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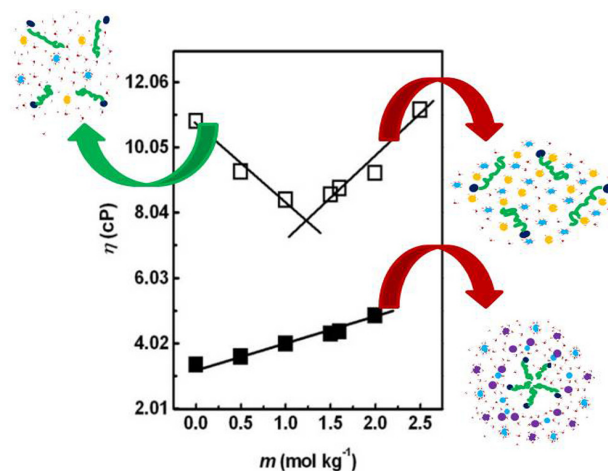
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CONTENTS

1377 Unusual salting effects in ionic liquid solutions

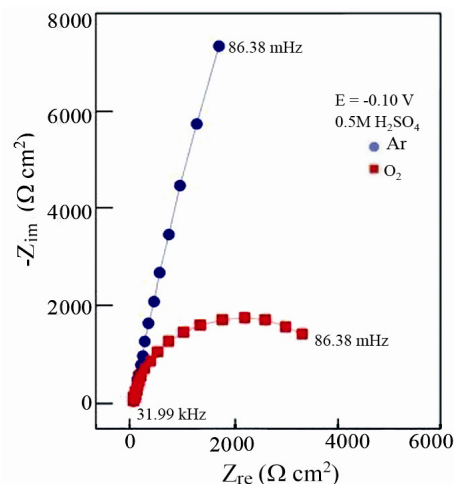
Salting behavior in water is altered in the presence of ionic liquids. In presence of ionic liquids with higher alkyl chain, salting-in agents display unusual fall and rise in the viscosity of the systems. No change in the behavior of the salting-out agents is noted in these ionic liquids.



Raju Nanda & Anil Kumar*

1383 Preparation and characterization of iron-polypyrrole-carbon composite for use as methanol tolerant cathode material in direct methanol fuel cells

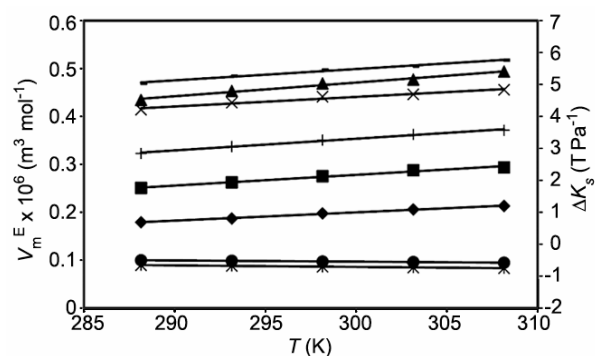
Electrochemical studies carried out with the iron-polypyrrole-carbon composite catalyst in Ar- and O₂- saturated 0.5 M H₂SO₄ with and without 1 M CH₃OH at 25 °C show that the catalyst is oxygen reduction reaction active and stable, and does not oxidize methanol.



Madhu, C S Sharma & R N Singh*

1391 Volumetric and acoustic studies of binary liquid mixtures of alkoxypropanols with ethyl acetoacetate in the temperature range (288.15 - 308.15) K

Excess molar volumes for the alkoxypropanols+ethyl acetoacetate binary mixtures are positive, indicating that the binary mixtures expand upon mixing the pure components and molecules of pure components interact weakly in solution. On increasing the chain length of the alkoxypropanol, the interactions become weaker.

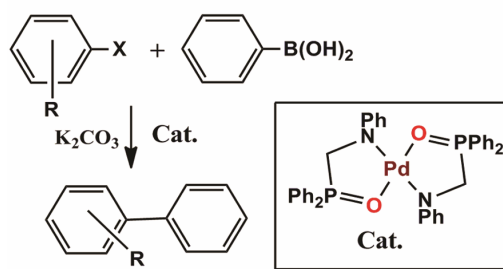


Amalendu Pal*, Harsh Kumar, Ritu Maan & Harish Kumar Sharma

Notes

1400 Palladium(II) complex of phosphinic amide, [Pd(Ph₂P(O)CH₂NPh)₂], and its catalytic investigation towards Suzuki-Miyaura cross-coupling reactions

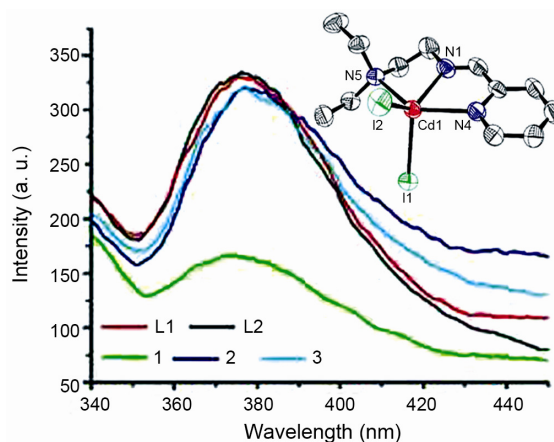
Synthesis and Suzuki-Miyaura cross-coupling reaction of the complex [Pd(Ph₂P(O)CH₂NPh)₂] is reported. Reaction of aryl halides with phenylboronic acid using [Pd(Ph₂P(O)CH₂NPh)₂] as catalyst gave moderate (35-55%) to high yields (100%) of the coupled product.



Sk Md Ibrahim, Chelladurai Ganesamoorthy & Maravanji S Balakrishna*

1404 Syntheses, structures and properties of cadmium(II) halide complexes containing tridentate Schiff bases

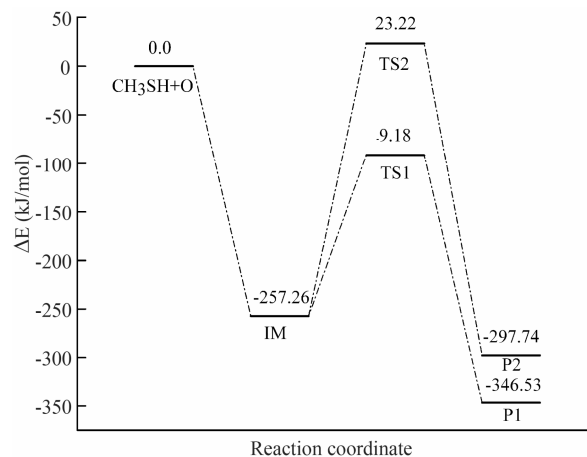
Pentacoordinated cadmium(II) halide complexes of two closely related tridentate Schiff bases are synthesised and X-ray crystallographically characterized. Chelation behavior of the Schiff bases and terminal motif of halides are seen in each case. Intermolecular C-H...Br hydrogen bonds, $\pi\cdots\pi$ and C-H... π interactions promote different dimensionalities. The complexes display intraligand ($\pi\text{-}\pi^*$) fluorescence in DMF solutions at room temperature.



Subhasish Kundu, Subhasis Roy, Kishalay Bhar,
Dipu Sutradhar, Partha Mitra &
Barindra Kumar Ghosh*

1411 Thermodynamic and kinetic investigations on the reaction of methanethiol with oxygen atom

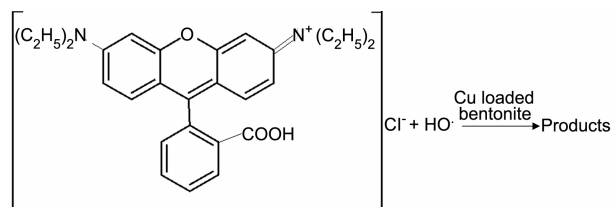
Thermodynamic and kinetic parameters of two channels for the $\text{CH}_3\text{SH}+\text{O}$ reaction have been investigated using the statistic theory and Eyring transition state theory with Wigner correction at 200-200 K. While both channels are spontaneous and exothermic and are thermodynamically favoured at low temperature and kinetically favoured at high temperature, channel I has an advantage over channel II.



Si Wei-Jinag, Zhuo Shu-Ping* & Zhou Zi-Yan

1416 Heterogeneous photo-Fenton like degradation of rhodamine B using copper loaded bentonite and H_2O_2

Photo-Fenton like degradation of rhodamine B using copper loaded bentonite and hydrogen peroxide as a novel catalytic system shows that the catalyst mineralizes the dye with photodegradation efficiency of 67.92% in the visible light.



Kiran Chanderia, Sangeeta Kalal, Jyoti Sharma,
Noopur Ameta & Pinki B Punjabi*

Authors for correspondence are indicated by (*)