

## SINGAPORE NATIONAL INSTITUTE OF CHEMISTRY PROFESSIONAL DEVELOPMENT COURSES



### Essentials of Toxicology – An Advanced Overview of Toxicological Sciences for Chemical Professionals 9 & 10 July 2007

Chemical related industries and trade are increasingly being regulated by governments worldwide, and toxicology is the corner stone of many regulations with high impacts on the manufacturing, commerce, transportation, logistic, custom control, waste management, as well as R&D of chemicals.

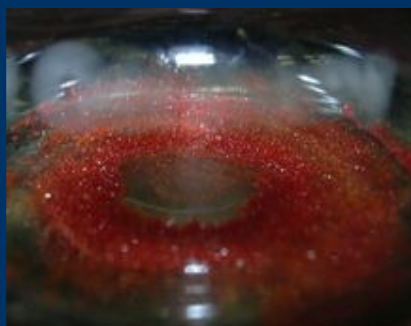
This two-day course aims to refresh your background knowledge about the principles and definitions of toxicology, and is designed to bring participants up to current levels of understanding of toxicology as it applies to both the human health and environmental areas.

At the end of the course, you will have current, cutting-edge knowledge in human health and environmental toxicology and be familiar with the process used to interpret biotoxicological data. In addition, you will gain working knowledge of techniques for risk assessment in human health and the ecosystem and understand and be able to apply the process of human and ecotoxicological risk management.

#### COURSE CONTENT

- Recap the general principles of toxicology, mechanisms of toxicology and risk assessment principles
- Pharmacokinetics of toxicants: absorption, distribution, and excretion
- Biotransformation of toxicants
- Non-target toxicology: chemical carcinogenesis, genetic toxicity, developmental toxicity & birth defects
- Target organ specific toxic responses: blood, immune system, liver, kidney, respiratory system, nervous system, ocular & visual system, heart & vascular systems, skin, reproductive system, endocrine system
- Toxic effects of agents & chemicals: pesticides, metals, solvents & vapours, natural toxins
- Environmental toxicology: air pollution, ecotoxicology
- Application toxicology: food, analytic/forensic, clinical, and occupational toxicology
- Regulatory toxicology

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Website: [www.snic.org.sg](http://www.snic.org.sg)



#### **FOR WHOM**

Chemists in all chemical industrial sectors: laboratory, QC, manufacturing, safety & regulatory compliance, logistic & transportation, waste management & pollution control, food, drugs & medicine, biotechnology, petroleum, specialty chemicals and commodity chemicals;

Chemical related professionals in regulatory, custom, and other chemical related governmental organisations;

Chemical related professionals in educational & other academic institutions.

#### **DURATION**

Two days (9.00 am to 5.00 pm)

#### **VENUE**

The Pines  
(30 Stevens Road, Singapore 257840)

#### **FEE**

S\$480 (S\$384 or 20% discount for SNIC members)

#### **HOW TO REGISTER**

Register online at [www.snic.org.sg](http://www.snic.org.sg) or complete the attached registration form. For enquiries, please contact the Secretariat for Singapore National Institute of Chemistry at [snic@cma.sg](mailto:snic@cma.sg) or tel: 6336 2328.

#### **ABOUT THE TRAINER**

**Dr. Peter Chan** has a B.Sc. in pharmacy from the Northeastern University, a Ph.D. in toxicology and pharmacology from the University of Mississippi Medical School, and a diploma in Executive Management from the Wharton Business School. He is a Diplomate of the American Board of Toxicology (D.A.B.T.).

Dr. Chan is the Managing Director of the PCTS Specialty Chemicals Pte Ltd that supplies raw materials to the coating industry in the region. In addition, he also serves as an adjunct associate professor in the Chemistry Department of the National University of Singapore, a member of the Singapore Standard Council, the Chairman of the Singapore Chemical Standard Committee of the Spring Singapore, and a Council member of the Singapore National Institute of Chemistry. Dr. Chan has published over 20 papers in scientific journals and authored 4 chapters in toxicology textbooks. He is a frequent speaker in scientific conferences.

#### **ABOUT THE SINGAPORE NATIONAL INSTITUTE OF CHEMISTRY**

The Singapore National Institute of Chemistry (SNIC) was established in year 1970 to serve the interests of chemists and to maintain a high standard of professional competence and ethical practice in Singapore. Most of its members are professionals from the chemistry-related industries.

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**SINGAPORE NATIONAL INSTITUTE OF CHEMISTRY PROFESSIONAL DEVELOPMENT COURSES  
AN ADVANCED OVERVIEW OF TOXICOLOGICAL SCIENCES FOR CHEMICAL PROFESSIONALS  
9 & 10 July 2007, The Pines (30 Stevens Road Singapore 257840)**

**REGISTRATION FORM**

**PERSONAL PARTICULARS** (Please print your particulars in Block Letters)

Prof     Dr     Mr     Mrs     Mdm     Ms

Family Name																					
First Name																					
Organisation																					
Mailing Address																					
Country											Postal Code										
Phone											Fax										
Email Address																					

COURSE	COURSE FEE FOR SNIC MEMBER	COURSE FEE FOR NON-SNIC MEMBER
<b>Essentials of Toxicology – An Advanced Overview of Toxicological Sciences for Chemical Professionals</b>	\$384.00	\$480.00
<b>Total Amount</b>		

No refund will be made for cancellation; replacement is allowed.

Meal Requirement:                       Vegetarian                       Others: \_\_\_\_\_

**METHOD OF PAYMENT**

By Cheque in Singapore Dollars drawn on a bank in Singapore and made payable to “**CMA International Consultants Pte Ltd**” .  
Cheque Number is \_\_\_\_\_ from issuing bank \_\_\_\_\_

By Credit Card. Please deduct the above amount from my  **VISA**     **MASTERCARD**     **AMEX**  
Card Holder's Name: \_\_\_\_\_  
Card Number:    \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_  
Expiry Date: (MM/YYYY)    \_\_\_\_\_ - \_\_\_\_\_

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

Please return the completed registration form, together with cheque payment if applicable, to:

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