

NOVEL SULFUR-NITROGEN-FLUORINE COMPOUNDS : SYNTHESIS AND  
PROPERTIES OF SF<sub>5</sub>NHF, SF<sub>5</sub>NClF AND SF<sub>4</sub>=NF

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Using reactions developed for the synthesis of CF<sub>2</sub>=NF, CF<sub>3</sub>NClF and CF<sub>3</sub>NHF from ClC≡N, F<sub>3</sub>S≡N can now be converted in high yield to the analogous sulfur compounds, SF<sub>4</sub>=NF, SF<sub>5</sub>NClF and SF<sub>5</sub>NHF. N-fluorotetrafluorosulfurimine is the simplest sulfur(VI) imine and is a rigid molecule. Details on the synthesis and properties of these novel compounds will be presented.