Theory: In this bridge one of the arms (AB) contains a variable standard capacitor C connected in series with a variable standard resistor as shown in Figure (2).Figure(2): Wien's bridge The two arms BC and CD contain two pure ohmic resistors R1 and R2 respectively, these should be of the same order or may be made equal.It is important to record the frequency of oscillation at which the measurements are made, since both the capacity and the resistance are dependent on the frequency.The bridge is used to measure the capacity of a capacitor and the resistance which are placed in the remaining arm.The resistor r is adjusted until silence is obtained as nearly as possible.The bridge is most sensitive when all the arms are equal.