Lecture 3 Dental Equipment Technologies Dr.Muna Merza

**Conventional Centrifuge Casting machine**

**Casting machine:**

It is used in chromium cobalt and crown & bridge laboratory, for pouring all types of metal.

**Types of casting machine:**

1 Conventional Centrifuge casting machine.

2. Electric casting machine.

**Conventional Centrifuge Casting machine**

**Parts:**

1. Protective cover (Guard): is made from metal the inner surface from the pressured aspect that circle the tools to protect the pouring part in case of failure in pouring melting part go away in the sped rotation.
2. Base: is the support center, it must have high strength and located in a non-moving surface to avoid vibration or rotation during work, and it contains movement lock.
3. Balance arm: it is the arm that is faced with the crucible arm; connect with the base from one side and the other side stabilizes on its heavy bodies "contour weight". These heavy bodies increase according to the weight of the pouring ring in the other side. The importance of this arm to protect 2 arms in a balancing way.
4. Crucible arm: its high strength arm connects with a base from one side and with perpendicular support wall from the other side and anterior to the support wall there are 3 parts which are:

a. Cradle; is locating downward of the ring. the advantage of the cradle is to surround melting ring & the importance of melting crucible metal is to pour the metal that inside it.

b. Melting crucible metal: to locate the molten metal it should be made from the ceramic because no carbon contains the metal.

c. locks: are important to stabilities melting crucible metal and melting ring in their place and making sure they are not moving.

5- Pin: which contains the spring used to rotation the arm during the casting process.

