

10th Anniversary
Celebration 2014-2024
The Malaysia Local Chapter of the Controlled Release Society

Asia Pacific Delivery Science Conference

APDSC Kuala Lumpur 2024
Asia Pacific Delivery Science Conference | 26 - 28 August

Revolutionising Delivery Science:

Bridging Theory, Innovation & Future Solutions

26 - 28 August 2024
Monash University Malaysia



As MyCRS marks a decade of excellence, the Asia Pacific Delivery Science Conference stands as a testament to our commitment to push boundaries via fostering collaboration together with the CRS Australian, Chinese Taipei and New Zealand Local Chapters. Together, let's embark on a journey that transcends time, celebrating the past, present, and future of scientific discovery in delivery science. Secure your place at this landmark event and be part of the scientific revolution that will define the next era!

Organised by: **Co-organiser:**

Co-hosts:

Partner journal:



Visit our website for more information

Register now!

CRS MALAYSIA LOCAL CHAPTER (MyCRS)

The establishment of the Malaysia Local Chapter of the Controlled Release Society Inc. (MyCRS) on March 19, 2014, marked a significant milestone in Malaysia's controlled release and drug delivery field.

MyCRS provides a platform for sharing ideas and technical expertise with those interested in this research area. To achieve this goal, it organises regular lectures, focus group discussions, webinars and conferences. We advocate delivery science within the local community and foster interactions with Controlled Release Society (CRS Inc.) headquarters in the US and their global community, reaching out to more than 50 countries. Additionally, MyCRS offers Travel Grants to students and young scientists, enabling them to participate in and present their research at international platforms.

ORGANISING COMMITTEE

Advisor	Prof. Dr. Mohd Cairul Iqbal Mohd Amin Assoc. Prof. Dr. Ng Shiow Fern
Chairperson	Dr. Fu Ju Yen
Co-chairperson	Assoc. Prof. Dr. Alice Chuah Lay Hong Dr. Goh Choon Fu
Scientific Committee	Prof. Dr. Kiew Lik Voon (Chair) Prof. Dr. Jui-Yang Lai (Co-Chair) Prof. Dr. Becky Chen (Co-Chair) Dr. Tushar Kumeria (Co-Chair) Prof. Shyamal Das (Co-Chair) Assoc. Prof. Dr. Fazren Azmi Assoc. Prof. Dr. Zuratul Ain Abdul Hamid Assoc. Prof. Hazrina Ab. Hadi Assoc. Prof. ChM. Dr. Awis Sukarni Mohmad Sabere Prof. Dr. Mohd Cairul Iqbal Mohd Amin Assoc. Prof. Dr. Ng Shiow Fern Dr. Fu Ju Yen Dr. Goh Choon Fu Assoc. Prof. Dr. Alice Chua Lay Hong Dr. Izzat Fahimuddin Mohamed Suffian Dr. Manisha Sharma
Corporate Engagement	Assoc. Prof. Dr. Hazrina Ab. Hadi
Secretariat	Nur Dini Fatini Mohammad Faizal
Finance & Sponsorship	Assoc. Prof. ChM. Dr. Awis Sukarni Mohmad Sabere
Marketing & Promotion	Lee Jing Yi Estee
Logistics	Dr. Ronald Lee Fook Seng Dr. How Chee Wun Dr. Athirah Bakhtiar Dr. Usha Sundralingam



PLENARY SPEAKERS



**Mohd Cairul Iqbal
Mohd Amin**

Professor
Universiti Kebangsaan Malaysia



Jui-Yang Lai

Professor
Chang Gung University



Chun-Xia Zhao

Professor
University of Adelaide



Paul Chi-Lui Ho

Professor
Monash University Malaysia



Tin Wui Wong

Professor
Universiti Teknologi MARA



Shyamal Das

Professor
University of Otago

KEYNOTE SPEAKERS



Yunching Chen

Professor
National Tsing Hua University



Chia-Ching Chang

Professor
National Yang Ming Chiao Tung
University



Hang Ta

Professor
Griffith University



Ida Idayu Muhamad

Professor
Universiti Teknologi Malaysia



Shang-Hsiu Hu

Professor
National Tsing Hua University



Chai Hong Yeong

Professor
Taylor's University



Amirali Popat

Associate Professor
University of Queensland



Shioh-Fern Ng

Associate Professor
Universiti Kebangsaan Malaysia



Khay Fong

Senior Lecturer
Monash University



Tushar Kumeria

Scientia Senior Lecturer
University of New South Wales

INVITED SPEAKERS



**Jeff Chien-Wen
Chang**

Professor
National Tsing Hua University



Yu-Fen Huang

Professor
National Tsing Hua University



**Kevin Chia-Wen
Wu**

Professor
National Taiwan University



Sanjay Garg

Professor
University of South Australia



**Alice Lay-Hong
Chuah**

Associate Professor
Monash University Malaysia



Chian-Hui Lai

Associate Professor
National Chung Hsing University



INVITED SPEAKERS



Chieh-Cheng Huang

Associate Professor
National Tsing Hua University



Khoon Lim

Associate Professor
University of Sydney



Bey Fen Leo

Associate Professor
University of Malaya



Wen-Hsuan Chiang

Associate Professor
National Chung Hsing University



**Awis Sukarni
Mohmad Sabere**

Associate Professor
International Islamic
University Malaysia



**Corrine Ying-
Xuan Chua**

Assistant Professor
Houston Methodist
Research Institute



Choon Fu Goh

Senior Lecturer
Universiti Sains Malaysia



Manisha Sharma

Senior Lecturer
University of Auckland



**Muhammad Farid Nazer
Muhammad Faruqu**

Senior Lecturer
University of Malaya



Nicholas Hunt

Senior Lecturer
University of Sydney



Shakila Rizwan

Senior Lecturer
University of Otago



Yousuf Mohammed

Senior Research Fellow
University of Queensland

INDUSTRIAL ENGAGEMENT

TECHNOLOGY TRANSLATION FROM R&D TO COMMERCIALISATION & APPLICATIONS

MODERATOR



Hazrina Ab. Hadi

Associate Professor
International Islamic University Malaysia

PANELLISTS



**Tunku Kamarul Zaman Tunku
Zainol Abidin**

Professor
University of Malaya



Wan Raihana Wan Aasim

Vice President
Malaysian Technology Development
Corporation




Shi Hao Lim

Corporate Affairs Manager
AstraZeneca Malaysia




PROGRAMME



26 AUG 2024, MON (DAY 1)

Time	Location	
	Auditorium 1 (5114)	Lecture Theater (3132)
07:45	Registration (Auditorium Foyer)	
08:45	Opening Ceremony President and Pro Vice-Chancellor: Prof. Dato' Dr. Adeeba Kamarulzaman Vice President (Research and Development): Prof. Dato' Ir. Dr. Faisal Rafiq Mahamd Adikan Head, School of Pharmacy: Prof. Dr. Shaun Wen-Huey Lee	
09:30	Plenary Session I <i>Advanced drug delivery systems: Post-COVID-19 perspectives, lessons learned and charting future directions</i> Plenary Speaker: Prof. Dr. Mohd Cairul Iqbal Mohd Amin	
10:15	Sponsor Talk I  <i>Advanced nutraceutical solutions: Red palm oil and tocotrienol nanotech synergy</i> Sponsor Speaker: Mr. Seven JJ Lee	
10:35	Coffee Break (The Porch)	
	Scientific Session I: Oral Delivery Session chair: Dr. Tushar Kumeria Session co-chair: Kok Hou Lou	
11:00	Keynote Session I <i>Overcoming biological barriers using inorganic nanoparticles</i> Keynote Speaker: Assoc. Prof. Dr. Amirali Popat	
11:45	Invited Session I <i>Oral nanotherapeutic formulation of insulin with reduced episodes of hypoglycaemia</i> Invited Speaker: Dr. Nicholas Hunt	
12:00	MyCRS Annual General Meeting	
12:15		
12:30		
12:45		
12:15	<i>Novel prebiotic carriers as microbiome-sensing colonic drug delivery systems</i> Oral Abstract Speaker: Amin Ariaee	
12:30	<i>Design, synthesis and biodistribution of colloiddally stable zirconium-based metal-organic frameworks for oral drug delivery</i> Oral Abstract Speaker: Nisha Tyagi	
12:45	<i>Enhancing the pharmacokinetics of abiraterone acetate through lipid-based formulations: Addressing solubility and food effect challenges</i> Oral Abstract Speaker: Ali Taheri	
13:00	Reception Lunch (The Porch)	
14:00	Plenary Session II <i>From fundamental nano-bio interactions to targeted delivery: The frontier of nanomedicine</i> Plenary Speaker: Prof. Dr. Chun-Xia Zhao	



Time	Location	
	Auditorium 1 (5114)	Lecture Theater (3132)
14:45	<p>Sponsor Talk II</p>  <p>Biotek Abadi</p> <p><i>Introduction to Copley scientific pharmaceutical testing and Haier biomedical cold chain solution</i> Sponsor Speaker: Mr. Ben Puah</p>	
15:05	Coffee Break (The Porch)	
	<p>Scientific Session II: Nanomedicine & Nanoscale I</p> <p>Session chair: Prof. Dr. Tin Wui Wong Session co-chair: Nur Dini Fatini Mohammad Faizal</p>	<p>Scientific Session III: Biomaterials & Bioengineering I</p> <p>Session chair: Assoc. Prof. Dr. Mohd Hanif Zulfakar Session co-chair: Rong Rong Ong</p>
15:35	<p>Keynote Session II</p> <p><i>Manipulating membranes in drug delivery</i> Keynote Speaker: Dr. Khay Fong</p>	<p>Keynote Session III</p> <p><i>Structural relationship to texture-sensory and release behaviours in solid functional food model</i> Keynote Speaker: Prof. Dr. Ida Idayu Muhamad</p>
16:20	<p>Invited Session II</p> <p><i>Versatile PEGylated chitosan-decorated polydopamine nanoparticles utilised as drug vehicles for combination cancer therapy</i> Invited Speaker: Assoc. Prof. Dr. Wen-Hsuan Chiang</p>	<p>Invited Session III</p> <p><i>Water-based synthesis of metal-organic frameworks (MOFs) for enzyme immobilisation, radiation therapy and dopamine sensing</i> Invited Speaker: Prof. Dr. Kevin Chia-Wen Wu</p>
16:50	<p><i>Development of bioactive lipid nanoparticles to dampen neuroinflammation</i> Invited Speaker: Dr. Shakila Rizwan</p>	<p><i>Cellulose hydrogel: A wonderful biomaterial for drug delivery and beyond</i> Invited Speaker: Dr. Choon Fu Goh</p>
17:20	<p><i>Nanoparticle-mediated delivery of CXCR4 antagonists: Reprogramming the hepatocellular carcinoma tumour microenvironment to boost immunotherapy</i> Oral Abstract Speaker: Jou-Chien Chiang</p>	<p><i>Recent advances in nanomaterials for biomedical applications and toxicity assessment</i> Invited Speaker: Assoc. Prof. Dr. Bey Fen Leo</p>
17:35	<p><i>Selective design of cubosomes with varying steric stabiliser regulates protein corona formation and cellular uptake</i> Oral Abstract Speaker: Santhni Subramaniam</p>	
17:50	<p><i>Trans-tympanic delivery of antibiotics through lauric acid-g-chitosan polymeric micelles for the non-invasive topical treatment of acute otitis media</i> Oral Abstract Speaker: Hooi Leong Loo</p>	<p><i>Performance of alternative bio-derived and bio-renewable solvents for in situ forming implant</i> Oral Abstract Speaker: Alaa Bazeed</p>
19:00	Dinner	



Time	Location	
	Auditorium 1 (5114)	Lecture Theater (3132)
08:30	<p style="text-align: center;">Plenary Session III</p> <p style="text-align: center;"><i>Rational design of nanomedicine: Enhancing the therapeutic potential of chemotherapeutic agents through innovative delivery strategies</i></p> <p style="text-align: center;">Plenary Speaker: Prof. Dr. Paul Chi-Lui Ho</p>	
09:15	Monash MSc Pharm Sci Course Introduction	
09:30	<p style="text-align: center;">Plenary Session IV</p> <p style="text-align: center;"><i>Advancing inhaled powder therapies for respiratory health</i></p> <p style="text-align: center;">Keynote Speaker: Prof. Dr. Shyamal Das</p>	
10:15	<p style="text-align: center;">Sponsor Talk III</p> <div style="text-align: center;">  <p>DKSH</p> </div> <p style="text-align: center;"><i>Integrating microfluidiser technology and QCM-D for advanced insights into nanoparticle-drug delivery systems</i></p> <p style="text-align: center;">Sponsor Speaker: Ms. Ashwathi Nambiar</p>	
10:35	Coffee Break (The Porch)	
	<p style="text-align: center;">Scientific Session IV: Biomaterials & Bioengineering II</p> <p style="text-align: center;">Session chair: Prof. Dr. Mohd Cairul Iqbal Mohd Amin Session co-chair: Yee Shan Sim</p>	<p style="text-align: center;">Scientific Session V: Nanomedicine & Nanoscale II</p> <p style="text-align: center;">Session chair: Dr. Usha Sundralingam Session co-chair: Muhammad Nooraiman Zufayri Mohd Noor</p>
11:00	<p style="text-align: center;">Keynote Session IV</p> <p style="text-align: center;"><i>A bioactive disintegrable polymer nanoparticle for synergistic vascular anti-calcification and drug delivery</i></p> <p style="text-align: center;">Keynote Speaker: Prof. Dr. Hang Ta</p>	<p style="text-align: center;">Keynote Session V</p> <p style="text-align: center;"><i>Theranostic nuclear medicine approaches in the treatment of unresectable tumours</i></p> <p style="text-align: center;">Keynote Speaker: Prof. Dr. Chai Hong Yeong</p>
11:45	<p style="text-align: center;">Invited Session IV</p> <p style="text-align: center;"><i>A flexible microgel system for guiding mesenchymal stem cell chondrogenic differentiation</i></p> <p style="text-align: center;">Invited Speaker: Prof. Dr. Chien-Wen Chang</p>	<p style="text-align: center;">Invited Session V</p> <p style="text-align: center;"><i>Tumour microenvironment-responsive nanomaterials in cancer therapeutics</i></p> <p style="text-align: center;">Invited Speaker: Prof. Dr. Yu-Fen Huang</p>
12:15	<p style="text-align: center;"><i>Mannose-modified interfaces in the application of anti-cancer drug loading or bio-sensing</i></p> <p style="text-align: center;">Invited Speaker: Assoc. Prof. Dr. Chian-Hui Lai</p>	<p style="text-align: center;"><i>Theranostic porous silicon nanoparticles for the personalised treatment of blood clots</i></p> <p style="text-align: center;">Oral Abstract Speaker: Peije Russell</p>
12:45	<p style="text-align: center;"><i>Unlocking the potential of DLP 3D printing in CMC hydrogel development for dermal delivery</i></p> <p style="text-align: center;">Oral Abstract Speaker: Rong Rong Ong</p>	<p style="text-align: center;"><i>Liquid crystal lipid nanoparticles for the effective co-delivery of gentamicin and rhDNase to combat Escherichia coli biofilms</i></p> <p style="text-align: center;">Oral Abstract Speaker: Anam Ahsan</p>
13:00	Lunch (The Porch)	
14:00	<p style="text-align: center;">Plenary Session V</p> <p style="text-align: center;"><i>Biomaterial advances for ocular pharmacotherapy</i></p> <p style="text-align: center;">Plenary Speaker: Prof. Dr. Jui-Yang Lai</p>	
14:45	<p style="text-align: center;">Sponsor Talk IV</p> <div style="text-align: center;">  <p>BMF BOSTON MICRO FABRICATION</p> </div> <p style="text-align: center;"><i>2 μm micro 3D printing and its innovative applications in microfluidics, microneedles and biomaterials</i></p> <p style="text-align: center;">Sponsor Speaker: Mr. Donald Chen</p>	
15:05	Coffee Break (The Porch)	
	<p style="text-align: center;">Scientific Session VI: Ocular, Brain & Central Nervous System</p> <p style="text-align: center;">Session chair: Prof. Dr. Shyamal Das Session co-chair: Hooi Leong Loo</p>	<p style="text-align: center;">Scientific Session VII: Transdermal Delivery</p> <p style="text-align: center;">Session chair: Assoc. Prof. Dr. Fazren Azmi Session co-chair: Celine Sulin Choo</p>
15:35	<p style="text-align: center;">Keynote Session VI</p> <p style="text-align: center;"><i>In situ magnetoelectric generation of nitric oxide and electric stimulus for nerve therapy by wireless chargeable materials</i></p> <p style="text-align: center;">Keynote Speaker: Prof. Dr. Shang-Hsiu Hu</p>	<p style="text-align: center;">Keynote Session VII</p> <p style="text-align: center;"><i>Activated carbon hydrogel-loaded with antimicrobial peptide microspheres: An antimicrobial and antitoxin medicated dressing for wound infections</i></p> <p style="text-align: center;">Keynote Speaker: Assoc. Prof. Dr. Shiow-Fern Ng</p>



Time	Location	
	Auditorium 1 (5114)	Lecture Theater (3132)
16:20	<p>Invited Session VI</p> <p><i>Enhanced traumatic brain injury repair via implantation of MSC spheroid-derived 3D decellularised ECM enriched with MSC secretome</i></p> <p>Invited Speaker: Assoc. Prof. Dr. Chieh-Cheng Huang</p>	<p>Invited Session VII</p> <p><i>Translational research through regulatory policy changes</i></p> <p>Invited Speaker: Dr. Yousuf Mohammed</p>
16:50	<p><i>Nose-to-brain delivery of novel drug-dye conjugates encapsulated in polymeric nanocarriers for treatment of brain tumours</i></p> <p>Invited Speaker: Dr. Manisha Sharma</p>	<p><i>Tocotrienols-loaded dressings for accelerated wound healing</i></p> <p>Invited Speaker: Assoc. Prof. Dr. Alice Lay-Hong Chuah</p>
17:20	<p><i>Functionalisation of nanoceria with sperminated hyaluronan for drug delivery performance for corneal alkali burn therapy</i></p> <p>Oral Abstract Speaker: Chia-Jung Yang</p>	<p><i>Utilisation of polymer combination in the development of novel dissolving microneedles for intradermal delivery of lidocaine hydrochloride as a local anesthetic agent</i></p> <p>Oral Abstract Speaker: Delly Ramadan</p>
17:35	<p><i>Role of neuroprotective factor-A-loaded lactic-co-glycolic acid nanoparticle in the Alzheimer's disease</i></p> <p>Oral Abstract Speaker: Tzu-Chuan Ho</p>	<p><i>From pixels to pricks: Crafting high-resolution microneedles via affordable additive manufacturing</i></p> <p>Oral Abstract Speaker: Jing Yi Lee</p>
17:50		<p><i>Intravaginal delivery of thermoresponsive in situ gels for prophylaxis and treatment of sexually transmitted infections</i></p> <p>Oral Abstract Speaker: Ritu Thapa</p>
18:05		<p><i>Understanding the interplay between lipid mesophases and protein complexes in vaginal cell line</i></p> <p>Oral Abstract Speaker: Shiva Montasseri</p>



Time	Location	
	Auditorium 1 (5114)	Lecture Theater (3132)
08:30	<p style="text-align: center;">Plenary Session VI <i>Research opportunities and advancement in cancer nanomedicine development</i> Plenary speaker: Prof. Dr. Tin Wui Wong</p>	
09:15	<p style="text-align: center;">Sponsor Talk V</p> <div style="text-align: center;">   <small>Solutions for Pharmaceutical Testing</small> </div> <p style="text-align: center;"><i>Improving drug quality from dissolution via data integrity to outsourcing</i> Sponsor Speaker: Mr. Juergen Kempf</p>	
09:35	<p style="text-align: center;">Industrial Engagement: <i>Technology translation from RnD to commercialisation & applications</i></p> <p style="text-align: center;">Moderator: Assoc. Prof. Dr. Hazrina Ab. Hadi</p> <p style="text-align: center;">Panellists: Prof. Dr. Tunku Kamarul Zaman Tunku Zainol Abidin Dr. Wan Raihana Wan Aasim Mr. Shi Hao Lim</p>	
11:00	Coffee Break (The Porch)	
	<p>Scientific Session VIII: Biomaterials & Bioengineering III</p> <p>Session chair: Dr. Ronald Lee Session co-chair: Ee Qian Lee</p>	<p>Scientific Session IX: Anticancer Therapeutics</p> <p>Session chair: Prof. Dr. Lik Voon Kiew Session co-chair: Asseel Hisham</p>
11:15	<p style="text-align: center;">Keynote Session VIII <i>High-efficiency carbon-related nanoparticle-mediated gene editing and delivery system development and application</i> Keynote Speaker: Prof. Dr. Chia-Ching Chang</p>	<p style="text-align: center;">Keynote Session IX <i>Breaking through barriers: Next-generation drug delivery systems for cancer immunotherapy</i> Keynote Speaker: Prof. Dr. Yunching Chen</p>
12:00	<p style="text-align: center;"><i>Porous material for biomedical applications</i> Keynote Speaker: Dr. Tushar Kumeria</p>	<p style="text-align: center;">Invited Session IX <i>Localised delivery of anti-cancer drugs</i> Invited Speaker: Prof. Dr. Sanjay Garg</p>
12:30	<p style="text-align: center;">Invited Session VIII <i>Black seed oil alginate beads: From bench to pilot scale</i> Invited Speaker: Assoc. Prof. Dr. Awis Sukarni Mohmad Sabere</p>	<p style="text-align: center;"><i>Localised immunomodulatory platforms for cellular therapy</i> Invited Speaker: Asst. Prof. Dr. Corrine Ying-Xuan Chua</p>
13:00	<p style="text-align: center;"><i>Synthetic degradable hydrogels for controlled delivery of therapeutics</i> Invited Speaker: Assoc. Prof. Dr. Khoon Lim</p>	<p style="text-align: center;"><i>Bioengineering extracellular vesicles (EVs) for endogenous encapsulation of CRISPR/Cas9 for their delivery as functional ribonucleoprotein (RNP) complex</i> Invited Speaker: Dr. Muhammad Farid Nazer Muhammad Faruq</p>
13:30	Lunch (The Porch)	
14:30	<p>Rapid Fire Presentation I</p> <p>Session chair: Assoc. Prof. Dr. Khoon Lim Session co-chair: Nur Dini Fatini Mohammad Faizal</p>	<p>Rapid Fire Presentation II</p> <p>Session chair I: Prof. Dr. Yunching Chen Session chair II: Dr. Izzat Fahimuddin Mohamed Suffian Session co-chair: Jing Yi Lee</p>
15:30	Coffee Break (The Porch)	
16:00	Travel Grant Awardee CRS Annual Meeting	
16:15	<p style="text-align: center;">Award & Closing Ceremony</p> <p>President of Local Chapter of Controlled Release Society Malaysia: Dr. Fu Ju Yen Australia: Prof. Dr. Chun-Xia Zhao Chinese Taipei: Prof. Dr. Jui-Yang Lai New Zealand: Prof. Dr. Shyamal Das</p>	



SPONSORS

PLATINUM



GOLD



DKSH



Red Palm Oil
Made with heart, made for all



SOTAX
Solutions for Pharmaceutical Testing

SILVER



eppendorf



IKA

designed for scientists

MERCK

BRONZE



PARTNER JOURNAL

