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### Green Emitters for White Light Emitting Diodes: A Comparative Study

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**Abstract :** In the present study, a comparative analysis was carried out on the luminescent properties of metaloquinolates of Zinc, Cadmium, Aluminium and the complexes have been used for the testing of white light emission in order to apply in phosphor converted White Light Emitting Diodes (pcLEDs). Initially, the resulting metaloquinolates were characterized by using Infrared, UV-Visible spectra, Thermogravimetry, Photoluminescence, and CIE Chromaticity Coordinates. The white light emission was realized by mixing each metaloquinolate with a red and blue emitters respectively. The results show that the complex, bis(8-hydroxyquinolinato)zinc(II),  $Znq_2$ , can be used as excellent luminescent green emitter for phosphor converted white LEDs (pcLEDs), realizing better white light emission than the other two metaloquinolates.

**Key words :** Metaloquinolate, Photoluminescence, White light emission, Green emitters, CIE Chromaticit.

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