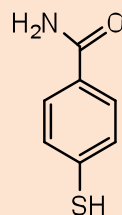
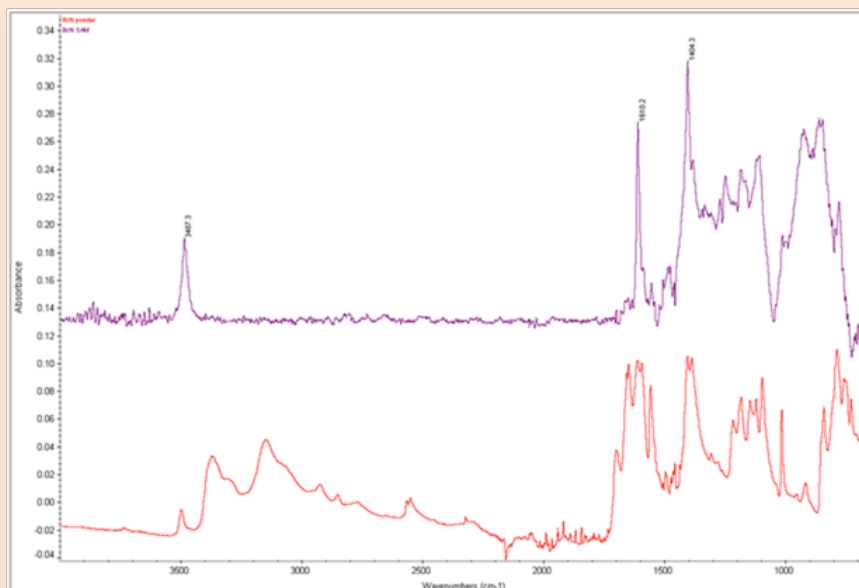


**Chemical name****4-mercaptobenzamide****Structure****Formula** C<sub>7</sub>H<sub>7</sub>NOS**MW** 153.02**Appearance** White powder**Solubility** Polar organic solvents such as chloroform, methanol, DMF, and DMSO**Storage** Room temperature under nitrogen**Handling** Degassed solvents and under nitrogen.**Description**

We have used the molecule to recognize DNA bases in nano-junctions. It reads DNA bases A, C, <sup>m</sup>C, and G except T, generating a characteristic electronic signature for each of them.<sup>1</sup>

1. Huang, S.; He, J.; Chang, S.; Zhang, P.; Liang, F.; Li, S.; Tuchband, M.; Fuhrman, A.; Ros, R.; Lindsay, S., Single base resolution in tunneling reads of DNA composition. *submitted to Nature nanotechnology* **2010**.

**FTIR spectra**

**4-Mercaptobenzamide in its monolayer on the gold substrate (purple) and its powder (red)**