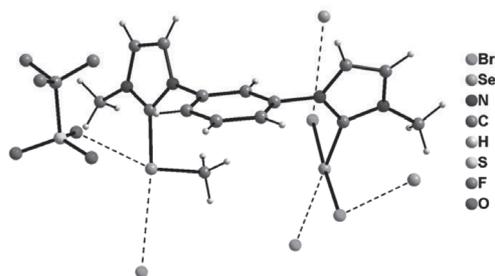


**MS43-P5** **Selenium–Oxygen and Selenium–Bromine Contacts in a Hypervalent bis-(2-Selanyl-imidazolium)-benzene derivative.** Eberhardt Herdtweck, Stefan M. Huber, Florian Kniep, *Catalytic Research Center, Technische Universität München, Ernst-Otto-Fischer-Straße 1, D-85747 Garching bei München*  
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The “T-shaped” hypervalent seleno compound (2-dibromoselenoyl-3-methylimidazolyl)phenyl-(2-methylselanyl-3-methylimidazolium trifluoromethylsulfonate) has been investigated in the solid state by a single-crystal X-ray diffraction analysis. Linear Br–Se–Br moieties are extremely rare. In all hypervalent systems isolated, a strong polarization was observed, with longer bond lengths at the selenium atom involving the most electronegative halogen. [1]



A complex 3d-network in the solid state is built up by two  $\text{Se}\cdots\text{Br}$  contacts in 3.3365(4) Å and 3.4906(5) Å. Whereas, in addition, one oxygen atom from the triflate anion is weakly connected to a Se atom to build an ionic pair with a  $\text{Se}\cdots\text{O}$  contact of 3.400(4) Å.

- [1] Juárez-Pérez, E. J., Aragoni, M. C., Arca, M., Blake, A. J., Devillanova, F. A., Garau, A., Isaia, A. F., Lippolis, V., Núñez, R., Pintus, A. & Wilson, C. (2011). *Chem. Eur. J.* **17**, 11497-11514.

**Keywords:** hypervalent compounds; X-ray crystal structure analysis; selenium compounds

**MS43-P6** **A proton transfer compound: pyridinium-fumarate** Wahiba Falek, Amani Direm, Zina Boutobba, and Nourredine Benali-Cherif, *Laboratoire des Structures, Propriétés et Interactions Inter-Atomiques, Université ‘‘Abbes Laghrou’’*, Khenchela 40.000, Algeria  
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The title compound,  $\text{C}_9\text{H}_9\text{NO}_4$ , is a proton-transfer system obtained from pyridine and fumaric acid. Both neutral and anionic forms of the acid are observed in the crystal structure. The latter contains a wide range of hydrogen-bonding interactions connecting the various fragments and forming a supramolecular structure.

Dicarboxylic acids possess a good potential to be used as proton donors in the synthesis of proton transfer compounds. Among these diacids, fumaric acid ( $\text{fudcH}_2$ ) has been used during recent years for the preparation of such compounds. For example, (pydaH)-(pydcH), in which 2,6-pyridinediamine (pyda) was used as a proton acceptor [1]. The Ethylenediguanidine (EDG) was also used as an acceptor in the proton-transfer compound (EDGH<sub>2</sub>)-(pydc) [2]. The crystal structure of (pyrimH) {H (Hpydc)<sub>2</sub>} has also been reported, and the N, N-diethyl-2-amino-6-methyl-4-pyrimidinol (pyrim) acted as a proton acceptor [1]. The proton transfer compounds: (creatH) (pydcH)  $\text{H}_2\text{O}$  [3] and (phenH) 2(pydc) have been also studied. We report here a proton-transfer compound, obtained from  $\text{fudcH}_2$  as a donor and pyridine as an acceptor [4].

- [1] Aghabozorg, H., Akbari Saei, A. & Ramezanipour, F. (2005). *Acta Cryst.* E61, o3242-o3244.  
[2] Moghimi, A., Aghabozorg, H., Sheshmani, S., Kickellbick, G. & Soleimannejad, J. (2005). *Anal. Sci.* **21**, x141-x142.  
[3] Moghimi, A., Sharif, M. A., Shokrollahi, A., Shamsipur, M. & Aghabozorg, H. (2005). *Z. Anorg. Allg. Chem.* **632**, 902-908.  
[4] Padmanabhan, Joseph, Thirumurugan & Rao, 2008.

**Keywords:** proton transfer compounds, single-crystals, hydrogen bonds