

**TOPOLOGICAL ASPECTS OF BORON TRIANGULAR
NANOTUBE AND BORON- α NANOTUBE-II**

**Y. Shanthakumari, P. Siva Kota Reddy*, V. Lokesha
and P. S. Hemavathi****

Department of Studies in Mathematics,
Vijayanagara Sri Krishnadevaraya University,
Ballari - 583105, INDIA
E-mail : yskphd2019@gmail.com, v.lokesha@gmail.com

*Department of Mathematics,
JSS Science and Technology University, Mysuru - 570006, INDIA
E-mail : pskreddy@jssstuniv.in

**Department of Mathematics,
Siddaganga Institute of Technology, Tumkur - 572103, INDIA
E-mail : psh@sit.ac.in

(Received: Jul. 29, 2020 Accepted: Oct. 15, 2020 Published: Dec. 30, 2020)

Abstract: Graph indices have attracted great interest as they give us numerical clues for several properties of molecules. Some indices give valuable information on the molecules under consideration using mathematical calculations only. For these reasons, the calculation and properties of graph indices have been in the center of research. Naturally, the values taken by a graph index is an important problem called the inverse problem. It requires knowledge about the existence of a graph having index equal to a given number. A considerable amount of topological graph indices are the degree based ones. Probably the largest degree based class of graph indices is Zagreb indices and Randić index is one of the most famous topological graph indices. There are several variants of them. In this paper, we compute the sum connectivity index, Randić index, reciprocal Randić index, reduced second Zagreb index, reduced reciprocal Randić index, first and second Gourava indices of boron nanotubes.