### Application Guidelines of the Delta Young Technology Scholar Award

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1. To promote the development of technology fields such as sustainable energy and smart manufacturing, and to continue channeling corporate resources into research innovation and talent cultivation, Delta Group intends to establish the "Delta Young Technology Scholar Award" to reward and recognize outstanding young scholars who are actively engaged in research and talent development. These guidelines are hereby established for compliance purposes.

- 2. Application Fields (Each applicant is limited to applying for one field per year)
  - (1) Power Electronics: Refers to power conversion, renewable energy, motor drives, components and modules, smart grids, power and energy electronics, and other emerging power electronics technologies.
  - (2) Power Systems: Refers to research in power system stability, power system resilience, smart grids, DC grids, distributed power systems for renewable energy, power storage systems, distribution automation, energy management, power market forecasting, and trading.
  - (3) Electric Vehicles: Refers to the expertise in power electronics, power semiconductors, and electric machine design for electric vehicles. Power electronics include converters and inverters, circuit topologies, smart drives, component drivers, optimized motor drive control, fault detection, and diagnosis. Power semiconductors include die-level modeling, module-level modeling, thermal impedance, EMI design, device reliability, and hybrid switch dynamics. Electric machine design includes stator and rotor design and optimization, winding short prediction, and manufacturing technology.
  - (4) Robotics: Refers to research in robotics applied in areas such as home, logistics, agriculture, catering, mobility aids, firefighting, and others. This includes autonomous programming and control, environmental sensing technology, 3D environmental information generation, human-machine interaction technology for image and voice recognition, and text input. Also included are learning techniques for mimicking human tasks and autonomous practices to enhance success rates.
  - (5) Smart Manufacturing: Refers to the establishment of highly adaptable smart manufacturing solutions, building related supply ecosystems, and creating value chains both inside and outside the enterprise. This includes Advanced Operational Technology, Advanced Information Technology and Advanced IoT Technology, such as smart machinery, smart production lines, smart factories, and the smart manufacturing industry chain, covering areas from related value and quality-related benefit system simulations to physical monitoring and control. This involves virtual reality integration, digital twin, and digital thread, using advanced modeling and simulation technologies, covering the entire product lifecycle and value chain—from basic materials, design, processes, manufacturing, to usage and maintenance at all stages—integrating and driving the design, manufacturing, and assurance of products/systems/solutions based on the Model Base-Physical and/or AI Data, and digitized data flows for the design, manufacturing, and assurance of products/systems/solutions.

### 3. Eligibility

Applicants must be below the age of forty-five (inclusive) as of the application deadline, hold a doctoral degree, and meet one of the following qualifications:

- (1) Full-time assistant professor or higher position (or equivalent) within the organizational structure of public or private universities and colleges in the country.
- (2) Full-time teaching staff on a non-quota basis who is hired by domestic postsecondary institutions, meets the legal qualifications, works full-time, and receives a monthly salary.

# 4. Award Mechanism

- (1) The award is a three-year cycle, and the annual award amount for each winner is NT\$1,000,000, totaling NT\$3,000,000 in award money.
- (2) Each winner can be awarded for a maximum of two cycles. The award cycle starts from January 1st of the year following the announcement of the winner's list.

# 5. Rights and Responsibilities

- (1) During the award cycle, Delta Group may engage in positive interactions with the winners, such as technical consultations, keynote speeches, and joint research and development projects, based on the winners' expertise. If a winner exhibits non-cooperation or a refusal to cooperate, Delta Group reserves the right to revoke their award unconditionally.
- (2) If additional expenses arise due to the aforementioned interactions, such as technical keynote speeches, international travel, or technical consultations, Delta Group will provide separate payments according to standards. These expenses will not be deducted from the total award amount. If Delta Group and the winner agree to initiate a joint research and development project, both parties will formulate an industry-academia research and development contract to govern their rights and responsibilities. Progress reports and outcome presentations will proceed according to the project schedule, and funding will be provided according to the contract, without deduction from the total award amount.

#### 6. Selection Process

- (1) Delta Group invites renowned scholars along with internal experts to form the Selection Committee.
- (2) The application and selection process is managed by the Selection Committee. One scholar will be selected from each field annually, for a total of five scholars. If there is no suitable candidate for a particular field, that field may remain vacant.
- (3) Evaluation criteria:
- A. Academic performance (40% weight)
- B. Research foresight (30% weight)
- C. Potential for future research collaboration with Delta Group (30% weight)
- (4) Upon the Selection Committee's decision, the list of winners will be announced in November of the application year, and an award ceremony will be held on a designated date for public recognition.

#### 7. Payment Mechanism

(1) The first-year award of NT\$1,000,000 will be transferred to the winner's designated bank account provided before January 1st of the year following the

announcement of the winner's list.

(2) Delta Group will convene a project meeting at the end of each year to review whether the qualifications of the winners have violated these guidelines during the award period. If approved, the winners will continue to receive the award money for the next year within the award period.

# 8. Application Process

Applicants should complete data entry and upload relevant documents through the Award's online form before the application deadline. The provided content should include the following information and other information required by Delta Group:

- (1) Application Form
- (2) Curriculum Vitae
- (2) Proof of current employment as faculty
- (3) Copy of national ID card or passport
- (4) Other review materials (list of works in the last 5 years and list of projects hosted or participated in)

If a winner engages in academic misconduct or adversely affects the reputation of the enterprise, including but not limited to plagiarism, data manipulation, false advertising, other actions that violate good morals, or if there are violations of Article 5, Delta Group has the right to suspend the payment of the prize until the Selection Committee investigates the veracity and severity of the mentioned behaviors. If the Selection Committee determines that the situation is serious, Delta Group can not only revoke the winner's qualification but also request the winner to return the awarded grant within a specified period. The winner agrees to cooperate unconditionally and without objections.

- 9. For matters not covered by these guidelines, Delta Group will follow relevant regulations.
- 10. These guidelines come into effect from the approval date, and the same applies to revisions.