9.50 **Is it possible to “trap” a resonance structure of a compound for study? Explain.**

9.51 **Write Lewis structures for the following species, including all resonance structures.** Also, show any formal charges.

a) $\text{HCO}_2^-$

```
[ O  
  H C O ]
```

b) $\text{CH}_2\text{NO}_2^-$

```
[ H O  
  C N  
  H O ]
```

9.53 **Write three resonance structures for hydrazoic acid, HN$_3$. The atomic arrangement is HNNN.** Show formal charges. Label the least favored resonance structure.

9.54 **Draw the two most favored resonance structures for diazomethane, CH$_2$N$_2$.** Show formal charges. Label the most favored resonance structure.
9.55 Draw three reasonable resonance structures for the OCN\(^-\) ion. Show formal charges. Label the most favored and least favored resonance structure.

\[
\begin{array}{ccc}
\text{O} & \text{C} & \text{N} \\
\end{array}
\]

\[\text{[Diagram showing resonance structures]}\]

9.56 Draw three resonance structures for the molecule N\(_2\)O in which the atoms are arranged in the order NNO. Indicate formal charges. Label the least favored and most favored structures.