



## Seasonal Variation of Physico-chemical Parameters of Chilika Lagoon, East Coast of India

**Sairendri Maharana, Mrutyunjay Jena\* and Malaya Kumar Misra**

*Post Graduate Department of Botany, Berhampur University, Bhanja Bihar-760 007, India*

*\*E-mail: mrutyunjay.jena@gmail.com*

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**Abstract:** Physico-chemical parameters of water of Chilika lagoon, Odisha such as salinity, temperature, dissolved oxygen, pH, water transparency, chloride, nitrate and phosphate content at nine sites were analysed during 2014 to 2015. The salinity level ranged between 2.1 and 29 ppt and temperature was more ( $31^{\circ}\text{C}$ ) at outer channel (Sipakuda), the mixing point with sea. pH varied from 8.0 to 8.8 and the water remained alkaline throughout the year in all the nine sites. Dissolved oxygen level was highest ( $8.9\text{ mg l}^{-1}$ ) at Badakuda site during summer. During winter season, the water transparency was maximum (101 cm) at Badakuda site. Chloride content was highest ( $13.4\text{ g l}^{-1}$ ) at outer channel (Sipakuda). Chloride, nitrate and phosphate contents of water fluctuated with season and sites.

**Keywords:** Chilika lagoon, Physico-chemical characteristics, pH, Salinity, Temperature

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