**2017化工年會壁報論文得獎名單**

**A. 生化及生醫工程**

| 報告編號 | 論文題目 | 單位 | 共同作者 | 壁報評分 |
| --- | --- | --- | --- | --- |
| PA016 | Effect of Crosslinker for hESCs Cultured on Hydrogels Grafted with ECM-Derived Oligopeptide | 中央大學 | Tseng Y.C. (曾也家)\*, Higuchi A. (樋口亞紺) | 傑出 |
| PA039 | The Study of an Impedimetric Microfluidic Chip Design for MUC1 Aptasensing | 臺灣大學 | Lai Chih-Yu (賴知佑), Chen Lin-Chi (陳林祈)\* | 傑出 |
| PA072 | Fermented Ganoderma sensitizes sorafenib to augment anti-proliferative effect on liver cancer | 臺北科大 | Ping-Chuan Kan (甘秉川) Hsu-Wei Fang (方旭偉)\* | 傑出 |
| PA090 | Fiber Orientation Influence Growth and Neuronal Differentiation of Human Adipose-derived Stem Cells on Nanofibers | 臺灣大學 | Tang Kao-Chun (唐誥羣), Jiashing Yu (游佳欣)\* | 傑出 |
| PA012 | Construction of in vitro Human Breathing Lung Model for Inhalation Drug Development | 清華大學 | Lin C.K. (林雋凱), Huang J.H. (黃振煌)\* | 佳作 |
| PA024 | Identification of novel CCR5 antagonists through structure-based virtual screening, docking, molecular dynamics simulation | 臺北科大 | Hsuan-Yu Lin (林宣佑), Hsuan-Liang Liu (劉宣良)\*, Yi Ho (何意) | 佳作 |
| PA038 | Characterization of antioxidant and fibroblastsgrowth-promoting properties of specific microbial metabolites | 成功大學 | Chien C.Y. (簡禎佑), Liu P.Y. (劉秉鏞), Hsu M.J. (許銘展), Li K.J. (李冠瑢), Yang C.C. (楊朝鈞), Han Y.L. (韓吟龍), Chang J.S. (張嘉修)\* | 佳作 |
| PA050 | The potential of AC-Impedance for biochemical analysis in microbial culture system | 元智大學 | J. A. Su (蘇建安),J. C. W. Lan (藍祺偉) | 佳作 |
| PA073 | DNA Separation by Post Array under Intermittent Electric Field | 臺灣大學 | Chih-Hsiang Shu (舒稚翔), Sheng-Hung Wang (王勝弘), Chen-Ju Liu (劉貞汝), Chih-Chen Hsieh (謝之真)\* | 佳作 |
| PA093 | Zwitterionic interpenetrating polymer network on polypropylene non-woven membranes via simple dip-coating process | 中原大學 | Chang Y. (張雍)\*, Chen P.J. (陳柏如) | 佳作 |

**B. 熱力與界面工程**

| 報告編號 | 論文題目 | 單位 | 共同作者 | 壁報評分 |
| --- | --- | --- | --- | --- |
| PB017 | Self-Consistent Field Theory for Interactions Between Solvent-Free Polymer-Grafted Nanoparticles | 臺灣大學 | Guan-Ting Pan (潘冠廷) , Hsiu-Yu Yu (游琇伃)\* | 傑出 |
| PB032 | Physical Properties of Catanionic Vesicles Fabricated from Pseudo-triple-Chained Ion Pair Amphiphiles | 成功大學 | P. H. Su (蘇珮瑄), Y. C. Su (蘇于晴), C. C. Chang (張家綺), C. H. Chang (張鑑祥)\* | 傑出 |
| PB004 | Estimation of a drug carrier formed by dihexadecyl phosphate and d-α-tocopheryl polyethylene glycol 1000 succinate | 雲林科大 | Chou Tzung-Han (周宗翰)\*, Cheng Hsin-Fang (鄭昕芳) | 佳作 |
| PB024 | Effect of solvent composition on the van't Hoff enthalpic curve using amylose 3,5-dichlorophenylcarbamate-based sorbent | 臺北科大 | Ang-Yeh Lin (林昂曄), Kai-Tse Cheng (鄭凱澤), Sin-Chang Chen (陳信昌), Hung-Wei Tsui (崔宏瑋)\* | 佳作 |

**壁報論文評分表: C. 材料在化工之應用**

| 報告編號 | 論文題目 | 單位 | 共同作者 | 壁報評分 |
| --- | --- | --- | --- | --- |
| PC008 | Formation of the Urchin-like Zn/ ZnO Material and Its Field Emission Application | 中正大學 | Hsu C.Y. (許嘉晏), Hu B.J. (胡博鈞), Wang C.C. (王志嘉), Li Y.Y. (李元堯)\* | 傑出 |
| PC025 | Photonic Crystals-Based Smart Glasses by Doctor Blade Coating | 中興大學 | Min-Fang Wu, Hsin-Yu Tseng,Hongta Yang\* | 傑出 |
| PC028 | One-step fabrication of hollow polymer microneedles via membrane filtration for therapeutic drug monitoring | 成功大學 | Yu-Chun Liu (劉昱君), Yi-Je Juang\* (莊怡哲) | 傑出 |
| PC066 | Aluminosilicate and Aluminogermanate Nanotubes: Thin Film Fabrication and Metal Ion Reduction | 臺灣大學 | Kang D.Y. (康敦彥)\*, Lin Y.H. (林予瑄) | 傑出 |
| PC075 | Scale-up of perovskite solar cell via ultrasonic spray coating | 中央大學 | Chou L.H (周俐慧), Liu C.L (劉振良)\* | 傑出 |
| PC106 | Room temperature sintering of caproic acid capped Cu nanoparticles by intense pulsed light in ambient condition | 臺灣大學 | WanYu Chung (鐘婉瑜), Ying Chih Liao (廖英志)\* | 傑出 |
| PC009 | Photoelectrochemical performances of core-shell CdS-CdO nanorod arrays enhanced with surface decoration of TiO2 nanoparticles | 清華大學 | Chia-Hsun Li (李佳勳), Chan-Wei Hsu (許展瑋), Shih-Yuan Lu\* (呂世源) | 佳作 |
| PC067 | Electromigration on intermetallic compounds in Sn-Au-Ni solders | 中正大學 | Lin.P.H. (林保璇),Wang.C.H (王朝弘) | 佳作 |
| PC084 | Fabrication and Properties of Well-Ordered Arrays of Silicon Nanotubes Prepared by Nanosphere Lithography Combined with Metal Assisted Chemical Etching | 中央大學 | Cheng S.L. (鄭紹良)\*, Gu R.Y. (古若妘), Chang C.W. (張晉偉) | 佳作 |
| PC105 | Selectively Metallization on 3D Microstructure on Flexible Substrates | 臺灣大學 | Shang-Chen Tsai, Kuan-Ming Huang, Ying-Chih Liao | 佳作 |

**壁報論文評分表: D. 電化學技術**

| 報告編號 | 論文題目 | 單位 | 共同作者 | 壁報評分 |
| --- | --- | --- | --- | --- |
| PD003 | Preparation of Titania-based pH Sensors | 成功大學 | Guo J.W. (郭家瑋),Yan S.H. (顏聖鴻),Lin F. (林法),Chen H.I. (陳慧英)\* | 傑出 |
| PD019 | Nano-porous CoV2O4 : a novel anode material for lithium-ion batteries with excellent electrochemical performance | 中原大學 | Jeng-Shin Lu (呂政欣), Irish Valerie B. Maggay, Wei-Ren Liu (劉偉仁)\* | 傑出 |
| PD021 | High rate capability of few layer graphene as anode material by jet cavitation for lithium ion batteries | 中原大學 | Jhao-Yi Wu (吳兆益), Pin-Chun Lin (林品均), Wei-Ren Liu\* (劉偉仁) | 傑出 |
| PD024 | Synthesis of few layer WS2 by jet cavitation as anode material for lithium ion batteries | 中原大學 | Liu W.R. (劉偉仁)\*, Lin P.C. (林品均), Yeh Y.Y. (葉彥妤) | 傑出 |
| PD061 | A Novel Synthesis for Sandwich-like Metal Oxide/Carbon Composite from Layered Double Hydroxide Template | 臺灣大學 | Chuang W., Lin Y.C., Chuang Y.C., Abdollahifar M., Wu N.L.\* | 傑出 |
| PD066 | On the electrosynthetic conditions for high OER activity of (Ni,Fe)OOH | 成功大學 | Lin C.Y (林家裕)\*, Huang S.C (黃詩晴) | 傑出 |
| PD041 | Nitrogen-doped Carbon Coated Porous Si derived from SiO for Lithium-ion Battery Anodes | 中正大學 | Wu C.Y.(吳京祐)\*, Wang C.H.(王朝弘) | 佳作 |
| PD059 | Highly spectral response indoline D205 as sensitizer used in copper mediated dye-sensitized solar cell. | 清華大學 | Kuo M.J. (郭秘甄)\*, Liu Y.C. (劉宇傑), Chou H.H. (周憲辛), Yeh C.Y. (葉鎮宇), Wei T.C. (衛子健) | 佳作 |

**E. 綠色化工技術與程序系統工程**

| 報告編號 | 論文題目 | 單位 | 共同作者 | 壁報評分 |
| --- | --- | --- | --- | --- |
| PE015 | Investigation of Minimum Energy Requirement for Ammonia-based Post-combustion CO2 Capture | 東海大學 | Lu Z.S. (盧正笙), Liu J. (劉佳霖)\* | 傑出 |
| PE026 | An algebraic identification method for continuous time-delay systems based on polynomial candidate functions | 成功大學 | Wan T.H. (萬廸翔)\*, Hwang S.H (黃世宏) | 傑出 |
| PE018 | Analyze the Differences in Different Kinds of Operation of Chemical Looping Hydrogen Production | 臺灣科大 | Lee H.Y. (李豪業)\*, Shin C. (忻辰), Chen J.L.(陳君霖) | 佳作 |
| PE028 | Fuzzy Optimization Model for Refinery Hydrogen Network Synthesis with Parametric Uncertainties | 臺北科大 | Zhi-Ting Chen (陳致廷), Jui-Yuan Lee (李瑞元)\* | 佳作 |

**F. 觸媒及反應工程**

| 報告編號 | 論文題目 | 單位 | 共同作者 | 壁報評分 |
| --- | --- | --- | --- | --- |
| PF012 | Monitoring the Reaction Mechanism in Steam Reforming of Methane by In Situ Transient and Steady-State DRIFTS Measurements | 臺灣科大 | Yu-Cheng Liu (劉祐誠), Shawn D. Lin (林昇佃)\*, Jyh-Chiang Jiang (江志強)\* | 傑出 |
| PF022 | A facile gas-phase self-assembly of Nickel-base Hybrid Nanoparticle for Carbon dioxide reforming of Methane | 清華大學 | Teng Yun Liang,Meiqi Wang, Chih-Yuan Lin, De Hao Tsai\* | 傑出 |
| PF037 | Sn-Cu based nanorods as highly efficient photocatalysts for sun-light assisted heterogeneous Fenton | 清華大學 | Chen Y.A. (陳昱安), Lee P.Y. (李博元), Koh S.A. (葛順安), Lee K.T. (李冠廷), Lu S.Y. (呂世源)\* | 傑出 |
| PF010 | Enhanced conversion and selectivity from bio-ethanol to benzene, toluene and xylene over modified HZSM-5 zeolite catalysts | 臺灣大學 | Cheng-Hung Lee (李政泓)\*, Chun-Yen Liu (劉俊彥), Kim Strüwe | 佳作 |
| PF026 | Lignin Depolymerization with Pd/C in Water/1-Butanol /Formic Acid to Produce Phenolic Compound | 臺灣大學 | Z. Y. Wang (王正彥), T. Yoshikawa (吉川琢也), Y. Nakasaka (中坂祐太),T. Masuda (增田隆夫), Kevin C.-W. Wu\* (吳嘉文) | 佳作 |
| PF048 | Photocatalytic degrdation of versatile organic pollutants using graphene oxide/Strontium titanate as a photocatalyst | 中原大學 | Chang C.W. (張健威)\* | 佳作 |

**G. 能源與環境工程**

| 報告編號 | 論文題目 | 單位 | 共同作者 | 壁報評分 |
| --- | --- | --- | --- | --- |
| PG004 | A flexible gel-type symmetric supercapacitor fabricated from 3D porous graphene-agar nanomaterials | 清華大學 | Heng-Yi Cheng (鄭恆亦), Yi-Hsiu Liao (廖苡琇), Shih-Yuan Lu (呂世源)\* | 傑出 |
| PG037 | Investigation on the Adsorption of Carbon Dioxide by Metal-Organic Frameworks | 成功大學 | Wang Y.L. (王衍霖), Lin G.W. (林冠文), Wu G.Y. (吳冠億),Syu M.J. (許梅娟)\* | 傑出 |
| PG053 | Using a highly stable cross-linked composite materials as an interfacial layer in organic solar cells | 明志科大 | Chih-Ping Chen (陳志平)\*,Hsiang-Lin Hsu (許翔林),Chung-Lin Chung (鍾冲林) | 傑出 |
| PG066 | Hierarchical TiO2 Nanostructured Array for Photoelectrochemical Water Oxidation and CO2 Photoconversion | 成功大學 | Hao-Chun Chang (張皓鈞), Jih-Sheng Yang (楊鈤笙), Jih-Jen Wu (吳季珍)\* | 傑出 |
| PG003 | The Influence of Solvent Treatment on the Performance of Perovskite Solar Cells | 臺灣科大 | Chen L.Y. (陳良益)\* , Chang C.H. (張哲航) | 佳作 |
| PG021 | Cultivating Chlorella sorokiniana AK-1 with swine wastewater for simultaneous algal biomass production and wastewater treatment | 成功大學 | Chang J.S. (張嘉修)\*, Chen C.Y. (陳俊延) , Kuo E.W. (郭恩瑋) | 佳作 |
| PG029 | Preparation of High-performance Printable Electrolytes for Dye-sensitized Solar Cell Application | 成功大學 | Ming-Hsiang Tsai (蔡明祥), Jian-Ci Lin (林建錡), I-Ping Liu (劉一平), Yuh-Lang Lee (李玉郎)\* | 佳作 |
| PG042 | Influence of TiO2 nano-particle size on the performance and J-V hysteresis of mesoscopic perovskite solar cells | 長庚大學 | 林威志, 賴佳忻, 李坤穆\* | 佳作 |
| PG056 | Goethite as an efficient heterogeneous Fenton-like catalyst for the degradation of benzoic acid | 大同大學 | Hong-Ming Li, Bo-Ru Lin, Ting-Yu Shieh, Jia-Ming Chern\* | 佳作 |

**H. 輸送與分離工程**

| 報告編號 | 論文題目 | 單位 | 共同作者 | 壁報評分 |
| --- | --- | --- | --- | --- |
| PH022 | A study of particle segregation in a rotating drum fitted with modified internals | 長庚大學 | Cheng T.H. (鄭東欣), Kuo H.P. (郭修伯)\* | 傑出 |
| PH043 | Fabrication of compact pillared-bilayer metal-organic framework membrane for gas separation | 臺灣大學 | Kan M.Y. (甘名揚)\*, Lee L.W. (李立偉), Kang D.Y. (康敦彥) | 傑出 |
| PH014 | The optimal design of the turbulence promoter in the desalination pretreatment system by using cross-flow microfiltration | 淡江大學 | Luo Y.L. (羅宇麟), Hwang K.J. (黃國楨), Ho C.D. (何啟東)\*, Tung K.L. (童國倫), Tsai H.Y. (蔡鴻源) | 佳作 |
| PH030 | Adsorption of carbon dioxide in defective zirconium-based metal-organic frameworks: a computational study | 中央大學 | Hao Yu Chin (金浩宇), Bor Kae Chang (張博凱)\* | 佳作 |