A simple antibubble maker

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The system consists in releasing a droplet on a soap film. The height of drop must be sufficient for the droplet to cross the interface. After the passage through the interface, the droplet is wrapped in a bubble. When the wrapped droplet hits the surface of the liquid, the bubble helps the formation of the antibubble. See L. Bai et al, COLSUA 509, 334 (2016) for more details.

You can use nearly any dishwashing liquid. It is important to work on a liquid surface free of any bubble. Here is the procedure:

- 1. Prepare soapy water
- 2. Over fill a tank with the soapy water
- 3. Fill the syringe with the soapy water and fix the syringe to the antibubble generator
- 4. Make a soapy film in the frame of the antibubble generator
- 5. Set the frame about 10-15 mm above the surface of the soapy water

6. Release a droplet.

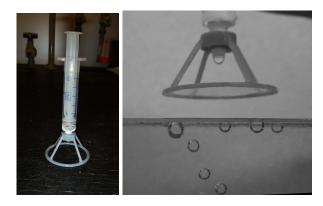


FIG. 1: (left) The generator is mounted at the tip of a syringe. (right) The generator releasing droplet through the frame. The frame is about 10-15 mm above the surface of the tank. Antibubbles can be seen under the surface.