Synthesis, Characterization of Cu$^{++}$, Ni$^{++}$ Metal Ion Chelates with Newly Synthesized Benzothiazolyl Hydrazones Derivatives

Bhagat S. M.
Department of Chemistry
I.C.S. College of Art’s, Commerce and Science, Khed, Ratnagiri, Maharashtra, India

Abstract: The transition Metal ion chelates of Cu$^{++}$ and Ni$^{++}$ is synthesized by using 2-(2$´$-hydroxy-3$´$-methyl phenyl)-4-bromo-6-ethoxy benzothiazolyl hydrazones and characterized by different analytical procedure and spectral study. These metal ion chelates are insoluble in common organic solvents. Infrared spectrum showed the bonding through azomethine N and ring N.

Keywords: Benzothiazolyl Hydrazones, Metal Ion Chelates.

REFERENCES
[1]. Kajal.A., Bala, S., Sharma N., Kamboj S. and Saini V. International Journal of medicinal Chemistry 1,11 (2014).
[2]. A Vaji p. G., Vinodkumar C.H., Patil S.A., Shivananda K.N. and Nagaraju C. European Journal of medicinal Chemistry (2009)
[3]. J. easmon, G. Puerstinger, T. Roth, H.H. Fiebig, M. Jenny, G. Helmish and J. Hofmann Int. J. Cancer, 94,88-96 (2001)
[4]. M.Hong, H. Yin., X. Zhang, C.Li. C. Yue and S. Cheng J. Organomet, Chem. 724, 23-31, (2013).
[5]. A. Datta, P.H. Liu, J. H. Huang, E. Garrriba, Turnabull, B. Machura, C.L. Hsu, W.T. Chang and A Pevec.Polyhedron, 44, 77-87,(2012)
[6]. A.S. Abu-Surrah, K.A. Abu Safieh, I.M. Ahmad, M.Y. abdalla, M.T. Ayoub, A.K. Qaroush and A.M. Abu-Mahtheieh. Eur. J. Med. Chem. 45, 471-475, (2010).
[7]. Melnk p., Leroux V., Sergheraert C. and Greuier p. Bioorg.Med.Chem., Lett, 16(1) 31-35, (2006)
[8]. Fontes, A.P.S., Guerra, W. Machado , F.C. Transition Met. Chem. 29, 382 (2004)
[9]. Sharma V.K., Shrivastava S. Met.Org. Chem. 35, 311,(2005).
[10]. Iskandar M.F. , El-Sayed, L. Salem, N.M.H.Waner., R. Haase W.J. Coord. Chem. 58, 125,(2005)
[11]. Martsinko E.E. , Seitullia I.I. Ya, Zub. V Russ. J. Coord. Chem. 31, 795, (2005)
[12]. M. Mohan, M.P. Gupta, L. Chandra and N.K. Jha Inorg. Chem. Acta. 15, 61-68, (1988)
[13]. M. Mohan, A Kumara and M. Kumar Inorg. Chem. Acta, 136,65-74, (1987).
[14]. M.S. Nair, D. Arish, R.S. Joseyphus Journal of Saudi Chemical Society, 16, 83-88 (2012).
[15]. K.S. Abou-Melha Spectrochemica Acta. Part A, 70, 162-170 (2008).
[16]. Katsuki. T. Coord. Chem. Rev., 140, 189, (1995).
[17]. Di. Bella S. Chem. Soc. Rev 30, 355 (2001).
[18]. Cogan D.A., Liu G.C., Kim K.J. and Co. Am. Chem. Soc. 120, 8011, (1998).
[19]. Pouda A.S. G.E. Badr and M.N. El. Haddad J. Korean Chem. Soc. 2, 124, (2008).
[20]. Ali M.A., M.H. Kabir, M. Nazimuddin, S.M. H. Mujumdar, M.T.H. Taraffder and M.A. Khair. Indian J. Chem. 27A, 1064, (1988).
[21]. Ferrari M.B., S. S. Capacchi, G. Pelosi, G. Reffo, P. Tarasconi, R. Alberlini, S. Pinelli and P. Lunghi. Inorg.Chim, Acta 286, 134, (1999).
[22]. Sanjeev R. Dudhal, Shrikant Kulkarni IJETSR volume 5, Issue 3 (2018)