

Virtual Visiting Professor

EP 5 : Topic
Research group meeting
(Research trends in chemistry,
energy, food, etc)

9 February 2022
 13.30 – 15.30 hrs.
 (Thailand Time, UTC+7)

Professor Philip Marriott
 School of Chemistry
 Faculty of Science, Monash University,
 Melbourne, Australia

Dr. Weeraya Khummueng
 Moderator

Meeting ID: 948 4442 6692

Zoom Meeting

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Participants (22)

6220310198 USANIYA WATTTHANA
 ANURAK BOONPECH 6220114068
 Chompounot Intong
 iPhone
 Madiyah Anwar(6220310172)มadiyah อานว
 mii mii
 Nareeman Doryee
 Pattamarat
 PONGSANT NUISOH
 Rusmanee Ma 62220310120[รสนม มา
 sahara ya(6220310116)เสหระยา
 Saowapa Chotisuan
 Sorbaryah Aila 6220310033
 Suriya Hahyeetammalang
 trin khawsung
 Walairat

History & Studies

PhD LaTrobe Uni
 PDF Bristol Uni
 Lect/Snr Lect NUS
 Lect/Prof RMIT
 Prof Monash

MECA Spectroscopy & GC / FID / FPD (Ni, Pd, Pt) Metal DTP Complexes
 GC-MS of metalloporphyrins; Porphyrin geochemistry
 GC reactor studies; Cyclophanes (Prof YH Lai; NUS) & oximes
 Capillary electrophoresis
 Gas chromatography; Multidimensional GC (MDGC)
 Comprehensive two-dimensional gas chromatography (GC×GC) & GC reactor oximes (extractions; fundamentals; applications)
 MDGC; GC×GC & GC reactor oximes
 HPLC-MS
 Phase developments
 Simulations

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International Visitors ~ Collaboration Studies:

- Sweden.** PAH in mammals; PL Extraction; Cryogenic effects; Env. toxicants; PCB;
- Denmark.** Bis-phenol A in fish
- Netherlands.** Metrics of data in GCxGC;
- UK.** Urban Atm. Pollution;
- USA.** Interconv floral attractant
- Mexico.** Urban pollution; Quant. anal. in GCxGC; PAH
- Colombia.** Ess oils
- Brazil.** Euca. oils; Laranja & Cachaça beverage; Ess. oils; Petroleum; Coffee;
- Germany.** Interconv #1 & #2; MDGC; Bioanalysis; MOF phases; Ess oils;
- Finland.** FAME in GCxGC;
- Switzerland.** 2D ret indices in GCxGC; MDGC; Fast GCxGC
- Italy.** Fast GC; Coffee; Ess oils; PAH in olives; Ret indices; GCxGC reproduce; Food flavonoids;
- Turkey.** Ess Oils; Herbs, Spices; SPME
- China.** Interconv; Spices; TCM; Ess Oils; Pesticides; Modulation
- Singapore.** Sildenafil in herbal nutrients
- Thailand.** Bio-diesel; Ess oils; Interconv;
- Pakistan.** FAME
- France.** Pesticides & Selective det
- Portugal.** Pepper; Sea salt VOC; Ess oils; MS detn; Pollutants

Participants (26)

Q. Find a participant

- 6220310124 Suthisa Srinuanchan
- 6220310166 Fatmee Doloh
- 6220310198 USANIYA WATTANA
- Apichai Bourchookarn
- Chompounoot Intong
- DHAMMACHAI CHONGSOOKSRI
- iPhone
- Madiyah Arwae(6220310172)มาดิยาห์ อรวะ
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- Pattamarat
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- Rusmanee Ma 6220310120[รศ.มานี มา]
- sahara ya(6220310116)สะหระยา
- Saowapa Chotisawan
- Sorbariyah Alla 6220310033

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GCxGC ~ Tutorial

Peaks are sliced (modulated); each slice is introduced into a short 2D column to provide further separation. Data presented as a 2D plot.

Participants (28)

Q. Find a participant

- DHAMMACHAI CHONGSOOKSRI
- iPhone
- Kittisak Tinpun
- Madiyah Arwae(6220310172)มาดิยาห์ อรวะ
- mii mii
- Nareeman Doryee

Chat

Me to Everyone

WK <https://forms.gle/nA1BedGEAG2S5r5m7>

รบกวนทุกท่านทำแบบประเมินด้วยนะคะ ขอขอบคุณค่ะ

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Advantages & Attributes of GC×GC

- GC×GC Uses 2 columns; 1st = long, 2nd = short
- GC×GC Has a modulator
- GC×GC Samples narrow 'cuts' from 1^D, transfer to 2^D
- GC×GC 2^D provides additional separation
- GC×GC Generates a 2D separation space
- GC×GC Peak compression e.g. 5 s → 0.2 s
- GC×GC Better detection sensitivity – improved LOD
- GC×GC Improves MS detection – reduces chemical background

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- SY sahara ya(6220310116)enervh an
- SC Saowapa Chotisuwan
- Sorbariyah Aila 6220310033
- T trin khawsung
- W Walairat
- สุวิภา ธะนิพัฒน์

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The Genesis of my Cryogenic modulator for MDGC & GC×GC..

Longitudinally Modulated Cryogenic System

@ ISCC Riva del Garda Conference Italy

(Hans-Gerd Janssen Lecture)

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*** DEANS SWITCH ***

Metabolomics Doping C ECD/MS Essential oils Fragrances & Aroma

Petrochemicals Amino Acids Flavonoids Pesticides

PAHs Fungicides GCxGC-qMS Carbs & Spices WINE

Illicit Drugs TAGs & DAGs POLLUTANTS

Allergen Fatty Acids Biofuels

Cryogenic CPME FLAVOURS TEROIDS TCM Natural Products

Joss Smoke Enantiomers 2190 MCS

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The GCxGC / MDGC 'Systems' Team

Then

Russell Kinghorn

Robert Shellie

Ruby Ong

Danielle Ryan

Michael Dunne

Tin Tran

James Harynuk

Weeraya Khummueng

Graham Eyres

Stefan Bieri

Shin-Miin Song

Yada Nolvachai

Blagoj Mitrevski

Yong-Foo Wong

Sung-Tong Chin

Sharif Khan

Chadin Kulsing

Now

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6220310180 Wafah Choorung

6220310198 USANIYA WATTTHANA

DC DHAMMACHAI CHONGSOOKSRI

I iPhone

MA Madiyah Arwae(6220310172)มadiyah อารว

Nareeman Doryee

Norsafia Manor

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PONGSANT NUISOH

ROJANA SAENGSTOT

RM Rusmanee Ma 6220310120(รสนม มา)

SY sahara ya(6220310116)เฮนรี่ อ

SC Saowapa Chotisuan

Sorbariyah Aila 6220310033

W Walairat

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The BRAZIL "Orthogonality Experiment"



Not-polar - Polar

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6120310024

6220114068 ANURAK BOONPECH

6220310022Thanathorn Intagarn

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6220310180 Wafah Choorung

6220310198 USANIYA WATTTHANA

DC DHAMMACHAI CHONGSOOKSRI

I iPhone

Kannika Sahakaro

MA Madiyah Arwae(6220310172)มadiyah อารว

Nareeman Doryee

Norsafia Manor

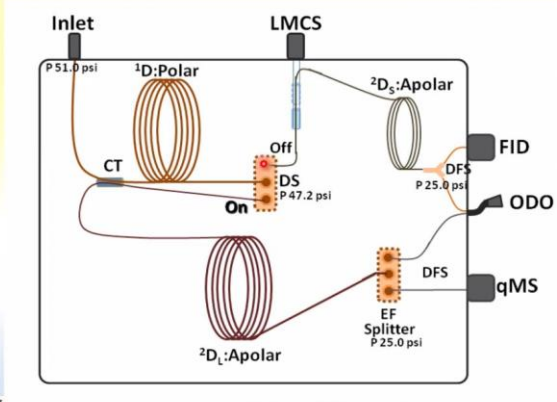
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Integrated GC×GC & MDGC with mass spectrometry and olfactometry

GC-FID/O GC×GC-FID MDGC-MS/O



Inlet P 51.0 psi

LMCS

1D:Polar

CT

Off

On

DS P 47.2 psi

2D:Apolar

FID

ODO

DFS P 25.0 psi

qMS

EF Splitter P 25.0 psi

2D:Apolar

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Find a participant

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Kannika Sahakaro

Madiyah Arwae(6220310172)จกัณณิณี าวา

Nareeman Doryee

Norsafia Manor

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ROJANA SAENGSTOT

Rusmanee Ma 6220310120(จกัณณิณี าวา)

sahara ya(6220310116)จกัณณิณี าวา

Saowapa Chotisuan

Sorbariyah Aila 6220310033

trin khawung

จกัณณิณี าวา

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Caulfield

Parkville

Peninsula

Malaysia

SEU – Monash, China

Prato Centre, Italy

Indonesia

IITB Monash Academy

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Find a participant

weeraya Khummueng (Me)

SAT_18 PSU (Host)

Kannika Sahakaro

Philip Marriott

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6220310039HANAN DUERAMAE

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Madiyah Arwae(6220310172)จกัณณิณี าวา

Nareeman Doryee

Norsafia Manor

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Pattamarat

Madiyah Arwae...

iPhone

Saowapa Chotis...

Philip Marriott

weeraya Khummueng

Kannika Sahakaro

PRINCE OF SONGKLA UNIVERSITY

Participants (24)

	weeraya Khummueng (Me)		
	SAT_18 PSU (Host)		
	Kannika Sahakaro		
	Philip Marriott		
	6120310024		
	6220310022Thanathorn Intagarn		
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	Madiyah Arwaet(6220310172)มadiyah อาวเอ		
	Nareeman Doryee		
	Norsofia Manor		

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Participants (24)		
Q Find a participant		
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	6220310180 Wafah Choorung	✉ 🗨
	6220310198 USANIYA WATTHANA	✉ 🗨
	DHAMMACHAI CHONGSOOKSRI	✉ 🗨
	iPhone	✉ 🗨
	Madilyah Arwae(6220310172)นางสาว อารว	✉ 🗨
	Nareeman Doryee	✉ 🗨
	Norsofia Manor	✉ 🗨
	Pattamarat	✉ 🗨
	PONGSANT NUISOH	✉ 🗨
	ROJANA SAENGSTOT	✉
	Rusmanee Ma 62220310120(นางสาว รส)	✉ 🗨
	sahara ya(6220310116)นายสาว ยะ	✉ 🗨
	Saowapha Chotsiisuan	✉ 🗨
	Sorbariyah Aila 6220310033	✉ 🗨
	สุภาว ฐิติพัฒน์	✉ 🗨
Invite		Mute Me