## CLAIMS

What is claimed is:

1. A packaging structure for a sensor probe, comprising:

a probe; and

an insulation housing formed at an outer periphery of the probe, wherein:

two ends of the probe are located outside the insulation housing; and

the insulation housing has a through hole extending through two ends of the insulation housing, the through hole being adapted to allow a temperature sensor probe to pass through the through hole, wherein the insulation housing has an extending portion at a rear end of the insulation housing, the extending portion having an insertion opening, wherein:

a rear end of the probe extends into the insertion opening, the through hole being in communication with the insertion opening; and

the insertion opening is adapted for a connection of a connection terminal in an inserting manner, wherein:

the insertion opening has an avoiding opening formed at a side wall of the insertion opening; and

the extending portion has a clamping wall located in the avoiding opening and adapted to clamp the connection terminal.

2. The packaging structure according to claim 1, wherein the insulation housing has a receiving groove formed at a rear end of the insulation housing, the receiving groove being in communication with the through hole and adapted to receive a rear end of the temperature sensor probe.

3. The packaging structure according to claim 2, wherein the receiving groove is located at one side of the through hole in a radial direction.

4. The packaging structure according to claim 2 or 3, wherein:

a depth of the receiving groove is equal to a radial dimension of the rear end of the temperature sensor probe; and/or

a length of the receiving groove is equal to a length dimension of the rear end of the temperature sensor probe.

5. The packaging structure according to claim 1, wherein the insertion opening has a guide groove formed at an inner wall of the insertion opening, the guide groove extending in a depth direction of the insertion opening.

6. A sensor probe, comprising:

the packaging structure for the sensor probe according to any one of claims 1 to 5; and

a wire connected to the probe in the packaging structure for the sensor probe by a connection terminal.

7. A sensor, comprising the sensor probe according to claim 6.

8. A water purifier, comprising:

the sensor according to claim 7; and

a waterway board defining a waterway, wherein the packaging structure for the sensor probe of the sensor is connected to the waterway board and is at least partially located in the waterway.