

## MINIMAL $\alpha$ -CLOSED SETS AND MAXIMAL $\alpha$ -CLOSED SETS

V. RANGARAJAN<sup>1</sup>, M. CHANDRASEKHARAN<sup>2</sup> AND A. VADIVEL<sup>3</sup>

<sup>1</sup> Department of Mathematics,  
K. S. R. College of Engineering, Tiruchengode, India

<sup>2</sup> Department of Mathematics,  
Erode Arts and Science College, Erode-638009, India

<sup>3</sup> Mathematics Section (FEAT), Annamalai University,  
Annamalainagar, Tamil Nadu-608 002, India

### Abstract

Some properties of minimal  $\alpha$ -closed sets and maximal  $\alpha$ -closed sets are obtained, which are dual concepts of maximal  $\alpha$ -open sets and minimal  $\alpha$ -open sets, respectively. Common properties of minimal  $\alpha$ -closed sets and minimal  $\alpha$ -open sets are clarified; similarly, common properties of maximal  $\alpha$ -closed sets and maximal  $\alpha$ -open sets are obtained. Moreover, interrelations of these four concepts are studied.

---

Key Words and Phrases : *Minimal  $\alpha$ -closed sets and Maximal  $\alpha$ -closed sets.*

2000 AMS Subject Classification : 54A05, 54D99.

© <http://www.ascent-journals.com>