

## Bilkent University Department of Mathematics

## PROBLEM OF THE MONTH

Term: January 2013

Find the minimum value of the expression

$$\frac{a}{b^3 + 54} + \frac{b}{c^3 + 54} + \frac{c}{a^3 + 54}$$

over all nonnegative real numbers a, b, c satisfying  $a + b + c = \frac{9}{2}$ .