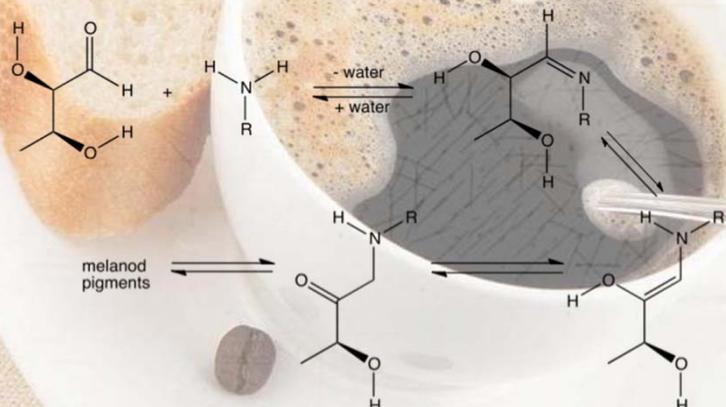


# Formation of Key Aroma Compounds during Food Processing



by **Dr. Deepthi K Weerasinghe**  
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## Abstract

Formation of key aroma compounds during food processing is critical to palatability and consumer acceptance of food. Maillard reaction, colloquially referred to as Process flavors and are due to the interaction of degraded products of carbohydrates, oxidative products of lipids, proteins and vitamins and minerals found in food. Maillard Chemistry celebrated 100 years and has been the subject of over ten ACS symposium series books. These flavors have been accepted in our food supply and they play an important role as a cost effective method of producing complex authentic tonalities. The advent of new analytical methodology has afforded a better understanding of the mechanism by which these flavors are formed that in turn has helped in addressing the consumer safety concerns. The predominant benefactor of process/and reaction flavor knowledge has been the flavor industry; that has grown from being a cottage industry to over US \$10 billion today.

**Host:** Prof. Zhou Weibiao  
**Date:** 24<sup>th</sup> Feb2014, Monday  
**Time:** 12pm to 1 pm  
**Venue:** Executive Classroom, S8-03-14

## About the speaker



Dr. Deepthi Weerasinghe received a Ph.D. in organic chemistry, from the University of Bath in Bath, U.K. and a B.Sc. (with honors) in applied chemistry, from Kingston University, in Surrey, U.K. He is currently a senior flavor scientist in Nestlé PTC Solon, working on delivering new sauce technology. Previously Dr. Weerasinghe has worked in Coke and PepsiCo and also 8 top flavor companies including IFF, Firmenich, Universal / Sensient. He has experience in various areas of food industry:

Maillard chemistry of savory and sweet flavors; mitigating the temporal profile of tastants; analyzing a variety of mixtures for organic compounds; matching flavors to cost reduce; manufacture of “natural”, Kosher, Halal and vegetarian flavors; and hands on experience in most aspects of molecular biology.

Dr. Weerasinghe is also a editorial advisory board member of the Journal of Agriculture and Food Chemistry since 2011. He interacts closely with FDA, USDA, CFSAN, academic and industrial scientists via ACS activities.

**All are welcome !**