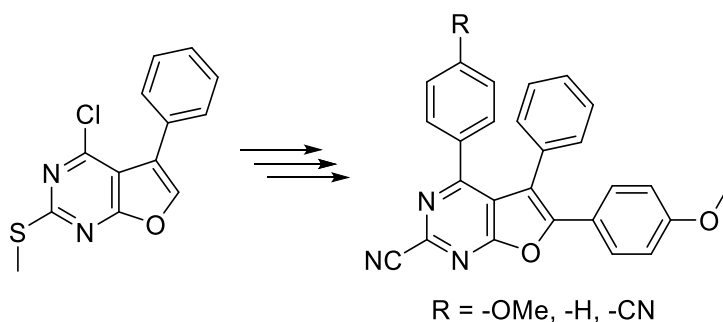


**SYNTHESIS OF 4-ARYL-2-CYANO-6-(4-METHOXYPHENYL)-5-PHENYLFURO[2,3-*d*]PYRIMIDINES VIA Pd(0) CATALYSED REACTIONS. STUDY ON PHOTOPHYSICAL PROPERTIES OF NON-LINEAR HETEROCYCLIC COMPOUNDS**

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Pyrimidine is a strong  $\pi$ -deficient aromatic heterocycle, which can be used as an electron-withdrawing moiety in “push-pull” aromatic systems alongside electron donating groups giving rise to internal charge transfer (ICT). These compounds attracted much attention due to their potential applications in a variety of fields such as nonlinear optics, liquid crystals and OLEDs. Herein, we report on the synthesis and photophysical properties of some furo[2,3-*d*]pyrimidines.



We applied a well-known Suzuki-Miyaura cross-coupling reaction to introduce aromatics with various electronic effects on to the 4<sup>th</sup> position in 2-cyano-4-chloro-6-(4-methoxyphenyl)-5-phenylfuro[2,3-*d*]pyrimidine, which was synthesised in couple of steps from the 4-chloro-2-methylthio-5-phenylfuro[2,3-*d*]pyrimidine. Photophysical data were collected in order to analyse the effect of electronically different substituents on fluorescence.

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