

Workshop on Benchtop NMR and Applications

Mr. Peter Sprenger

Managing Director of Kruthwong & Sprenger

Date	: 21 January 2016 (Thursday)
Time	: 9:30am – 4:00pm
Venue	: SCM809
Language	: English
Facilitator	: Dr. Zhang Hongjie

Abstract

Nuclear Magnetic Resonance (NMR) is a powerful method to elucidate the structure of organic molecules. The workshop is intended for all audiences, for students and academics who are interested in NMR. The first part of the workshop will review the concepts of NMR structure elucidation by introducing the basic NMR experiments including 1D (^1H and DEPT) and 2D (COSY and HSQC) NMR and more. This will be presented by running real NMR experiments in the workshop. We will use the Inversion Recovery (IR) experiment to demonstrate how NMR could be thought in the classroom and apply it to a real world application. The concepts of chemical reaction monitoring and real applications in forensic sciences will round up the workshop. Researchers and Students are encouraged to bring their own NMR samples. Deuterated solvents are not required since the Benchtop NMR we use has a built in lock system.

Speaker

Peter Sprenger is the Managing Director of Kruthwong & Sprenger (K&S) www.krusp.com, incorporated in Bangkok and Singapore. K&S is the official distributor in Southeast Asia and Hong Kong, of Magritek, a New Zealand based High Tech company specialized in NMR benchtop systems. www.magritek.com K&S is also an authorized reseller of MestreLab www.mesterlab.com, a software company specialized in NMR data processing. Peter has extensive experience in Magnetic Resonance. From 1995 to 2014, he started and managed the operations of Bruker, a leading NMR instrument manufacturer, in Southeast Asia and has conducted many workshops and seminars. Peter has a BSc. degree in Electrical Engineering from the Technical University Rapperswil, Switzerland, and two MSc. degrees (Electrical Engineering and Nuclear Engineering) from the Massachusetts Inst. of Technology, Cambridge MA, USA.

**** All are welcome ****



Agenda of Workshop on Benchtop NMR and Applications
Thursday January 21 2016

Time	Topic	Speaker
9.30 – 9.40	Welcome Address	Dr. Zhang Hongjie
9.40 – 10.30	NMR and chemical structures	Peter Sprenger
10.30 – 11.30	NMR, the Physics of it	Peter Sprenger
11.30 – 12.00	Teaching NMR	Peter Sprenger
12.00 – 13.00	Lunch Break	
13.00 – 13.45	NMR application: Reaction Monitoring	Peter Sprenger
13.45 – 14.30	NMR application: Forensic Science	Peter Sprenger
14.30 – 15.55	Running NMR experiments	Students
15.55 – 16.00	Closing	All