

## عنوان مقاله:

Dibromo-5,5-dimethylhydantoin: a versatile catalyst for synthesis of 3,3-bis(indolyl)oxindoles-1,3

## محل انتشار:

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## خلاصه مقاله:

A condensation of various isatins with indole derivatives has been carried out in the presence of 1,3-dibromo-5,5-dimethylhydantoin (DBDMH) as catalyst at 50 °C in ethanol in order to form 3,3-bis(indolyl) oxindoles. The products were obtained within 20-90 min by 70-96% yields. The efficacy of the procedure has been confirmed by catalyzing the condensation reaction of pyrrole which was used as another sort of heterocycle with indole to obtain its corresponding 3,3-bis(2-pyrrolyl)oxinole. A plausible mechanism of the condensation based on DBDMH activating role has also been proposed. DBDMH is an effective, commercially available, insensitive to moisture and easily handling catalyst. Simple procedure, easy work-up, mild reaction conditions, high yields and short reaction times are the highlighted points of reported method.

## کلمات کلیدی:

Dibromo-5,5-dimethylhydantoin, isatin, indole, 3,3-bis(indolyl)oxindoles-1,3

## لینک ثابت مقاله در پایگاه سیویلیکا:

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