

## Editorial

### Ventilation for Better Indoor Air Quality - Selected Papers from the Indoor Air 2005 Conference

When we discuss indoor air quality, we probably cannot forget Benjamin Franklin (1706-1790) as a great believer in fresh air, who regularly took a cold air bath in the morning when he sat naked in his bedroom. In his 11-page long "Preparatory notes and hints for writing a paper concerning what is called catching cold" in 1773, he noted "numbers of people in a close room, and exercising there, fill the air with putrid particles" and "think they get cold by coming out of such hot rooms. They get them by being in". On July 14, 1773 he wrote in a letter to Benjamin Rush: "I have long been satisfied from observation, that besides the general colds now termed influenzas, (which may possibly spread by contagion, as well as by a particular quality of the air), people often catch cold from one another when shut up together in close rooms, coaches, etc., and when sitting near and conversing so as to breathe in each other's transpiration; the disorder being in a certain state." At this point, we should consider the current concerns about the threat of an influenza pandemic from avian influenza (H5N1). It has probably been one of the most unfortunate "events" for the field of indoor air and ventilation that Franklin did not complete his planned paper on catching cold.

It has taken us a long time to recognize the importance of indoor air quality. Indoor air quality affects our health and is especially important because people spend more than 90% of their time indoors.

Ventilation and source control are the two basic engineering tools for better indoor air quality. Ventilation refers to the process of introducing and distributing outdoor and/or properly treated recirculated air into a building or a room. We concur with Andrew Persily's point of view, as expressed in his paper published in this Issue, that "It is not surprising that an issue as important as ventilation is associated with so many questions. However, it is surprising that the existence and importance of so many of these questions are not always appreciated, let alone answered."

The Indoor Air conference series has been a great platform for exchanging new scientific findings and new ideas among the community of indoor air quality researchers, ever since the first conference in Copenhagen in 1978. Indoor Air 2005, the 10th International Conference on Indoor Air Quality and Climate, was held from September 4 to 9, 2005 in Beijing, China. This conference attracted nearly 1000 participants from about 50 countries with 136 parallel sessions and 956 contributed papers. These papers are available on CD through [www.indoor2005.org.cn](http://www.indoor2005.org.cn) or [www.tup.com.cn](http://www.tup.com.cn).

This Special Issue contains 7 extended papers from Indoor Air 2005 and reflects the continuing contribution made by scientists in understanding the importance and new techniques of ventilation. Taken together, the papers published in this Special Issue provide a snapshot of the wide range of current interests in the area of building ventilation, such as displacement ventilation and natural ventilation.

Special thanks go to Professor Qingyan Chen, Chair of the Journal Committee of Indoor Air 2005 for his great coordination effort. We would also like to thank all the authors and more than 20 peer reviewers for their work and effort for this special Issue.

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