Food is not only vital to the survival of human beings, it is also deeply integrated into the culture of each civilization. In Asia, food embodies art, family, pleasure and wellbeing. For those who are interested in the chemistry of food, there is still a lot to be discovered, especially in Asian food. This presentation will briefly highlight three areas which will challenge all chemists and biologists:

Taste: the science of taste has revolutionized the food industry. Scientists are now beginning to understand how humans perceive saltiness, sweetness, bitterness and sourness. With the use of high throughput screening, molecules that are more potent than monosodium glutamate and sucrose are already available to food companies to develop food with less monosodium glutamate and beverage with less sugar.

Fermentation: Asians started fermenting foods since prehistoric times, for preservation, taste enhancement and nutrition. Many traditional fermentation processes such as soya sauce have been industrialized. However, it is only in recent years that scientists began using proteomic tools to discover novel bioactive peptides molecules in fermented foods, paving the way for new drugs and nutraceuticals.

Antimicrobials: Consumers today are pushing food companies to replace chemical preservatives like benzoates and sorbates with natural ingredients such as essential oils, bacteriocins and organic acids. In addition, food scientists and packaging engineers are exploring the use of active packaging as complementary or alternative approach to chemical preservation.

 CBC SEMINAR ANNOUNCEMENT

Dr. Allan Lim
Group Manager, Food Science and Innovation Partnerships
Nestlé R&D Center

The Science of Food

Date: 20th May 2011 (Friday)
Time: 11am – 12.30pm
Venue: NTU SPMS CBC Building Level 2, Conference Room
Host: Assoc. Professor Li Tianhu