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Supplemental Information

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Supporting Material

The Influence of Lipid Bilayer Physicochemical Properties on Gramicidin A Conformer Preferences

John W. Patrick,¹ Roberto C. Gamez,¹ and David H. Russell^{1,*}

¹Department of Chemistry, Texas A&M University, College Station, Texas

*Correspondence: russell@chem.tamu.edu

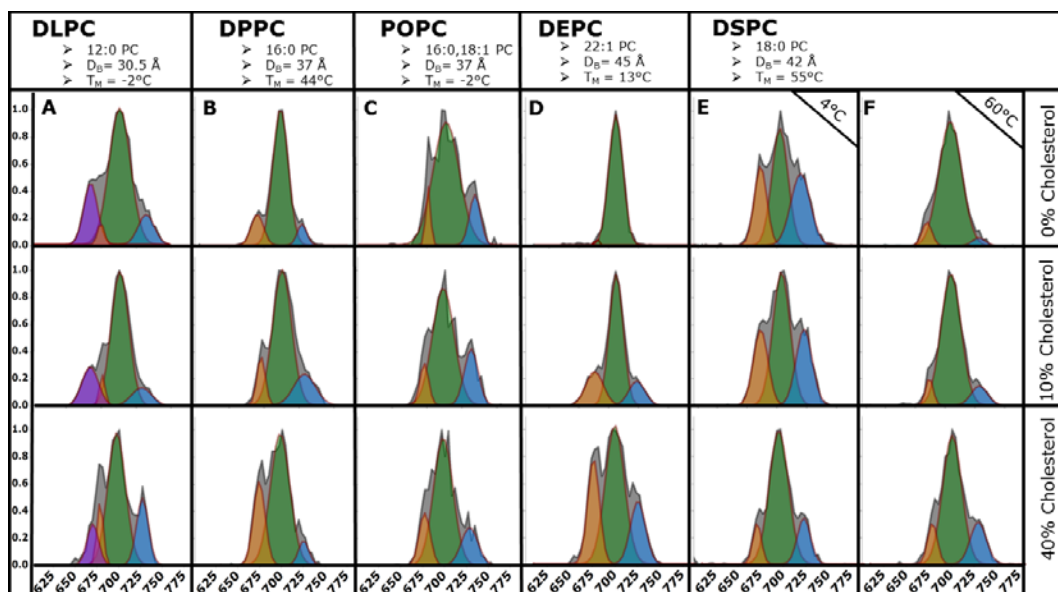


Figure S1 – CCS profiles for $[2\text{GA} + 2\text{Na}]^{2+}$ ions electrospayed from 100 nm DLPC (A), DPPC (B), POPC (C), DEPC (D), and DSPC (E-F) vesicles containing 0-40 mol% cholesterol (vertical, shown at right) plotted as relative abundance vs. CCS (\AA^2). Acyl chain designations, lipid bilayer thickness (D_B), and gel-to-liquid phase transition temperatures (T_M) are provided for each lipid. Peaks fit using $n=3$. Conformers have been labeled according to the following scheme: Purple – Nascent conformer (660 \AA^2), Orange – PDH (675 \AA^2), Green – ADH (700 \AA^2), Blue – SSHH (725 \AA^2).

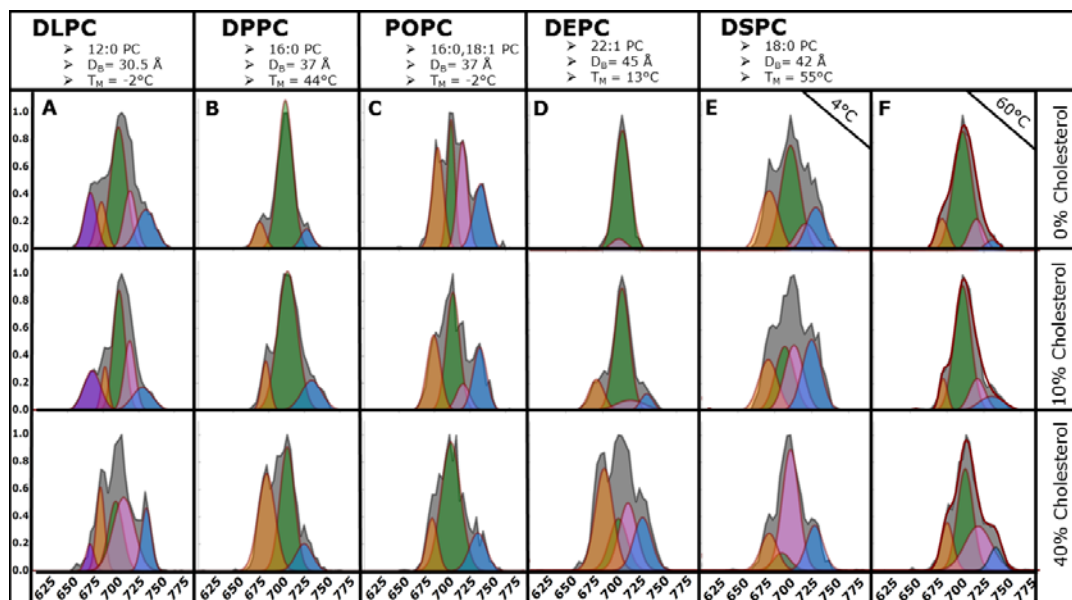


Figure S2 - CCS profiles for $[2\text{GA} + 2\text{Na}]^{2+}$ ions electrospayed from 100 nm DLPC (A), DPPC (B), POPC (C), DEPC (D), and DSPC (E-F) vesicles containing 0-40 mol% cholesterol (vertical, shown at right) plotted as relative abundance vs. CCS (\AA^2). Acyl chain designations, lipid bilayer

thickness (DB), and gel-to-liquid phase transition temperatures (TM) are provided for each lipid. Peaks fit using $n=4$. Conformers have been labeled according to the following scheme: Purple – Nascent conformer (660 Å²), Orange – PDH (675 Å²), Green, Magenta – ADH (700 Å²), Blue – SSHH (725 Å²).