


Cutting-edge Nanotechnologies for Good Health and Well-being


9-12
JULY
2024

A joint International Conference Funded by Chulalongkorn University (Thailand), MSCA-RISE OXIGENATED project through CIC biomaGUNE (Spain) and supported by the Embassy of Spain in Bangkok and CDTI-Ministry of Science, Innovation and Universities, Spain

Time	Tuesday 9 JUL 2024	Wednesday 10 JUL 2024	Thursday 11 JUL 2024	Friday 12 JUL 2024
8.00-9.00	<p>8.00-8.30: Registration</p> <p>8.30-9.00: Open ceremony</p> <p>By:</p> <ul style="list-style-type: none"> CU president (or vice president for research affairs) Ambassador of Spain to Thailand, H.E. Felipe de la Morena (tentative) Representative of EU Delegation in Bangkok (tentative/TBC) CIC biomaGUNE Scientific Director (Prof. Aitziber L. Cortajarena) PMU-B representative Project OXIGENATED representative (Dr. S. Moya) <p><i>(Final protocol arrangement depending on confirmations needs to be confirmed)</i></p>	<p>Session 3: Target it precisely.</p> <p>8.00-8.30:</p> <p>3.1. Homing peptides for targeted nanomedicine solutions in cancer (Prof. T. Teesalu, EE, ONLINE as an option)</p> <p>8.30-9.00:</p> <p>3.2. Strategies for peptide synthesis and their applications in targeting and as antibacterials (Prof. F. Albericio, ZA)</p>	<p>-PARALLEL SESSION- (Main Hall)</p> <p>Session 7: Repair it smartly.</p> <p>8.00-8.30:</p> <p>7.1. Hybrid materials/MOFs for tissue engineering (Prof. G. Wang, CN)</p> <p>8.30-9.00:</p> <p>7.2. Organ-on-chip nano-assembled 3D models for oral mucositis-induced chemotherapy (Prof. J. N. Ferreira, TH)</p> <p>9.00-9.30:</p> <p>7.3. Nanomedicine strategies for targeted delivery of biologics (Prof. H. Cabral, JP)</p> <p>9.30-10.00:</p> <p>7.4. Biomaterials and artificial organs (Prof. G. Abrahm, AR, to be replaced)</p> <p>.....</p> <p>-PARALLEL SESSION- (Technical Site Visits for members of the Spanish delegation)</p> <p>8.00-15.00:</p> <p>Spanish delegates visit Thai companies/institutes that work on nanomedicine or related field.</p> <ol style="list-style-type: none"> HOSPITAL – Siriraj Hospital (TBC) NANOTECH/NSTDA (TBC) SIAM BIOSCIENCE (TBC) 	<p>09:00 – 17:00</p> <p>Session 9: The linkage with industry (hosted by CDTI, Spanish Embassy and PMU-C)</p> <p>SPAIN-THAILAND Innovation Forum:</p> <p><i>“Harnessing the potential of nanotechnology in Future Health, Personalized Medicine and Wellbeing.”</i></p> <p>Objective: for creating Dialogue and networking platform between Thailand and Spain promoting exchange on technological trends in nanotechnology, and their applications to future health, personalized medicine, and wellbeing.</p> <ul style="list-style-type: none"> Information will be shared on the bilateral funding scheme (TLSIP – Thailand & Spain Innovating Program) jointly implemented by CDTI (Spain) and PMU-C (Thailand) promoting and funding innovation-driven R&D cooperation between Spanish and Thai companies and other R&D-performing organizations. <p>9.00-9.20:</p> <p>I. Opening remarks & Inauguration</p> <p>By:</p> <ul style="list-style-type: none"> MHESI representative

				<ul style="list-style-type: none"> Ambassador of Spain to Thailand, H.E. Felipe de la Moran CDTI representative PMU-C representative
9.00-10.00	<p>9.00-10.00: Preliminary lecture: Self-adaptive biomaterials in tissue regeneration (Prof. C. Gao, CN)</p>	<p>9.00-9.30: 3.3. Mesoporous materials in targeted cancer treatment (Prof. G. Illia, AR, ONLINE) 9.30-10.00: 3.4. Cancer stem cells as a target for cancer therapy (Prof. P. Chanvorachote, TH)</p>		<p>9.20-9.50: II. Overview of R&D Capacities in Nanomedicine</p> <ul style="list-style-type: none"> Nanomed representative PMU-C representative (TBC) <p>09:50 – 10:20 III. Thailand-Spain bilateral R&D funding mechanism (TLSIP)</p> <ul style="list-style-type: none"> CDTI representative PMU-C representative (TBC)
10.00-10.15	Coffee break	Coffee break	Coffee break	10:20-10:30 Coffee break
	<p>Session 1: Elevating the killing power. 10.15-10.45: 1.1. CAR-T therapy with non-viral vectors (Prof. G. Romero, USA, ONLINE) 10.45-11.15: 1.2. Development of sustainable Chimeric Antigen Receptor T cell for cancer treatment in Thailand (Prof. K. Suppipat, TH) 11.15-11.45: 1.3. Glyco nanomaterials in immunotherapy (Prof. M. Marradi, IT)</p>	<p>Session 4: Magnetize me! 10.15-10.45: 4.1. Advanced magnetic nanomaterials at the frontier of the wireless neurotech (Prof. D. Gregurec, DE) 10.45-11.15: 4.2. Hydrogel for cancer treatment (Prof. Joaquim Miguel Oliveira, PT) 11.15-11.45: 4.3. Nanomaterials as tools for animal castration (Prof. C.M. Lucci, BR)</p>	<p>Pitch session 2: 3-minute research pitch (3 min pitch, 2 min Q&A, 5 min each) 10.20-11.20: Grad Students (13-24)</p> <ul style="list-style-type: none"> Presenter 13 Presenter 14 Presenter 15 Presenter 16 Presenter 17 Presenter 18 Presenter 19 Presenter 20 Presenter 21 Presenter 22 Presenter 23 Presenter 24 	<p>10.30-11.40: V. Technical Session I R&D capacities / pitching ideas for cooperation Spanish side (TBC): Thai side (TBC):</p> <p>11.40-12.50: V. Technical Session II (Cont.) Thai side (TBC): Spanish side (TBC):</p> <p>12:50 – 13:00 Closing Remarks for the Session 9</p>
12.00-13.00	Lunch Lunchbox provided	Lunch Hotel international buffet	Lunch Hotel international buffet	13:00 – 14:00 Lunch (offered by Embassy of Spain / CDTI)

13.00-15.00	<p>13.00-13.30: 1.4. Cancer stem cell therapy approaches in nanomedicine (Prof. G. Calabrese, AR)</p> <p>Session 2: Kill it with light, heat, and sound. 13.30-14.00: 2.1. Photodynamic therapy in oral cancer treatment (Prof. R. Bentes, BR) 14.00-14.30: 2.2. Photothermal therapy with nanomaterials (Prof. J. Fuente, ES) 14.30-15.00: 2.3. Sonodynamic therapy of cancer: challenges and opportunities (Prof. A. Sosnik, IL)</p>	<p>Pitch session 1: 3-minute research pitch (3 min pitch, 2 min Q&A, 5 min each) 13.00-14.00: Grad Students (1-12)</p> <ul style="list-style-type: none"> • Presenter 1 • Presenter 2 • Presenter 3 • Presenter 4 • Presenter 5 • Presenter 6 • Presenter 7 • Presenter 8 • Presenter 9 • Presenter 10 • Presenter 11 • Presenter 12 <p>Session 5: Tiny tools for diagnosis and treatment 14.15-14.45: 5.1. Engineering protein-nanomaterial composites for nanomedicine: innovative tools for therapy and diagnosis (Prof. A. Cortajarena, ES) 14.45-15.15: 5.2. Next-Gen Nanomedicines - Transforming nanotechnology from drug delivery to design (Prof. G. Battaglia, ES)</p>	<p>Session 8: Better living through nanotechnology 13.00-13.15: 8.1. Enhanced biological activities of plant extracts through quaternised chitosan (Prof. N. Muangsin, TH) 13.15-13.30: 8.2. Preretinal nanoparticles: Synthesis, retinal stability and delivery into skin of different layers (Prof. S. Wanichwecharungruang, TH) 13.30-13.45: 8.3. Synthesis and surface modification of Inorganic Nanomaterials for biomedical applications (Prof. N. Insin) 13.45-14.00: 8.4. In silico and in vitro approaches in anti-cancer drug discovery (Prof. T. Rungrotmongkol) 14.00-14.15: 8.5. Hyaluronic acid-based nanomaterials for skin delivery and skincare cosmetics (Prof. J. Luckanagul, TH) 14.15-14.30: 8.6. Bioinspired nanoparticle synthesis from natural sources (Dr. T. Yata, TH) 14.30-14.45: 8.7. Nano emulsion as natural preservatives (Prof. U. Siripatrawan, TH) 14.45-15.00: 8.8. Nanotechnology in Umami and Kokumi Flavors, (Dr. H. Uneyama, JP)</p>	<p>-PARALLEL SESSION- (Function Room) IV. Bilateral innovation forum: B2B, R2B, R2R meetings 14.00-17.00: seeking opportunities for setting up the business partnership between Thai academic institutes/ Thai companies and Spanish companies</p> <p>-PARALLEL SESSION- (Main Hall) Session 10: ROUND Table Discussion for research network and collaboration 14.00-16.00 (focusing on outcomes for:)</p> <ul style="list-style-type: none"> • Establishing research network or consortium • Publications • Research proposal for EU grants. <p>A short presentation of each PI (<i>including researchers from PMU-B's drug delivery research network</i>) about their research interest and a call for collaboration. (Dr. C. Boonla as a moderator)</p>
15.00-15.15	Coffee break	Coffee break	Coffee break	Coffee break
15.15-16.15	<p>Honorary session: Prof. Dr. Hans Bäuml, Charité Universitätsmedizin Berlin, DE 15.15-15.45: H1. Inspirational talk by Prof. H. Bäuml (DE) 15.45-16.15: H2. A talk by Prof. R. Georgieva (DE/BG)</p>	<p>Session 6: Combatting bad bugs with armed troops. 15.30-16.00: 6.1. Biomedical applications of nanozyme armed bacteriophages (Prof. Z. Mao, CN, to be replaced) 16.00-16.30: 6.2. VLP-based treatments against house dust mite (Prof. A. Jacquet, TH)</p>	<p>Poster Session: Poster exhibition II</p> 	<p>16.00-16.30: Poster presentation award announcement</p> <p>Closing Remarks (Dr. S. Moya)</p>

16.15-17.00	<p>16.15-16.30: H3. Redox potential of hemoglobin microparticles and impact of layer-by-layer coating (Prof. Miroslav Karabaliev, BG)</p> <p>16.30-16.45: H4. Hemoglobin-albumin cluster "HemoAct" as red blood cell substitute and O₂ therapeutic (Prof. T. Komatsu, JP)</p> <p>16.45:17.00: H5. A talk by Prof. Y. Tragoolpua (TH)</p>	<p>Poster Session: Poster exhibition I</p> 		
18.00	Welcome party (drink and light meal) at Chulanarumitr House		Bangkok Dinner Cruise (invited guests only) or at Ambassador Resident	
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EVENT

Local organizer:

Faculty of Medicine, Faculty of Science, Faculty of Pharmaceutical Sciences, Chulalongkorn University, Bangkok THAILAND
Embassy of Spain in Bangkok, THAILAND

Oversea partner:

CIC biomaGUNE, San Sebastián, SPAIN
CDTI, SPAIN

Venue:

Day 1: CU Music Hall
Chulalongkorn University
Bangkok, THAILAND
Day 2-4: Mandarin Hotel,
Bangkok, THAILAND