

# Pharmaceutical Science and Technology Seminar 24-27 May 2023

Theme: *Advances in Technology Science and Research*

Venue: **Raffles Town Club** (RTC), 1 Plymouth Avenue, Singapore 297753

**24 – 27 May 2023**

## ***Objective:***

This seminar provides an updated comprehensive overview of the latest advances in pharmaceutical science and manufacturing technologies for dosage form design through concise lectures by the experts. Participants will gain useful insights in industry-relevant research and the art on preparation and characterization of pharmaceutical dosage forms, particularly solids, for the healthcare sector.

## ***Who Should Attend:***

Personnel involved in pharmaceutical science, R&D and manufacture of pharmaceutical products:

- ✓ *Pharmaceutical education and research*
- ✓ *Production / QA / QC*
- ✓ *Product formulation and development*
- ✓ *Contract manufacturing*
- ✓ *Regulation and marketing*

## ***Note:***

- Presentation materials will be supplied
- Daily lunches and teas will be provided
- Complimentary networking dinner: 25 May 2023

## **REGISTRATION FORM & QUERIES**

to: [secretariat@geanus.com](mailto:secretariat@geanus.com)

for downloads: <https://geanus.com/home-geanus-vdt-pharmtechsem/pharmtechsem/>

*Organizer: Geanus Technology, Singapore*

*Co-organizer: Society of Pharmaceutical Education & Research (SPER), India*



*In celebration of 25 years of technology science & research*

**“It’s not years that count, it’s the life in the years”**

*Adapted from quote by Abraham Lincoln*

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## Pharmaceutical Science and Technology Seminar 24-27 May 2023

Programme: Wednesday 24 May [Raffles Town Club, Ballroom II, Level 1]

Time (Hr)	Event/Presentation Title	Speaker
0800-0820	Registration (RTC, lobby of ballroom)	
0820-0830	Welcome	
0830-0910	Basics of batch granulation	Goh Hui Ping GEA Process Engineering
0910-0950	Dry granulation - how does using roller compaction reduce costs	Fraser Gow Alexanderwerk
0950-1030	Technology advancements in pharma solids processing	Yeswanth Suryadevara GEA Process Engineering
1030-1050	Tea	
1050-1130	Process optimisation, scale-up and cleaning of batch wet granulation equipment and systems	Dilwyn Patterson Consultant
1130-1210	Recent lactose developments and advances in solid dosage form production	Thomas Pilgram Meggler
1210-1250	Advances in mannitol as an excipient	Chow Keat Theng Roquette Asia Pacific Innovation Center
1250-1330	Lunch	
1330-1410	Recent innovations in pharmaceutical formulation and film coating	Glenn Russell Colorcon
1410-1450	Influence of compression tooling on manufacturing success - from development to production	Parthiban Anbalagan Natoli Engineering
1450-1530	The use of compaction simulator during the whole tablet lifecycle	Bruno Villa MedelPharm
1530-1550	Tea	
1550-1630	Structure-property of pharmaceutical solids	Cai Ting China Pharmaceutical Univ
1630-1710	Taking a deep dive into factors affecting drug release from amorphous solid dispersions	Hiew Tze Ning University of Iowa
1710-1750	Formulation development of drug stability improvement by HME process and DOE approach	Neo Li Xiaohai STA PDS

## Pharmaceutical Science and Technology Seminar 24-27 May 2023

### Programme: Thursday 25 May [Raffles Town Club, Ballroom II, Level 1]

Time (Hr)	Event/Presentation Title	Speaker
0830-0910	Developing poorly water soluble NCEs faster: strategies and case studies	Wang Likun Nanjing HaiWei
0910-1050	A study on the development of once-a-week transdermal patch containing donepezil	Park Eun-Seok Sungkyunkwan University
1050-1030	Putting patients first: enabling value-added formulations for improved patient outcomes and customer appeal	Tan Bing Xun Roquette Asia Pacific Innovation Center
1030-1050	Tea	
1050-1130	Design of extrusion-spheronization pellets	Celine Liew Monash Univ Malaysia
1130-1210	Development of cushioning filler for MUPS tablet	Maria L. A. D. Lestari Airlangga University
1210-1250	Powder flow and specialty tablets	Goh Hui Ping GEA Process Engineering
1250-1400	Photo-taking & Lunch	
1400-1440	Design of diminutive granules for minitables production	Loo Shang Jun GSK
1440-1520	Measuring fast disintegration - introduction to visimetric disintegration tester	Audrey Zheng Yi National Univ of Singapore
1520-1600	Novel complex dosage forms in drug delivery: do we need a new biopredictive toolbox?	Matthias G Wacker National Univ of Singapore
1600-1620	Tea	
1620-1700	Harmonizing quality operations in pharma with advanced integrated systems	Kanimozhi Sivarajan Shimadzu (Asia Pacific)
1700-1740	Artificial intelligence and expert systems in pharmaceutical applications	Metin Celik PTI, USA
1900-2130	Gala Dinner [John Jacob Ballroom II]	St Regis Singapore

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## Pharmaceutical Science and Technology Seminar 24-27 May 2023

Programme: Friday 26 May [Raffles Town Club, Ballroom II, Level 1]

Time (Hr)	Event/Presentation Title	Speaker
0830-0910	Global pharmaceutical supply chain - research to commercialisation	Oh Ching Mien Zuellig Pharma
0910-0950	Isolation of oleanolic acid from <i>Clematis armandii</i> for differentiation from adulterants by HPTLC/HPLC	Ha Minh Hien Institute of Drug Quality Control - HCMC
0950-1030	Impurity identification and quantification	Liw Wan Tung Shimadzu (Asia Pacific)
1030-1050	Tea	
1050-1130	Methodology and application of process analytical technology (PAT) for traditional Chinese medicine manufacturing	Huang Hongxia Zhejiang Univ City College
1130-1210	Precision medicine: Critical roles of pharmaceutical technologists	Wong Tin Wui Univ Technology MARA
1210-1250	Intelligent manufacturing technology for personalized traditional Chinese medicine preparation	Hong Yanlong Shanghai Univ of TCM
1250-1330	Lunch	
1330-1410	Pharma spray drying - benefits, applications and challenges	David Costes GEA Process Engineering
1410-1450	Resorbable polymer for long-acting injections - Essential considerations to accelerate drug development projects	Lee Chin Chiat Corbion
1450-1530	Lipid-based nanocarriers for precise drug delivery	Zhan Changyou Fudan University
1530-1550	Tea	
1550-1630	Enhancing bioavailability using lipid-based formulation	Ouyang Hongyi Gattefosse
1630-1710	Recent advances of functional peptides in medical applications	Zhu Yishen Nanjing Technical Univ
1710-1750	Evaluation of diversity and variability of excipients based on functional indexes and their transmission rules in direct compression tablet formulations and products of traditional Chinese medicine	Shen Lan Shanghai Univ of TCM

## **Pharmaceutical Science and Technology Seminar 24-27 May 2023**

**Programme: Saturday 27 May [Shimadzu Asia Pacific, 79 Science Park Drive, Cintech IV, Singapore Science Park 1, Singapore 118264]**

0900-1100 Hr: Visit to Shimadzu (Asia Pacific) Application Development & Support Centre

1100 Hr: Lunch

1200 Hr onwards: Half-day Singapore City Tour

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## Biography of Speakers

	<p><b>Parthiban Anbalagan</b> is the Pharmaceutical Manufacturing Consultant for Natoli Engineering Company for the Asia Pacific region. He graduated with a pharmacy degree from National University of Singapore and pursued a doctorate degree (PhD) in pharmaceutical technology. Dr Parthiban has authored several research articles in the field of solid dosage manufacturing in international journals. Areas of expertise include solids manufacturing systems, formulation development and compression studies. His current responsibilities include tool design, solid dosage troubleshooting and training professionals from the pharmaceutical industry and academia.</p>
	<p><b>Cai Ting</b> is currently professor of Pharmaceutical Sciences, Dean of School of Engineering at the China Pharmaceutical University. He received a BA from Fudan University in China, and received his PhD in chemistry from Virginia Tech, and completed a postdoctoral training in the School of Pharmacy at University of Wisconsin-Madison. His research focuses on delivering poor water-soluble drugs, crystallization of pharmaceuticals, solid-state chemistry, and crystal engineering. His research interests also include developing self-assembled materials for controlled and long-term drug delivery. He is the principal investigator of multiple projects financially supported by National Science Foundation of China, Ministry of Science and Technology.</p>
	<p><b>Metin Çelik</b> is the President of PTI, Inc., USA and Adjunct Professor at the UNM-USA. He received his BS degree from Turkey and PhD degree from United Kingdom. Dr Çelik worked at Novartis-Switzerland, Novartis-Turkey, SKF Laboratories-USA. He also worked a faculty member at Rutgers-USA, NEU-Cyprus, EMU-Cyprus. Dr Çelik established the first two Compaction Simulator Systems in USA, both in the industry and academia. He has numerous publications, has made mostly invited over 250 presentations, and has acted as a consultant to the FDA, pharmaceutical industry worldwide. Dr Çelik is the founder of Expert Systems and Excipients Focus Groups at the AAPS.</p>
	<p><b>Chow Keat Theng</b> heads the Applied Sciences Pharma team at the Asia Pacific Innovation Center at Roquette. Tasked to deliver the innovation pipeline for its Pharma Solutions business, Keat Theng and her team supports the strategic management of innovation portfolio and oversee the operations management for the Asia Pacific Innovation Center located in Singapore. Keat Theng joined Roquette in 2017 as a Pharmaceutical Research Manager following ten years of experience working in pharmaceutical product development with Abbott, AbbVie and MSD and A*Star. She holds a BSc in Pharmacy and a PhD in Pharmaceutics from the National University of Singapore after which she completed her postdoctoral fellowship at The University of Texas at Austin in 2009.</p>
	<p><b>David Costes</b> is a Chemical Engineer from Toulouse in France and holds a Ph.D. degree in Biotechnology from Lund University in Sweden. He has been working in the Pharma industry for more than 20 years, starting his career as a medicinal chemist and turning to sale of excipients, APIs and Pharma services. He joined GEA in Denmark in 2010 where he is since then responsible for the sale of GEA's Pharma Spray Dryers in Europe and Asia.</p>

## Pharmaceutical Science and Technology Seminar 24-27 May 2023

	<p><b>Goh Hui Ping</b> obtained his PhD in Pharmaceutical Sciences from National University of Singapore and worked as an application specialist at GEA Process Engineering for pharmaceutical processes related to oral solid dosage forms - granulation, coating and tablet compression. He was later engaged as a senior pharmaceutical scientist at Roquette Asia Pacific where he took on projects related to modified release dosage forms. He is currently a senior application specialist at GEA Process Engineering.</p>
	<p><b>Fraser Gow</b> is an International Sales Manager for Alexanderwerk GmbH, a German based company, who are a leading global supplier of Dry Compaction and Granulation Equipment. He is responsible for sales and marketing in the UK / Ireland and Asia. He has a diploma in electro-mechanical engineering and is based in UK. Previously worked for 15 years with GEA (Niro Pharma Systems) in project management and sales, before taking on the current sales position in 2011.</p>
	<p><b>Ha Minh Hien</b> is currently working at the Institute of Drug Quality Control in Ho Chi Minh City, Vietnam and is the Head of Traditional-Herbal Medicine Analysis Department. His research has focused on Pharmaceutical Chemistry and Quality Control of Traditional-Herbal Medicines. He was awarded the Nagai Foundation Pre-Doctoral Scholarship to pursue his research work in GEA-NUS Pharmaceutical Processing Research Laboratory, Department of Pharmacy, National University of Singapore in 2010. Dr Ha Minh Hien has published several international articles in the field of quality control. He has been invited to present at several conferences and is a visiting lecturer at universities.</p>
	<p><b>Hiew Tze Ning</b> obtained her Bachelor of Science (Pharmacy) and Ph.D. degrees from the National University of Singapore and is a proud GEA-NUS alumna. In 2019, she joined the Department of Industrial and Physical Pharmacy at the College of Pharmacy, Purdue University as a postdoctoral researcher, where her research focused on amorphous solid dispersion formulations. She is currently an assistant professor in the Department of Pharmaceutical Sciences and Experimental Therapeutics at the College of Pharmacy, University of Iowa. Dr Hiew has received a number of awards including the Excellent Teaching Assistant Award (2016), IPEC Foundation Graduate Student Award (2017), and the Patrick DeLuca Emerging Researcher Award (2020).</p>
	<p><b>Huang Hongxia</b> obtained her BSc (Pharmacy) and PhD degrees from Zhejiang University. Her research focus on quality control of traditional Chinese medicine (TCM). Dr Huang has published more than 20 papers in international journals, two patents, and more than 10 software copyrights. Her work is sponsored by grants from National Science Foundation of China and other national and enterprise projects. Dr Huang is currently an assistant professor in Zhejiang University City College</p>



## Pharmaceutical Science and Technology Seminar 24-27 May 2023

	<p><b>Hong Yanlong</b> is a PhD and Professor of Shanghai University of TCM. His main research interests include intelligent manufacturing technology for personalized TCM preparations and new drug development. He has undertaken 14 projects including those from the National Natural Science Foundation, China and published 120 papers; won the second prize of Shanghai Technological Invention Award in 2022, obtained 1 clinical approval of new drug, 8 successful patents and 2 software copyrights.</p>
	<p><b>Lee Chin Chiat</b> has held many roles ranging from technical to business since entering the workforce in 2002. He was ISP technical manager for Asia, currently known as Ashland, head of Asia for research and development in Akzo Nobel Surface Chemistry and Rio Tinto Minerals. At Rio Tinto, he was also responsible for market development before being hired by Evonik SEA as the business director for the ASEAN, Pakistan, Australia and New Zealand region. He had a stint as the head of GEA Process Engineering in China, before joining Corbion in this current role in the field of resorbable biopolymers.</p>
	<p><b>Maria Lucia Ardhani Dwi Lestari</b> is an Assistant Professor at Universitas Airlangga in Surabaya, Indonesia. She obtained her PhD from Freie Universiteit Berlin, focusing on nanocrystals formulation of poorly soluble drugs. Main expertise is in the particle size reduction using top-down method and transferring the nanocrystals obtained into solid dosage form. A major focus of current work is utilization and modification of the existing tablet excipients to be able to be used as cushioning filler for compacting pellets. This research was begun in 2017, when she undertook research visiting scheme at GEA-NUS with the invitation from A/P Paul WS Heng and sponsored by Nagai Foundation.</p>
	<p><b>Celine Liew</b> obtained her BSc and PhD from NUS. Following her PhD, she worked in the Pharmaceutical Department, Ministry of Health, Singapore before joining Department of Pharmacy, NUS as a Research Fellow in GEA-NUS PPRL in 1997 and later, as a faculty member, 2001-21. She has also industrial work experience as Senior Scientist at Niro Inc., MD, USA, 2002-3. She is currently an Assoc Prof at the School of Pharmacy, Monash University Malaysia. Her research interest is in pharm solids, preformulation and formulation, granulation and pelletization along with material characterization and multiparticulate dosage forms.</p>
	<p><b>Liw Wan Tung</b> is LC product manager with 10 years of experience in LC, LCMS at Shimadzu Asia Pacific Pte Ltd. She has 13 years of working experience in analytical science, specializing in method development of various LC/LCMS applications. Her previous research work at Shimadzu has mainly focused on fully automated pre-column derivatization of amino acids in a variety of food and biopharmaceutical sample matrices. Prior to joining Shimadzu, she started her professional career as a QAQC chemist in pharmaceutical multinational company. She earned her bachelor's honour's degree in chemistry back in 2009.</p>








## Pharmaceutical Science and Technology Seminar 24-27 May 2023

	<p><b>Neo Li Xiaohai</b> graduated with PhD in Pharmacy (2015) from the Shanghai University of TCM and has since worked over 8 years at STA. He has expertise in designing various dosage forms (conventional, enabling, controlled release, pellets, bilayers, etc.) with experience in Phase I-III product development and manufacture.</p>
	<p><b>Loo Shang Jun</b> has a bachelor's degree in pharmacy, as well as a doctorate in pharmaceutics and pharmaceutical technology. He is a physical chemist with the Manufacturing Science &amp; Technology department at GlaxoSmithKline, where he provides technical expertise on physical properties to Primary / Secondary interfaces and ensures that product is fit for purpose. He also renders support for product / process investigations stemming from deviations / adverse product trend. Shang Jun is a registered pharmacist in Singapore. He is particularly concerned about the quality, safety and efficacy of pharmaceutical products, and has strong interest in innovative formulation science and advanced pharmaceutical process technology.</p>
	<p><b>Oh Ching Mien</b> obtained his bachelor degree in Pharmacy and PhD in Pharmaceutical Sciences from the National University of Singapore. His research focussed on pharmaceutical formulation development and process optimisation. Ching Mien has published a number of research papers in internationally renowned pharmaceutical journals. Currently, with Zuellig Pharma, he is responsible for driving regional clinical trial business growth and penetration into various markets, developing new business opportunities and execution of key accounts strategies. His experiences include supply chain of pharmaceuticals and medical devices, regulatory submission and evaluation of therapeutic products as well as pharmaceutical manufacturing of solid dosage form.</p>
	<p><b>Ouyang Hongyi</b> is a board certified and licensed pharmacist, with a Bachelor's degree in Pharmacy (1st class) and PhD in Pharmaceutical Technology from GEA-NUS. As a senior engineer at MSD under pharmaceutical technical operations, Hongyi was tasked with product stewardship for two film-coated tablet products and was responsible for high shear granulation. He also gained experience as a formulation scientist at Clinuvel Pharmaceuticals and led the oral drug delivery team in the development of solid dosage forms of therapeutic peptides. Currently at Gattefossé, Hongyi is responsible for technical marketing in the pharmaceutical division for the Asia Pacific region, covering oral, topical and rectal drug delivery. Outside of work, Hongyi is a keen volleyball player and enjoys travelling.</p>






## Pharmaceutical Science and Technology Seminar 24-27 May 2023

	<p><b>Park Eun-Seok</b> earned Bachelor's and Master's degrees in Pharmacy from Sungkyunkwan University, Korea, and Master's in PK from the University of Iowa, USA, followed by a PhD in Physical Pharmacy from MUSC. Since 1996, Dr Park has been a professor at Sungkyunkwan University, serving as Dean of Pharmacy, KAPSA President, and KSPST President. In 2010, Dr Park established GEA-SKKU PPRC and currently serves as its director, focusing on research in formulation development and pharmaceutical processing.</p>
	<p><b>Dilwyn Patterson</b> was educated at the University of Manchester, UK where he graduated with a PhD in materials science. He has provided technical support for the design and operation of batch processing equipment and systems including on site trouble shooting and providing assistance to optimise customers' processes. His jobs included Sales Manager the UK and Ireland, 1989-1994, for Asia and Australasia, from 1994-1999 and 2000-2017 for Japan, South Korea and Taiwan. From 2017 to 2022, he was the Product Manager and Senior Process Specialist for batch granulation, coating and pelletising. Dilwyn had worked with the pharmaceutical industry for more than 30 years and during this time gained considerable expertise in batch process technologies. He has regularly given lectures / presentations at seminars and academic courses. He retired in June 2022.</p>
	<p><b>Thomas Pilgram</b> holds a pharmacy degree from Bonn University in Germany complemented by post-graduate studies in East Asian Economics. He spent most of his career in Asia working at industry leaders with a focus on a wide range of pharmaceutical ingredients especially excipients. His areas of expertise comprise marketing, business management, technical applications and general management. His career spans positions as Regional Head Pharma Solutions Asia-Pacific at BASF, Country Head of Colorcon Japan and most recently President Japan and Managing Director APAC BU Excipients at MEGGLE. He also served for several years in the board of directors at IPEC Japan.</p>
	<p><b>Glenn Russell</b> graduated from University of Technology, Sydney, Australia in 1985 with a Degree in Applied Chemistry (First Class Honours). He was employed by Pfizer Australia for 13 years in the areas of quality control, product development and manufacturing (solid and liquid dosage forms). He joined Colorcon Asia-Pacific in 1994 as Area Technical Manager based in Singapore, providing technical support to the pharmaceutical industry throughout South-East Asia in the areas of film coating, modified release and core tablet formulation. In August 2006, Glenn was appointed as Technical Director, Colorcon Asia-Pacific, leading the technical team in the Asia Pacific region. He is currently based in Australia and travels extensively throughout the Asia Pacific region.</p>
	<p><b>Shen Lan</b> is a PhD and Professor of Shanghai University of TCM. Her main research focus is in the key technologies for traditional Chinese medicine preparation. She has undertaken 12 projects from the National Natural Science Foundation, China and published over 130 papers. She won the second prize of Shanghai Technological Invention Award in 2022. She has 6 awarded patents.</p>

## Pharmaceutical Science and Technology Seminar 24-27 May 2023

	<p><b>Kanimozhi Sivarajan</b> has completed her Doctorate in Analytical Chemistry from National University of Singapore in 2013 with specialization in analytical chemistry and instrumentation. She started her professional career as Lab Supervisor at SGS Testing Labs, Singapore and gained vast knowledge on Regulatory Compliance, Automation in Lab Processes and Electronic Data Management and faced various regulatory audits from Global FDA &amp; Customers. With the current role at Shimadzu (Asia Pacific), Singapore as Assistant Manager - APAC region, she is driving digitalization and automation projects by introducing lab Informatics solutions such as LabSolutions CS Network, LIMS and QMS solutions for electronic data management, compliance practices and Lab workflows.</p>
	<p><b>Yeswanth Suryadevara</b> is a Mechanical Engineer and worked in Laurus Labs as an Operations Excellence Manager. During the tenure at Laurus Labs focused on Process Optimisation, OEE and handled CAPEX Projects of Oral Solid Dosages. He is currently a Technical Sales Manager at GEA Process Engineering.</p>
	<p><b>Tan Bing Xun</b> oversees the application lab activities in Roquette's Innovation Centre, Singapore, to provide technical solutions and support to pharma customers in the Asia region. Prior to his current role, he was a senior scientist in AbbVie and was actively involved in R&amp;D development of new chemical entities and formulation of paediatric drug products. He holds a degree in Pharmacy and a PhD in Pharmaceutical Sciences from the National University of Singapore.</p>
	<p><b>Bruno Villa</b> is General Manager and co-founder of Medelpharm with Ingrid Coyle. He holds a Master in Computer Science and Applied Mathematics from ENSIMAG as well as a Master in Business Administration from INSEAD. His career started with +15 years in international computer industry (USA, Europe). Medelpharm was founded 20 years ago and is today the leading manufacturer of a new market segment, mechanical compaction simulator. This technology made information on compaction accessible to a very large majority of formulation scientists all over the world.</p>
	<p><b>Matthias G Wacker</b> works in the Department of Pharmacy at the National University of Singapore. He earned his PhD in pharmaceutical technology from Goethe University (Germany), where he also was a principal investigator and completed his habilitation at the Institute of Pharmaceutical Technology. Prior to joining NUS, he headed the Department of Pharmaceutical Technology at Fraunhofer IME in Frankfurt. He serves on the editorial boards of several prestigious journals and is member of several committees (e.g., USP, ISO). In his research, he focuses biopredictive release and in silico methods to establish in vitro-in vivo correlations for dispersed dosage forms.</p>

## Pharmaceutical Science and Technology Seminar 24-27 May 2023

	<p><b>Wang Likun</b> obtained his PhD from NUS in 2011 with research topic of PAT and pharmaceutical process understanding; he worked for Janssen (as senior scientist &amp; group leader in Belgium, 2011-2015) and Hengrui (as site director in China, 2015-2018) in the area of preformulation &amp; enabling formation development with more than 20 patents filed. In 2018, Likun founded Nanjing HaiWei Technologies, a CRO focusing on NCE early development, especially poorly water-soluble compounds &amp; stability prediction with kinetics modelling.</p>
	<p><b>Wong Tin Wui</b> obtained his PhD degree from National University of Singapore in 1999. He is presently lecturer/principal fellow at Faculty of Pharmacy and Smart Manufacturing Research Institute, Universiti Teknologi MARA. His research areas are precision oral/skin/pulmonary nanodrug delivery. Professor Wong is the founder of Non-Destructive Biomedical and Pharmaceutical Research Centre, Malaysia and Sino-Malaysia Molecular Oncology and Traditional Chinese Medicine Delivery Joint Research Centre, Medical College, Yangzhou University, China. He serves as the visiting/adjunct/lecture professor of Universiti Malaya, Malaysia; National University of Singapore; Yangzhou University, China and is the postgraduate faculty member of Chulalongkorn University, Thailand.</p>
	<p><b>Zhan Changyou</b> is a professor of pharmacology at School of Basic Medical Sciences, Fudan University. He obtained his PhD in Pharmaceutics from Fudan University in 2010. His recent research focuses on understanding the in vivo delivery process of lipid-based therapeutics. Dr Zhan has published &gt;100 peer-review scientific papers with citation by &gt;5700 times (H-index 43). His scientific achievements have been honoured by scientific awards in China and the international, including, the National Outstanding Youth Funds of NSFC (2021), New Hundred-Talent Program of Shanghai Municipal Commission of Health and Family Planning (2018), Natural Science Award of MOE of China (2017), Natural Science Award of Shanghai City (2016), Postdoctoral Fellow Award of American Association of Pharmaceutical Scientists (2013) and National Outstanding Doctoral Dissertation Award of China (2012).</p>
	<p><b>Audrey Zheng Yi</b> holds a BSc (Hons) in Pharmacy and a PhD in Pharmaceutical Sciences from the National University of Singapore. She is currently working as a research fellow in GEA-NUS Pharmaceutical Processing Research Laboratory. Her research work focuses on investigating the less understood factors affecting tablet disintegrability, with the aim to uncover complementary factors that can be harnessed to promote tablet disintegration, as well as evaluating disintegration test methods for fast disintegrating tablets.</p>
	<p><b>Zhu Yishen</b> holds a PhD in Biochemical Engineering and has dedicated his career to the development of functional peptides and peptide drugs, as well as pharmaceutical preparations and drug analysis. He has conducted extensive research into drug delivery systems and the biomedical applications of functional peptides. Recently, Professor Zhu's research group has achieved significant advances in the area of osteochondral repair by combining functional peptides with 3D printed biomaterial scaffolds, working in collaboration with hospitals. Additionally, Professor Zhu is exploring the emerging field of drug conjugates, which holds immense potential in the areas of drug delivery and medicinal chemistry.</p>