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APPENDIX A

The materials used in automatic headspace.

- A : 10 mL vial for automatic headspace.
- B : Gray septum.
- C : Aluminium cap.
- D : Adaptor, vial (for 10 mL).
- E : Manual Hand Operated Crimper.
- F : The procedure of sealed vial for headspace study.

APPENDIX B

The Calibration of the Volume of Vial for Headspace used in this Study

The volume of vial used in the study was calibrated by the procedure as described in the following:

1. Weight an empty vial.
2. Fill the vial with distilled water up to the brim.
3. The difference between weight of the vial filled with the water and the weight of empty vial is equal the weight of water in vial.
4. Knowing the density of water, the volume of the vial could be determined by the following equation

$$D = W / V$$

Where D = the density of water.

W = the weight of water in vial.

V = the volume of vial.

VITA

Miss Pranom Khaowmek was born in July 28, 1969. She received a Bachelor Degree of Science in Chemistry from Faculty of Science at Burapha University in 1991. In the next year, she was admitted into a Master Degree program in analytical chemistry at Chulalongkorn University. She works at the Scientific and Technological Research Equipment Centre, Chulalongkorn University from 1991 to present.

