



# Optimum Frying - Practical and Theoretical Aspects Workshop

**Date: Saturday 8 February 2020**

**Time: 9.00am – 4.00pm**

**Venue: ICC Sydney**

**Room: Meeting Room C2.1**

**Workshop Cost: AUD \$400 per person (Inc GST)**

Deep-fat frying is one of the most popular processes for food preparation and has an increasing market world-wide. Although this complex and dynamic process takes place at the surface of the food the reactions in the oil are still poorly understood. Nowadays it is realized that chemical and physical changes of fats and oils at elevated temperature cannot be explained by autoxidation only. Since all fat in fried food is replaced by used frying oil the focus of interest also has to be on aspects important for maintaining the oil quality.

The program will cover new theoretical and practical aspects necessary for a better understanding of the frying process. In this context the developments in frying technology, possibilities to improve the quality and heat stability of frying oils by addition of plant based ingredients or filtering and oil treatment will be discussed.

New analytical methods for fast and easy quality control to monitor the degradation of oil in the fryer and



possibilities to avoid the formation of toxic compounds during frying will also be presented.

**Thus, this workshop is intended for all persons from food producers, sciences, official and commercial laboratories, marketing and consumers who are involved in the production of fried food, research on the frying process or the assessment of used frying oils or interested in deep-fat frying in general.**

The aim of the workshop is to provide the participants with new information on frying and to discuss the latest findings in order to make the market of fried products fit for the future.

## Preliminary Program

9.00am	Regulatory issues throughout the world for fats and oils <i>Bertrand Matthaeus, Max Rubner Institut, Detmold, Germany</i>
9.30am	Fundamentals of the deep frying process <i>Christian Gertz, Maxfry GmbH, Hagen, Germany</i>
10.00am	Formation and migration of health-risk compounds during deep frying <i>Bertrand Matthaeus, Max Rubner Institut, Detmold, Germany</i>
11.00am	Oxidation and structural decomposition of fats and oils at ambient and elevated temperatures <i>Christian Gertz, Maxfry GmbH, Hagen, Germany</i>
11.30am	Occurrence and measurement of volatile compounds in the fumes of different frying processes <i>Bertrand Matthaeus, Max Rubner Institut, Detmold, Germany</i>
12:00pm	Application of Near infrared spectrophotometry to the study of the degradation products of fats <i>Dagmar Behmer, Bruker, Maxfry GmbH</i>
1.30pm	Filtering and oil treatment <i>Samantha Magee, Carlson, UK</i>
2.00pm	Natural and synthetic compounds as stabilizer of frying oils <i>Christian Gertz, Maxfry GmbH, Hagen, Germany</i>
2.30pm	Properties and performance of different vegetable oils for fryings <i>Bertrand Matthaeus, Max Rubner Institut, Detmold, Germany</i>
3.00pm	Simulation of the frying process <i>Christian Gertz, Maxfry, Hagen, Germany</i>

**3.30pm Final Discussion (30 mins)**