$$\frac{\partial H_z(\vec{r},t)}{\partial y}-\frac{\partial H_y(\vec{r},t)}{\partial z}=J_x(\vec{r},t)+\varepsilon_0\frac{\partial E_x(\vec{r},t)}{\partial t}+\frac{\partial P_x(\vec{r},t)}{\partial t}$$

$$\frac{\partial H_x(\vec{r},t)}{\partial z}-\frac{\partial H_z(\vec{r},t)}{\partial x}=J_y(\vec{r},t)+\varepsilon_0\frac{\partial E_y(\vec{r},t)}{\partial t}+\frac{\partial P_y(\vec{r},t)}{\partial t}$$

$$\frac{\partial H_y(\vec{r},t)}{\partial x}-\frac{\partial H_x(\vec{r},t)}{\partial y}=J_z(\vec{r},t)+\varepsilon_0\frac{\partial E_z(\vec{r},t)}{\partial t}+\frac{\partial P_z(\vec{r},t)}{\partial t}$$

$$\frac{\partial H_x(\vec{r},t)}{\partial x}+\frac{\partial M_x(\vec{r},t)}{\partial x}+\frac{\partial H_y(\vec{r},t)}{\partial y}+\frac{\partial M_y(\vec{r},t)}{\partial y}+$$

$$+\frac{\partial H_z(\vec{r},t)}{\partial z}+\frac{\partial M_z(\vec{r},t)}{\partial z}=0$$

$$\frac{\partial E_z(\vec{r},t)}{\partial y}-\frac{\partial E_y(\vec{r},t)}{\partial z}=-\mu_0\frac{\partial H_x(\vec{r},t)}{\partial t}-\mu_0\frac{\partial M_x(\vec{r},t)}{\partial t}$$

$$\frac{\partial E_x(\vec{r},t)}{\partial z}-\frac{\partial E_z(\vec{r},t)}{\partial x}=-\mu_0\frac{\partial H_y(\vec{r},t)}{\partial t}-\mu_0\frac{\partial M_y(\vec{r},t)}{\partial t}$$

$$\frac{\partial E_y(\vec{r},t)}{\partial x}-\frac{\partial E_x(\vec{r},t)}{\partial y}=-\mu_0\frac{\partial H_z(\vec{r},t)}{\partial t}-\mu_0\frac{\partial M_z(\vec{r},t)}{\partial t}$$

$$\varepsilon_0\frac{\partial E_x(\vec{r},t)}{\partial x}+\frac{\partial P_x(\vec{r},t)}{\partial x}+\varepsilon_0\frac{\partial E_y(\vec{r},t)}{\partial y}+\frac{\partial P_y(\vec{r},t)}{\partial y}+$$

$$+\varepsilon_0\frac{\partial E_z(\vec{r},t)}{\partial z}+\frac{\partial P_z(\vec{r},t)}{\partial z}=q(\vec{r},t)$$

$$\vec{J}=\vec{\vec{\sigma}}\cdot\vec{E},\ \left\{\vec{J}=\sigma\vec{E}\ \right\}$$

$$\vec{D}=\varepsilon_0\vec{E}+\vec{P}\ \Leftrightarrow\ \vec{D}=\vec{\vec{\varepsilon}}\cdot\vec{E},\ \ \left\{\vec{D}=\varepsilon\vec{E}\right\}$$

$$B=\mu_0\left(H+M\right)\Leftrightarrow\ \vec{B}=\vec{\vec{\mu}}\cdot\vec{H},\ \ \left\{\vec{B}=\mu\vec{H}\right\}$$