ , that are complementary to polyfluoroolefin elastomers.

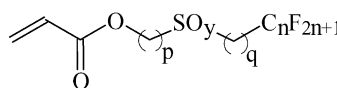


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### Synthesis of fluoro-substituted monomers bearing a functionalised lateral chain. Part 2. Preparation of sulfoxides and sulfones containing monomers

B. Péés<sup>a</sup>, J.M. Paul<sup>b</sup>, N. Oget<sup>c</sup>, M. Sindt<sup>c</sup>, J.L. Mieloszynski<sup>c</sup><sup>a</sup>*Atofina, Centre d'étude de Recherche et de Développement, 27470**Serquigny, France*<sup>b</sup>*Atofina, Centre de Recherches et Développement de l'Est, B.P. 61005,**57501 Saint-Avold Cedex, France*<sup>c</sup>*Laboratoire de Chimie et Applications (LCA), Groupe Synthèse Organique EA-3471, Université de Metz, Ile du Saucy, 57012 Metz Cedex 01, France*

The oxidation of ω-(ω-perfluoroalkylalkyl-sulfanyl)-alkyl acrylates to corresponding sulfoxides and sulfones is described in this paper.



y = 1, 2

p = 2, 3, 4, 11

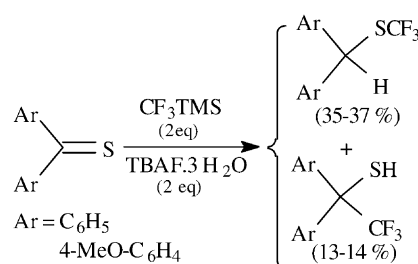
q = 2, 11

n = 6, 6-8\*, 8

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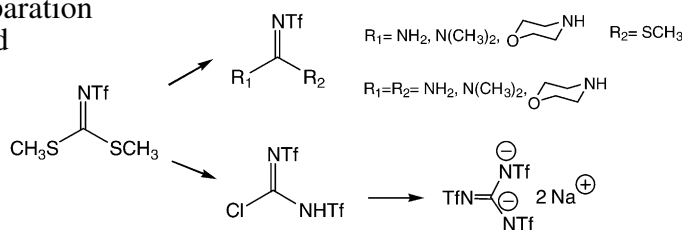
### Fluoride-assisted trifluoromethylation of aromatic thiones with (trifluoromethyl)trimethylsilane

Sylvie Large-Radix, Thierry Billard, Bernard R. Langlois

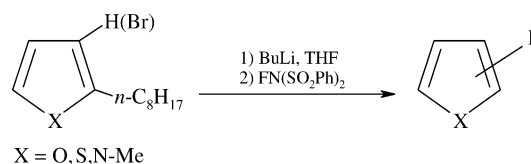
*Laboratoire SERCOF (UMR 5622), Université Claude Bernard-Lyon I, 43,**Bd du 11 Novembre 1918, F-69622 Villeurbanne Cedex 69622, France**J. Fluorine Chem.*, **124** (2003) 151

### *N*-Bis(methylthio)methylen-trifluoromethanesulfonylamide $\text{CF}_3\text{SO}_2\text{N}=\text{C}(\text{SCH}_3)_2$ : new reagent for the preparation of *N*-trifluoromethylsulfonylimino carbonic and thiocarbonic acids derivatives

Vitaly N. Petrik, Natalia V. Kondratenko, Lev M. Yagupolskii

*Department of Fluorine Chemistry, Institute of Organic Chemistry,**National Academy of Sciences of Ukraine, Murmanskaya Str. 5,**02094 Kiev, Ukraine**J. Fluorine Chem.*, **124** (2003) 159

### Synthesis and NMR studies of 2- and 3-fluorosubstituted five-membered heterocycles

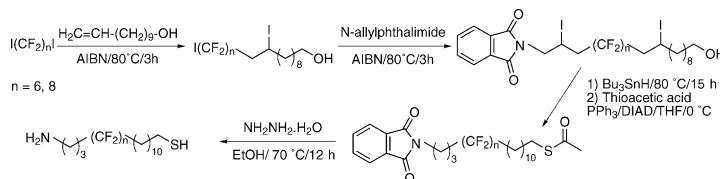
Elena Dvornikova<sup>a</sup>, Małgorzata Bechcicka<sup>a</sup>, Krystyna Kamieńska-Trela<sup>a</sup>, Adam Krówczyński<sup>b</sup><sup>a</sup>*Institute of Organic Chemistry, Polish Academy of Sciences, Kasprzaka 44,**01-224 Warsaw, Poland*<sup>b</sup>*Department of Chemistry, University of Warsaw, Al. Żwirki and Wigury 101,**02-089 Warsaw, Poland*A full set of 2- and 3-fluoro-substituted thiophenes, pyrroles and furans has been synthesized for the first time. The <sup>1</sup>J<sub>CC</sub> couplings measured for these compounds are the largest among those determined for five-membered heterocycles so far.

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### Synthesis of amino terminated semifluorinated long-chain alkanethiols

C. Amato, P. Calas

Laboratoire Organisation moléculaire, évolution et matériaux fluorés, UMR CNRS 5073, Université de Montpellier II, CC 17, Place E. Bataillon, F34095 Montpellier Cedex 05, France



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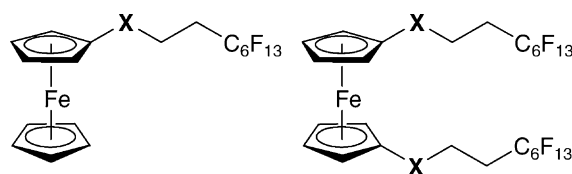
### Selective mono- and di{(perfluoroalkyl)acylation} of ferrocene

David Hazafy<sup>a</sup>, Marie Sobociková<sup>a</sup>, Petr Štěpnička<sup>b</sup>, Jiří Ludvík<sup>c</sup>,  
Martin Kotora<sup>a</sup>

<sup>a</sup>Department of Organic and Nuclear Chemistry, Faculty of Science, Charles University, Hlavova 2030, 128 43 Prague, Czech Republic

<sup>b</sup>Department of Inorganic Chemistry, Faculty of Science, Charles University, Hlavova 2030, 128 43 Prague, Czech Republic

<sup>c</sup>J. Heyrovský Institute of Physical Chemistry, Academy of Sciences of the Czech Republic, Dolejškova 3, 182 23 Prague, Czech Republic



X = C(O), CH<sub>2</sub>

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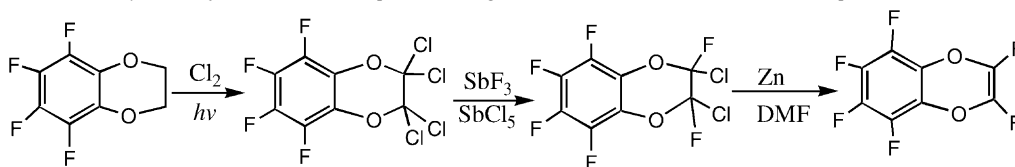
### A novel perfluoromonomer: perfluoro-2,3-dihydro-1,4-benzodioxin

Weihong Liu<sup>a</sup>, Yasuhiro Koike<sup>b,c</sup>, Yoshi Okamoto<sup>a</sup>

<sup>a</sup>Six Metrotech Center, Polymer Research Institute, Polytechnic University, Brooklyn, NY 11201, USA

<sup>b</sup>Faculty of Science and Technology, Keio University, Yokohama 223-8522, Japan

<sup>c</sup>ERATO, Koike Photonics Polymer Project, K2 Town Campus 144-8 Ogura, Saiwai-ku, Kawasaki 212-0054, Japan



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### Synthesis and solution properties of sulfate-type hybrid surfactants with a benzene ring

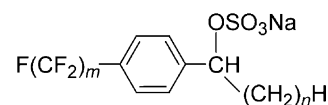
Haruhiko Miyazawa<sup>a,b</sup>, Kanako Igawa<sup>a,b</sup>, Yukishige Kondo<sup>a,b</sup>, Norio Yoshino<sup>a,b</sup>

<sup>a</sup>Department of Industrial Chemistry, Faculty of Engineering, Tokyo University of Science, 1-3 Kagurazaka, Shinjuku-ku, Tokyo 162-8601, Japan

<sup>b</sup>Institute of Colloid and Interface Science, Tokyo University of Science, 1-3 Kagurazaka, Shinjuku-ku, Tokyo 162-8601, Japan

FmPHnOS aqueous solution showed low critical micelle concentration and high surface activity.

Aggregation number of FmPHnOS micelles ranged from 6 to 45 and the hydrodynamic radius of the micelles was in a range of 1.4–3.1nm.



$m = 4, 6, 8, \quad n = 3, 5, 7$

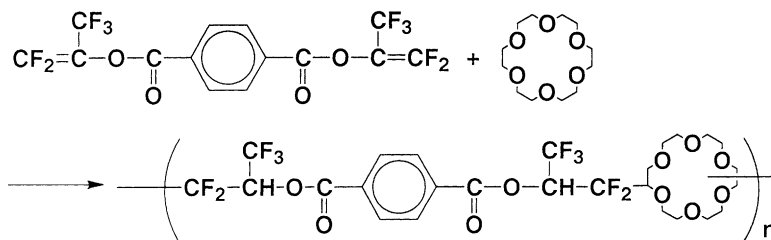
FmPHnOS

### Novel fluorinated polymer from 18-crown-6 by radical polyaddition

Tadashi Narita<sup>a</sup>, Hiroshi Hamana<sup>b</sup>, Masato Takeshita<sup>a</sup>, Hirotsuda Fujiwara<sup>a</sup>

<sup>a</sup>Department of Materials Science and Engineering, Graduate School of Engineering, Saitama Institute of Technology, 1690 Fusaiji, Okabe, Saitama 369-0293, Japan

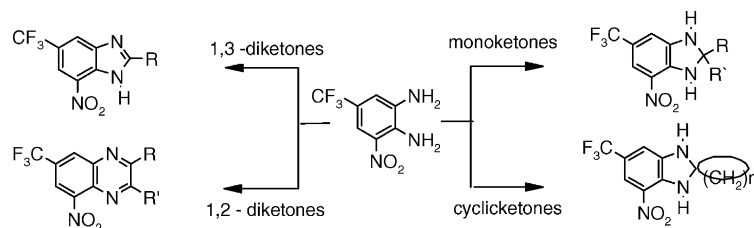
<sup>b</sup>Department of Applied Chemistry, Faculty of Engineering, Saitama Institute of Technology, 1690 Fusaiji, Okabe, Saitama 369-0293, Japan



### Studies on the reaction of unsymmetrical trifluoromethyl 1,2-phenylenediamine with various ketones leading to novel fluorinated heterocycles

G. Venkat Reddy, V.V.V.N.S. Rama Rao, D. Maitraie, S. Ravikanth, R. Yadla, S.N. Reddy, B. Narsaiah, P. Shanthan Rao

Organic Division II, Indian Institute of Chemical Technology, Hyderabad 500007, AP, India

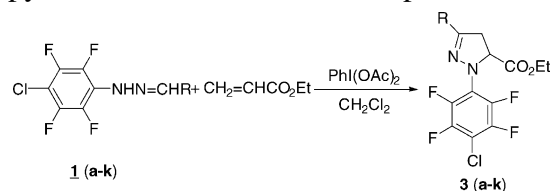


### Synthesis of polyfluorophenyl substituted-4,5-dihydropyrazole derivatives via 1,3-dipolar cycloaddition of nitrile imine with ethyl acrylate

Li-Ping Song<sup>a,b</sup>, Shi-Zheng Zhu<sup>b</sup>

<sup>a</sup>School of Chemistry and Pharmaceutics, East China University of Science and Technology, Shanghai 200237, China

<sup>b</sup>Laboratory of Organofluorine Chemistry, Shanghai Institute of Organic Chemistry, Chinese Academy of Science, Shanghai 200032, China



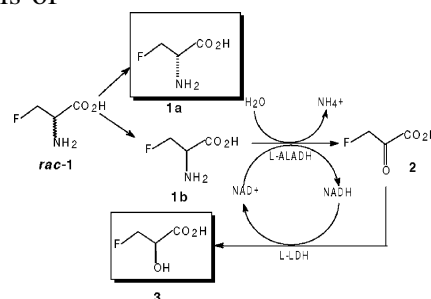
3-Substituted-1-(4-chloro-2,3,5,6-tetrafluorophenyl)-5-ethoxycarbonyl-4,5-dihydropyrazoles (**3**) were synthesized by reaction of aldehyde 4-chloro-2,3,5,6-tetrafluorophenylhydrazones (**1**) with [bis(acetoxy)iodo]benzene in the presence of ethyl acrylate.

### Kinetic aspects involved in the simultaneous enzymatic synthesis of (S)-3-fluoroalanine and (R)-3-fluorolactic acid

Luciana P.B. Gonçalves<sup>a,b</sup>, O.A.C. Antunes<sup>a,b</sup>, Gerson F. Pinto<sup>a,b</sup>, Enrique G. Oestreich<sup>a,b</sup>

<sup>a</sup>CT Bloco A Lab 536B, Instituto de Química, Universidade do Brasil, Rio de Janeiro, RJ 21945-900, Brazil

<sup>b</sup>CT Bloco A Lab 641, Cidade Universitária, Rio de Janeiro, RJ 21945-900, Brazil



### 1-Fluoro-2,4,6-trichloro-1,3,5-triazinium tetrafluoroborate: synthesis, characterization, and ability to effect electrophilic aromatic substitution

R. Eric Banks<sup>a</sup>, Mohamed K. Besheesh<sup>a</sup>, Wolfgang Fraenk<sup>b</sup>, Thomas M. Klapötke<sup>b</sup>

<sup>a</sup>Department of Chemistry, UMIST, P.O. Box 88, Manchester M60 1QD, UK

<sup>b</sup>Department of Chemistry, Ludwig-Maximilians University of Munich,

Butenandstrasse 5-13 (D), D-81377 Munich, Germany

The synthesis of 1-fluoro-2,4,6-trichloro-1,3,5-triazinium tetrafluoroborate, [(ClCN)<sub>3</sub>F]<sup>+</sup>[BF<sub>4</sub>]<sup>-</sup> (**1**), and its application of **1** as an electrophilic fluorinating agent are reported.

