

A current of 15 mA is maintained in a 50-turn circular coil of radius 5.0 cm. A uniform magnetic field of magnitude 0.80 T is directed parallel to the plane of the coil. What is the magnitude of the torque exerted by the magnetic field on the coil?

$$\vec{\tau} = iNA \hat{n} \times \vec{B}$$

$$\tau = iNAB = (15 \times 10^{-3}) (50) (\pi (0.05)^2) (0.8)$$

$$= 4.7 \times 10^{-3} \text{ N}\cdot\text{m}$$

04 Sep	11 Sep	18 Sep	25 Sep	2 Oct	9 Oct	23 Oct	30 Oct	6 Nov	13 Nov	20 Nov	27 Nov	4 Dec	11 Dec	18 Dec
Solutions of the quizzes can be found on the webpage: http://faculty.kfupm.edu.sa/phys/aljalal/phys102.htm														
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