Curriculum Vitae

Dr. Makrand Manohar Patil

M.Sc., Ph. D. Analytical Chemistry Laboratory, Department of Chemistry, Shivaji University, Kolhapur, M. S. (INDIA) Email: <u>patilmakrand15@gmail.com</u> Contact No: - +91 9970751899 (Mobile)



OBJECTIVE

To continue successful Research & Development with exceptional hands-on experienced from Concept to Completion, where my qualification and experience can enhance organizational, operational development, profit growth, mission objectives, efficiency, resource utilization and employee satisfaction.

EXPERIMENTAL SKILLS

- Develop and implements synthesis research and development procedures and techniques and play dual design function role.
- Manage and direct the synthesis research and method development to meet organizational needs and to capitalize on potential new products.
- Ensure all development projects, initiatives and processes establish in conformance with organization's policies and objectives.
- > Experience in handling UV-VIS Spectrophotometer (Optizen α), pH Meter (SL-127), HPLC (Agilent)
- > Well versatile with literature searching.
- I have ability to work independently as well as in groups & am familiar with all types of commonly used computer software's.
- Good Knowledge of Analytical Techniques: Column Chromatography, Thin Layer Chromatography, Solvent extraction, Dissolution apparatus, UV-VIS Spectrophotometer, HPLC (Agilent make).

INDUSTRIAL EXPERIENCE: 2 Month

• S.G Phyto Pharma Pvt. Ltd, Kolhapur

PERSONAL DETAIL

Name	: Makrand Manohar Patil
Nationality	: Indian
Gender	: Male
Marital Status	: Unmarried
Date of Birth	: 15 th Sept, 1988
Permanent Address	: A/P: Tasgaon Tal: Tasgaon, Dist: Sangli, Maharashtra, 416312.
Languages Known	: English, Hindi, Marathi (Read, Write, Speak)
Email	: patilmakrand15@gmail.com

EDUCATIONAL QUALIFICATION

Exam	University/ Board	Subjects	Year	Class obtained
Ph. D.	Shivaji university, Kolhapur	chemistry	July 2022	
M.Sc.	Shivaji University, Kolhapur	Organic Chemistry	2009 - 2010	First Class
B.Sc.	Shivaji University, Kolhapur	Chemistry	2006 - 2008	Second Class
H.S.C.	Kolhapur Board	P.C.B. A	2004 - 2005	Second Class
S.S.C.	Kolhapur Board		2002 - 2003	Second class

AWARDS AND ACHIEVEMENTS

Presente International and National Conferences and Complete career-oriented course in meditation course in meditation plants.

RESEARCH EXPERIENCE 07 Years 02 Month

\triangleright	Title of Ph. D. Thesis	: Extraction and separation of some metal ions with high
		molecular weight amines.
\triangleright	Area	: Solvent extraction, Synthesis of amines, and their analytical applications
\triangleright	Institute	: Department of Chemistry, Shivaji University, Kolhapur. INDIA
۶	Guide	: Dr. G. N. Mulik (Balwant college vita)

Solvent extraction is a procedure for processing materials by using a solvent to separate out variety of components within a material sample. Nowadays, the solvent extraction technique is very commonly used with liquids, gases and solids to separate out the individual components. The solvent extraction procedure is carried out frequently in the research laboratory by the chemist as a routine purification process in analytical separations and removal of metal ions from aqueous solutions or wastewaters. Due to its extraordinary ability to remove one or more constituents from a solution quantitatively, the technique becomes a valuable technology for recovering a range of metals from solutions.

Research Experience: 07 Years

- Research Paper Publications-
- **4** Papers Published 7

 Extraction of iridium(III) by ion-pair formation with 2-octylaminopyridine in weak organic acid media.
Vishal J. Suryavanshi, Makrand M. Patil, Sunil B. Zanje, Arjun N. Kokare, Gurupad D. Kore, Mansing
A. Anuse, Ganpatrao N. Mulik, Separation Science and Technology, 2016, 51(10), 1690–1699. http://www.tandfonline.com/doi/abs/10.1080/01496395.2016.1177076 2. Development of a liquid-liquid extraction system of rhodium(III) by 2-octylaminopyridine from weak malonate media.

Vishal J. Suryavanshi, **Makrand M. Patil**, Sunil B. Zanje, Arjun N. Kokare, Rupali R. Pawar, Mansing A. Anuse, Ganpatrao N. Mulik, **Journal of the Chinese Chemical Society**, **2016**, **63(8)**, **694-702**. http://onlinelibrary.wiley.com/doi/10.1002/jccs.201500541/full

- Development of liquid-liquid extraction and separation method for ruthenium(III) with 2octylaminopyridine from succinate media: analysis of catalysts.
 Vishal J. Suryavanshi, M. M. Patil, S. B. Zanje, A. N. Kokare, A. P. Gaikwad, M. A. Anuse, G. N. Mulik, Russian Journal of Inorganic Chemistry, 2017, 62(2), 257–268. https://link.springer.com/article/10.1134/S003602361702019X
- Ion-pair based liquid-liquid extraction of gold(III) from malonate media using 2-octylaminopyridine as an extractant: analysis of alloy, mineral, ayurvedic drug and e-waste sample.
 Vishal J. Suryavanshi, Arjun N. Kokare, Sunil B. Zanje, Abhijeet N. Mulik, Rupali R. Pawar, Makrand M. Patil, Ashwini P. Gaikwad, Mansing A. Anuse, Ganpatrao N. Mulik, Turkish Journal of Chemistry, 2018, 42, 1032 – 1044. http://journals.tubitak.gov.tr/chem/issues/kim-18-42-4/kim-42-4-8- 1712-34.pdf.

5. Liquid-liquid extraction of zinc(II) from acid media with N-*n*-heptylaniline as an extractant: analysis of pharmaceutical and commercial sample

Pawar RR, Suryavanshi VJ, Patil **MM, Patil** SS, Mulik GN, **Biomedical Journal of Scientific & Technical Research**, **2018**, **10**(3), **001965**. https://biomedres.us/pdfs/BJSTR.MS.ID.001965.p

6. Extraction and separation of bismuth (III) using liquid anion exchanger from aqueous hydrochloric acid media. Makrand patil, Vishal Suryavanshi, Rupali Pawar, Ganpatrao Mulik. IJRAR- International Journal of Research and Analytical Reviews 2019 225-231

7. Highly proficient extraction separation of thorium(IV) from sulfuric acid solution using N-ndecylaniline: real sample analysis **Makrand M. Patil** · Vishal J. Suryavanshi · Abhijeet G. Mulik · Ganpatrao N. Mulik **Journal of Radioanalytical and Nuclear Chemistry 2020, 325, 111-119.** <u>https://doi.org/10.1007/s10967-020-07204-7</u>

Papers Communicated - 01

1. Effect of chain length on solvent extraction of bismuth(III) from hydrochloric acid media using high molecular weight amines.

Rupali Pawar, Vishal Suryavanshi, **Makrand Patil**, Suresh Patil, Ganpatrao Mulik, **Bulgarian** Chemical Communications, Under review.

Reference:

Dr. G. N. Mulik Ex-Head & Associate Professor, P. G. Department of Chemistry, Balwant College, Vita. Email: ganpatraomulik@rediffmail.com Cell: +919970225634.

Declaration:

I do hereby declare that the statements made in this application are true, complete and correct to the best of my knowledge and belief. I understand and agree that in the event of my any information being found false or incorrect/ incomplete or intelligibility being detected at any time before or after selection/ interview, my candidature is liable to be rejected.

Date - 14 Nov 2023

Sincerely Yours,

Patilin

(Dr. Makrand Manohar Patil)