

The laboratory measuring complex for modeling freezing and thawing processes under low-temperature conditions contains a container (1) with a gelatin phantom, cryoinstrument (8), resistance thermometers (4), connected to a multi-channel analog-to-digital signal converter (5), a low-temperature thermal field analyzer that measures the temperature of an object down to  $-150^{\circ}\text{C}$  (7), with software and a computer for visualization and automatic data recording (6). Wherein, the container (1) is placed in an additional container with coolant (2), which is connected to a circulating thermostat with a pump (12), and resistance thermometers (4) are fixed in different planes on a fixing device (3). Additionally, video cameras (9), (10), (11) are located in three mutually perpendicular directions to the cryo-exposure zone.