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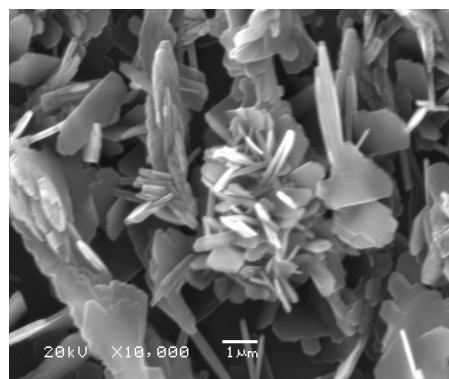
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CONTENTS

- 1689** **Synthesis and characterization of Co(II)- and Zn(II)-8-hydroxyquinolate multilayer nanoparticles via successive ion layer adsorption and reaction technique**

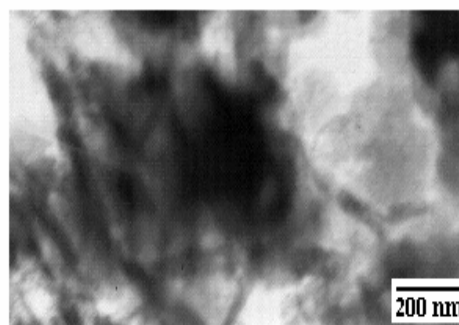
Successive ion layer adsorption and reaction technique is used to synthesize multilayer thin films of Co(II)- and Zn(II)-8-hydroxyquinolate nanoparticles.



Sawsan M S Haggag* & Mohamed E Mahmoud

- 1697** **Sol-gel derived nanostructured zinc oxide for bright luminescence in ultraviolet and visible spectral regions**

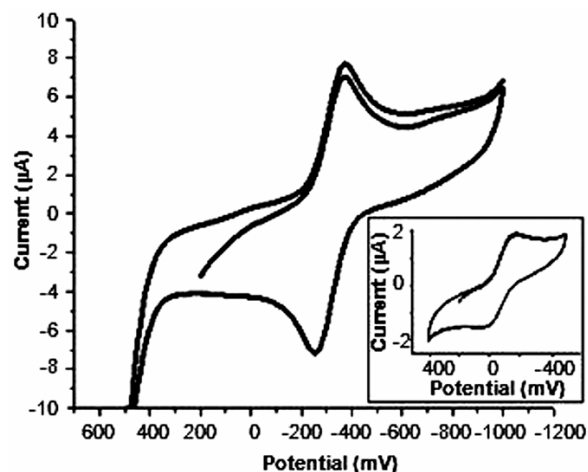
The highest luminescence in the 950 °C sintered ZnO sample is due to the formation of nanowhiskers along with nanoparticles.



Amita Verma* & A K Srivastava

1703 Interaction of catechin with an iron(III) bis-benzimidazole diamide complex

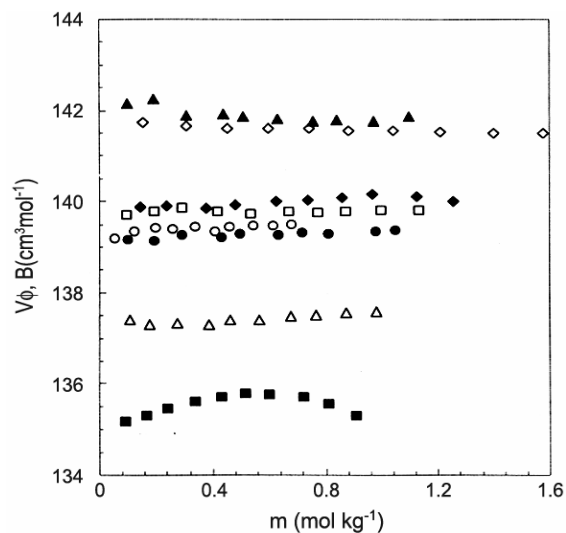
The $[\text{Fe}(\text{L})\text{Cl}_3]$ complex efficiently binds with catechin and the bound complex reduces the antioxidant activity of catechin considerably.



Nidhi Tyagi & Pavan Mathur*

1709 Studies on volumetric properties of triethylamine in organic solvents with varying polarity

Values of limiting partial molar volumes and excess partial molar volumes decrease in the order: heptane > 2-butanone > ethyl ethanoate > 1,4-dimethyl benzene > butyl ethanoate > ethylbenzene > chlorobenzene > nitrobenzene. The values of limiting partial molar volumes, partial volume of transfer and void volume have been rationalized in terms of solute-solvent and solute-solute interactions. The Flory theory/ERAS model has also been applied.

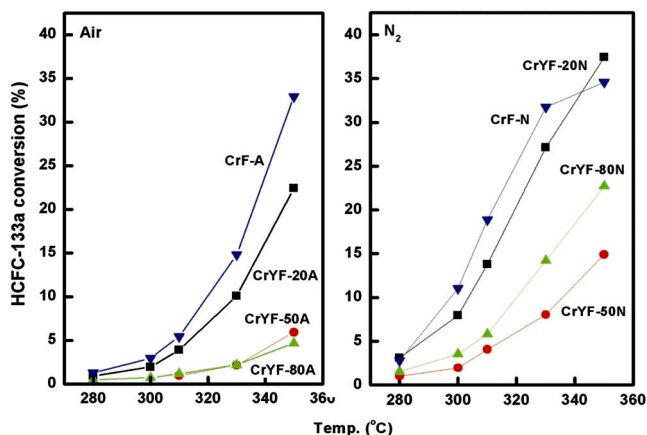


S P Ijardar, N I Malek & S L Oswal*

Notes

- 1719 Vapor phase fluorination of 1,1,1-trifluoro-2-chloroethane over $\text{CrO}_x\text{-Y}_2\text{O}_3$ catalysts: Effects of calcination atmosphere and chromium content

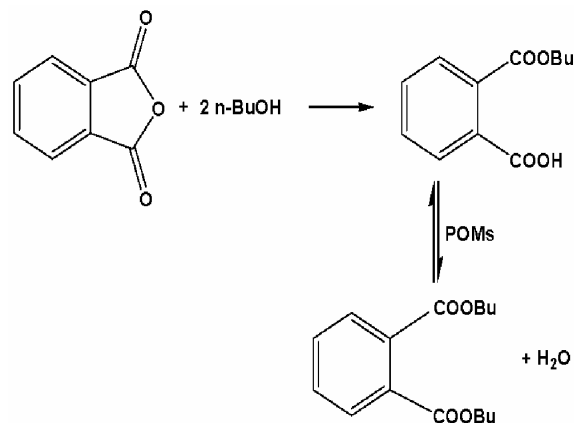
The chromium oxide species of the catalysts calcined in nitrogen atmosphere are much easier to fluorinate to chromium fluoride and show higher catalytic activity than those calcined in air.



Zhi-Ying Pu*, Hong-Bo Yu, Wen-Zhi Jia,
Huan Zhou, Yue-Juan Wang & Meng-Fei Luo

- 1725 Preparation, characterization and catalytic application of some polyoxometalates with Keggin, Wells-Dawson and Preyssler structures

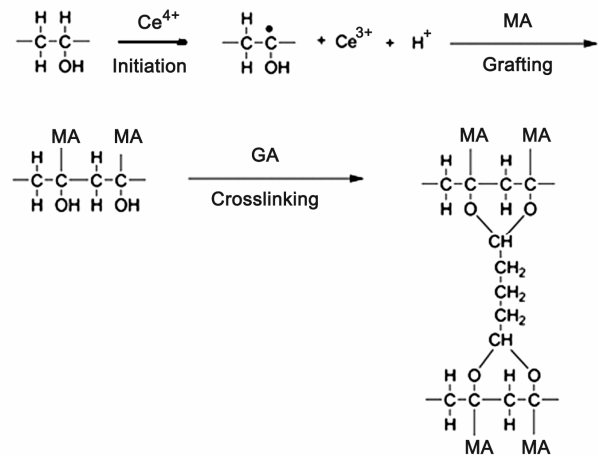
Catalytic activity of various POMs for esterification reaction of phthalic anhydride by 1-butanol has been investigated. Results show that the esterification yield of dibutylphthalate depends on several factors such as reaction time, amount of catalyst and type of solvent. Amongst the various catalysts studied, $\text{K}_3[\text{PMo}_6\text{W}_6\text{O}_{40}]$ shows the best reactivity and efficiency.



Shabnam Sheshmani*, Marzieh Arab Fashapoyeha,
Masoud Mirzaei, Bita Abedi Rad,
Somayeh Nouri Ghortolmesh & Mohammad Yousefi

1730 Synthesis and application of cross-linked graft copolymer from poly(vinyl alcohol) and malic acid

A new polymer based on grafting and cross-linking of poly(vinyl alcohol) has been synthesized for analytical purpose.



P Chowdhury*, B Singha & A Mukherjee

1735 Annual Index

Authors for correspondence are indicated by (*)