| Number | R&D Achievement Name   | Applicable Industry                                     | Executive Unit     | Contact Person  | Extension | Remarks |
|--------|--|---|--------------------|-----------------|-----------|---------|
| E001   | 11   | Advanced Manufacturing & Systems / Environment & Energy | Physics Division   | Tsai,Chun-Huang | 7354      |         |
| E002   |  | Energy, Aerospace, Biomedical,<br>Chemical              | Physics Division   | Tsai,Chun-Huang | 7354      |         |
| E003   | Plasma Sprayed Metal Supported Solid<br>Oxide Fuel Cell and Method for<br>Manufacturing the Same | Energy, Aerospace, Biomedical,<br>Chemical              | Physics Division   | Tsai,Chun-Huang | 7354      |         |
| E004   | IL avers for Projecting Metal  | Energy, Aerospace, Biomedical,<br>Chemical              | Physics Division   | Tsai,Chun-Huang | 7354      |         |
| E005   | Preparation Method of Platinum Alloy<br>Catalyst by Using Carbon Nanotube as<br>Carrier          | Chemical Industry                                       | Chemistry Division | Ning-Yih Hsu    | 5501      |         |
| E006   | Fuel Cell Catalytic Module   | Chemical Industry                                       | Chemistry Division | Ning-Yih Hsu    | 5501      |         |
| E007   | Method of Fabricating Fuel Reforming<br>Catalyst for SOFC Power Generating<br>System             | Chemical Industry                                       | Chemistry Division | Ning-Yih Hsu    | 5501      |         |
| E008   | Apparatus for Testing Catalyst   | Chemical Industry                                       | Chemistry Division | Ning-Yih Hsu    | 5501      |         |
| E009   | Gas Reaction Devices   | Chemical Industry                                       | Chemistry Division | Ning-Yih Hsu    | 5501      |         |

### 108年7月9日修訂

| Number    | R&D Achievement Name   | Applicable Industry   | Executive Unit                          | Contact Person | Extension | Remarks |
|-----------|--|---|---|----------------|-----------|---------|
| E010      | Preparation of Platinum Alloy Catalyst with Nano-network Structure   | Chemical Industry   | Chemistry Division                      | Sian-Du Chyou  | 5311      |         |
| E011/G001 |  | Environment and Energy \ Chemical and Nano Materials                                | Chemistry Division                      | Hwa-Jou Wei    | 5376      |         |
| E012      | Method of Fabricating Catalyst Carrier for Generating Hydrogen through Methane Reformation   | Chemical Industry , Fuel Cell Industry  | Chemistry Division                      | Men-Han Huang  | 5324      |         |
| E013      | Reactor with Honeycomb Catalyst for Fuel Reformation   | Chemical Industry , Fuel Cell Industry  | Chemistry Division                      | Men-Han Huang  | 5324      |         |
| E014      | A Novel Synergistic Process and Recipe<br>for Fabrication of a High Integrity<br>Membrane Electrode Assembly of Solid<br>Oxide Fuel Cell | Environmental and Energy  | Nuclear Fuels and<br>Materials Division | Tai-Nan Lin    | 6834      |         |
| E015      | Process and Apparatus of CO <sub>2</sub> Energy<br>Source Adopted in Solid Oxide Fuel<br>Cell  |   | Nuclear Fuels and<br>Materials Division | Tai-Nan Lin    | 6834      |         |
| E016      | A Process for Fabrication of a Fully Dense Electrolyte Layer Embedded in Membrane Electrolyte Assembly of Solid Oxide Fuel Cell          | Environmental and Energy<br>Industry, Fuel Cell Industry, Fine<br>Ceramics Industry | Nuclear Fuels and<br>Materials Division | Tai-Nan Lin    | 6834      |         |

| Number | R&D Achievement Name   | Applicable Industry   | Executive Unit                          | Contact Person | Extension | Remarks |
|--------|--|---|---|----------------|-----------|---------|
| E017   | A Novel Process for Fabrication of a<br>Sputter Deposited Fully Dense<br>Electrolyte Layer Embedded in a High<br>Performance Membrane Electrolyte<br>Assembly of Solid Oxide Fuel Cell | Environmental and Energy<br>Industry, Fuel Cell Industry, Fine                      | Nuclear Fuels and<br>Materials Division | Tai-Nan Lin    | 6834      |         |
| E018   | The Innovation Process for Anode<br>Treatment of Solid Oxide Fuel Cell -<br>Membrane Electrode Assembly (SOFC-<br>MEA) to Upgrade the Power Density in<br>Performance Test             | Environmental and Energy<br>Industry, Fuel Cell Industry, Fine                      | Nuclear Fuels and<br>Materials Division | Tai-Nan Lin    | 6834      |         |
| E019   | Formulation of Nano-scale Electrolyte<br>Suspensions and its Application Process<br>for Fabrication of Solid Oxide Fuel<br>Cell-membrane Electrode Assembly<br>(SOFC-MEA)              | Environmental and Energy<br>Industry, Fuel Cell Industry, Fine                      | Nuclear Fuels and<br>Materials Division | Tai-Nan Lin    | 6834      |         |
| E020   | Process to Produce Fine Ceramic<br>Powder through a Chemical Reactor<br>with Powder Collection Device  |   | Nuclear Fuels and<br>Materials Division | Tai-Nan Lin    | 6834      |         |
| E021   | Measurement Process for Determination of the Optimum Contact Pressure among Components of a Solid Oxide Fuel Cell Stack in the Packaging Process and its Measurement Apparatus         | Environmental and Energy<br>Industry, Fuel Cell Industry, Fine<br>Ceramics Industry | Nuclear Fuels and<br>Materials Division | Tai-Nan Lin    | 6834      |         |
| E022   | Innovation Control Process for Specific Porosity/Gas Permeability of Electrode Layers of SOFC-MEA through Combination of Sintering and Pore  | Industry, Fuel Cell Industry, Fine  | Nuclear Fuels and<br>Materials Division | Tai-Nan Lin    | 6834      |         |

### 108年7月9日修訂

| Number | R&D Achievement Name  | Applicable Industry  | Executive Unit                          | Contact Person   | Extension | Remarks |
|--------|---|--|---|------------------|-----------|---------|
|        | Former Scheme and Technology  |  |   |                  |           |         |
| E023   | A Current Collection Apparatus and<br>Method of Processing for a Solid Oxide<br>Fuel Cell |  | Nuclear Fuels and<br>Materials Division | Tai-Nan Lin      | 6834      |         |
| E024   | THION-TEMPERATURE FILET CALL SEATING  | Fuel Cells Sealing, Electronic<br>Packaging, Electronic Ceramics               | Nuclear Fuels and Materials Division    | Liu, Chien-Kuo   | 6775      |         |
| E025   | Glass Sealing Material Composition and<br>Sealing Method                                  | Fuel Cells Sealing, Electronic<br>Packaging, Electronic Ceramics               | Nuclear Fuels and<br>Materials Division | Liu, Chien-Kuo   | 6775      |         |
| E026   | and Heat Exchangers for the Solid Ox-   | Energy Industry, Petrochemical<br>Industry and Matel<br>Manufacturing Industry | Nuclear Fuels and<br>Materials Division | Wen-Tang Hong    | 6774      |         |
| E027   | Solid Oxide Fuel Cell System<br>Technology  | Energy Industry, Petrochemical<br>Industry and Matel<br>Manufacturing Industry | Nuclear Fuels and<br>Materials Division | Ruey-Yi Lee      | 6761      |         |
| E028   |   | Energy Industry, Petrochemical<br>Industry and Matel<br>Manufacturing Industry | Nuclear Fuels and<br>Materials Division | Yung-Neng Cheng  | 6762      |         |
| E029   | Method for Measuring Metallic Areaspecific Resistance                                     | Solid Oxide Fuel Cell  | Nuclear Fuels and<br>Materials Division | Wei-Ja Shong     | 6763      |         |
| E030   |   | Environment and Energy \ Chemical and Nano Materials                           | Chemistry Division                      | Hsieh, Chin-Lung | 6388      |         |