पेटेंट कार्यालय
शासकीय जर्नल

OFFICIAL JOURNAL
OF
THE PATENT OFFICE

निर्गमन सं. 46/2022	शुक्रवार	दिनांक: 18/11/2022
ISSUE NO. 46/2022	FRIDAY	DATE: 18/11/2022

पेटेंट कार्यालय का एक प्रकाशन
PUBLICATION OF THE PATENT OFFICE

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/10/2022

(21) Application No.202221059414 A
(43) Publication Date : 18/11/2022

(54) Title of the invention : PREPARATION AND EVALUATION OF SILVER NANOPARTICLES OF PLUMERIA RUBRA BARK EXTRACT AND IT'S PHARMACOLOGICAL SCREENING

(51) International classification :A61K0036240000, A61P0031180000, A61K0033380000, A61K0009510000, B82Y0040000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Ms. Shubhangi Yashwant Khade
Address of Applicant :Department of Pharmaceutics, Rajarambapu College of Pharmacy, Kasegaon, Sangli, Maharashtra, Pin Code: 415404 Kasegaon ---------- ----------
2)Dr. Manojkumar Mukundrao Nitalikar
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Ms. Shubhangi Yashwant Khade
Address of Applicant :Department of Pharmaceutics, Rajarambapu College of Pharmacy, Kasegaon, Sangli, Maharashtra, Pin Code: 415404 Kasegaon ---------- ----------
2)Dr. Manojkumar Mukundrao Nitalikar
Address of Applicant :Department of Pharmaceutics, Rajarambapu College of Pharmacy, Kasegaon, Sangli, Maharashtra, Pin Code: 415404 Kasegaon ---------- ----------

(57) Abstract :
The present invention relates to the Preparation and Pharmacological evaluations of silver nanoparticles prepared from the extract of stem bark of Plumeria rubra.. The characterization of synthesized nanoparticles was carried out by UV- Vis spectroscopy, FT-IR analysis, XRD, SEM, entrapment efficiency, determination of particle size and Zeta Potential. Pharmacological evaluation of synthesized silver nanoparticles was performed. The synthesized silver nanoparticles showed a strong antiviral activity against HIV virus. Anticancer activity of synthesized silver nanoparticles was checked against MCF-7 breast cancer cell line by MTT assay. The results demonstrated that silver nanoparticles of Plumeria rubra stem bark extract exhibits excellent anticancer potential. Results also concluded that the that the silver nanoparticles prepared from the extract of stem bark of Plumeria rubra has shown excellent antioxidant, anticancer, antiviral, antibacterial potentials.

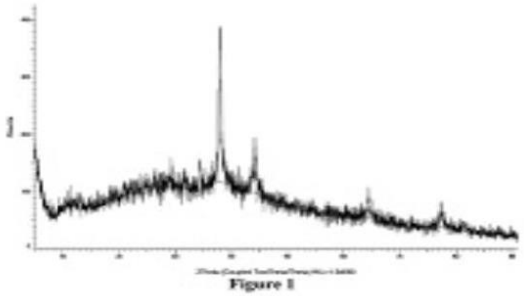

Figure 1

No. of Pages : 19 No. of Claims : 5