

**NATIONAL SYMPOSIUM ON
MATHEMATICAL METHODS AND APPLICATIONS**
22nd December 2004
Indian Institute of Technology, Madras
Chennai, TN
India

**Study of S-zero divisors
and S-idempotents in rings**

W.B.Vasantha Kandasamy
Department of Mathematics
Indian Institute of Technology
Chennai – 600 036

T.Subramaniyan
Department of Mathematics
Gurunanak College
Chennai – 600 042

Abstract:

In this paper we define specially the notions of Smarandache zero divisors and Smarandache idempotents in rings. We show a zero divisor in general is not a S-zero divisor but a S-zero divisor is a zero divisor. Based on the notion of S-zero divisors we define Smarandache domains. Relation between the integral domains and S-domains are obtained.

All Rights Reserved. This work is Copyright © W.B.Vasantha Kandasamy, and T.Subramaniyam, 2004. Mathematicians can use the above material for research purposes, but the work of the author(s) ***must*** be acknowledged. Violators of copyright, and those indulging in *plagiarism* and *intellectual theft* are liable for strict prosecution.

e-mail: vasantha@iitm.ac.in
web: www.vasanthakandasamy.org