

International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 3, Issue 2, December 2023

A Review on High Performance Liquid Chromatography

Sakshi Hruday Meshram and Farah Khan

New Montfort Institute of Pharmacy, Ashti, Wardha, Maharashtra, India sakshimeshram256@gmail.com

Abstract: High performance liquid chromatography (HPLC) has been widely used for years as an analytical method and is a key tool for the separation and analysis of pharmaceutical drugs, for drug monitoring and for quality assurance and life science research. HPLC is commonly used for Separation and analysis of non-volatile compounds. Due to the flexibility of this technique numerous applications have been adopted for routine use in the pharmaceutical industries, research laboratories, analytical laboratories, clinical laboratories and also colleges. In order to make a qualitative assessment of the compound and quantitative analysis of the compound in Pharmaceuticals products such as aspirin, ibuprofen, paracetamol, Salts like sodium chloride and potassium phosphate, Organic chemicals like polymers (e.g. polystyrene, polyethylene), Proteins like egg white or blood protein, Heavy hydrocarbons like asphalt or motor oil, Many natural products such as ginseng, herbal medicines, plant extracts and Thermally unstable compounds such as trinitrotoluene (TNT) and also clinical chemistry HPLC is regularly used technique

Keywords: High performance liquid chromatography, Pharmaceutical impurity profiling, Pharmaceutical quality control, stationary phase, pharmaceutical drugs

REFERENCES

- [1]. P. Ravi Sankar, K. Sai Snehalatha, Shaik. Tabassum Firdose, p. Srinivasa Babu Vignan Pharmacy College, Vadlamudi, Gunter, Andhra Pradesh, India.
- [2]. Dr. S. Malathi, Dr. Pallavi Mangesh Patil, Dr. Sunil Kumar Thakur Publication PVT.LTD.LUCKNOW
- [3]. D.Guillarme and M.W Dong. Newer development in HPLC impacting pharmaceutical analysis: A brief review, Amer. Pharm. Rev 16(4),36-43,2013.
- [4]. Swadesh, J.K. HPLC: practical and Industrial Application 2001.
- [5]. MS Pallavi Nemgonda Patil Suresh Gyan Vihar University, Jaipur, Rajastan India.
- [6]. Operating procedure HPLC standard operating procedure. Aminex 87-H and 87-P analytical columns university of Kentucky, Biosystems and Agricultural Engineering Dept.
- [7]. Narayudu Vanda muri, KR Srinivas Nagabattuh Subrahmanya Swamy Kurra , Sahana Battula, LPS NaineshaAllada, PoojthaBandam.
- [8]. Department of Pharmaceutical analysis, Aditya institute of practical science and research, Surampalem, East Godavari district, Andra Pradesh, India.
- [9]. Wenzhong Xiao and Peter J. Oefner Genome Technology Center, Stanford University, palo Alto, California Communication by Mark H.Paalman.
- [10]. Hongfeng Yin Kevin Killeen Agilent Technology InC, Santa Clara, CA, USA.
- [11]. Skoog, D; Holler, F; Crouch, S. Principles of Instrumental Analysis 2007.
- [12]. Mukthi;Thammana Department of pharmacy, Vignan Instituted of Pharmaceutical Technology, Duv vada , visakhapatanam , Andhra Pradesh, India.
- [13]. MS Pallavi Nemgonda Patil Suresh Gyan Vihar University, Jaipur, Rajastan, India

DOI: 10.48175/568

