

CHAPTER 5

CONCLUSION

We constructed an exposure chamber prototype that can be used for toxicity testing of inhaled substances. This chamber can mimic the human lung. Human lung epithelial cells (A549) cultured in the chamber by the air/liquid interface technique were suitable for toxicity testing of inhaled substances including VOCs and particulate matter.

Air pollution in Warorot market and Saraphi district showed different response to human lung epithelial cells. This might be because of the difference in the composition of air pollution from each area. Thus, it is worth to study the molecular mechanism of air pollution induced human lung epithelial cell toxicity.