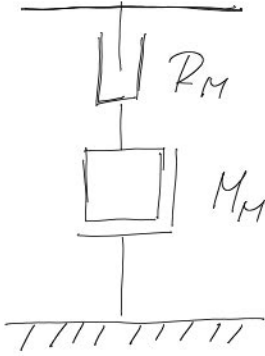


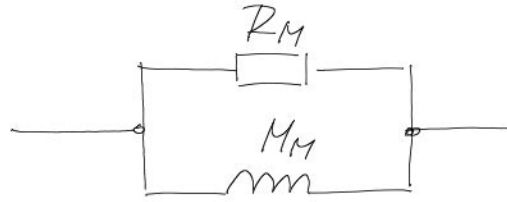
⇒



$$Z_M = \underbrace{R_M}_{Z_{M1}} + \underbrace{sM_M}_{Z_{M2}} = R_M + j\omega M_M$$



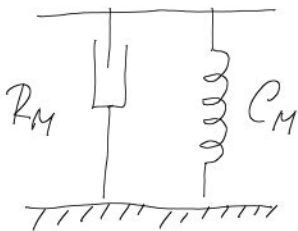
⇒



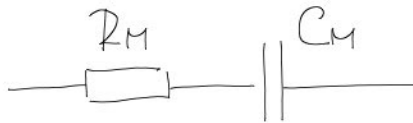
$$\frac{1}{Z_M} = \frac{1}{Z_{M1}} + \frac{1}{Z_{M2}}$$

$$Z_M = \frac{Z_{M1} \cdot Z_{M2}}{Z_{M1} + Z_{M2}}$$

$$Z_M = \frac{R_M \cdot sM_M}{R_M + sM_M} = \frac{R_M + j\omega M_M}{R_M + j\omega M_M}$$



⇒



$$Z_M = R_M + \frac{1}{sC_M} = R_M + \frac{1}{j\omega C_M}$$

$\underbrace{\hspace{1cm}}_{Z_{M1}} \quad \underbrace{\hspace{1cm}}_{Z_{M2}}$