



BHARAT INSTITUTE OF TECHNOLOGY
Mangalpally (V), Ibrahimpatnam (M), R. R. District (AP) - 501510
(Approved by AICTE & PCI, New Delhi and Affiliated to JNTUH, Hyderabad)
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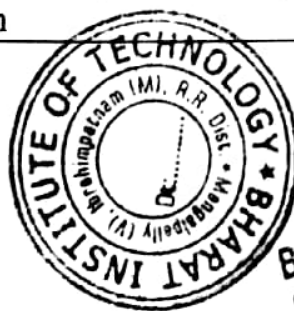
B. Pharm IV Yr II Semester Project List (AY:2018-2019)

Sl. No.	Hall Ticket No.	Name of the student	Guide Name
Antibacterial potential of curcumin incorporated cerim oxide nanoparticles against E.coli resistant strain			
1.	15171R0001	Arshia khan	Dr. M. Kiranmai
2.	15171R0006	Lakshmi Priya	
3.	15171R0037	J. Ramya	
4.	15171R0039	V. Kavya	
5.	15171R0048	T. Balavardhan Reddy	
Development and validation for the quantitative estimation of Nateglinide in bulk by RP-HPLC			
6.	15171R0003	P. Meghana	Ms. N. Maneesha Mrs. Phanisree
7.	15171R0025	A. Sirisha	
8.	15171R0035	P. Nithila	
9.	15171R0036	Anusha	
10.	15171R0049	Vishal	
Study of Antioxidant potential of Indian herbs onion, ginger and garlic			
11.	15171R0002	A. Mounika	Mrs. Nirmala Bharati
12.	15171R0004	Ashritha	
13.	15171R0054	Gopi Krishna	
14.	15171R0034	Dharani	
Evaluation of anti-urolithianic activity of Maringa oleifera leaves by UV spectrophotometer			
15.	15171R0014	O.V. Poojitha	Mrs. B. Uma Rajeswari
16.	15171R0007	S. Akshitha	
17.	15171R0032	V. Vineetha	
18.	15171R0026	Ch. Tulasi	
RP-HPLC method development and validation for estimation of Nefinavir in pure form and pharmaceutical dosage form			
19.	15171R0019	S. Rehana	Mrs.S .Namratha & Mrs. Priyanka
20.	15171R0030	Farheen Begum	
21.	15171R0042	D. Sreeja	
22.	15171R0043	K. Bhavani	
Formulation and evaluation of Herbal Analgesic gel			
23.	15171R0016	V. Vani Priya	Dr. G. Sumalatha
24.	15171R0040	V. Sai Deeksha	
25.	15171R0027	K. Sravya	
26.	15171R0012	J. Shrestha	
Synthesis, Characterization and Anthelmintic Activity Study of Novel Substituted Benzimidazole Derivatives			
27.	15171R0008	A. Sowjanya Reddy	Dr. Mrinmay



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28.	15171R0011	M. Durga Bhavani	Das
29.	15171R0061	K. Shravan Kumar	
30.	15171R0063	P. Vivek Reddy	
Preparation, in-vivo and ex-vivo characteristic of matrix type transdermal patches of palonosteros			
31.	15171R0038	K. Chandrika	Dr. A.V.Badrinath
32.	15171R0044	N.B. Bhargavi	
33.	15171R0031	P. Deepika	
34.	15171R0067	J. Pradeep Reddy	
Formulation and evaluation of herbal lipstick from color pigments of punica granatum			
35.	15171R0009	D. Sravani	Dr. Sai Krushna
36.	15171R0020	R. Glory Theresa	
37.	15171R0022	G. Sai Pravallika	
38.	15171R0028	P. Anjali	
Formulation and in-vitro evaluation of aloevera cleansing face and body cream			
39.	15171R0010	J. Renuka	Dr. S. Sandhya Rani
40.	15171R0013	P. Vardhini	
41.	15171R0017	K. Sahithi	
42.	15171R0041	N. Prathyusha	
43.	15171R0024	S. Niharika	
Synthesis and antimicrobial antifungal activity of Pyrazoline Derivatives.			
44.	15171R0050	T. Naresh	Mr. Dinesh
45.	15171R0059	R. Srikanth	
46.	15171R0056	B. Sai Krishna	
47.	15171R0051	T. Ranjith Yadav	Dr. Mihir Parmar
48.	15171R0053	A. Nikhil Kumar	
49.	15171R0021	A. Narendra	
50.	15171R0057	Srinath	
51.	15171R0003	Y. Sai Meghana	Dr. Vijaya Vani
52.	15171R0055	P. Akhil	
53.	15171R0060	G. Suresh	
54.	15171R0018	K. Sowjanya	
Formulation, Characterization and in-vitro evaluation of isoniazide microsphere			
55.	15171R0005	K. Likitha Purna	Dr. Y. Phalguna
56.	15171R0033	Prashanthi	
57.	15171R0029	Akhila	
58.	15171R0015	N. Shirisha	
59.	15171R0047	Y.Prakash	Mrs. Keerthi
60.	15171R0052	M.Madhusudhan	
61.	15171R0065	B.Naresh	
62.	15171R0062	Irfan	



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A PROJECT REPORT ON
STUDY OF ANTIOXIDANT POTENTIALS OF INDIAN HERBS
ONION, GINGER AND GARLIC

A Thesis Submitted in Partial Fulfillment of the Requirements
Of
BACHELOR OF PHARMACY

Submitted to
Jawaharlal Nehru Technological University
HYDERABAD

by

A.MOUNICA	(15171R0002)
S.ASHRITHA	(15171R0004)
G.DHARANI	(15171R0034)
G.SHAILAJA	(15171R0068)

Under the guidance of
Mrs.S.NIRMALA BHARATHI

M.Pharm, PhD

ASSOCIATE PROFESSOR

Dept. of Pharmaceutical Chemistry



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R.R. Dist. - 501 510, Telangana

A PROJECT REPORT ON
FORMULATION AND IN VITRO EVALUATION OF ALOEVERA CLEANSING
FACE AND BODY CREAM

A Thesis Submitted in Partial Fulfillment of the Requirements

Of

BACHELOR OF PHARMACY

Submitted to

Jawaharlal Nehru Technological University

HYDERABAD

by

K.SAHITHI	(15171R0017)
P.VARDHINI	(15171R0013)
S.NIHARIKA	(15171R0024)
N.PRATHYUSHA	(15171R0041)
LRENUKA	(15171R0010)

Under the guidance of

Dr. G.SANDHYA RANI ML Pharm, PhD, pdf

Dept. of Pharmaceutics



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Kesav
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**A PROJECT REPORT ON
REPARATION, IN-VITRO AND EX-VIVO CHARACTERIZATION OF MATRIX
TYPE TRANSDERMAL PATCHES OF PALONOSETRON HYDROCHLORIDE**

A Thesis Submitted in Partial Fulfillment of the Requirements

Of

BACHELOR OF PHARMACY

Submitted to

Jawaharlal Nehru Technological University

HYDERABAD

by

J.PRADEEP REDDY (15171R0067)

K.CHANDRIKA (15171R0038)

M.BHARGHAVI (15171R0044)

P.DEEPIKA (15171R0031)

Under the guidance of

Dr. A VenkataBadarinarath, M.Pharm., Ph.D.

Dept. of Pharmaceutics



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**SYNTHESIS, CHARACTERIZATION AND ANTIHELIMINTIC STUDY OF NOVEL
SUBSTITUTED BENZIMIDAZOLE DERIVATIVES**

A Thesis Submitted in Partial Fulfillment of the Requirements

Of

BACHELOR OF PHARMACY

Submitted to

Jawaharlal Nehru Technological University

HYDERABAD

by

A.SOWJANYA (15171R0008)

K.SHRAVAN (15171R0061)

M.DURGA (15171R0011)

P.VIVEK REDDY (15171R0063)

Under the guidance of

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A PROJECT REPORT ON
FORMULATION, CHARACTERIZATION AND INVITRO EVALUATION OF
ISONIAZID MICROSPHERES

A Thesis Submitted in Partial Fulfillment of the Requirements

Of

BACHELOR OF PHARMACY

Submitted to

Jawaharlal Nehru Technological University

HYDERABAD

By

K.LIKHITHA PURNA (15171R0005)

N.SHIRISHA (15171R0015)

S.AKHILA (15171R0029)

B.PRASHANTHI (15171R0033)

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Dr. Y.PHALGUNA M.Pharm., Ph.D

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MANGALAPALLY (V), IBRAHIMPATNAM (M), R.R. DIST -501510

STATEMENT OF SCORES

ASSESSMENT OF INTERNSHIP OF 6th YEAR PHARM.D

(DOCTOR OF PHARMACY)
ACADEMIC YEAR 2018-2019

Registration No: 13171T0001

Name of the candidate: SARIKONDA SREEKAR VARMA

S.NO	Assessment Criteria	Maximum Scores	Scores Secured
1	Proficiency of knowledge required for each case management	5	03
2	The Competency in skills expected for providing clinical pharmacy services	5	04
3	Responsibility, Punctuality, work up of case, involvement in patient care	5	04
4	Ability to work in a team (Behavior with other healthcare professionals including medical doctors nursing staff and colleagues)	5	04
5	Initiative, participation in discussions, research aptitude	5	03

Poor	Fair	Below Average	Average	Above Average	Excellent
0	1	2	3	4	5

Note: A Score of less than 3 in any of above items will represent unsatisfactory completion of membership

Verified by DR. TESY THANKACHAN

Signature of the Head of the institution

(With Seal)

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Ibrahimpatnam (M), R.R. Dist - 501510



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R.R. Dist - 501510, Telangana

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MANGALAPALLY (V), IBRAHIMPATNAM (M), R.R. DIST -501510

STATEMENT OF SCORES

ASSESSMENT OF INTERNSHIP OF 6th YEAR PHARM.D(POST BACCALAUREATE)

(DOCTOR OF PHARMACY)
ACADEMIC YEAR 2018-2019

Registration No: 16175T0004

Name of the candidate: SYED MUKHTAR RAZI

S.NO	Assessment Criteria	Maximum Scores	Scores Secured
1	Proficiency of knowledge required for each case management	5	04
2	The Competency in skills expected for providing clinical pharmacy services	5	03
3	Responsibility, Punctuality, work up of case, involvement in patient care	5	03
4	Ability to work in a team (Behavior with other healthcare professionals including medical doctors nursing staff and colleagues)	5	04
5	Initiative, participation in discussions, research aptitude	5	04

Poor	Fair	Below Average	Average	Above Average	Excellent
0	1	2	3	4	5

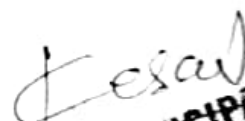
Note: A Score of less than 3 in any of above items will represent unsatisfactory completion of membership

Verified by DR. TESU. THANKACHAN 

Signature of the Head of the institution

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STATEMENT OF SCORES

ASSESSMENT OF INTERNSHIP OF 6th YEAR PHARM.D(POST BACCALAUREATE)

(DOCTOR OF PHARMACY)
ACADEMIC YEAR 2018-2019

Registration No: 13171T0006

Name of the candidate: ZOHA

S.NO	Assessment Criteria	Maximum Scores	Scores Secured
1	Proficiency of knowledge required for each case management	5	04
2	The Competency in skills expected for providing clinical pharmacy services	5	03
3	Responsibility, Punctuality, work up of case, involvement in patient care	5	03
4	Ability to work in a team (Behavior with other healthcare professionals including medical doctors nursing staff and colleagues)	5	04
5	Initiative, participation in discussions, research aptitude	5	04

Poor	Fair	Below Average	Average	Above Average	Excellent
0	1	2	3	4	5

Note: A Score of less than 3 in any of above items will represent unsatisfactory completion of membership

Verified by DR. TESHU THANKACHAN

Signature of the Head of the institution

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PHARMACEUTICS -M. PHARM (2018-2019)-PROJECT VIVA LIST

S.NO	HALL TICKET NO	NAME OF THE STUDENT	TITLE
1	13171S0303	S. INDU REKHA	FORMULATION & EVALUATION OF EXTENDED RELEASE TABLETS OF BOSENTAN
2	13171S0305	G.BHARGAVI	FORMULATION & EVALUATION OF FAST DISSOLVING TABLETS OF RIZATRIPTON
3	15171S0301	B.SANGEETHA	FORMULATION & EVALUATION OF GASTRO RETENTIVE DRUG DELIVERY SYSTEM CONTAINING PROPRANOLOL.HCL
4	15171S0304	K.YASHASREE	FORMULATION & EVALUATION OF TELMISARTAN SOLID DISPERSION OF ENCAPSULATION USING DIFFERENT POLYMER
5	16171S0307	K.NAGAJYOTHI	DESIGN AND OPTIMIZATION OF DILTIAZEM MATRIX TABLETS AS SUSTAINED RELEASE
6	15171S0313	T.THIRUPATHAIAH	FORMULATION AND INVITRO EVALUATION OF PRAZOSIN.HCL NANOPARTICLES
7	15171S0315	M.BOBBI KUMAR	FORMULATION,CHARACTERIZATION OF POLYMERIC NANOPARTICLES OF DOCETABINE
8	17171S0301	DONKESHWAR PRASANTH	EFFECT OF POLYMERS IN THE FORMULATION OF SUSTAINED RELEASE TABLETS OF GUAIFESIN USING VARIOUS HYDROPHILIC POLYMERS
9	17171S0302	G.MOUNIKA	FORMULATION AND INVITRO CHARACTERIZATION OF LAMIVUDINE MICROSPHERES FOR SUSTAINED DRUG DELIVERY
10	17171S0303	K.JAGRUTHI	FORMULATION AND INVITRO EVALUATION OF ITOPRIDE FAST DISSOLVING TABLETS USING SUPERDISINTEGRANTS



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11	17171S0304	KRUTHIKA LALIT	FORMULATION AND INVITRO EVALUATION OF KETOPROFEN USING B-CYCLODEXTRIN CAPPED SILVER NANOPARTICLES
12	17171S0305	MADDI SWETHA	FORMULATION AND EVALUATION OF PITAVASTATIN NANOPARTICLES
13	17171S0306	MEKAPOTHULA PAVANI	FORMULATION AND INVITRO EVALUATION OF ANASTROZOLE LOADED TRANSFEROSOMAL GELS
14	17171S0308	P.BHARATH KUMAR	FORMULATION AND EVALUATION OF FLOATING MICROSPHERS OF REPAGLINIDE BY IONIC GELATION METHOD
15	17171S0309	R.SWAPNA	FORMULATION AND INVITRO EVALUATION OF EPIRUBICIN ORGANOGELS
16	17171S0310	TALLAPALLY KAVERI	FORMULATION AND INVITRO EVALUATION OF OPALONOSETRON MICROSPONGES



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CERTIFICATE

This is to certify that the research work entitled **"FORMULATION & INVITRO EVALUATION OF KETOPROFEN USING β -CYCLODEXTRIN CAPPED SILVER NANOPARTICLES"** submitted to Jawaharlal Nehru Technological University Hyderabad in the partial fulfillment for the award of degree of **MASTER OF PHARMACY** in **Pharmaceutics** is a bonafide work carried out by **KRUTHIKA LALIT** (Reg.No.17171S0304) during the academic 2018-2019 under the guidance and supervision of **Dr. Y. Phalguna** M.Pharm., Ph.D., Associate professor, HOD, Department of Pharmaceutics

The results embodied in this thesis have not been submitted to any other university or institute for the award of any degree or diploma.



P. Phalguna
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Kesaw

Antiatherosclerotic Activity Of *Annona reticulata*



**PROJECT PROTOCOL SUBMITTED TO THE JAWAHARLAL NEHRU
TECHNOLOGICAL UNIVERSITY-HYDERABAD IN PARTIAL FULFILMENT
FOR THE AWARD OF THE DEGREE OF**

**MASTER OF PHARMACY
IN
(PHARMACOLOGY)**

Submitted by
MANTEPALLY PRASHANTH KUMAR (M.Pharm)
Regd. No .1717180107

Under the supervision of
Mrs. PASUPULATI. HARITHA,

**M.Pharm , Ph.D
Associate Professor
Department of Pharmacology**



**Bharat Institute of Technology (Pharmacy)
MANGALPALLY, HYDERABAD-501510**



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Jawahar Lal Nehru Institute of Technology



**Bharat Institute of Technology
Mangalpally, Ibrahimpatnam, Hyderabad-501510**

PROJECT PROTOCOL

2018-19

1.	Name of the Student	ASIYA SHAHNAZ
2.	Name of the Branch	Hospital & Clinical Pharmacy (HCP)
3.	Name of the Course	M. Pharmacy
4.	Registration Number	17171S0503
5.	Date of Submission of Protocol	
6.	Name of the Institutional Guide & Designation	Dr. SHIBNATH KAMILA Professor ; HOD- Hospital Pharmacy Bharat Institute of Technology - Pharmacy
	Name of the Institutional Co-Guide & Designation	Dr. M. KIRANMAI Professor; HOD-Pharmaceutical Chemistry Bharat Institute of Technology - Pharmacy
7.	Name of the Clinical Guide & Designation	
8.	Title of the Project Topic	A Prospective Evaluation of Anti-Inflammatory Activity of <i>Tinospora cordifolia</i> (Guduchi Ghana) extract loaded Silver Nanoparticles for treating Gouty Arthritis.
9.	<p>a) Does the study require any investigations or interventions to be conducted on patients or on animals? If so describe briefly. No, therapeutic interventions or investigations are required. Patients medical records will be reviewed and patients will be interviewed briefly for collecting the information about their medical and physical condition as required. Patient's site with the pain (joint) will be examined under supervision of registered medicinal practitioner with his consent and improvement before and after application of the GEL formulated.</p> <p>b) If Yes, to obtain the clearance within 3 months from the date of protocol submission: - NA</p>	
10.	Place of Study to be conducted: Bharat Institute of Technology & Dr BRKR Ayurvedic hospital.	



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INTRODUCTION:

Gout is an inflammatory joint disease, associated with an elevated uric acid level in blood which further leads to the deposition of urate crystals in the joints and kidneys followed by painful inflammation, gouty arthritis, and uric acid nephrolithiasis. Xanthine oxidase (XO) is responsible for oxidation of hypoxanthine to xanthine and finally xanthine to uric acid. Over activity of this enzyme and increased intake of dietary food rich in nucleic acids (e.g. meat, leguminous seeds) impair renal excretion of uric acid and result in hyperuricemia and gout [1].

Inflammation is the complex response of the immune system to infection and injury that leads to removal of offending factors and restoration of tissue structure and physiological function [12]. The symptoms of inflammation are characterized by pain, heat, redness, swelling and loss of function. It can be classified into two major types either acute or chronic, based on the duration of the inflammatory reaction. Though initiated as a protective phenomenon, loss of regulation of this complex process can lead to the development of various inflammatory disorders[2].

Another alternative method to develop newer anti-inflammatory agents with sustained release and better efficacy is the use of nanotechnology for drug development and delivery. Nanotechnology deals with the synthesis and fabrication of materials at the nanoscale level (1-100 nm). Among the various nanoparticles available, silver nanoparticles are gaining more importance due to their diversified biological properties and potential applications. Silver has been used since ancient times for the treatment of wounds and inflammation and nanoparticles of silver have been developed which have potent anti-inflammatory and anti-oxidant activities[2].

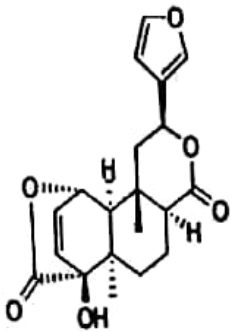
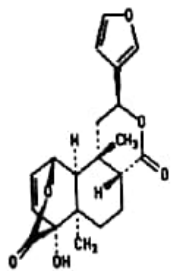
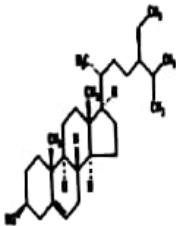
Silver nanoparticles can be synthesized by various physical and chemical methods, however they are costly, cumbersome and toxic to the environment. The use of biological systems as potential nanofactories has been widely explored as they are economical and eco-friendly. Plant extracts contain phyto-chemicals which aid in the reduction of the silver ions. The added advantage of using plants is that the alkaloids or also act as capping agents, thereby conferring the silver nanoparticles with additional pharmacological properties[2].

Tinospora cordifolia (commonly referred as Amrita or Guduchi) is a large, glabrous, climbing shrub indigenous to tropical Indian subcontinent and other Asian countries belonging to the family Menispermaceae. A variety of constituents have been isolated from *Tinospora cordifolia* from different parts such as alkaloids, diterpenoid lactones, steroids, glycosides, aliphatic compounds and polysaccharides. It is widely used especially for immune-modulatory, cardio-protective and hepato-protective. In Ayurveda, it has shown Anti-rheumatic, anti-gout activity, it has also shown beneficial effect in diabetic foot ulcers and allergic rhinitis[3].



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Plant Active Metabolites: -

S. No	ACTIVE CHEMICAL	STRUCTURE	ACTION	SAFETY REFERENCE
1.	Isocolumbin (<i>Tinospora cordifolia</i>)		Isocolumbin has both Anti-Inflammatory and anti-microbial activity. Both Isocolumbin and columbin has a significant anti-inflammatory activity.	M Rai, SS Gupta; J Res Ind Med., 1966, 10, 113-6. VK Pendse, AP Dadhich, PN Mathur, MS Bal Madam; Indian J Pharm Sci, 2000, 62, 257. CHEMISTRY AND MEDICINAL PROPERTIES OF TINOSPORA CORDIFOLIA (GUDUCHI)
2.	Columbin (<i>Tinospora cordifolia</i>)		Columbin possess anti-inflammatory, anti-tumor, and inhibition of enzyme activity.	M Rai, SS Gupta; J Res Ind Med., 1966, 10, 113-6. VK Pendse, AP Dadhich, PN Mathur, MS Bal Madam; Indian J Pharm Sci, 2000, 62, 257. CHEMISTRY AND MEDICINAL PROPERTIES OF TINOSPORA CORDIFOLIA (GUDUCHI)
3	β-sitosterol (<i>Tinospora cordifolia</i>)		glucocorticosteroid induced osteoporosis in early inflammatory arthritis.	M Rai, SS Gupta; J Res Ind Med., 1966, 10, 113-6. VK Pendse, AP Dadhich, PN Mathur, MS Bal Madam; Indian J Pharm Sci, 2000, 62, 257. CHEMISTRY AND MEDICINAL PROPERTIES OF TINOSPORA CORDIFOLIA (GUDUCHI)



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NEED OF THE STUDY:

The drugs used in inflammatory disorders may be either insignificant anti-inflammatory effects or mild to moderate anti-inflammatory activity. These drugs can cause gastric or intestinal ulceration that can sometimes cause secondary anemia including the liver damage to ultimate failure.

The present study is undertaken to synthesize silver particles using the aqueous extract of *Tinospora cordifolia* and to evaluate the silver nanoparticles for anti-inflammatory activity. Thus by synthesizing silver nanoparticles using *Tinospora cordifolia* extract, the potential advantages of phytomedicine and nanomedicine will be combined to result in a more enhanced and synergistic anti-inflammatory effect.

PATIENTS AND METHODS: -

AIM AND OBJECTIVE

AIM: - The aim of the study is Evaluation of Anti-Inflammatory Activity of *Tinospora cordifolia* (Guduchi Ghana) extract loaded Silver Nanoparticles for treating Gouty Arthritis.

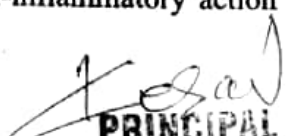
OBJECTIVE: -

1. Collection and authentication of plant by botanist.
2. To prepare plant extract and silver Nanoparticles loaded with plant extract
3. Characterization of silver Nanoparticles loaded with plant extract using UV-Visible spectroscopy , FTIR, X-RD, Zeta potential and scanning electron microscopy(SEM).
4. To prepare herbal gel formulation.
5. To conduct skin irritation test
6. To evaluate the efficacy of herbal gel formulation for anti-inflammatory action among the study population.

STUDY DESIGN

- A prospective open – label, non – randomized, outpatient-based, single centered study that will be carried out to determine the efficacy of drug for anti-inflammatory action among the study population.




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- Patients with C/O inflammation both Male and Female aged about (Male 30-50yr) and (Female pre and post menopause) will be selected in our studies and with their consent will be performed for 1 month using test (GEL) drug.
- The test ayurvedic GEL will be applied on their different joints (preferred) or region where inflammation is occurring and with necessary precautions.
- The data is will be collected from the different groups of patients after therapy.
- The result will be calculated by using statistical tools.

STUDY SITE: - Bharat Institute of Technology and Dr. B.R.K.R. government Ayurvedic hospital, Erragadda, Hyderabad, (T.S)

STUDY PERIOD: - The study was proposed to be conducted for the period of 6 months.

PREPARATION OF HERBAL GEL: -

Gel Formulation :

S.No	Ingredients
1.	Carbopol 934
2.	Glycerine
3.	Sodium carboxy methyl cellulose
4.	Silver Nanoparticles
5.	Preservatives (methyl paraben, propyl paraben)
6.	Distilled Water-vehicle (%)

Preparation of Herbal Gel Formulation:

Preparation of Extract:

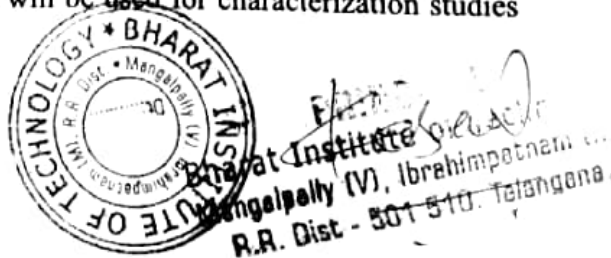
The stems of *Tinospora cordifolia* will be dried in hot air oven at 55°C for 20 min. The stems will be grinded mechanically to make powder.

☐ Preparation of hydro –alcoholic extract:

Powder (100g) will be defatted with petroleum ether and extracted with ethanol(95% v/v) with distilled water (80:20) using Soxhlet extraction apparatus. The filtrate obtain will be subjected to dryness at 100°C on water bath to give a residue.(4)

☐ Synthesis of silver nanoparticles:

To 100 ml of 1mM AgNO₃ solution, 1 gm of the aqueous extract *Tinospora cordifolia* will be added and the mixture will be kept in a magnetic stirrer for 2 hrs. The mixture will be then centrifuged at 3000 rpm for 10 min and the residue will be used for characterization studies



(UV-Visible spectroscopy, FTIR, X-RD, Zeta potential and scanning electron microscopy (SEM)).(6)

Preparation of Topical Gel :

200 ml — 1 gm
Herbal gel will be prepared using carbopol-934 as a gelling agent in 1% w/w concentration with deionized water using mechanical stirrer. With continuous stirring, other ingredients like glycerine will be added. 1 % w/w herbal extract will be added to the gel and stir for sufficient time homogeneous mixing of extracts in gel base. Further, the topical formulation will be evaluated with physicochemical evaluation (pH, viscosity, spreadability etc.). Prepare gel will be filled in collapsible tubes and stored at cool and dry place.(6)

Toxicity Studies:

Skin irritation test will be done on rabbits based on standard statistical tools.

INCLUSION CRITERIA:

- ☐ Patients both Male and Female, Men usually develop it between the ages of 30 and 50.
Women are more prone to gout after menopause
- ☐ Patient diagnosed with joint inflammation.
- ☐ Patient able to provide information consent by written or by oral modes.
- ☐ Patients who are not hospitalized (out-patient status)

EXCLUSION CRITERIA:

- ☐ Patients of Age < 18
- ☐ Impaired renal and hepatic function (creatinine ≥ 2.0 mg/dl)
- ☐ Lactating women/ patients.

EVALUATION PROCEDURE

Tools used

- Patients pro forma will be designed to collect the data in order to obtain information regarding the clinical efficacy of the Gel,
- The McGill Pain Questionnaire will be used to evaluate a person experiencing significant pain.
- The data of test drug will be analyzed for its comparative Anti-Inflammatory effects using statistical analysis.



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PLAN OF WORK

Protocol Preparation



Designing the patient data collection form.



Seeking permission for ethical committee.



Preparation of formulation.



Recruitment of study population of patients suffering with joint pain disorder.



Data collection & evaluation for the potency of drug on different age groups.



Calculation and statistical Evaluation.



Report and submission of Thesis



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A Prospective Evaluation of Anti-Inflammatory Activity of *Tinospora cordifolia* (Guduchi Ghana) extract loaded Silver nanoparticles for treating Gouty Arthritis

PATIENT DATA COLLECTION FORM

Patient Name: _____

Age _____ **Gender** _____ **Weight** _____

Date of Admission _____ **Address:** _____

Mob NO: _____

HISTORY: -

HISTORY OF PRESENT ILLNESS: -

PAST MEDICAL HISTORY: -

DRUGS USED PREVIOUSLY: -

FAMILY HISTORY: -

PATIENT ALLERGIC TO ANY SPECIFIC FOOD/SUBSTANCE/CHEMICAL



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EVALUATION OF PATIENTS

Questionnaires	Score before treatment	Score after 3 days treatment	Score after 7 days treatment
How Strong is Your Pain?			
How Does Your Pain Change with Time?			
Any precipitating factor increases or decreases Pain			
Progression of the pain with days after usage of gel			

*NOTE: - scores will be calculated based on McGill Pain Questionnaire

Interpretation:

- minimum pain score: 0 (would not be seen in a person with true pain)
- maximum pain score: 3
- The higher the pain scores the greater the pain.

Signature of participant

Signature of investigator



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Mangalpur, (V2), B.R. Road,
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INFORMED PATIENT CONSENT FORM

Subject identification number for this trial _____

Title of the Project:

Name of the Principal Investigator _____ Tel. No. _____

I have received the information sheet on the above study and have read and / or understood the written information.

I have been given the chance to discuss the study and ask questions.

I consent to take part in the study and I am aware that my participation is voluntary.

I understand that I may withdraw at any time without this affecting my future care.

I understand that the information collected about me from my participation in this research and sections of any of my medical notes may be looked at by responsible persons (ethics committee members / regulatory authorities). I give access to these individuals to have access to my records.

I understand I will receive a copy of the patient information sheet and the informed consent form.

Signature / Thumb Impression of subject

Date of signature

Printed name of the subject in capitals

Signature / Thumb Impression of legally
Accepted representative

Date of signature

Printed name of legally acceptable representative in capitals



[Handwritten signature]

Relationship of legally accepted representative to subject in capitals

Signature of the person conducting the
Informed consent discussion

Date of Signature

Printed name of the person conducting the
Informed consent discussion in capitals

Signature of impartial witness

Date of signature

Printed name of the impartial witness in capitals



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ANNEXURE -II

SHORT-FORM McGill PAIN QUESTIONNAIRE

Patient Name: _____

Age: _____

Weight: _____

Gender: _____

Cell No _____

Date: _____

PAIN PROSPECTIVE	NONE	MILD	MODERATE	SEVERE
THROBBING				
SHOOTING				
STABBING				
SHARP				
CRAMPING				
HOT-BURNING				
ACHING				
HEAVY				
TENDER				
TIRING-EXHAUSTING				
PUNISHINGCRUEL				

NO PAIN |-----| WORST POSSIBLE PAIN



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REFERENCES:-

- Indian medicinal plants useful in treatment of gout: A review for current status and future prospective, Bhupinder Kapoor, Gagandeep Kaur, Mukta Gupta, Reena Gupta. Vol 10, Issue 11, 2017
- Journal of Nanomedicine & Nanotechnology Published Date: February 08, 2015
Aparna Mani KM, Seethalakshmi S, Gopal V (2015) Evaluation of In-vitro Anti-Inflammatory Activity of Silver Nanoparticles Synthesised using Piper Nigrum Extract. J Nanomed Nanotechnology 6:268. doi:10.4172/2157-7439.1000268
- A Review on *Tinospora cordifolia*
*U. Spandana, Shaik Liakhat Ali, T.Nirmala, M.Santhi, SD. Sipai Babu
International Journal of Current Pharmaceutical Review and Research IJCPR, May-July 2013; 4(2); 61-68
- A review on urocosuric activity of *Tinospora cordifolia* Palak A. Shah and Gaurang B. Shah Bangladesh J Pharmacol 2015; 10: 884-890.
- M Rai, SS Gupta; J Res Ind Med., 1966, 10, 113-6.
VK Pendse, AP Dadhich, PN Mathur, MS Bal Madam; Indian J Pharm Sci, 2000, 62, 257. CHEMISTRY AND MEDICINAL PROPERTIES OF *TINOSPORA CORDIFOLIA* (GUDUCHI)
- Development and Evaluation of Gel Incorporated with Synthesized Silver Nanoparticle from *Ocimum gratissimum* for the Treatment of Acne Vulgaris
S Lakshmana Prabul*, A Umamaheswaril, S Rajakumar, PL Bhuvaneswaril and S Muthupetchi. Published 2017.



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Jawaharlal Nehru Institute of Technology



Bharath Institute of Technology – Pharmacy
Mangalpally, Ibrahimpatnam, Hyderabad – 501510
PROTOCOL FOR PROJECT STUDY
2018 – 2019

1.	Name of the Student	SYEDA NASMA FATIMA
2.	Name of the Branch	Hospital and Clinical Pharmacy (HCP)
3.	Name of the Course	M. Pharmacy
4.	Registration Number	17171S0508
5.	Date of Submission of Protocol Review	
6.	Name of the Institutional Guide and Designation	Dr. SHIBNATH KAMILA, PhD Associate Professor, HOD-Dept. of Pharmacy Practice Bharat Inst. of Technology
7.	Name of the Clinical Guide and Designation	
8.	Title of the Project Topic	A Prospective Clinical Study to Evaluate the Efficacy of Nootropic Hair Nourishment Oil.
9.	a) Does the study require any investigations or interventions to be conducted on patients or animals? If so describe briefly No, therapeutic investigations or interventions are required. It is a topical application as a form of hair oil. The effect will be evaluated based on interview about the beneficial action of the formulation.	
10.	Place of Study to be conducted: Bharat Institute of Technology and DR. B.R.K.R government Ayurvedic hospital and College, Erragadda, Hyderabad, Telangana.	



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Protocol

INTRODUCTION:

In Ayurvedic approach, falling of hair is coined out as in term of 'Khalitya'. "Medhya" is an Ayurvedic concept that implies intellect or wisdom. The word "Memory" refers to the faculty by which the mind stores and remembers information. It is the power or process of reproducing or recalling what has been learned and retained especially through associative mechanisms. Mild forgetfulness and short term memory loss are common complaints in people as they age.

Hair nourishment and grooming aids have become increasingly popular throughout the world. Preparations available in the market for men include hair creams, liquid brilliantines, pomades and solid brilliantines, tonics, lotions and conditioners and for women wave sets, hair sprays, special rinses and lotions, brilliantines and conditioners. There are number of herbal plants, utilized in hair care formulations.

Nootropics are class of cognitive enhancing supplement that improve concentration and boost memory. Nootropics are often used to increase attention spans, help individuals focus and as studying aids. Nootropics referred to as "smart drugs" as they are associated with increased intelligence, motivation, and mental energy.

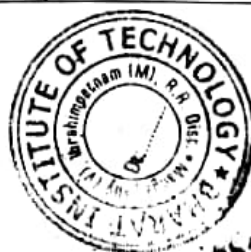
The objective of the study is to formulate hair nourishment oil applied topically which imparts hair growth, nourishment as well as improve memory and concentration by the incorporation of herbal drugs.

The ingredients used in the formulation of hair oil are *Phyllanthus emblica*, *Cinnamomum verum*, *Aloe vera*, *Sesamum indicum*, *Prunus dulcis*, *Cocos nucifera*, *Santalum album*, *Eclipta prostrate*, *Rosmarinus officinalis*. *Phyllanthus emblica* (Amla) is medhya nurturing for the mind and enhancing coordination among dhi (acquisition), dhriti (retention), and smriti (recall). It helps sharpen the intellect and mental functioning. It supports the nervous system and strengthens the senses. The researchers found that increased ingestion of cinnamon dramatically improved the memory of poor-learning mice. A study published in *Nutritional Neuroscience* found that *Aloe vera* reduced depression and improved memory in mice. Massaging your head with warm Sesame oil stimulates hair growth, controls dandruff, nourishes

the scalp. Almond have been proven to enhance brain functions, memory power and cognitive performance. A use of coconut oil is as a potential treatment for dementia and Alzheimer's disease. Sandalwood oil has been noted for its ability to boost the memory and support concentration, thereby reducing anxiety and stress. Bhringraj oil helps in maintaining the natural colour of hair. Rosemary stimulates cell division and dilates blood vessels and, in turn, stimulates hair into producing new hair growth.

Plant Active Metabolites:

S.NO	PLANT INGREDIENTS	ACTION
1.	<i>Phyllanthus emblica</i>	It is medhya nurturing for the mind and enhancing coordination among dhi (acquisition), dhriti (retention), and smriti (recall). It helps sharpen the intellect and mental functioning. It supports the nervous system and strengthens the senses.
2.	<i>Cinnamomum verum</i>	The researchers found that increased ingestion of cinnamon dramatically improved the memory of poor-learning mice.
3.	<i>Aloe vera</i>	A study published in <i>Nutritional Neuroscience</i> found that <i>Aloe vera</i> reduced depression and improved memory in mice.
4.	<i>Sesamum indicum</i>	Massaging your head with warm Sesame oil stimulates hair growth, controls dandruff, nourishes the scalp.
5.	<i>Prunus dulcis</i>	It have been proven to enhance brain functions, memory power and cognitive performance.



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6.	<i>Cocos nucifera</i>	Uses of coconut oil is as a potential treatment for dementia and Alzheimer's disease.
7.	<i>Santalum album</i>	Sandalwood oil has been noted for its ability to boost your memory and support concentration, thereby reducing anxiety and stress
8.	<i>Eclipta prostrata</i>	Bhringraj oil helps in maintaining the natural colour of your hair.
9.	<i>Rosmarinus officinalis</i>	It stimulates cell division and dilates blood vessels and, in turn, stimulates hair into producing new hair growth.

LITERATURE REVIEW:

1. Mani Vasudevan and Milind Parle (2007) study was aimed at investigating the effects of Anwala churna (*Emblica officinalis* Gaertn.), an Ayurvedic preparation on memory. ^[1]
2. Khushbu k. Modi et al (2016) Cinnamon Converts Poor Learning Mice to Good Learners: Implications for Memory Improvement. ^[2]
3. Sumita Halder et al (2013) *Aloe vera* improves memory and reduces depression in mice. ^[3]
4. Shijna Kappally et al (2015) COCONUT OIL – A REVIEW OF POTENTIAL APPLICATIONS. In the neurological disorder Alzheimer's disease (AD), memory loss and cognitive decline occurs because of death of brain cells. ^[4]
5. Zheng Feng et al (2004) Long-term effects of melatonin or 17 β -estradiol on improving spatial memory performance in cognitively impaired, ovariectomized adult rats. OVX Sprague-Dawley rats received daily injections of melatonin (5, 10 and 20 mg/kg) or 17 β -estradiol (E2, 80 μ wk. g/kg) or sesame oil for 16 wk. Morris water maze results showed that ovarian steroid deprivation resulted in spatial memory impairment, while

melatonin and E2 significantly ameliorated spatial memory deficits in OVX rats. These findings demonstrate the important effects of melatonin and E2 on cholinergic neurons and support the potential application of melatonin in the treatment of dementia in postmenopausal women. [5]

6. Zehra Batool et al (2016) Repeated administration of almonds increases brain acetylcholine levels and enhances memory function in healthy rats while attenuates memory deficits in animal model of amnesia. [6]
7. Songhee Jeon et al (2011) A modified formulation of Chinese traditional medicine improves memory impairment and reduces A β level in the Tg-APPswe/PS1dE9 mouse model of Alzheimer's disease. [7]
8. R. K. Roy et al (2008) Hair growth promoting activity of *Eclipta alba* in male albino rats. [8]
9. Panahi Y et al (2015) Rosemary oil vs minoxidil 2% for the treatment of androgenetic alopecia: a randomized comparative trial. The present study aimed to investigate the clinical efficacy of rosemary oil in the treatment of androgenetic alopecia (AGA) and compare its effects with minoxidil 2%. Patients with AGA were randomly assigned to rosemary oil (n = 50) or minoxidil 2% (n = 50) for a period of 6 months. In contrast, both groups experienced a significant increase in hair count at the 6-month endpoint compared with the baseline and 3-month endpoint (P < .05). [9]

NEED FOR STUDY:

The word "Nootropic" comes from the Greek for "to bend or shape the mind." The formulated hair oil is used to enhance memory, concentration and as well as for the hair growth. The effect of the formulated hair oil is good on the hair and memory.

The formulation has a beneficial effect on the human volunteers. It is also used as a preventive therapy for Alzheimer's disease and Dementia.

PATIENTS AND METHODS:

AIM: - To perform "A Prospective Clinical Study to Evaluate the Efficacy of Nootropic Hair Nourishment Oil."



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OBJECTIVE:

- Selection and Authentication of plant ingredients by the Botanist.
- Collection of the ingredients.
- To prepare the formulation using the ingredients.
- To perform toxicity studies in animals.
- To study drug efficacy of formulated hair nourishment oil for nootropic action and hair growth on healthy human volunteers.

STUDY DESIGN:

Single, blind, placebo, controlled, parallel, and randomized phase-1 clinical study.

STUDY SITE: BHARAT INSTITUTE OF TECHNOLOGY .

STUDY PERIOD: The study is proposed to be conducted for 6 months.

STUDY POPULATION: Around 30 healthy human volunteers for 15days and follow up.

ETHICS: The study is to be conducted as per ethical guidelines.

APPLICATION: As a hair oil.

PREPARATION OF MEDICATED OINTMENT:

FORMULATION:

Botanical Name	Common Name	Family	Part used	For 100 ml
<i>Phyllanthus emblica</i>	Amla, Indian gooseberry.	Phyllanthaceae	Powder from the fruits.	40%
<i>Cinnamomum verum</i>	Cinnamon	Laurels	Powder from the bark.	20%
<i>Aloe vera</i>	Indian Aloe	Asphodelaceae	Gel from the leaves.	40%
<i>Sesamum indicum</i>	Sesame	Pedaliaceae	Oil from the seeds.	30%

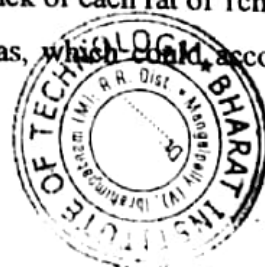
<i>Prunus dulcis</i>	Almond	Rosaceae	Oil from the fruits.	20%
<i>Cocos nucifera</i>	Coconut	Arecaceae	Oil from the fruits.	40%
<i>Santalum album</i>	Sandal wood	Santalaceae	Powder from the bark.	10%
<i>Eclipta prostrata</i>	Bhringraj	Asteraceae	Powder of the flower.	30%
<i>Rosmarinus officinalis</i>	Rosemary	Lamiaceae	Powder of the leaves.	10%

PREPARATION OF HERBAL HAIR OIL:

- Initially the drugs which are to be powdered are dried in the shade so that there will be no loss of the active metabolites for 48 hours.
- Then the drugs are powdered and passed through sieve number 100 to make it a fine powder of the drugs.
- The oil of all the other drugs is mixed together to form oil base.
- The powdered drugs are then added to the oily base to form a uniform mixture and heated on a water bath.
- Now allow the mixture to settle for 2 days and then again heat it on water bath.
- Sonication process is carried out after heating.
- Centrifugation is performed after this and the supernatant oil is collected after centrifugation.
- Transfer the formulated oil into a suitable container.

TOXICITY STUDIES:

The prepared formulation is assessed for primary skin irritation test. Six healthy rats were selected for the study. Each rat was caged individually food and water given during the test period 24 hrs prior to the test. The hair from the back of each rat of 1 cm² was shaved on the side of the spine to expose sufficiently large test areas, which could accommodate three test sites



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were cleaned with surgical spirit. Measured quantity (1ml) (5% w/w) of the formulations (OD1, OD2 and OD3) were applied over the respective test sites on one side of the spine and observed for erythema and edema for 48hrs after application.

INCLUSION CRITERIA:

- Study subjects should be > 18 years.
- Healthy human volunteers either male or female.
- Subjects who are willing to participate and signing informed consent form.
- Subjects who are not on any other memory enhancement therapy.
- Subjects who are ready to not to take any other medication during the course of the study unless there is serious illness or in case of emergency.

EXCLUSION CRITERIA:

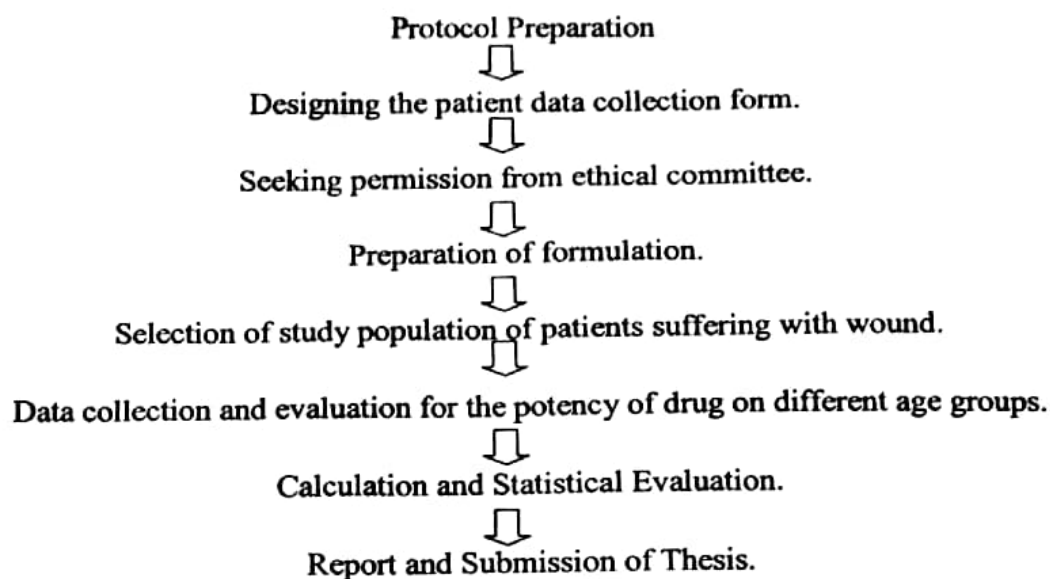
- Subjects below 18 years of age.
- Unhealthy human volunteers.
- Patients suffering from psychological problems.
- Subjects who are not willing to participate and not signing informed consent form.
- Pregnant women and lactating mother.
- Subjects who for at least 1 week prior to study have used any drugs, alcohol or indulge in smoking.

EVALUATION PROCEDURE

Tools Used

- Patient proforma is designed in such a way in order to obtain information regarding the clinical efficacy of formulated HERBAL HAIR OIL.
- The Questionnaire is used to evaluate the people.
- Data of test drug will be analyzed for its enhancement action in the memory and hair growth.

PLAN OF WORK



REFERENCE:

1. Mani Vasudevan and Milind Parle, Memory enhancing activity of Anwala churna (*Emblica officinalis* Gaertn.): An Ayurvedic preparation, Science Direct, 2007, 91, 46-54.
2. Khushbu K. Modi, Suresh B. Rangasamy, Sridevi Dasarathi, Avik Roy, Kalipada Pahan, Cinnamon Converts Poor Learning Mice to Good Learners: Implications for Memory Improvement, Journal of Neuroimmune Pharmacology, 2016, 11, 693-707.
3. Sumita Halder, Ashish k. Mehta, Pramod k. Mediratta, *Aloe vera* improves memory and reduces depression in mice, Nutritional Neuroscience, 2013, 16, 250-254.
4. Shijna Kappally, Arun Shirwaikar and Annie Shirwaikar, COCONUT OIL – A REVIEW OF POTENTIAL APPLICATIONS, *Journal of Drugs and Medicines*, 2015, 7, 149.



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5. Zheng Feng, Yong Cheng, Jun-tian Zhang, Long-term effects of melatonin or 17 β -estradiol on improving spatial memory performance in cognitively impaired, ovariectomized adult rats, *Journal of Pineal Research*, 2004, **37**, 198-206.
6. Zehra Batool, Sadia Sadir, Laraib Liaquat, Saiqa Tabassum, Syeda Madiha, Sahar Rafiq, Sumayya Tariq, Tuba Sharf Batool, Sadia Saleem, Fizza Naqvi, Tahira Perveen, Saida Haidar, Repeated administration of almonds increases brain acetylcholine levels and enhances memory function in healthy rats while attenuates memory deficits in animal model of amnesia, *Brain Research Bulletin*, 2016, **120**, 63-74.
7. Songhee Jeon, Shambhunath Bose, Jinyoung Hur, Kiyoungh Jun, Young-Kyoon Kim, Kyoung Sang Cho, Byung-Soo Koo, A modified formulation of Chinese traditional medicine improves memory impairment and reduces A β level in the Tg-APP^{swe}/PS1^{dE9} mouse model of Alzheimer's disease, *Journal of Ethnopharmacology*, 2011, **137**, 783-789.
8. R. K. Roy, Mayank Thakur, V. K. Dixit, Hair growth promoting activity of *Eclipta alba* in male albino rats, *Archives of Dermatological Research*, 2008, **300**, 357-364.
9. Panahi Y, Taghizadeh M, Marzony ET, Sahebkar A, Rosemary oil vs minoxidil 2% for the treatment of androgenetic alopecia: a randomized comparative trial, *Europe PMC Plus*, 2015, **1**, 15-21.

PATIENT INFORMED CONSENT FORM

Subject identification number for this trial _____

Title of the project:

Name of the principal investigator: _____ Tel. No. _____

I have received the information sheet on the above study and have read and / or understood the written information.

I have been given the chance to discuss the study and ask questions.

I consent to take part in the study and I am aware that my participation is voluntary.

I understand that I may withdraw at any time without this affecting my future care.

I understand that the information collected about me from my participation in this research and sections of any of my medical notes may be looked at by responsible persons (ethics committee members / regulatory authorities). I give access to these individuals to have access to my records.

I understand I will receive a copy of the patient information sheet and the informed consent form.

Signature/ Thumb impression of subject

Date of Signature

Printed name of the subject in capitals

Signature/ Thumb impression of the legally accepted representative

Date of Signature



[Signature]
Principal Investigator
Bharat Institute of Technology
Mangalpally (V), R.R. Dist. - 501 510, Telangana

A Prospective Clinical Study to Evaluate the Efficacy of Nootropic Hair Nourishment Oil

Name:	Age:	Date
Gender:	Address:	Mobile No.:
Body Temp:	Pulse Rate:	Blood Pressure:

Skin Rash: Yes ☐ NO ☐

GIT- Disturbance: Yes ☐ NO ☐

Life Style:

A. Food Habit:

Vegetarian ☐

Non-Vegetarian ☐

B. Exercise:

Yes ☐

No ☐

If yes How Long?

Education qualification:

S.S.C ☐

Intermediate ☐

Graduation ☐

Others :

Questionnaire:

➤ Have you had any prior memory instruction or training?

Yes

NO

IF yes, then what type of training you had undergone

.....

➤ What are your reasons for taking the workshop training?

.....

➤ How would you rate your memory in term of learning and adopting the situations?

Major problems

some minor problems

no problem



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2.	Memorize the squares test (online)			
3.	Olfactory test			
	➤ Smell test			
	➤ Taste buds test			
4.	Visual memory test			
	➤ Test 1			
	➤ Test 2			
5.	Mathematic calculation test			
6.	Telephone number test			

SHORT TERM MEMORY TEST

A list of 16 words will be given to the subject for 5 minutes and the subject will be asked to remember as many words as possible. After 5 minutes the subject will be asked to represent the words on a blank paper. Total number of words remembered by the subject is calculated.

List of words to be remembered:

Maze	Pencil	Balloon	Lunch box
Separate	Delicious	Chair	City
Pirate	Mistake	Traffic	Stairs
Cloth	Norway	Bamboo	Knob

Express the remembered words below in the give table:



Handwritten signature: T. esav
Bharat Institute of Technology
Mangalpally (V), Ibrahimpatnam
R.R. Dist - 501 510, Telangana

MEMORIZE THE SQUARES TEST (ONLINE)

About the test

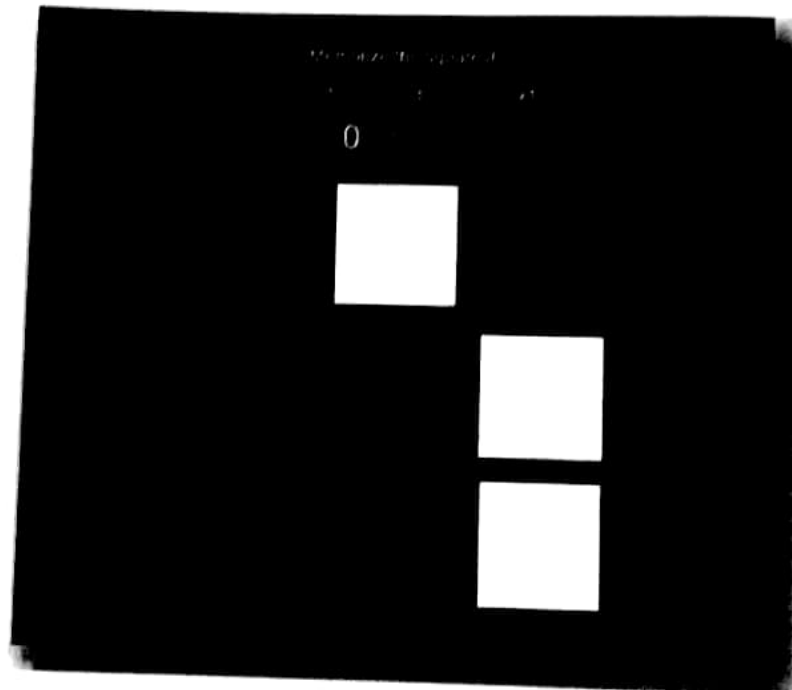
Every level, a number of tiles will flash white. Memorize them, and pick them again after the tiles are reset!

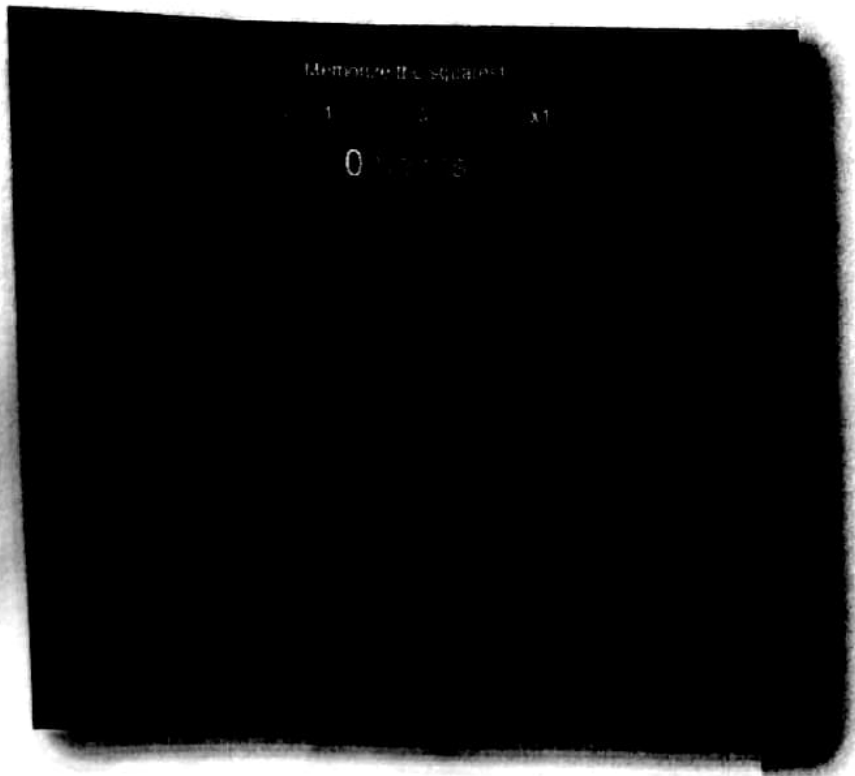
Levels get progressively more difficult, to challenge your skills.

Each click is scored by $\text{COMBO} \times \text{LEVEL}$.

If you miss a tile, the COMBO counter resets.

If you miss 3 tiles on a level, you go back one level, and lose one life.





Kesav

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TELEPHONE NUMBER TEST

Below provided telephone numbers are given to the subject for 5-10 minutes in order to memorize them.

After 5-10 minutes the subject is asked to recall the telephone numbers. The number of telephone numbers recalled correctly is noted.

S.NO	Name of Office	Telephone Number
1	Prime minister	040-28210186
2	Parliament house	040-27428936
3	Government of Telangana	040-233310521
4	Chief minister	040-25104891
5	District collector	040-25697158
EMERGENCY NUMBERS		
6	Fire station	040-81564723
7	Police station	040-61536485
8	Blood bank	040-85694235
9	Ambulance	040-85209306
10	Hospital	04025614824



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Mangalpally (Village), Ibrahimpatnam (Mandal), Ranga Reddy District – 501510.

CERTIFICATE

This is to certify that **CHINNI SRAVANI REDDY** Regd. No. **1317110023** has satisfactorily completed the course of Internship Practical in Krishna Institute of Medical sciences Ltd., which is in Memorandum of Understanding with our college as designed by PCI and submitted to JNTUH for course during the academic year 2018-2019.

[Signature]
22/2/19

Signature of Faculty

[Signature]

Head of the Department

Internal Examiner

[Signature]
22/2/19

External Examiner



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Mangalpally (Village), Ibrahimpatnam (Mandal), Ranga Reddy District - 501510.

CERTIFICATE

This is to certify that K . Harika Regd. No. 1317110011 has satisfactorily completed the course of Internship Practical in Krishna Institute of Medical sciences Ltd., which is in Memorandum of Understanding with our college as designed by PCI and submitted to JNTUH for course during the academic year 2018-2019.

Regd
22/2/19

Signature of Faculty

Regd
22/2/19

Head of the Department

Regd
22/2/19

Internal Examiner

Regd
22/2/19

External Examiner

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Regd
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R.R. Dist - 501 510, Telangana.



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Mangalpally (Village), Ibrahimpatnam (Mandal), Ranga Reddy District - 501510.

CERTIFICATE

This is to certify that RAASAM SAI JYOTHSNA Regd. No. 13171T0012
satisfactorily completed the course of Internship Practical in Krishna Institute of
Medical sciences Ltd., which is in Memorandum of Understanding with our
college as designed by PCI and submitted to JNTUHI for course during the
academic year 2018-2019.


22/2/19


Signature of Faculty


22/2/19

Head of the Department


22/2/19


Internal Examiner


22/2/19

External Examiner

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CERTIFICATE

This is to certify that **PITCHIKA SUBHADRA** Regd. No. 13171T0021 has satisfactorily completed the course of Internship Practical in Krishna Institute of Medical sciences Ltd., which is in Memorandum of Understanding with our college as designed by PCI and submitted to JNTUH for course during the academic year 2018-2019.

[Signature]
22/2/19

Signature of Faculty

[Signature]

Head of the Department

[Signature]
22/2/19

Internal Examiner

[Signature]
22/2/19

External Examiner

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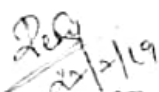
[Signature]
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Bharat Institute of Tech
Mangalpally (V), Ibrahimpatnam
R.R. Dist - 501 510. Tel




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Mangalpally (Village), Ibrahimpatnam (Mandal), Ranga Reddy District - 501510.

CERTIFICATE

This is to certify that **PITCHIKA SUBHADRA** Regd No 13171T0021 has satisfactorily completed the course of Internship Practical in Krishna Institute of Medical sciences Ltd., which is in Memorandum of Understanding with our college as designed by PCI and submitted to JNTUH for course during the academic year 2018-2019.


Signature of Faculty


Head of the Department


Internal Examiner


External Examiner

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Mangalpally (V), Ibrahimpatnam (M), R. R. District (AP) – 501510

(Approved by AICTE & PCI, New Delhi and Affiliated to JNTUH, Hyderabad)

V Yr Pharm D & II Yr Pharm D (PB) Project List (AY:2018-2019)

Batch No	Roll No.	Student Name	Institutional Guide Name	Hospital Guide Name
1.	Impact of intravenous proton pump inhibitors in prevention and management of upper GI bleeding in critical care unit.			
	14171T0010	K.Akshitha Reddy	Ms. Kiran Verma	Dr. Sethu Babu, MBBS (AU), MD (Int Med) (OU). DM (Gastroenterology)
	14171T0012	K.Sri Hasanthi		
2.	Comparision of clinical outcomes between cefaperazone + sulbactum, piperacillin + tazobactum as Empirical therapy in UTI.			
	14171T0004	A.Sai Bashitha	Mrs. B. Uma Rajeshwari	Dr.E. Ravi, MD, DM, Consultant Nephrologist
	14171T0026	Ch.Srinidhi		
3.	Comparitive clinical study of warfarin and rivaroxaban (newer anti-coagulant) in the treatment of Venous thromboembolism with respect to efficacy and side effects.			
	14171T0018	P.Trishanka Reddy	Ms. Ashwini	Dr. Shivaraju, MBBS, MD (Internal medicine), DIP.
	14171T0021	T.Sai Priya Reddy		
4.	Role of calcitrol in chronic kidney disease - mineral bone disorder in dialysis patients.			
	14171T0014	M.Roja	Mrs. Nirmala Bharathi	Dr.G. Diwakar Naidu, MBBS,MD, DM (Nephrology)
	14171T0020	S.Niharika Reddy		
5.	Effectiveness of fixed dose combination (ciclesonide, formoterol and tiotropium) therapy in the management of COPD.			
	14171T0007	D.Lakshmi Prasanna	Dr.Sneha.V.Reddy	Dr.V.V.Ramana Prasad, MBBS, MD (Pulmology)
	14171T0008	G.Nishitha Reddy		
6.	Deceased donor kidney transplant with ATG induction and triple immunosuppressive agents (Tacrolimus, MMF, Prednisolone)			
	14171T0011	K.Shobha	Dr.G.Suma Latha	Dr.Sreedhar Reddy, MD, DM, Consultant Nephrologist
	14171T0025	P.Sai Priya		
7.	Outcomes of living related kidney transplant recipient with triple immunosuppesants (tacrolimus, mycophenolate, corticosteroids) at 6 months post transplantation.			



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	14171T0017	P.Keerthi	Dr. Divya	Dr.Sreedhar Reddy, MD, DM, Consultant Nephrologist
	14171T0022	T.Akhila		
8.	Efficacy and safety of sacubitril/valsartan and valsartan on heart failure patients in tertiary care centre.			
	14171T0016	P.Sarika	Dr. Shibnath Kamila	Dr.Dayasagar Rao, MBBS, MD (Cardiology)
	14171T0027	S.Avani Prakash		
9.	Clinical effect of formoterol and glycopyrronium in copd patients.			
	14171T0009	J.Pravallika	Dr. T. Tesy	Dr.V.V.Ramana Prasad, MBBS, MD(Pulmology)
	14171T0019	G.Priyanka		
10.	Clinical spectrum of sodium glucose co transporter (SGLT2) inhibitors in dual or triple therapy in type II diabetes patients in tertiary care centre.			
	14171T0002	A.Bhavananjali	Dr. V. Sneha	Dr .Shiva Raju, MBBS, General Medicine
	14171T0003	A.Gayathri		
	14171T0023	G.Ram Charan		
	14171T0024	M.Sudesh		
12.	A project on safety and efficacy of cefoperazone - sulbactam and piperacillin - tazobactam in sepsis in medical intensive care unit.			
	14171T0001	A.Sravya Reddy	Dr. C. Kiranmai	Dr. Praveen Kumar Kulkarni, MBBS, MD, (General Medicine)
	14171T0006	Ch.Eeshitha		



Tesay
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**OUTCOME OF LIVING RELATED KIDNEY TRANSPLANT RECIPIENT
WITH TRIPLE IMMUNOSUPPRESSANTS (TACROLIMUS,
MYCOPHENOLATE, STEROIDS) AT 6 MONTHS POST
TRANSPLANTATION.**

PROJECT REPORT



Dissertation work submitted to Jawaharlal Nehru Technological University,
Hyderabad, in partial fulfillment of requirements for the degree of
Doctor of Pharmacy (Pharm.D)

Submitted by

P.KEERTHI (14171T0017)

T.AKHILA (14171T0022)

UNDER THE GUIDANCE OF

<u>Institutional Guide</u>	<u>Hospital Guide</u>
Dr. DIVYA KULKARNI Assistant Professor, PHARMLD BIT-Pharmacy	Dr.Sreedhar Reddy MBBS,DNB(Paed),DNB(Nephro) Consultant Nephrologist Department of Nephrology KIMS



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2018-2019



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PRINCIPAL
Bharat Institute of Technology
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Hyderabad - 501 510, Telangana.

IMPACT OF INTRAVENOUS PROTON PUMP INHIBITORS IN PREVENTION AND MANAGEMENT OF UPPER GASTRO INTESTINAL BLEEDING IN CRITICAL CARE UNIT.

PROJECT REPORT



Dissertation work submitted to Jawaharlal Nehru Technological University,
Hyderabad, in partial fulfillment of requirements for the degree of

Doctor of Pharmacy(Pharm.D)

Submitted by

KAKSHITHA REDDY (14171T0010)

K.SHRI HASANTHI (14171T0012)

UNDER THE GUIDANCE OF

Hospital Guide	Institutional Guide
Dr.Sethu Babu M.D. D.M. Senior consultant Department of gastroenterology KIMS hospital.	Ms. Kiran Verma Asst Professor Bharat Institute Of Technology (Pharmacy).



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2018-2019



Bharat Institute of Technology
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R.R. Dist - 501 040, Telangana.

COMPARISON OF THE CLINICAL OUTCOMES BETWEEN CEFOPERAZONE+SULBACTAM AND PIPERACILLIN+TAZOBACTAM AS EMPIRICAL THERAPY FOR URINARY TRACT INFECTIONS.

PROJECT REPORT



Dissertation work submitted to Jawaharlal Nehru Technological University,
Hyderabad, in partial fulfillment of requirements for the degree of

Doctor of Pharmacy(Pharm.D)

Submitted by

A.SAI BASHITHA (14171T0004)

CH.SRINIDHI (14171T0026)

UNDER THE GUIDANCE OF

Hospital Guide	Institutional Guide
Dr. E.RAVI M.D, D.M , Consultant Nephrologist Department of Nephrology KIMS hospital.	B. UMA RAJESHWARI Asst.Professor , Dept.Pharmaceutical biotechnology Bharat Institute Of Technology (pharmacy).



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2018-2019