





## **CHAPTER 8: ELECTROMAGNETISM**



## Fleming's Left-Hand Rule

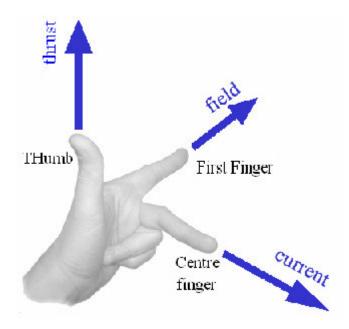
**Fleming's left-hand rule** is used to predict the direction of a **force** (or thrust) acting on a current-carrying conductor in a magnetic field. It is also known as the **Motor Rule**.

The left hand is stretched out with the thumb, first finger and centre finger mutually at right angles to each other.

The  $\underline{\mathbf{F}}$ irst finger represents the direction of the  $\underline{\mathbf{F}}$ ield.

The  $\underline{\mathbf{C}}$  entre finger represents the direction of the  $\underline{\mathbf{C}}$  urrent.

The **Th**umb represents the direction of the **Th**rust.



Is there also a Fleming's right-hand rule?

Yes, there is also a Fleming's right hand rule which is used for generators. It is used to determine the direction of the induced e.m.f. (or induced current) in a generator. See the topic on electromagnetic induction.

Both rules are named in honour of a British engineer, *John Ambrose Fleming*, who invented them.

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