1 **Supplement**

2 **Insoluble lipid film mediates the transfer of soluble saccharides from the sea to**

3 **the atmosphere: the role of hydrogen bonding**

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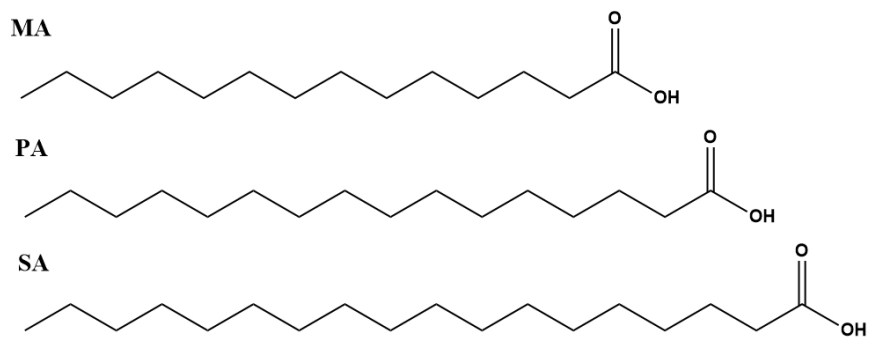
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10   Figure S1. Chemical structures of the three fatty acids used in this study.

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14   Figure S2. The physical drawing of a plunging jet-sea spray aerosol generator.

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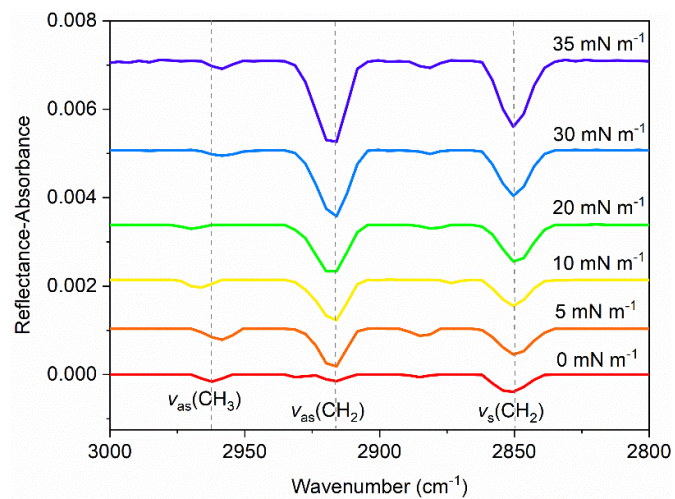
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18 Figure S3. PM-IRRAS spectra (3000–2800 cm^{-1}) of mixed fatty acids at the

19 air/seawater interface at different surface pressure.

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