### Track-I: Material synthesis and characterization

		Page
AMEEHA2022-MC 001	Nano-structured porous carbon-silica composite aerogel derived from low-cost kapok fibers and TEOS Apipong putham	2
АМЕЕНА2022-МС 002	Synthesis of sulfated titanium dioxide catalyst for sorbitol dehydration to isosorbide Natthaphong Lertna	4
AMEEHA2022-MC 003	The degradation of formaldehyde by advanced oxidation process using n-ZVI/TiO <sub>2</sub> as a catalyst Pakpoom Athikaphan	6
AMEEHA2022-MC 004	Green synthesis of silver nanoparticles from flower extract of <i>Butea monosperma</i> and its antimicrobial activity Chethan Kumar B G	8
AMEEHA2022-MC 005	Dynamically hydrothermally grown perovskite $La_xSr_{1-x}Fe_{0.01}Ti_{0.99}O_3$ (0.01 $\leq x \leq 0.03$ ) photocatalysys and its improved photoresponse in degradation of fluoroquinolone antibiotic under visible light region Totsaporn Suwannaruang	9

		Page
AMEEHA2022-MC 006	Facile synthesis of hybridge Fe <sub>3</sub> O <sub>4</sub> /ZnO nanosphere composite with high photocataysis activity Yuwadee Prapawasit	11
AMEEHA2022-MC 007	Novel cubic heterojunction Fe <sub>2</sub> O <sub>3</sub> /ZnO composite for the photocatalyst application Phurinat Hemnil	13
AMEEHA2022-MC 010	Role of interfacial properties in rosin solution for the development of natural resin-based <i>in situ</i> forming systems. Setthapong Senarat	15

### Track-II: Advanced materials

		Page
AMEEHA2022-AM 002	Antimicrobial and antitumoral activities of saturated fatty acid solutions Torsak Intaraphairot	17
AMEEHA2022-AM 007	Performance of partial replacement of bagasse ash with ordinary Portland cement in concrete G D Kumara	19
AMEEHA2022-AM 008	PVA/STO nanocomposite thick film based colour switching matrices for UV sensing applications Mahadeva Prasad P	21

# Track-III: Energy and storage

		Page
AMEEHA2022-ES 001	Enhancing deoxygenation of waste cooking palm oil via pyrolytic catalysis cracking under atmospheric pressure over CaO-MgO catalyst modified by K <sub>2</sub> O for green bio-fuel production Ratchadaphon Chuepetch	23
AMEEHA2022-ES 002	Upgrading pyrolytic oil via in-situ hydrodeoxygenation over nickel doped HZSM-5 Warangkana <u>Khangwichian</u>	25
AMEEHA2022-ES 003	Physicochemical and structural characteristics of carbonaceous products obtained by hydrothermal carbonization of pulp and paper sludge waste Piyanut Phuthongkhao	27
AMEEHA2022-ES 004	Utilization of black-liquor by hydrothermal liquefaction Nakarin Duangkaew	29
АМЕЕНА2022-ЕЅ 005	Conversion of sewage sludge from industrial wastewater treatment to solid fuel through hydrothermal carbonization process Siridet Paiboonudomkarn	31

		Page
AMEEHA2022-ES 007	Aluminium-doped-Zinc Oxide Nanofillers Loaded Polyvinylpyrrolidone Nanocomposite Based New Age Dielectrics Chitra S.G.	33

# **Track-IV: Environmental applications**

		Page
AMEEHA2022-EA 001	Photocatalytic reduction of hexavalent chromium in the presence of scavenger using metal-TiO <sub>2</sub> photocatalysis Darika Permporn	35
AMEEHA2022-EA 002	Treatment of melanoidin-contaning wastewater using purified laccase from <i>Megasporoporia</i> sp. KKU-LKNG-07: enzyme characterization and decolorization performance Wittawat Toomsan	37
AMEEHA2022-EA 002	Trihalomethane precursors removal from high-bromide natural water using magnetic ion exchange resin and coagulation Nareenat Ranthom	39
AMEEHA2022-EA 004	Removal of triclocarban by electro peroxone: effect of operational parameters Supitchaya Jenjaiwit	41
AMEEHA2022-EA 006	UV-VIS irradiation driven CO <sub>2</sub> reduction into hydrocarbons on novel tri-metallic based layered double hydroxide Jijoe Samuel Prabagar	43

		Page
	Hybrid ZnFe204/AgS nanocomposite for enhanced photocatalytic activity and microbial activity towards targeted superbugs S. Yadav	44
AMEEHA2022-EA 008	Synthesis and study of photocatalytic performance of the MnTiO3/Ag/gC3N4 composite for photoinduced degradation of antibiotic (tetracycline) and synthesis of ammonia T. Tenzin	45
AMEEHA2022-EA 009	Facile synthesis of NdFeO3 perovskite photocatalytic degradation of organic dyes and antibiotics Hosakote Shankara Anusha	46
АМЕЕНА2022-ЕА 010	Remediation of arsenic-contaminated water by green zero- valent iron nanoparticles Ratthiwa Deewan	47
AMEEHA2022-EA 013	Relationship between dissolved organic nitrogen (DON) and biodegradable dissolved organic nitrogen (BDON) to haloacetonitrile formation potential in water treatment plants Thunyalux Ratpukdi	50

		Page
	Facile synthesis of functional nanostructure ZnSnO <sub>3</sub> and nanocomposite ZnSnO <sub>3</sub> /Fe/gC <sub>3</sub> N <sub>4</sub> for photocatalytic remediation of persistent organic pollutants Prakash Kariyajjanavar	52
AMEEHA2022-EA 014		
	Cannabis waste to energy via hydrothermal carbonization Ekkachai Kanchanatip	53
AMEEHA2022-EA 015		
	Utilization of lignin separated from pulp and paper wastewater for lead removal Pummarin Khamdahsag	55
AMEEHA2022-EA 017		
AMEEHA2022-EA 018	Competitive adsorption analysis of anionic and cationic dyes from multicomponent adsorption system using <i>Prosopis</i> <i>juliflora</i> activated carbon: performance evaluation, effects of operational parameters, kinetics and isotherm study Pratheek C N	58
AMEEHA2022-EA 019	Performance evaluation of photochemical and electrochemical techniques for degradation of pharmaceuticals and personal care products: effect of operational parameters and kinetic study Manjunath S V	60

		Page
AMEEHA2022-EA 020	Synthesis and characterization of manganese oxide nanoparticles and their optical properties Mounika Tirukoti	62
AMEEHA2022-EA 022	Rapid on-site monitoring of paraquat herbicide residue in soils via simple plastic lab-on-a-chip Rattanan Thaisa-ng	64
АМЕЕНА2022-ЕА 023	Bio-nanocomposite foams of starch reinforced with nanocellulose fibers Nattakan Soykeabkaew	66
АМЕЕНА2022-ЕА 024	Bio-foams of cassava starch/wheat gluten blends produced by microwave processing Supattra Klayya	68
AMEEHA2022-EA 025	Development of self-sandwich biocomposites based on rice straw and epoxy thermoset resin Phattharasaya Rattanawongkun	70

		Page
AMEEHA2022-EA 026	Response surface optimization for increasing dissolved oxygen by multiple tray aerators Oudomsack Pongmala	72
AMEEHA2022-EA 028	Assessment of radiation dose due to <sup>226</sup> Ra, <sup>222</sup> Rn and <sup>210</sup> Po in drinking water of Chamarajanagar district, Karnataka state, India Lavanya B. S. K.	74
АМЕНА2022-ЕА 029	Studies on the distribution of U and <sup>210</sup> Po in ground water of kodagu district, karnataka state, india and effective radiation dose to the public Namitha S N	76

# **Track-V: Medical applications**

		Page
АМЕЕНА2022-МА 003	Natural rubber-based pressure sensitive adhesive as a drug carrier Napaphol Puyathorn	79
AMEEHA2022-MA 004	Design, manufacture and applications of minimalistic dumbbell-shaped DNA delivery vectors Volker Patzel	81
AMEEHA2022-MA 009	Evaluation of shear bond strength of high molecular chitosan nanoparticle incorporated heat polymerized polymethyl methacrylate denture base resin with acrylic resin teeth: an <i>in</i> <i>vitro</i> study Radhika Krishnan C	83