International Journal of ChemTech Research
CODEN (USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555
Vol.11 No.11, pp 17-23, 2018

Direct Synthesis of Singly-Bridged Biscalixarenes and Crowned-Calixarenes

***Abha Naveen Kumar**

***Bio-Organic Division, Bhabha Atomic Research Centre, Mumbai 400085, India**

Abstract : Two tail-to-tail linked singly-bridged biscalix[6]/[4]arenes were directly synthesized by reaction of calix[6]/[4]arenes with diethyleneglycol ditosylate in presence of $KHCO_3$ as the base. It was found that this coupling depended on the kind of calixarene. With calix[4]arene, both corresponding biscalixarene and crowned-calixarene were obtained in this reaction. But in case of *p-tert*-butylcalix[4]arene, this reaction afforded corresponding crowned-calixarene only. In addition to that, coupling reaction also depends on the linker as evident by the synthesis of corresponding crowned-calixarenes/mono-O-alkylated derivatives, in case of *p-tert*-butylcalix[6]arene.

Keywords: Biscalix[6]arene, biscalix[4]arene, crowned-calix[4]arene, crowned-calix[6]arene.

Abha Naveen Kumar /International Journal of ChemTech Research, 2018,11(11): 17-23.

DOI= http://dx.doi.org/10.20902/IJCTR.2018.111103

*****