

## Appendix 1: Potential high-pressure application areas.

### High Temperature/High Pressure

- **1, Material Science Applications**
  - **1A, Production of Pore-free materials, such as polymers**
  - **1B, Production of Black Phosphorus**
  - **1C, Machining, processing and development of superhard materials**
- **2, Supercritical Fluids**
  - **2A, Supercritical CO<sub>2</sub> extraction**
    - **2A1, Applications on Industry**
      - **2A1a, Extraction of animal oils, such as mink oils**
      - **2A1b, Possible Li-ion battery recycling**
    - **2A2, Applications on Food**
      - **2A2a, Extraction of essential oils**
      - **2A2b, Extraction of aromatic compounds**
      - **2A2c, Extraction of antioxidants**
  - **2B, Depolymerization with Supercritical Fluids**
    - **2B1, Recycling of composite materials containing polymers**
      - **2B1a, Carbon fiber recycling**
      - **2B1b, Glass fiber recycling**
    - **2B2, Depolymerization of pure plastics for recycling**
    - **2B3, Lignin depolymerization**
    - **2B4, Supercritical Water Oxidation**
      - **2B4a, Oxidative destruction of halogenated compounds, such as dioxins**
      - **2B4b, Oxidative destruction of organic chemicals, such as Furan**
      - **2B4c, Production of fuel gasses, such as H<sub>2</sub>, CO, and CH<sub>4</sub>, from Biomass**
- **3, High Pressure Pasteurization**
  - **3A, Jams**
  - **3B, Soups**
  - **3C, Juice**
  - **3D, Meat**
  - **3E, Dairy**