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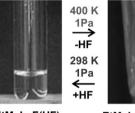
#### Chemistry in heterocyclic ammonium fluorohydrogenate room-temperature ionic liquid

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Physicochemical properties and molecular science in heterocyclic ammonium fluorohydrogenate RTIL are reviewed.



EtMeImF(HF)<sub>2.3</sub>

EtMeImF(HF)<sub>1.0</sub>

Trifluoromethylation of non-activated aldimines with trimethyl(trifluoromethyl)silane in the presence of tetramethylammonium fluoride: A closer look into the reaction route

Nataliya V. Kirij<sup>a</sup>, Lesya A. Babadzhanova<sup>a</sup>, Valeria N. Movchun<sup>a</sup>, Yurii L. Yagupolskii<sup>a</sup>, Wieland Tyrra<sup>b</sup>, Dieter Naumann<sup>b</sup>, Hendrik T.M. Fischer<sup>b</sup>, Harald Scherer<sup>b</sup>

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#### Selective fluorination of m-tyrosine by $OF_2$

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COOH COOH COOH COOH 
$$NH_2$$
  $NH_2$   $N$ 

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## Sequential ene, Diels-Alder reactions of AF4-yne with 1,3,5-cycloheptatriene

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AF4-yne undergoes sequential ene and Diels-Alder reactions to give two diastereoisomeric 2:1 adducts.

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### Convenient synthesis of 3,3,3-trifluoropropanoic acid by hydrolytic oxidation of 3,3,3-trifluoropropanal dimethyl acetal

Takeo Komata<sup>a,b</sup>, Shinya Akiba<sup>b</sup>, Kenji Hosoi<sup>b</sup>, Katsuyuki Ogura<sup>a</sup>

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3,3,3-Trifluoropropanoic acid was conveniently and efficiently prepared starting from 1-chloro-3,3,3-trifluoropropene.

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### Synthesis and structure of trifluoromethylated arylhydrazones formed from coupling of 4-(dimethylamino)-1,1,1-trifluorobut-3-en-2-one with diazonium salts

Huiling Jiang, Shizheng Zhu

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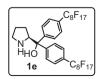
A series of trifluoromethylated arylhydrazones were prepared via an azo-coupling reaction and the crystal structure was discussed via the X-ray diffraction analysis.

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#### Enantioselective catalytic epoxidation of $\alpha,\beta$ -enones promoted by fluorous $\alpha,\alpha$ -diaryl-L-prolinols

Haifeng Cui<sup>a</sup>, Yawen Li<sup>b</sup>, Changwu Zheng<sup>a</sup>, Gang Zhao<sup>a</sup>, Shizheng Zhu<sup>a</sup>

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#### Rhodium-catalyzed $\alpha$ -fluoroalkylation reaction of ketones using silyl enol ethers

Kazuyuki Sato, Makoto Higashinagata, Takashi Yuki, Atsushi Tarui, Masaaki Omote, Itsumaro Kumadaki, Akira Ando

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The treatment of silyl enol ethers with fluoroalkyl halides  $(R_f - X)$  in the presence of RhCl(PPh<sub>2</sub>)<sub>3</sub> gave  $\alpha$ -fluoroalkylated ketones.

$$R_f - X + Q - SiX_3$$
 Rh cat.  $R + Q - R - R$ 

# Synthesis and properties of new pyridine-bridged poly(ether-imide)s based on 4-(4-trifluoromethylphenyl)-2,6-bis[4-(4-aminophenoxy) phenyl]pyridine

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A series of fluorinated pyridine-bridged aromatic poly(ether-imide)s were prepared from a novel pyridine-containing aromatic diamine monomer and the resulting polyimides exhibited good solubility in organic solvents, excellent thermal properties, and good mechanical properties, as well as low dielectric constants and good optical transparency. The effects of fluorine substituents were discussed.

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### Expansion of the pentafluorobenzene ring of perfluoro-1,2-diethyl-1-phenylbenzocyclobutene under the action of SbF<sub>5</sub>

Tatyana V. Mezhenkova, Vladimir R. Sinyakov, Victor M. Karpov, Vyacheslav E. Platonov, Tatjana V. Rybalova, Yuri V. Gatilov

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$$\begin{array}{c|c} F_5C_2 & F \\\hline F & F \\\hline C_2F_5 & \hline \end{array} \begin{array}{c} (1) \ SbF_5 \\\hline (2) \ H_2O & \hline \end{array} \begin{array}{c} F_5C_2 \\\hline F & F \\\hline \end{array} \begin{array}{c} C_2F_5 \\\hline \end{array}$$

## Preparation of novel fluoroalkyl end-capped oligomeric nanoparticles-encapsulated hibitane

Hideo Sawada<sup>a</sup>, Takuro Kariya<sup>a</sup>, Masaki Mugisawa<sup>a</sup>, Takahisa Oya<sup>b</sup>, Shin-ichi Ogino<sup>b</sup>, Hiroshi Kakehi<sup>a,c</sup>, Masashi Miura<sup>c</sup>, Norifumi Isu<sup>c</sup>

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Fluoroalkyl end-capped N-(1,1-dimethyl-3-oxobutyl)acrylamide oligomer [ $R_F$ -(DOBAA) $_n$ - $R_F$ ] reacted with hibitane in methanol at 90 °C to afford  $R_F$ -(DOBAA) $_n$ - $R_F$  oligomeric nanoparticles-encapsulated hibitane in good isolated yields.

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