Appendix 2: Scientific Research, Scientific Research and Teaching Equipment List

Scientific research, scientific research and teaching equipment refers to experimental equipment, devices, and instruments (excluding pilot-scale equipment) that meet the relevant provisions of 'fixed assets' in Article 21 of the Implementation Rules of the Provisional Regulations of the People's Republic of China on Value-Added Tax (Order of the Ministry of Finance and the State Taxation Administration No. 50), and that provide necessary conditions for scientific research, teaching, and scientific and technological development. Specifically, it includes the following four categories:

I. Experimental Environment

- (1) Teaching experimental instruments and devices;
- (2) Teaching demonstration and presentation instruments and devices;
- (3) Ultra-clean equipment (e.g., ventilation, sterilization, pure water, purification equipment, etc.);
- (4) Special experimental environment equipment (e.g., ultra-low temperature, ultra-high temperature, high pressure, low pressure, strong corrosion equipment, etc.);
- (5) Special power supply and lighting equipment;
- (6) Cleaning and circulation equipment;
- (7) Constant temperature equipment (e.g., water baths, incubators, sterilizers, etc.);
- (8) Small crushing and grinding preparation equipment.

II. Sample Preparation Equipment and Devices

- (1) Special pumps (e.g., molecular pumps, ion pumps, vacuum pumps, peristaltic pumps, turbo pumps, dry pumps, etc.);
- (2) Culturing equipment (e.g., incubators, fermenters, etc.);
- (3) Micro-sampling equipment (e.g., samplers, precision balances, etc.);
- (4) Separation, purification, and concentration equipment (e.g., centrifuges, chromatography, extraction, crystallization equipment, rotary evaporators, etc.);
- (5) Gas, liquid, and solid mixing equipment (e.g., vortex mixers, etc.);
- (6) Gas generation equipment, gas compression equipment;
- (7) Special sample preparation equipment (e.g., microtomes, tablet presses, coating machines, thinners, polishers, etc.), laboratory injection, extrusion, granulation, and film pressing equipment, and laboratory sample pre-treatment equipment.

III. Laboratory-Specific Equipment

- (1) Special photography and camera equipment (e.g., underwater, high-altitude, high-temperature, low-temperature, etc.);

- (2) Key equipment for scientific research aircraft and vessels;
- (3) Special data recording equipment (e.g., large-format scanners, large-format plotters, tape drives, optical disk drives, etc.);
- (4) Materials science-specific equipment (e.g., dry gel apparatuses, special crucibles, ceramics, graphics conversion equipment, plates for plate-making, special plasma sources, ion sources, epitaxial furnaces, diffusion furnaces, sputtering equipment, ion etchers, materials testing machines, etc.), reliability testing equipment, microelectronics processing equipment, communication simulation equipment, communication environment testing equipment;
- (5) Small smelting equipment (e.g., vacuum, powder, electroslag, etc.), special welding equipment;
- (6) Small dyeing, finishing, and spinning testing-specific equipment;
- (7) Electrophysiology equipment.

IV. Computer Workstations, Medium and Large Computers