

# FOOD TOXICOLOGY

## MASTERCLASS SERIES

2 Masterclasses | 3 - 6 August 2020, 9am - 6pm

### Background

Understanding and ensuring food safety is essential for professionals active in food science, food business and food control. In particular, the success of food business operators is dependant on being pro-active for food safety. For this task, knowledge in food toxicology and risk assessment is essential.

### Course Objectives

This course is intended first to provide insights into the principles of toxicology and second to present specific contaminants and residues in foods (mycotoxins, process contaminants, pesticides, heavy metals) as well as emerging contaminants for risk assessment and ensuring food safety.



### MASTERCLASS I

#### Fundamentals of Toxicology and Risk Assessment

**3 - 4 August 2020**  
9am - 6pm

- Understand principles of toxikokinetics (resorption, transport, distribution, phase I- / phase II / phase III metabolism, conjugation, elimination) and toxikodynamics (dose activity relations, acute and chronic toxicity, studies for assessing the toxicity)
- Understand different strategies for risk assessments of foods
- Apply the principles of toxicokinetics and toxicodynamics to risk assessment of foods

### MASTERCLASS II

#### Food Safety Management

**5 - 6 August 2020**  
9am - 6pm

- Understand the basis of maximum limits for food additives, contaminants and residues
- Understand the risks from major contaminants including mycotoxins, process contaminants, heavy metals as well as from pesticide residues
- Conclude maximum limits for unknown and emerging contaminants to protect consumers
- Conclude mitigation strategies to protect consumers



**MASTERCLASS INSTRUCTOR:**  
**Prof. Dr. Michael Rychlik**  
**Technical University of Munich (TUM)**  
Chair of Analytical Food Chemistry (Head)  
Comprehensive Foodomics Platform  
Research Department Nutrition and Food Sciences (Director)  
Honorary Professor at the **University of Queensland**, Australia

**VENUE:**  
**Technical University of Munich (TUM) Asia**  
**Level 5, 510 Dover Road, SIT@SP Building, Singapore 139660**

Each Masterclass consists of lectures and tutorials.

### Who Should Attend

Food scientists and professionals in food business, academia and inspection.

### Masterclass Fees

**SGD 600/pax\***

\*The price is per Masterclass in this two part Masterclass series.

**FOR MORE INFORMATION  
OR TO REGISTER, PLEASE  
VISIT:**

[www.tum-asia.edu.sg/foodmc](http://www.tum-asia.edu.sg/foodmc)

