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Title:	Synthesis of Ag(II) 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenylporphyrin and its facile demetalation to 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetraphenylporphyrin
Authors:	Ravindran, S.V. (/jspui/browse?type=author&value=Ravindran%2C+S.V.) Pennathur, A.K. (/jspui/browse?type=author&value=Pennathur%2C+A.K.) Nandhini Devi, G. (/jspui/browse?type=author&value=Nandhini+Devi%2C+G.) Pennathur, G. (/jspui/browse?type=author&value=Pennathur%2C+G.)
Keywords:	Demetalation Halogenated porphyrin metalloporphyrin Bromination
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Citation:	Journal of Porphyrins and Phthalocyanines, 20(5), pp. 656-661
Abstract:	A novel one-step strategy for the synthesis of 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-Tetraphenylporphyrin using AgII OBP is described. AgII OBP was synthesized and was. Bromination of AgII TPP was carried out in a one-step reaction by varying the subsequently demetalated using H ₂ S time interval and stoichiometric addition of Br ₂ . The molecular weight of the halogenated porphyrin was confirmed by MALDI-TOF mass spectrometry. The synthesis of Ag(II) 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-Tetraphenylporphyrin was followed by demetalation of Ag(II) ion from the halogenated porphyrin. The demetalation of was carried out under mild conditions using sodium sulphide in trifluoroacetic acid. The time taken for the demetalation was considerably lesser than previously reported and which facilitated a simple way for the isolation of the final product in good yield. The yield of the free base was 98%. The formation of the product and purity was confirmed by ¹ H NMR, Mass spectrometry. UV-visible spectrophotometer clearly showed the appearance of a characteristic Q-band of the octa-brominated porphyrin.
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