評審: 陳蓉瑤 (國立成功大學 )/ 朱哲毅 (國立中興大學)

| 發表順序               | 時間          | 題目與發表作者   |
|--------------------|-------------|---|
|                    |             | The effect of methyl-substituents on electrochemical properties and supercapacitor                |
| E-A1-1             | 13:30-13:38 | behavior of triarylamine-based polyamides   |
|                    |             | 何泓霖 (國立臺灣大學)  |
|                    |             | Enhanced Thermoelectric Properties of Poly(phenylene butadiynylene)/Carbon                        |
| E-A1-2             | 13:38-13:46 | Nanotube Nanocomposites for Wearable Thermoelectric Generator Applications                        |
|                    |             | 施暐宸 (國立臺灣大學)  |
|                    |             | Bi-Functional Photothermal and Thermoelectric Hydrogel for Water Purification and                 |
| E-A1-3             | 13:46-13:54 | Waste Heat Harvesting   |
|                    |             | 王鈺皓 (國立臺灣大學)  |
|                    |             | High Performance Phototransistor Memory Enabled by the Mismatch of                                |
| E-A1-4             | 13:54-14:02 | Spontaneous Orientation Polarization at the Channel/Electret Interface                            |
|                    |             | 翁逸勳 (國立臺灣大學)  |
|                    |             | Gel Polymer Electrolyte Employing Single-Ion Conducting Pathways for Lithium-Ion                  |
| E-A1-5             | 14:02-14:10 | Batteries   |
|                    |             | 盧昱璇 (國立清華大學)  |
|                    |             | Construction and Application of Fully π-Conjugated, Diyne-linked Conjugated                       |
| E-A1-6             | 14:10-14:18 | Microporous Polymers for Energy Storage   |
|                    |             | 王珮慈 (國立中山大學)  |
| -                  | 14:18-14:25 | Break   |
|                    |             | Unveiling the Synergistic Effect of the Incorporation of Perfluorophenyl Moiety in                |
| г л1 7             | 14.25 14.22 | Benzimidazole-based Non-fullerene Acceptor for Enhanced Photovoltaic                              |
| E-A1-7             | 14:25-14:33 | Performance and Thermal Stability   |
|                    |             | 曾啟鈞 (國立陽明交通大學)  |
|                    |             | An integrated system utilizing blue energy to electrolyze seawater for hydrogen                   |
| E-A1-8             | 14:33-14:41 | production  |
|                    |             | 李杰叡 (明志科技大學)  |
|                    |             | Advanced Anti-Counterfeiting: Dual-pattern Fabrication and Moiré Animation on                     |
| E-A1-9             | 14:41-14:49 | Azopolymer Films via Linearly Polarized Lights  |
|                    |             | 張銘軒 (國立陽明交通大學)  |
|                    |             | Emission Gain Layer of Polycaprolactone-Silver Nanoparticles with Förster                         |
| E-A1-10            | 14:49-14:57 | Resonance Energy Transfer for High-Performance Perovskite Light-Emitting Diodes                   |
|                    |             | 顏禎里 (國立臺灣大學)  |
|                    |             | Shear-Induced Alignment of Polystyrene-b-Poly (Lactic Acid) with Cylindrical                      |
| E-A1-11            | 14:57-15:05 | Morphology and Its Impact on Grain Boundary Defects and Mechanical Properties                     |
|                    |             | 游子毅 (國立中央大學)  |
|                    |             | Aromatic Side Chain effect of C-shaped ortho-Benzodipyrrole-based Nonfullerene                    |
| E 44 40            | 15:05-15:13 | Acceptors for Efficient Organic Photovoltaics   |
| E-A1-12            |             | 呂佳芳 (國立陽明交通大學)  |
| E-A1-12            |             | 口住力 (國工物的文通八字)  |
| E-A1-12            |             | ロ 上 方(図 工 物 内 欠 逆 八 字)  A Multi-Scale Modeling Approach to Investigate the Coefficient of Thermal |
| E-A1-12<br>E-A1-13 | 15:13-15:21 |   |

評審: 阮至正 (國立成功大學) / 林昆翰 (國立清華大學)

| <br>發表順序                               | 時間          | 題目與發表作者   |
|--|-------------|---|
|  |             | Pyrene-Fused Azaacene COFs: A Platform for Enhanced Conjugation and Efficient         |
| E-A2-1                                 | 15:40-15:48 | Hydrogen Evolution  |
|  |             | Hoang Chau Kim Dung (國立清華大學)  |
|  |             | Tetrabenzonaphthalene and Triphenylamine Connecting Redox-Active                      |
| E-A2-2                                 | 15:48-15:56 | Anthraquinone formed Conjugated Microporous Polymers as Organic Electrodes for        |
| L 712 Z                                | 13.10 13.30 | Enhanced Energy Storage Efficiency  |
|  |             | 陳念萍(國立中山大學)   |
|  |             | Investigating the Influence of Metal Introduction Methods via Ionization and          |
| E-A2-3                                 | 15:56-16:04 | Coordination on the Properties of Covalent Organic Frameworks                         |
|  |             | 黃翊展 (國立清華大學)  |
|  |             | Utilization of Crystalline Self-Assembled Monolayers in Biomimetic Photosynaptic      |
| E-A2-4                                 | 16:04-16:12 | Transistors toward Ultraviolet Light Protection                                       |
|  |             | 吳亞璇 (國立臺灣大學)  |
|  |             | N-type Semiconducting Polymers with Improved Stretchability by Using                  |
| E-A2-5                                 | 16:12-16:20 | Stereoisomers as Conjugation Break Spacers  |
|  |             | 陳明漢 (國立成功大學)  |
|  |             | Pyridine-Based Conjugated Microporous Polymers for Photocatalytic Hydrogen            |
| E-A2-6                                 | 16:20-16:28 | Production  |
|  |             | 李佩容 (國立中山大學)  |
|  | 16:28-16:35 | Break   |
|  |             | Piezo-catalysis property of PVDF/Graphene@Ag membranes                                |
| E-A2-7                                 | 16:35-16:43 | for carbon dioxide reduction reaction   |
|  |             | 田新源 (國立臺灣科技大學)  |
|  |             | Construction of Triphenylene-Based Two-Dimensional Covalent Organic                   |
| E-A2-8                                 | 16:43-16:51 | Frameworks for Boosting Photocatalytic Hydrogen Evolution                             |
|  |             | Khanh Do Gia Huynh (國立清華大學)   |
|  |             | Improvement of Electro-Optical Properties of Twisted Nematic Liquid Crystal           |
| E-A2-9                                 | 16:51-16:59 | Devices via Polymeric Nanoparticle Dopants  |
|  |             | 辛孟哲 (國立成功大學)  |
|  |             | Enhanced Tetracycline Removal Through a Novel PVDF/δ-MnO <sub>2</sub> Photocatalytic  |
| E-A2-10                                | 16:59-17:07 | Membrane Reactor  |
|  |             | 劉士宏 (中原大學)  |
|  |             | Rational Design of Ultra stable Conjugated Microporous Polymers Based on Pyrene       |
| E-A2-11                                | 17:07-17:15 | and Perylene Units as High-Performance Organic Electrode Materials for                |
| r \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | 17.07-17.15 | Supercapacitor Applications   |
|  |             | Poonam Nagendra Singh (國立中山大學)  |
|  |             | Application of Electrospinning Functionalized double layer Gel-State Electrolytes for |
| E-A2-12                                | 17:15-17:23 | Lithium-Ion Batteries   |
|  |             | 許淘鈞 (國立臺灣科技大學)  |

評審: 李明家(國立陽明交通大學) / 孫亞賢 (國立成功大學)

| 發表順序    | 時間          | 題目與發表作者  |
|---------|-------------|--|
|         |             | Porous Organic Polymers (POPs) for Artificial Solid-electrolyte Interface (A-SEI) of   |
| E-A3-1  | 9:00-9:08   | Lithium Metal Batteries  |
|         |             | 張雅筑 (國立臺灣大學)   |
|         |             | <b>Eco-Compatible Solvent Additives for Enhancing Charge Mobility in Well-Oriented</b> |
| E-A3-2  | 9:08-9:16   | Crystalline Semiconducting Polymers  |
|         |             | 洪偉銘 (國立臺灣科技大學)   |
|         |             | Metal-organic framework-derived transition metal chalcogenides Thin-film Polyme        |
| E-A3-3  | 9:16-9:24   | Electret and Its Application in OFET Memory  |
|         |             | 林志穎 (國立臺灣師範大學)   |
|         |             | Applying Microwave Irradiation to Modify the Microstructure of Conjugated              |
| E-A3-4  | 9:24-9:32   | Polymers in Solution and the Corresponding Thin Films                                  |
|         |             | 張明浩 (國立臺灣科技大學)   |
| E-A3-5  | 9:32-9:40   | Silicon-Based Additives on Self-Assembly of Pyridine-Based Copolymers                  |
| L A3 3  |             | 黃瀠萱 (國立中山大學)   |
| -       | 9:40-9:45   | Break  |
|         |             | Mechanically Robust and Ultrastable 2D-MOF/1D-Aramid Nanofiber Composite               |
| E-A3-6  | 9:45-9:53   | Membrane for Highly Efficient Osmotic Power Harvesting                                 |
|         |             | 龍家安 (國立臺灣科技大學)   |
|         |             | Investigating the Impact of Interfacial-Active Nanoparticles on Spinodal               |
| E-A3-7  | 9:53-10:01  | Decomposition in Polymer Blends  |
|         |             | 余澔 (國立臺灣科技大學)  |
|         |             | A New Method to Fabricate the Squarely Packed Cylinders in Diblock                     |
| E-A3-8  | 10:01-10:09 | Copolymer/Nanoparticle Nanocomposite Films by Low-Intensity Magnetic Field             |
|         |             | 邱文聖 (國立中興大學)   |
|         |             | Preparation of Hyperbranched Polymers by Atom Transfer Radical Self-Condensing         |
| E-A3-9  | 10:09-10:17 | Vinyl Polymerization for Polyurethane-based Anion Exchange Membranes                   |
|         |             | 阮紅日 (國立中興大學)   |
|         |             | Exploring the Impact of Conjugated Polymers Immobilized by Stretchable Matrix          |
| E-A3-10 | 10:17-10:25 | and 3D Layering for Enhanced Photocatalytic Hydrogen Production                        |
|         |             | 孫語恩 (國立清華大學)   |

評審: 鄭彥如 (國立陽明交通大學) / 王志逢 (國立中山大學)

| <br>發表順序 | 時間          | 題目與發表作者  |
|----------|-------------|--|
| E-B1-1   | 13:30-13:38 | Near Zero Poisson's Ratio in a Surface-based 3D Printed Perforated Lattice Structure 伊凡 (國立臺灣科技大學)   |
| E-B1-2   | 13:38-13:46 | Efficient, High-Yield, Ionized Biopolymer-Mediated Fabrication of Exfoliated MoSe2  Nanosheets with Reversible Dispersion Properties in Water  Kumasser Kusse Kuchayita (國立臺灣科技大學)   |
| E-B1-3   | 13:46-13:54 | High-performance NF lamellar-structured GO-Amphiphilic polymer nanocomposite membrane via synthesized polymer control interlayer spacing for enhancing water permeability and precise solute rejection for water treatment  Gefayehu Tameru Yeserah (國立臺灣科技大學) |
| E-B1-4   | 13:54-14:02 | Alkaline-Responsive, Self-Healable, and Conductive Copolymer Composites with Enhanced Mechanical Properties Tailored for Wearable Tech 張家維 (國立陽明交通大學)  |
| E-B1-5   | 14:02-14:10 | Advancing Nanopore Technology: Anodic Aluminum Oxide Membranes with Anisotropic Pores through Controlled Stretching 林于鈞(國立陽明交通大學)  |
| E-B1-6   | 14:10-14:18 | Enhancing Conductivity and Self-Healing in PEDOT:PSS/Poly(Ionic Liquid) Elastomers for Sensor Applications  林桓緯(國立陽明交通大學)  |
| -        | 14:18-14:25 | Break  |
| E-B1-7   | 14:25-14:33 | Surface Functionalization of Zr—Based 2D—MOFs for Optimized Thermoelectric Properties in Carbon Nanotube Composites  林政遠(國立臺灣大學)   |
| E-B1-8   | 14:33-14:41 | Synergic Ionic Liquid Systems: Light-Responsive and Self-Healable Poly(Ionic Liquid) Films Incorporating Azobenzene-Based Ionic Liquids 吳佳諦(國立陽明交通大學)  |
| E-B1-9   | 14:41-14:49 | Exfoliated 2D Nanosheet-Based Conjugated Polymer Composites with P-N Heterojunction Interfaces for Highly Efficient Electrocatalytic Hydrogen Evolution Randy Arthur Rusli (國立臺灣科技大學)  |
| E-B1-10  | 14:49-14:57 | Enhanced the conductivity of graphene oxide through conjugated polymers for multi-stimulus responsive bilayer soft actuators  Wei-Cheng Jhao (明志科技大學)  |
| E-B1-11  | 14:57-15:05 | Thermally-Induced Realignment of Wrinkled Patterns as Dry Adhesives<br>賴郁芳 (國立中興大學)  |
| E-B1-12  | 15:05-15:13 | Fabrication of Thermochromic Cholesteric Liquid Crystalline Actuation Film with Various Bending Angles 郭仲瑜 (國立成功大學)  |
| E-B1-13  | 15:13-15:21 | Natural Photonic Crystals Inspired for Trapping of Structural Coloration<br>張鶴騰 (國立中山大學)   |

評審: 趙基揚 (國立台灣大學) / 蔣酉旺 (國立中山大學)

| <br>發表順序 | 時間          | 題目與發表作者  |
|----------|-------------|--|
| E-B2-1   | 15:40-15:48 | Synthesis of Zwitterionic Dopamine Nanoparticles to Prepare Polyamide Thin-Film Composite Pervaporation Membranes for Separation of Isopropanol-Water Mixtures 劉宣亭 (中原大學)                      |
| E-B2-2   | 15:48-15:56 | 3D printing ultra-tough double network ionogel with jammed microgel-poly(vinyl alcohol) ink by solvent exchange with deep eutectic solvent 蔡志昇 (國立成功大學)  |
| E-B2-3   | 15:56-16:04 | Regulate Intra- and Intermolecular Interactions of CO <sub>2</sub> -based Copolymers via Chemical Structure Design<br>朱志緯 (國立中山大學)   |
| E-B2-4   | 16:04-16:12 | Tailoring Nanopore Geometry in Anodic Aluminum Oxide Membranes Through Physical Stretching and Controlled Anodization 劉育君 (國立陽明交通大學)   |
| E-B2-5   | 16:12-16:20 | Mechanically Robust, Self-healable and Recyclable Polyurethane Elastomer via Incorporating Chain Extenders for Skin-inspired Sensing 表家安 (國立清華大學)  |
| E-B2-6   | 16:20-16:28 | Layer-by-Layer Fabrication of PEI/WS2/PSSA-co-MA Trilayer Composite Membrane for Pervaporation Dehydration of Isopropanol  John Benedict F. Fangonil (中原大學)                                    |
| -        | 16:28-16:35 | Break  |
| E-B2-7   | 16:35-16:43 | Fabrication of Polyetheramide-Based Thin-Film Nanocomposite Membrane Incorporated with Zwitterionic Nanoparticles for Dye Desalination Faith B. Illescas (中原大學)                                |
| E-B2-8   | 16:43-16:51 | Fabrication of Poly(dopamine-acrylate) Graphene Oxide Membrane for Pervaporation Separation of Isopropanol-Water Mixture  Kristian Marcel E. Magpantay (中原大學)                                  |
| E-B2-9   | 16:51-16:59 | Low hygroscopic cocrystal of ammonium dinitramide(ADN) and novel dibenzo-18-crown-6 derivatives with a promising application for increasing energetic content of cocrystallization 林旻杰(國立中山大學) |
| E-B2-10  | 16:59-17:07 | Direct ink writing of Nitrile Butadiene Rubber Assisted by Cellulose Nanocrystals and a Solvent Exchange Process<br>江政穎 (國立成功大學)   |
| E-B2-11  | 17:07-17:15 | Peculiar Network Phases from Controlled Self-Assembly of Star-block Polystyrene-block-Polydimethylsiloxane  蔡宇傑 (國立清華大學)   |
| E-B2-12  | 17:15-17:23 | Unique Network Phases and Corresponding Phase Transitions from Self-Assembly of Chiral Triblock Terpolymers 林品樺 (國立清華大學)   |

評審: 游聲盛 (國立成功大學) / 邱智瑋 (國立台灣科技大學)

| 發表順序    | 時間          | 題目與發表作者  |
|---------|-------------|--|
| E-B3-1  | 9:00-9:08   | The mechanism underlying the effects of metal cluster variation and aminosilane functionalization of MOF-74 on the OSN performance of AS-MOF-74(M)/P84 mixed-matrix composite membranes    |
|         |             | Biadglign Ayalneh Habte (國立臺灣科技大學)   |
| E-B3-2  | 9:08-9:16   | Fabrication and Characterization of Hybrid Arranged Liquid Crystal Actuators<br>黃薏靜 (國立成功大學)   |
| E-B3-3  | 9:16-9:24   | Inducing Charge Polarity Control with Solvent Effect in Sugar-based Block Copolymer and Carbon Nanotube Composites in Thermoelectric Application 陳彦宇 (國立臺灣大學)                              |
| E-B3-4  | 9:24-9:32   | Synthesis of PDMSMA-co-MMA Random Copolymers via ATRP and Reaction-Induced Microphase Separation in Epoxy Thermosetting Resins to Form Various Self-Assembled Microstructures  陳思齊(國立中興大學) |
| E-B3-5  | 9:32-9:40   | Designing Luminescent Alginate Hydrogels via Lanthanide Complex Pre-Coordination for Enhanced Properties 蘇昱嘉(國立臺灣大學)   |
| -       | 9:40-9:45   | Break  |
| E-B3-6  | 9:45-9:53   | Development of 3D Printed Biodegradable Composites for Coral Regeneration<br>邱彦榕 (國立清華大學)  |
| E-B3-7  | 9:53-10:01  | Improving light sensing performance through ferrocene/quantum dot supramolecular design  陳羿妏(國立臺灣科技大學)   |
| E-B3-8  | 10:01-10:09 | Enhanced Pervaporation Performance of Dimethyl Carbonate/Methanol Mixtures Using UIO-66-NH2/Polyvinyl Alcohol (PVA) Composite Membranes 邱俊翔 (中原大學)   |
| E-B3-9  | 10:09-10:17 | Improving hydrogen production through metal deposition of conductive tubular membranes 林暐翔 (中原大學)  |
| E-B3-10 | 10:17-10:25 | Pyrene-Containing Covalent Organic Polymers Combined with Nano-Carbon Composites for Enhanced Supercapacitive Energy Storage 黃唯鈞 (國立中山大學)  |

評審: 鄭智嘉 (國立台灣科技大學) / 楊博智 (元智大學)

| <br>發表順序 | 時間          | 題目與發表作者  |
|----------|-------------|--|
|          |             | Analysis and exploration of introducing various metal compounds into different   |
| E-B4-1   | 10:45-10:53 | coordination sites to improve the meshed self-healing elastomers   |
|          |             | 陳彥亨 (國立清華大學)   |
|          |             | Enhance the Li+ selectivity of PA/PES membranes by introducing crown ether   |
| E-B4-2   | 10:53-11:01 | during interfacial polymerization and surface modification with EDTA   |
|          |             | 林承翰 (中原大學)   |
|          |             | Bipolarity Adjustment in Perovskite Quantum Dots via Metal Doping for High-  |
| E-B4-3   | 11:01-11:09 | Performance Photosynaptic Transistors  |
|          |             | 陳威丞 (國立臺灣大學)   |
|          |             | Effects of Carbohydrate Block Copolymer Architectures on the properties of   |
| E-B4-4   | 11:09-11:17 | Nonvolatile Phototransistor Memory   |
|          |             | 游秉叡 (國立臺灣大學)   |
|          |             | Exploration of Novel Biodegradable Polymer/Metal-organic Framework Compound  |
| E-B4-5   | 11:17-11:25 | (MOF) Composites: Crystallization Behaviors and Physical Properties in the<br>Presence of MOF                            |
|          |             | 問書仔 (逢甲大學)   |
|          | 11:25-11:30 | Pial / (建サハデ)  Break   |
| -        | 11.25-11.50 |  |
| E D4 6   | 11:30-11:38 | Synthesis of PDMS and 2-Vinylpyridine to Random Copolymers by RAFT Polymerization and Their Self-assembly Investigations |
| E-B4-6   |             | 劉伊純 (國立中興大學)   |
|          |             | <u> </u>   |
| E-B4-7   | 11:38-11:46 | Fabrication and Characterization of Thermo/Photo-Sensitive Azo-Derived Liquid Crystal Elastomeric Actuators              |
| L-D4-7   | 11.50-11.40 | 林彦廷(國立成功大學)  |
|          |             | Hydrogen Bonding Dynamics and Mechanical Optimization in Energetic   |
| E-B4-8   | 11:46-11:54 | Thermoplastic Elastomers   |
| 2 3 1 0  | 11.10 11.01 | 蔡明諺 (國立中山大學)   |
|          |             | Multifunctional Porous Organic Polymer Separator in Gel-state Electrolytes for   |
| E-B4-9   | 11:54-12:02 | Lithium-Sulfur Batteries   |
| -        |             | 陳品翰 (中山大學)   |
|          |             | "Grafting to" Rubber Composite for Elastic Dielectric  |
| E-B4-10  | 11:02-12:10 | Dinda Bazliah (國立臺灣科技大學)   |
|          |             |  |

評審: 林彥丞 (國立成功大學) / 鄭力誠 (國立高雄科技大學)

| 發表順序   | 時間           | 題目與發表作者   |
|--------|--------------|---|
|        |              | Preparation of Zwitterionic-modified Ceramic Fillers for Solid-state Polymer          |
| E-B5-1 | 13:00-13:08  | Electrolytes  |
|        |              | 李兆翊 (國立臺灣科技大學)  |
|        |              | Vapor Phase Synthesis of Coordination Polymers and Parylene-Based Composite           |
| E-B5-2 | 13:08-13:16  | Coatings for Bioengineering   |
|        |              | 胡書嫚 (國立臺灣大學)  |
|        |              | Effects of polar solvents and graphene addition on the crystalline phase formation in |
| E-B5-3 | 13:16-13:24  | polyvinylidene fluoride (PVDF) membranes via non-solvent induced phase                |
|        |              | separation  |
|        |              | 雷文晴 (國立臺灣科技大學)  |
|        |              | Innovative Composite Materials based PVDF-HFP Co-Polymer for Dual-Function            |
| E-B5-4 | 13:24-13:32  | Energy Generation and Pollution Mitigation  |
|        |              | 何蕾娜 (國立臺灣科技大學)  |
|        |              | Investigation of Seawater-responsive Dissolution and Degradation Characteristics of   |
| E-B5-5 | 13:32-13:40  | Poly (glycerol maleate) (PGM)-Based Composite Film                                    |
|        |              | 劉語恩 (國立清華大學)  |
|        | 13:40-13:45  | Break   |
|        |              | Preparation of Hollow Gyroid (HG) Templates Using Photodegradable Block               |
| E-B5-6 | 13:45-13:53  | Copolymer Hybrid System   |
|        |              | 孫婉旖 (國立中山大學)  |
|        |              | Templating Synthesis of Continuous Nanomaterials through Bottom-up Networked          |
| E-B5-7 | 13:53-14:01  | Films   |
|        |              | 許芳瑀 (國立中山大學)  |
| E-B5-8 | 14:01-14:09  | Poly(Lactic Acid)-Based Composites Modified with Poly(Glycerol Maleate)               |
|        | I-1.01-14.03 | 王品媛 (國立清華大學)  |
|        |              | Mechanically Robust and Light-Responsive COF/ANF Nanocomposite Membranes for          |
| E-B5-9 | 14:09-14:17  | Enhanced Blue Energy Harvesting   |
|        |              | 薛凱丞 (國立臺灣科技大學)  |
|        |              |   |

評審: 詹正雄 (國立成功大學)/葉伊純 (國立台灣大學)

| 發表順序    | 時間          | 題目與發表作者   |
|---------|-------------|---|
|         |             | Development of cell sorting biomaterials: Purification of hiPSC-derived               |
| E-C1-1  | 13:30-13:38 | cardiomyocytes  |
|         |             | 張家綸 (國立中央大學)  |
|         |             | Purification of Colon Cancer Cells Using Membrane Filtration Method via Modified      |
| E-C1-2  | 13:38-13:46 | Porous Polymeric Membranes  |
|         |             | 洪聆鈞 (國立中央大學)  |
|         |             | CO <sub>2</sub> -Responsive drug delivery system created by supramolecular design and |
| E-C1-3  | 13:46-13:54 | assembly for safer, more effective cancer therapy                                     |
|         |             | 江宜捷 (國立臺灣科技大學)  |
|         |             | CO <sub>2</sub> -Responsive Water-Soluble Conjugated Polymers as a Multifunctional    |
| E-C1-4  | 13:54-14:02 | Fluorescent Probe for Bioimaging Applications   |
|         |             | 王子銘 (國立臺灣科技大學)  |
|         |             | Tuning the Emission and Electrochromic Properties of Aromatic Polyamides through      |
| E-C1-5  | 14:02-14:10 | Dicarboxylic Acid Position Modifications  |
|         |             | 林靖玹 (國立臺灣大學)  |
|         |             | Non-phosgene Synthesis Approach for Glycidyl Carbamate Resins Employing               |
| E-C1-6  | 14:10-14:18 | Amidine-based Superbases with Recycled Polycarbonate                                  |
|         |             | 陳彦全 (國立臺灣大學)  |
|         | 14:18-14:25 | Break   |
|         |             | Sustainable Strategy: Multiple Lifecycles Polyurethane Prepared from Waste            |
| E-C1-7  | 14:25-14:33 | Polycarbonate with Extreme Ductility  |
|         |             | 徐浩倫 (國立臺灣大學)  |
|         |             | Photoreactive silver-containing supramolecular polymers that form self-assembled      |
| E-C1-8  | 14:33-14:41 | nanogels for efficient antibacterial treatment  |
|         |             | 林耘均 (國立臺灣科技大學)  |
|         |             | Eco-friendly Choice: Using Deep Eutectic Solvents to Accelerate Visible Light-        |
| E-C1-9  | 14:41-14:49 | Induced, Catalyst-Free Single Unit Monomer Insertion Reactions                        |
|         |             | 洪伯融 (國立成功大學)  |
|         |             | Modification and structure development for the synthesis of long-chain branched       |
| E-C1-10 | 14:49-14:57 | polypropylene   |
|         |             | 蔡尚霖 (國立中正大學)  |
|         |             | Lab-on-the-Needles: A microneedle patch-based SenBox as mobile healthcare unit        |
| E-C1-11 | 14:57-15:05 | for highly sensitive ex vivo and in vivo detection of protein biomarkers              |
|         |             | 許盈培 (國立中山大學)  |
|         |             | Guiding Tubular Dentin Regeneration by 3D-aligned Polymer Scaffold Using Vapor        |
| E-C1-12 | 15:05-15:13 | Sublimation and Deposition Fabrication  |
|         |             | 陳重儒 (國立臺灣大學)  |

評審: 吳宗明 (國立中興大學)/蕭育生 (國立臺灣科技大學)

| 發表順序    | 時間          | 題目與發表作者  |
|---------|-------------|--|
|         |             | Enhancing Thermoelectric Performance of Polymerized Non-Fullerene-                         |
| E-C2-1  | 15:40-15:48 | Acceptor/SWCNT Composite Thin Films by central core engineering                            |
|         |             | 周哲安 (國立臺灣大學)   |
| E-C2-2  | 15:48-15:56 | Heteroatom-doped carbons based on benzoxazine polymers for CO₂ capture                     |
|         | 13.10 13.30 | 鄭昀謙 (國立中山大學)   |
|         |             | Conjugated Polymers Based on Diphenylthiourea, Tetraphenylethene and                       |
| E-C2-3  | 15:56-16:04 | Dibenzofulvene for the Detection of Cuprous Ion and Hydrogen Peroxide                      |
|         |             | 潘文黃康 (國立臺灣科技大學)  |
|         |             | Design and Synthesis of Benzoxazine-Functionalized Octavinylsilsesquioxane for             |
| E-C2-4  | 16:04-16:12 | Enhanced Carbon Dioxide Adsorption via Heat Treatment                                      |
|         |             | 蕭晴文 (國立中山大學)   |
|         |             | Efficient Synthesis of Poly(methyl methacrylate) via Photo-Induced ATRP                    |
| E-C2-5  | 16:12-16:20 | Polymerization Mediated by Deep Eutectic Solvents  |
|         |             | 李惟如 (國立成功大學)   |
| E-C2-6  | 16:20-16:28 | 高熱穩定性與機械穩定性的生質來源聚醯亞胺用於可繞性電子元件  |
| L-C2-0  | 10.20-10.20 | 洪永騰 (國立臺北科技大學)   |
| -       | 16:28-16:35 | Break  |
| F C2 7  | 16.25 16.42 | Environmentally Recyclable Ionogels for Ionic Thermoelectric Supercapacitor                |
| E-C2-7  | 16:35-16:43 | 鄭羽煊 (國立臺灣大學)   |
| F C2 0  | 16.42 16.51 | Degradable and Stretchable N-Type Conjugated Random Copolymers in OFETs                    |
| E-C2-8  | 16:43-16:51 | 鍾佳學 (國立成功大學)   |
|         |             | Achieving Full Wettability of Hydrophobic Poly(vinylidene difluoride) Membranes            |
| E-C2-9  | 16:51-16:59 | via Surface PEGylation Spray-Coating for Improved Anti-Biofouling Performance              |
|         |             | 陳廷瑋 (中原大學)   |
|         |             | Dielectric Barrier Discharge Plasma-Assisted Fabrication of Regenerative Biocidal          |
| E-C2-10 | 16:59-17:07 | ePTFE Membranes  |
|         |             | 朱怡珊 (中原大學)   |
|         |             | Donor-Acceptor Thiazolo[5,4-d]thiazole-Based Conjugated Microporous Polymers               |
| E-C2-11 | 17:07-17:15 | for Organic Pollutant Adsorption and Photocatalytic Degradation                            |
|         |             | 宋佩霓 (國立中山大學)   |
|         |             | Design and Synthesis of Fully Benzoxazine-based Porous Organic Polymer for CO <sub>2</sub> |
| E-C2-12 | 17:15-17:23 | Capture  |
|         |             | Mohsin Ejaz (國立中山大學)   |
|         |             | Poly(glycerol-sebacate-dithiodipropionate-sulfone) nanoparticles encapsulating             |
| E-C2-13 | 17:23-17:31 | iron showed an inhibitory effect against Klebsiella pneumoniae                             |
|         |             | 江翊生 (國立成功大學)   |

評審: 黃智峯(國立中興大學) / 吳冠毅 (國立台北科技大學)

| <br>發表順序 | <br>時間      | 野 <b>日                                   </b>                                      |
|----------|-------------|--|
|          | 101         | 題目與發表作者  |
| E 60.4   |             | Catalytic hemin/peptide complex initiated reversible addition-fragmentation chain  |
| E-C3-1   | 9:00-9:08   | transfer polymerization  |
|          |             | 張曜宇(國立成功大學)  |
|          |             | Enhancing Separation Efficiency: Breakthroughs of Graphene Oxide Membranes in      |
| E-C3-2   | 9:08-9:16   | Organic-Organic solvents Azeotropic Systems  |
|          |             | 郭信佑 (國立臺灣科技大學)   |
|          |             | Application of MIL-53(Fe)/PVDF Mixed-Matrix Membranes in Photocatalytic            |
| E-C3-3   | 9:16-9:24   | Membrane Reactors for Tetracycline Degradation                                     |
|          |             | 黃茂庭 (中原大學)   |
|          |             | Research on the Application of Layer-by-Layer Assembly Technique in the            |
| E-C3-4   | 9:24-9:32   | Construction of 3D Artificial Skin and Cartilage Tissue Models                     |
|          |             | 吳奕緹 (國立成功大學)   |
|          |             | NIR-II Responsive CNT-Alginate Hydrogels for Synergistic Photothermal-Controlled   |
| E-C3-5   | 9:32-9:40   | Release in Cancer Treatment  |
|          |             | 賴頤禛 (國立臺灣大學)   |
| -        | 9:40-9:45   | Break  |
|          | 9:45-9:53   | Structurally Defined Amphiphilic AAO Membranes Using UV-Assisted Thiol-Yne         |
| E-C3-6   |             | Chemistry: Applications in Nanopatterning, Anti-Counterfeiting, and Electronics    |
|          |             | 李林叡 (國立陽明交通大學)   |
|          | 0.70.40.04  | Ozone-treated Lignin modified diketoenamine Vitrimers: synthesis and properties    |
| E-C3-7   | 9:53-10:01  | 吳念勳 (國立清華大學)   |
|          |             | Antifouling Properties of Amine-Oxide Containing Zwitterionic Polymers             |
| E-C3-8   | 10:01-10:09 | Van-Sieu Luc (國立陽明交通大學)  |
|          |             | Hydrophobic Association Hydrogels: Engineering Low-Hysteresis and Antibacterial    |
| E-C3-9   | 10:09-10:17 | Performance  |
|          | 10.03 10.17 | 歐宜臻 (國立高雄科技大學)   |
|          |             | Circular Economy Approach: Renewable Polyurethane/SiO <sub>2</sub> Nanohybrids via |
|          | 10:17-10:25 | Reclaimed Waste Polycarbonate for Carbon Dioxide Fixation and Separation           |
| E-C3-10  |             | Application  |
|          |             | 陳易陞 (國立臺灣大學)   |
|          |             |  |

## 評審:鍾宜璋 (國立高雄大學) / 石健忠 (國立雲林科技大學)

| 發表順序    | 時間          | 題目與發表作者   |
|---------|-------------|---|
|         |             | Modulation of the Conformation, Segment Compatibility, and Coplanarity              |
| E-C4-1  | 10:45-10:53 | Conjugated Polymers by Aldol Condensation for Efficient Ambipolar Organic Field-    |
|         | 20.10 20.00 | Effect Transistors  |
|         |             | 吳冠霖 (國立臺灣大學)  |
| E-C4-2  | 10:53-11:01 | Novel Low-k and Biobased Photosensitive Polyimides                                  |
|         |             | 劉瑜 (國立臺灣大學)   |
|         |             | Synthesis of Carbon Quantum Dot/Hydrogel Hybrids for Boosted Photodegradation       |
| E-C4-3  | 11:01-11:09 | Efficiency of Methyl Red  |
|         |             | 林雅嫻 (南臺科技大學)  |
|         |             | Layer-by-Layer Self-Assembled Membrane Using Sulfonated Polyethyleneimine and       |
| E-C4-4  | 11:09-11:17 | Tannic Acid for Highly Selective Pervaporation Dehydration of Butanol               |
|         |             | 李馬文 (中原大學)  |
|         |             | Low-energy Zwitterionization of Expanded Polytetrafluoroethylene Membranes          |
| E-C4-5  | 11:17-11:25 | using Dopamine: Biocompatibility and Thermostability                                |
|         |             | 李珮瑄 (中原大學)  |
| -       | 11:25-11:30 | Break   |
|         |             | Sterilizable Self-Cleaning Polycationic PVDF Membranes with Sustainable Bacteria-   |
| E-C4-6  | 11:30-11:38 | Killing and Releasing Capabilities for Water Treatment                              |
|         |             | Kuan-Chin Lu (中原大學)   |
|         |             | Study on the Regulation of KW Gel to Keloid Fibroblasts and its Healing for Keloid  |
| E-C4-7  | 11:38-11:46 | Scars   |
|         |             | 吳育昕 (國立成功大學)  |
|         |             | Zwitterionic Surface Modification of Polypropylene Nonwoven Fabric via Dielectric   |
| E-C4-8  | 11:46-11:54 | Barrier Discharge Plasma for Enhanced Leukodepletion Efficiency                     |
|         |             | 張巧羚 (中原大學)  |
|         |             | Printable Polypeptide-Poly(ethylene glycol)-Polypeptide Triblock Copolymer          |
| E-C4-9  | 11:54-12:02 | Hydrogels Based on Poly(O-benzyl-L-serine) and Poly(O-benzyl-L-tyrosine)            |
|         |             | 潘氏霞媚 (國立成功大學)   |
|         |             | The surface modification of pure titanium micro-arc oxidation coating antibacterial |
| E-C4-10 | 11:02-12:10 | ions and low-temperature plasma treatment with UV-grafting thermosensitive          |
| E-C4-10 | 11.02-12.10 | hydrogel for enhancing osseointegration and antibacterial properties                |
|         |             | 謝旻哲 (淡江大學)  |

評審: 王潔 (國立清華大學) / 曹峯溢 (國立彰化師範大學)

| 發表順序    | 時間          | 題目與發表作者   |
|---------|-------------|---|
| E-C5-1  | 13:00-13:08 | Study on the Synthesize Polyamides via Ugi-type Multicomponent Polymerization           |
|         |             | and Functionalizing with Disulfide Bonds for Crosslinking and Vitrimer Materials        |
|         |             | 許均睿 (國立中興大學)  |
| E-C5-2  | 13:08-13:16 | Synthesis and Characterization of Polymer Containing Phenothiazine Derivatives by       |
|         |             | Suzuki-Miyaura Coupling   |
|         |             | 黃柏儒 (國立臺灣科技大學)  |
|         | 13:16-13:24 | Synthesis and Application of Zwitterionic Cross-linked Core-shell Block Copolymers      |
| E-C5-3  |             | for Solid-state Electrolyte   |
|         |             | 曾靚 (國立臺灣科技大學)   |
| E-C5-4  | 13:24-13:32 | Photoinduced Controlled Radical Polymerization Mediated by BiOCl Nanosheets             |
| E-C3-4  |             | 王笠安 (國立陽明交通大學)  |
|         | 13:32-13:40 | Preparation of N,O-maleoyl-functional chitosan/ poly(ethylene oxide) hydrogels          |
| E-C5-5  |             | with a Schiff-base cross-linked structure and their controlled release application      |
|         |             | 廖元皓 (國立中山大學)  |
| -       | 13:40-13:45 | Break   |
|         | 13:45-13:53 | Vapor-Phase Fabrication of Porous Parylene Coatings for A Interstitial Fluid Filtration |
| E-C5-6  |             | Device  |
|         |             | 張育銘 (國立臺灣大學)  |
|         | 13:53-14:01 | An in vitro study of fibrinogen conversion to fibrin using various combinations of      |
| E-C5-7  |             | snail mucin protein fractions   |
|         |             | 蔡宥楠 (國立臺北科技大學)  |
| E-C5-8  | 14:01-14:09 | Light-Tailorable Hydrogels Prepared from Polypeptide Block Copolymers for Nerve         |
|         |             | Regeneration  |
|         |             | 林軒宇 (國立臺灣大學)  |
| E-C5-9  | 14:09-14:17 | Microplasma-Induced Radical Polymerization for Green Elastic Polymer and                |
|         |             | Luminescent Nanocomposite   |
|         |             | Daniel Muara Sentosa (國立臺灣科技大學)   |
| E-C5-10 | 14:17-14:25 | Development of Functional Porous Materials via Vapor-Phase Polymerization for           |
|         |             | Biomolecule Encapsulation   |
|         |             | 徐亦辰 (國立臺灣大學)  |

評審: 李思禹 (國立中興大學) / 邱昱誠 (國立臺灣科技大學)

| 發表順序    | 時間          | 題目與發表作者  |
|---------|-------------|--|
| E-C6-1  | 13:00-13:08 | Gold Nanocubes/Nanoscale Mica Platelets as Flexible Substrates for High-Efficiency     |
|         |             | SERS Bacterial Biosensor   |
|         |             | 呂明璋 (國立臺灣科技大學)   |
| E-C6-2  | 13:08-13:16 | Synthesis of Adamantane-modified PS-b-PMMA for controlling microphase-                 |
|         |             | separated structure  |
|         |             | 馬場江麻 (北海道大學)   |
| E-C6-3  | 13:16-13:24 | Bio-Inert Chitosan Membranes Functionalized with Zwitterionic Polymers for             |
|         |             | Diabetic Wound Recovery  |
|         |             | 馬振倫 (中原大學)   |
|         | 13:24-13:32 | Ionic Gradient Power Generation from Seawater and CO₂ Absorption Using Light-          |
| E-C6-4  |             | Responsive Covalent Organic Framework  |
|         |             | 李雅淳 (國立臺灣科技大學)   |
|         | 13:32-13:40 | Enhancing Vascularization of 3D-Printed Glycerol-Based Biodegradable Scaffolds         |
| E-C6-5  |             | through Optimized Cell Culture Conditions  |
|         |             | 李捷菱 (國立清華大學)   |
| -       | 13:40-13:45 | Break  |
|         | 13:45-13:53 | 3D biomimetic hybrid scaffold of Glycidyl methacrylate modified Silk                   |
| E-C6-6  |             | Fibroin /(poly(propylene glycol)diacrylate) for Cyclic Stretching cell culture of lung |
| 1 00 0  |             | cancer line  |
|         |             | 陳隽翃 (國立臺灣科技大學)   |
| E-C6-7  | 13:53-14:01 | Evaluation of factors on hair development and regeneration                             |
|         |             | 許文哲 (國立成功大學)   |
| E-C6-8  | 14:01-14:09 | Syntheses of Low Molecular Weight Poly(ethylene oxide) Block Polyisoprene with         |
|         |             | Precise Structural and Molecular Weight Control  |
|         |             | 莊詠筌 (國立中正大學)   |
| E-C6-9  | 14:09-14:17 | Development of Water-Soluble Biodegradable Polymer Films Using Ionic Liquids           |
|         |             | 范譯元 (國立清華大學)   |
| E-C6-10 | 14:17-14:25 | Crosslinking-enabled core-shell nanostructure based on conductive polymer              |
|         |             | hydrogels/carbon nanotubes for salivary glucose biosensor                              |
|         |             | 劉謦豪 (國立清華大學)   |

評審: 孫一明 (元智大學) / 卓家榮 (義守大學)

| 發表順序    | 時間          | 題目與發表作者  |
|---------|-------------|--|
|         |             | Highly Efficient Self-Floatable WO <sub>2.72</sub> /B-TiO <sub>2</sub> @CF/Rayon/PU Janus Membrane for |
| E-D1-1  | 10:45-10:53 | Full-Spectrum Solar Desalination, Simultaneous Water Evaporation and                                   |
|         |             | Photocatalysis   |
|         |             | Wubetu Belay Yeshaneh (國立臺灣科技大學)   |
|         | 10:53-11:01 | Intrinsic Self-Healing and Environmental Sensing Textiles: Developing Electrospun                      |
| E-D1-2  |             | Fibers for Durability and Adaptability   |
|         |             | 駱則瑜 (國立陽明交通大學)   |
|         | 11:01-11:09 | Intrinsically Healable and Photo-Responsive Electrospun Fabrics: Integrating PVDF-                     |
| E-D1-3  |             | HFP, TPU, and Azobenzene Ionic Liquids   |
|         |             | 張峻齊 (國立陽明交通大學)   |
|         | 11:09-11:17 | Electrospun Biomass Polyethylene Furanoate Nonwoven Substrates for Flexible                            |
| E-D1-4  |             | Thermoelectric Generators  |
|         |             | 黃以璿 (國立臺灣大學)   |
|         | 11:17-11:25 | Self-Healing Commercial Fibers via Dual Solvent Dip-Coating: Advancing Smart                           |
| E-D1-5  |             | Textiles   |
|         |             | 蔡宗宏 (國立陽明交通大學)   |
| -       | 11:25-11:30 | Break  |
|         | 11:30-11:38 | Fabricating 3D Printable Nanoporous Polymer by Photopolymerization and Flash-                          |
| E-D1-6  |             | freezing   |
|         |             | 陳語蕎 (國立成功大學)   |
| E-D1-7  | 11:38-11:46 | Digital Light Processing for Tough Poly-acrylates Damping Polymer Fluid Gel                            |
|         |             | 陳飛帆 (國立成功大學)   |
|         | 11:46-11:54 | Development and Application of an Environmentally Friendly Photocatalytic                              |
| E-D1-8  |             | Polymer Upcycling System   |
|         |             | 呂柏毅 (國立臺灣大學)   |
| F D1 0  | 11:54-12:02 | 3D Printing of Nanoporous Polymers Enabled by Flash-Freezing   |
| E-D1-9  |             | 王俊叡 (國立成功大學)   |
|         | 11:02-12:10 | Effect of Various Membrane Fabrication Parameters on the Wettability and DCMD                          |
| E-D1-10 |             | Performance of Poly(vinylidene difluoride) Membranes   |
|         |             | Yuan Chen Huang (中原大學)   |
|         |             |  |