



ASTER REPORT

JULY - 2026

VIVEKANANDHA PHARMACY COLLEGE

Sankagiri, Salem (Dt.) - 637303

SWAMY VIVEKANANDHA MEDICAL COLLEGE HOSPITAL AND RESEARCH INSTITUTE

Elayampalayam - 637 205, Tiruchengode, Namakkal Dt.,
website : svmchri.com, e-mail : svmchriadmissions@vivekanandha.ac.in



- Accident and Toxicology Emergency Care
- General Medicine
- Diabetology
- Cardiology
- Obstetrics and Gynecology
- Orthopedic Surgery
- General Surgery
- Pediatrics
- Physiotherapy & Rehabilitation
- Nephrology
- Ophthalmology
- Medical Oncology
- Radiology (CT / MRI / USG)
- ENT
- Obesity and Fitness Center
- Nutrition and Dietetics
- 24 hrs Cath Lab
- Laparoscopic Surgery
- Neurology
- Master Health Check - UP
- Dental Care



VIVEKANANDHA
MEDICAL CARE HOSPITAL

Elayampalayam, Tiruchengode Taluk, Namakkal Dist, Ph : 04288 - 224422, 7373100100



NABH Pre Accredited

24 Hours Emergency Cardiac Center



24 HOURS EMERGENCY
AMBULANCE CONTACT

☎ **7373 100 100**

Thiru Balaji Scan Centre, Allwin Diagnostics (P) Ltd.,

Main Campus : Elayampalayam, Tiruchengode, Namakkal Dt., Tamilnadu.

Branch : Tiruchengode Town.

Mail : care@vivekanandha.hospital / Web : vivekanandha.hospital





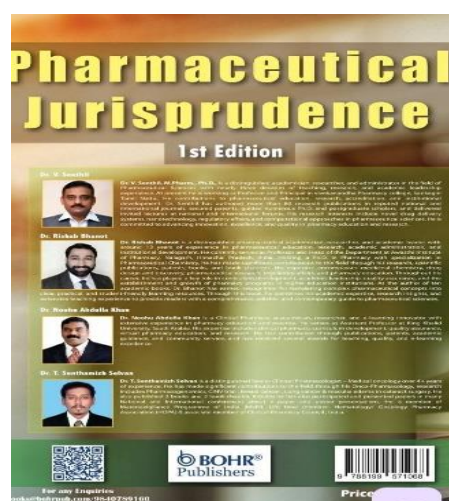
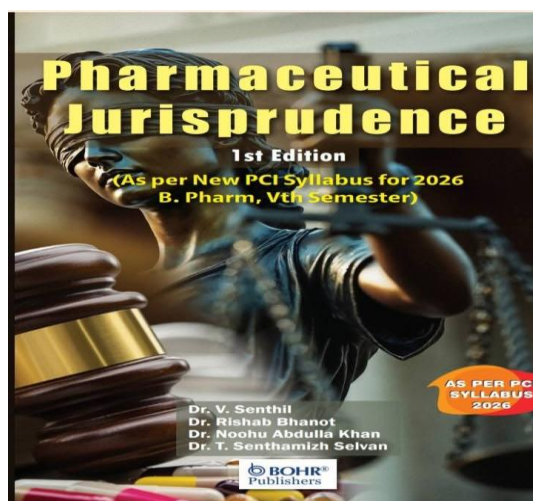
**VIVEKANANDHA PHARMACY COLLEGE
VEERACHIPALAYAM, SANKARI – 637 303**

JULY 2026 - ASTER MONTHLY REPORT

A – Academic Excellence-

- ✓ The **Department of Pharmacy Practice**, Vivekanandha Pharmacy College, Sankagiri, successfully organized an **International Seminar on Innovative Pharmacy Practice for the Era of Precision Healthcare** on 03rd July 2026 at the Auditorium, RTT Campus, Sankagiri. The seminar was conducted in association with The Tamil Nadu Dr. M.G.R. Medical University, Chennai and the Association of Pharmaceutical Teachers of India (APTI). The programme was accredited with **10 Continuing Education Programme (CEP) Credit Points from TNMGRU**, recognizing its academic significance and contribution to professional development.
- ✓ The Department proudly organized the **release** of the book **“Pharmaceutical Jurisprudence”** authored by Dr. V. Senthil, Principal, VPC along with the **launch** of its **Pharmacy Practice Newsletter, Clinical Insights (Volume 1, Issue 1)**, marking a significant milestone in promoting academic excellence, professional development, and the dissemination of knowledge in the fields of pharmacy practice, clinical therapeutics, and healthcare psychology. More than 600 participants took part in the event, making it a grand success.



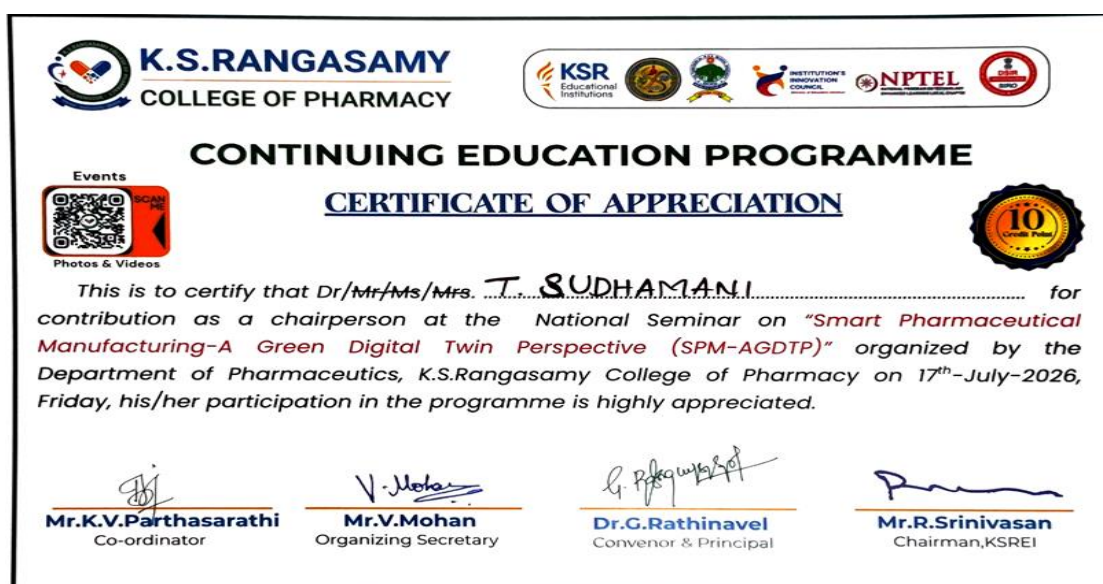


Dr V Senthil, Principal Published a Book entitled '*Pharmaceutical Jurisprudence*'
First Edition.

- ✓ **Dr. K. Krishnaveni** appointed as a reviewer for the Oral Case Presentation competition online mode organized by The Erode College of Pharmacy, Erode on 2nd July 2026.



- ✓ **Dr. T. Sudhamani** was honored as Chairperson in the One-day National Seminar on “Smart Pharmaceutical Manufacturing: A Green Digital Twin Perspective (SPM-AGDTP)” at K.S.Rangasamy College of Pharmacy, Tiruchengode on 17 July 2026.



- ✓ **Dr. T.Sudhamani** guided **V. Banupriya II** (B.Pharm IV Semester) secured the **3rd Prize** in the **E-Poster Presentation Competition** and received a **cash award of ₹1,000** during the event held at K.S.Rangasamy College of Pharmacy, Tiruchengode on 17 July 2026.

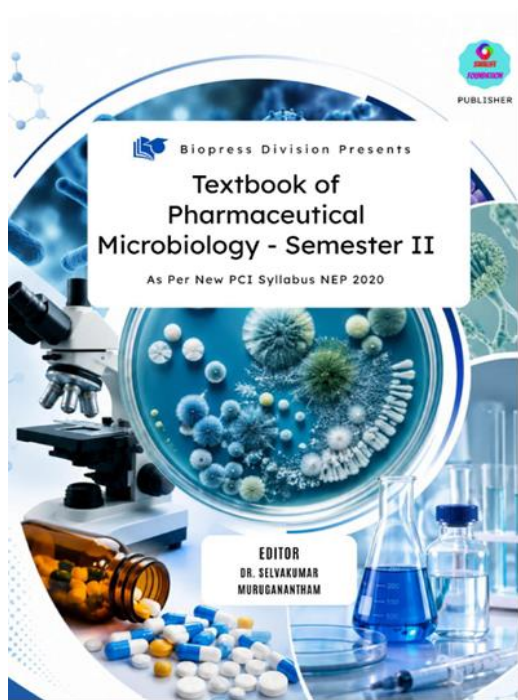


- ✓ **Mr. J. Dhanasekar** guided **Ms. Shehanas Banu A II** (B.Pharm IV-Semester) secured the **First Prize** in the **E-Poster Presentation Competition** and received a **cash award of ₹3,000** during the event held **Vellalar College of Pharmacy, Erode** from **15–17, July 2026**.



- ✓ All staff members of Pharmaceutics department (**Nandhakumaran Subramanian, Selvakumar Muruganantham, Lathamani Lakshmanan, Snehal Dasharath Pawar, Dhanasekar Jayakumar & Sudhamani Thangavel**) equally contributed & Published a Book entitled **“Textbook of Pharmaceutical Microbiology – Semester II”** (As per New

PCI Syllabus NEP 2020) with an ISBN Number: 978-93-49682-02-3 in Biopress Publications, Swalife Foundation, Pune, India.



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- ✓ **Dr.R.Thirumurthy** was invited has a **Evaluator for 1st International Conference on Oncology: Emerging Research and Innovation for Cancer Prediction and Prevention (ICON-CPP-2026)**, scheduled on 17th July 2026 at Vellalar College of Pharmacy, Erode.

✓



- ✓ **Mrs. K.Mounika and Mrs. L. Ramya** participated in and coordinated the VIII Semester B.Pharm students for the Hands-on Training Programme conducted at Swamy Vivekanandha College of Pharmacy, Tiruchengode on 22.07.2026.



S – Student-Centered

- ✓ All faculty members actively involved PCI registration for D.Pharm, B.Pharm & Pharm D students
- ✓ **Dr. T. Sudhamani & Mr. J. Dhanasekar** successfully attended **one day seminar** for **47 students of II (B.Pharm IV Semester)** to attend and **9 students** were presented various **e-poster** on innovative pharmaceutical research topics during on “Smart Pharmaceutical Manufacturing: A Green Digital Twin Perspective (SPM-AGDTP) at ”**K.S.Rangasamy College of Pharmacy, Tiruchengode** on 17 July 2026.



- ✓ **Mr. J. Dhanasekar** successfully organized a **GPAT Guidance Session** for B.Pharm students. The session was delivered by **Mrs. Pavithra Elangovan**, providing valuable guidance on GPAT preparation, examination strategies, and career opportunities in pharmacy on **24 July 2026**.



- ✓ **Dr. C. Arokiarani & Dr. P. Dineshkumar** taken responsibility and took students for HPV 2nd dose vaccination drive on 22.07.2026 & 24.07.2026.
- ✓ The **Department of Pharmacognosy**, Vivekanandha Pharmacy College, Sankagiri, organised a guest lecture on 10 July 2026 at 10.00 AM in the seminar hall. The lecture topic was **“Innovation in Herbal Cosmetics: From Traditional Herbs to Modern Personal Care Products.”**

SANKAGIRI VIVEKANANDHA PHARMACY COLLEGE
Veerachipalayam, Sankagiri, Salem (DT) - 637 303

Department of Pharmacognosy organises a
Guest Lecture on
**Innovation in Herbal cosmetics:
From Traditional Herbs to
Modern Personal Care products**

Speaker
Ms.Brindha Sakthivel
Research Associate
Analytical Research & Development
Himalaya Wellness Company
Bangalore

Presided by
Prof. Dr. M. KARUNANITHI, B.Pharm., M.S., Ph.D., D.Litt.,
Chairman & Secretary
Vivekanandha Educational Institution
Tiruchengode, Sankagiri, More Palayam

CONVENER
Dr. V.SENTHIL M.Pharm., Ph.D
Principal

ORGANISING SECRETARY
Dr. K. RAJENDRAN M.Pharm, Ph.D
Professor & Head
Department of Pharmacognosy

JULY 10, 2026, FRIDAY
SEMINAR HALL, VPC
@ 10.00 AM

" We Welcome you All "



- ✓ **Mr. N. Parthiban** has organized the pharmacy students to participate in *Inter college Sports completion* event held on 23/07/2026 and 24/07/2026 in United Pharmacy college at Coimbatore.

- ✓ **Mrs.V.Srividhya, Mr.S.Sakthisundaram, Mr.A.Dineshkumar** has attended the Two days International Conference ICON-CPP-2026 at **Vellalar College of Pharmacy** on 23.07.2026 & 24.07.2026



✓ T – Teaching / Training / Technology

- ✓ **Ms. L. Lathamani** had successfully completed **6 days webinar in Important Power BI Skills** on 13.07.2026 – 18.07.2026 conducted by **Novitech R&D Private Limited** & workshop on **Scientific Data Plotting** on 26.06.2026 organized by **MetaChem Academy**.



- ✓ **Mr. J. Dhanasekar** successfully completed the 2 days workshop on Prompt engineering for healthcare and drug discovery conducted on 27-28 July 2026



- ✓ **Dr. P. Dineshkumar, Dr. S. Ruban & Dr. R. A. Hirija, Mr. R.Mouleeswaran, Mr.A.Dineshkumar** attended a Faculty Development Program (FDP) on the topic **"Transforming Pharmacy Education through Artificial Intelligence, Digital Innovation and NEP 2020: Strategies for Academic Excellence"** conducted at Prime College of Pharmacy, Kerala, on **27.07.2026 – 31.07.2026**.



- ✓ **Mrs. K.Mounika**, has participated as a delegate in the National Online Faculty Development Programme (FDP) Series titled **"Sampling strategies and bias control in clinical research and Making sense of Data: Raw numbers to meaningful insights"**, organized by the SRM College of Nursing, SRM Institute of Science and Technology, on 08th July 2026.



E – Education / Extension

- ✓ **Ms. L. Lathamani** had successfully completed **One month internship in Data Analytics, Artificial Intelligence and Machine Learning** from June 22nd to July 22nd 2026 at **Novitech R&D Private Limited**.



R – Research / Responsibility

- ✓ **Dr. M. Selvakumar Muruganantham** actively published **6 book chapters** as First and Corresponding Author in **Advances in Targeted Therapies, Volume II, Chapter number 18-23**, published by Academic Decipher (May 2026). Pp 124-245. ISBN: 978-81-686413-7-2;
1. **Virosome:** Versatile Nanocarriers for Therapeutics and Vaccine Development
 2. **Fast Disintegrating Oral Films:** An Emerging Platform for Rapid Drug Delivery
 3. **Electrospun Nanofibers:** Innovations in Drug Delivery and Biomedical Applications

4. **Spanlastics:** Advanced Elastic Nanovesicles as a Versatile Platform for Enhanced Drug Delivery
5. **Archaeosomes:** Next-Generation Vesicular Drug Delivery Systems
6. **A Comprehensive Review on Transferosomes:** A Promising Vesicular Drug Delivery System

- ✓ **Dr. M. Selvakumar Muruganantham** actively published a research article entitled “Stability indicating RP-HPLC method for the estimation of NSAIDs based formulation”, Bulletin of Pharmaceutical Research, Vol. 15, No. 2, pp. 192-198.
- ✓ **Dr. M. Selvakumar Muruganantham** actively published a review article entitled “Critique Review on Quinoline Fused Pyrazoline in Medicinal Chemistry Studies” as Co-author, authored by G. Muthuboopathi, P. Pushpavalli, M. Selvakumar, S. Ranjini, P.T. Venkatachalam, P. Parthiban, K. Rubasri, and R. Sharmila, in Transformative Medical Materials, Vol. 1, Article No. 100004, 2026.
- ✓ **Dr. M. Selvakumar Muruganantham** actively published a research article entitled “Microwave Assisted Synthesis and *In-vitro* Anti-inflammatory Evaluation of Mannich Base-Derived Pyrazolone Analogues” as Co-author, authored by Muthuboopathi G, Selvakumar M, Dhanasekar J, Venkatachalam T, Balan P, Parthiban P, Vinothkumar S, and Sattanathan K, in *International Journal of Drug Delivery Technology (IJDDT)*, Volume 16, Issue 68s, 1394-1403, 2026.
- ✓ **Dr. M. Selvakumar** actively contributed as an Invited Reviewer for “Bio NanoScience” & “Recent Patents on Nanotechnology” Journal – Springer Nature on 31.07.2026.



- ✓ **Dhanasekar J, Vanisri V, Snehal Dasharath Pawar, Lathamani L, Ruban S, Nandhakumaran S. Recent Advances in Molecular Medicine: From Gene Therapy to Personalized Therapeutics. Journal of Chemical Health Risks. 2026;16(4):3285–3312. ISSN: 2251-6727.**

Journal of Chemical Health Risks

www.jchr.org

JCHR (2026) 16(4), 3285-3312 | ISSN: 2251-6727

Recent Advances in Molecular Medicine: From Gene Therapy to Personalized Therapeutics

Dhanasekar J¹, Vanisri V², Snehal Dasharath Pawar³, Lathamani L¹, Ruban S¹, Nandhakumaran S¹

¹Assistant Professor, Department of Pharmacaceutics, Vivekanandha Pharmacy College, Veerachipalayam, Sankari, Salem, Tamil Nadu, India- 637 303, affiliated to The Tamil Nadu Dr. M.G.R. Medical University, Chennai, Tamil Nadu, India.

²Student, Vivekanandha Pharmacy College, Veerachipalayam, Sankari, Salem, Tamil Nadu, India- 637 303, affiliated to The Tamil Nadu Dr. M.G.R. Medical University, Chennai, Tamil Nadu, India.

³Assistant Professor, Department of Pharmacy practice, Vivekanandha Pharmacy College, Veerachipalayam, Sankari, Salem, Tamil Nadu, India- 637 303, affiliated to The Tamil Nadu Dr. M.G.R. Medical University, Chennai, Tamil Nadu, India.

Address for Correspondence -

Dhanasekar J, Assistant Professor, Department of Pharmacaceutics, Vivekanandha Pharmacy College, Veerachipalayam, Sankari, Salem, Tamil Nadu, India- 637 303

(Received: 08 April 2026)

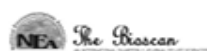
(Revised: 29 May 2026)

(Accepted: 17 July 2026)

KEYWORDS: Molecular medicine, Gene therapy, Personalized therapeutics, Genome editing, Molecular Nanobots.	ABSTRACT: Over the past decade, molecular medicine has transformed disease understanding and treatment through advances in molecular biology, genomics, and drug delivery technologies. This review highlights recent progress in gene therapy and personalized therapeutics while critically examining the challenges limiting their clinical application. Significant developments include efficient viral vectors such as adeno-associated viruses and lentiviruses, along with safer non-viral vectors including lipid nanoparticles and polymer-based carriers. However, issues related to delivery efficiency, tissue specificity, immunogenicity, and long-term safety remain. Genome-editing technologies, particularly CRISPR/Cas, have editing, and prime editing, enable precise correction of disease-causing mutations, although off-target effects and ethical and regulatory concerns continue to restrict widespread use. Pharmacogenomics, precision oncology, and targeted drug delivery systems have advanced personalized treatment based on individual genetic and molecular characteristics, but high costs, data complexity, and patient privacy concerns remain significant barriers. Emerging technologies such as nanogenetics engineering, bioinformatics, artificial intelligence, organoid models, and mRNA platforms have enhanced disease modeling, biomarker discovery, and therapeutic design, although further validation and regulation are required for routine clinical implementation. Future efforts are expected in nanogenetics gene editing, personalized vaccines, AI-assisted clinical decision-making, and nanomedicine-based targeting, supporting more precise, patient-centered healthcare while addressing technical, ethical, and economic challenges.
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- ✓ **Lathamani L, Poornima A, Ranjinisri C, Dhanasekar J, Snehal Dasharath Pawar, Arvinthkumar R, Arokia Rani C, Hirija R A.** Medicinal Plants used in the management of PCODS. The Bioscan. 2026;21(2): S.I(2), 21529-21557. DOI: [https://doi.org/10.63001/tbs.2026.v21.i02.S.I\(2\).pp21529-21557](https://doi.org/10.63001/tbs.2026.v21.i02.S.I(2).pp21529-21557) .

(ISSN: 0973-7049(P))



21(2): S.I(2), 21529-21557 2026

www.thebioscan.co

MEDICINAL PLANTS USED IN THE MANAGEMENT OF POLYCYSTIC OVARY SYNDROME (PCOD)

Lathamani L^{1*}, Poornima A¹, Ranjinisri C¹, Dhanasekar J¹, Snehal Dasharath Pawar¹, Arvinthkumar R², Arokia Rani C², Hirija R A²

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DOI: [https://doi.org/10.63001/tbs.2026.v21.i02.S.I\(2\).pp21529-21557](https://doi.org/10.63001/tbs.2026.v21.i02.S.I(2).pp21529-21557)

KEYWORDS

Polycystic Ovary Syndrome (PCOS),
Insulin Resistance,
Hormonal Imbalance,
Hyperandrogenism.

Article Info

Received: 24.06.2026

Accepted: 09.05.2026

Published: 19.05.2026

Abstract

PCOS or polycystic Ovary Syndrome is also known as polycystic ovarian disease (PCOD) and is a common endocrine disease that afflicts women of the child-bearing age. Diagnosis of the disorder involves the imbalance of hormones, abnormal ovulation, hyperandrogenism and the presence of numerous cysts in the ovaries. Common symptoms of PCOS include irregular menstrual cycles, infertility, obesity, acne, and excessive hair growth (hirsutism). Besides the reproductive issues, PCOS is typically linked with a metabolic disorder comprising insulin resistance, dyslipidemia and increased probability to develop type-2 diabetes and heart diseases. The existing modalities of managing PCOS are largely based on the management of the symptoms with the help of hormonal therapy, insulin-sensitizing drugs as well as lifestyle modification. However, the drugs may be counter-productive in the long-term and may fail to cure the underlying metabolic abnormalities completely. This has also raised more interests in the use of the medicinal plants as alternative/supplementary therapy in the treatment of the PCOS. Medicinal plants have penetrated into the systems in traditional medicine because of their diversity in terms of their pharmacological effects. Endocrine functions, insulin sensitivity, reduction of oxidative stress and normalization of ovarian activity can be controlled by the use of such plants. It is reported that some of the herbs like Withania somnifera, Trigonella foenum-graecum, Mentha spicata, Glycyrrhiza glabra, Linum usitatissimum, Nigella sativa and Gymnema sylvestre and Ocimum satum have been found to have a positive effect on the treatment of PCOS. The current review shows the potential pharmacological utility of therapeutic un-modified medicinal plants of interest that can be applied in the treatment of women with PCOS to enhance their reproductive and metabolic health.

- ✓ **PATENT:** The Indian Patent Application and it was cited as: *Mounika K, Mohanapriya Karthikeyan, Snehal Dasharath Pawar, Lathamani L, Dhanasekar J, Arvinthkumar Rathnakumar, S. Sivashankari, H. Gomathy, K. Anu Sahaya Supria, Dhineshmani M, S. Jesima Begam, C. Nithya Darsini.* Herbal Pulmonary Aerosol System for CPR Prevention in Ischemic Heart Disease. Indian Patent Application Publication No. 202641077967 A. Application filed on 24 June 2026; Published on 03 July 2026.

MEDICINAL PLANTS USED IN THE MANAGEMENT OF POLYCYSTIC OVARY SYNDROME (PCOD)

Lathamani L¹, Poornima A¹, Ranjini C¹, Dhanasekar J¹, Snehal Dasharath Pawar¹, Arvinthkumar R¹, Arukia Rani C², Hirija R A¹

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DOI: [https://doi.org/10.60001/absc.2026.v21.02.S.1\(2\).pp21529-21557](https://doi.org/10.60001/absc.2026.v21.02.S.1(2).pp21529-21557)

KEYWORDS	Abstract
Polycystic Ovary Syndrome (PCOS), Insulin Resistance, Hormonal Imbalance, Hyperandrogenism	PCOS or polycystic Ovary Syndrome is also known as polycystic ovarian disease (PCOD) and is a common endocrine disease that affects women of the child-bearing age. Diagnosis of the disorder involves the imbalance of hormones, abnormal ovulation, hyperandrogenism and the presence of numerous cysts in the ovaries. Common symptoms of PCOS include irregular menstrual cycles, infertility, obesity, acne, and excessive hair growth (hirsutism). Besides the reproductive issues, PCOS is typically linked with a metabolic disorder comprising insulin resistance, dyslipidemia and increased probability to develop type-2 diabetes and heart diseases. The existing modalities of managing PCOS are largely based on the management of the symptoms with the help of hormonal therapy, insulin-sensitizing drugs as well as lifestyle modification. However, the drugs may be counter-productive in the long-term and may fail to cure the underlying metabolic abnormalities completely. This has also raised more interests in the use of the medicinal plants as alternative/supplementary therapy in the treatment of the PCOS. Medicinal plants have penetrated into the systems in traditional medicine because of their diversity in terms of their pharmacological effects. Endocrine functions, insulin sensitivity, reduction of oxidative stress and normalization of ovarian activity can be controlled by the use of such plants. It is reported that some of the herbs like Withania somnifera, Triptanella foenum-graecum, Morinda spicata, Glycyrrhiza glabra, Laurus saccatussumum, Nigella sativa and Gymnema sylvestre and Ocimum sativum have been found to have a positive effect on the treatment of PCOS. The current review shows the potential pharmacological utility of therapeutic un-modified medicinal plants of interest that can be applied in the treatment of women with PCOS to enhance their reproductive and metabolic health.
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(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :24/06/2026

(21) Application No.202641077967 A

(43) Publication Date : 03/07/2026

(54) Title of the invention : HERBAL PULMONARY AEROSOL SYSTEM FOR CPR PREVENTION IN ISCHEMIC HEART DISEASE

(51) International classification	(71) Name of Applicant :
(31) Priority Document No	1) Mrs. Mounika K
(32) Priority Date	Address of Applicant :Associate Professor, Vivekanandha Pharmacy College, Sunkari, Salem, Tamil Nadu, Pincode:- 637303 Tamil Nadu India
(33) Name of priority country	2) Mrs. Mohanapriya Karthikeyan
(86) International Application No	3) Mrs. Snehal Dasharath Pawar
Filing Date	4) Ms. Lathamani L
(87) International Publication No	5) Mr. Dhanasekar J
(61) Patent of Addition to Application Number	6) Dr. Arvinthkumar Rathnakumar
Filing Date	7) Mrs. S. Sivasankari
(62) Divisional to Application Number	8) Ms. H. Gomathy
Filing Date	9) Dr. K. Ann Sahaya Supria
	10) Mr. Dhineshmani M
	11) Mrs. S. Jesima Begam
	12) Mrs. C. Nibhya Darsini
	(72) Name of Inventor :
	1) Mrs. Mounika K
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	3) Mrs. Snehal Dasharath Pawar
	4) Ms. Lathamani L
	5) Mr. Dhanasekar J
	6) Dr. Arvinthkumar Rathnakumar
	7) Mrs. S. Sivasankari
	8) Ms. H. Gomathy
	9) Dr. K. Ann Sahaya Supria
	10) Mr. Dhineshmani M
	11) Mrs. S. Jesima Begam
	12) Mrs. C. Nibhya Darsini

(57) Abstract :

The present invention provides a novel herbal pulmonary aerosol system comprising chitosan nanoparticles loaded with ethanolic extract of Matti banana for rapid cardioprotective intervention. The herbal extract contains flavonoids, polyphenols, catechins, and other antioxidant compounds demonstrating antioxidant, anti-inflammatory, endothelial protective, nitric oxide-enhancing, and vasodilatory activities. Nanoparticles with mean diameter of 320 nanometers were formulated using ionic gelation technique, achieving 82 percent entrapment efficiency and 38 percent drug loading. The nanoparticles were incorporated into aerosol systems achieving 72 percent fine particle fraction suitable for deep lung deposition. In vitro studies demonstrated potent antioxidant capacity with IC50 of 22 micrometers per milliliter, dose-dependent vasodilatory activity with 65 to 72 percent maximal relaxation, cytocompatibility with cardiomyocytes and lung epithelial cells maintaining greater than 80 percent viability, and capacity to protect cardiomyocytes from hypoxia-induced death by 51 percent.

No. of Pages : 24 No. of Claims : 10

The Patent Office Journal No. 27/2026 Dated 03/07/2026

80470

✓ **Ms. Snehal Dasharath Pawar and Mr. J. Dhanasekar** actively participated in the **SSTSI Review Competition – June 2026**, organized by the **Swalife Society for Translational Science & Innovation (SSTSI)** and **Swalife Foundation** in collaboration with **Biopress Journals**. The competition recognized contributions to scientific writing and research excellence.



- ✓ **Dr. R. Arvinthkumar and Mrs. K.Mounika**, published a paper “Drug Repurposing: Expanding Therapeutic Potential of Existing Drugs” in **The Bioscan an International Quarterly Journal of Life Science** on 17.07.2026.



- ✓ **Dr. P. Dineshkumar, Mr.R.Mouleeswaran*, Mr. S.Sakthisundaram, Mr. A. Dineshkumar, Mr. S. Prithivirajan** published a paper “A Wound Healing Potential of 5-Amino Salicylic Acid by Tissue Regeneration of Using Excision Wound Model in Albino Wistar Rat” in **YMER** on the month of **July**.



- ✓ **Mrs. Athmika N** had done patent work on Method for real-time cognitive load monitoring in workplace environments and published on 17/07/2026.

(12) INDIAN PATENT APPLICATION

(54) Title: Method for real-time cognitive load monitoring in workplace environments	
(51) International Classification: A61B 5/00, A61B 5/024, G06N 3/08, A61B 5/026 G06N 3/04	(71) Name of Applicant(s): 1. Ms. Chanchal Sharma, 2. Mr. Sachin Verma, 3. Dr. Chandra Sekar T, 4. Dr. Sakshi Someja, 5. Ms. Athmika N, 6. Dr. Deeksha Agrawal, 7. Dr. Sahmika Sridhar, 8. Dr. Suigtha Varsha,
(21) Application No: 202611067894	(72) Name of Inventor(s): 1. Ms. Chanchal Sharma 2. Mr. Sachin Verma 3. Dr. Chandra Sekar T 4. Dr. Sakshi Someja 5. Ms. Athmika N 6. Dr. Deeksha Agrawal 7. Dr. Sahmika Sridhar 8. Dr. Suigtha Varsha
(31) Priority Document No: --	
(32) Priority Date: --	
(86) International Application No: --	
Filing Date: --	
(87) International Publication No: --	
(61) Patent of Addition to Application No: --	
Filing Date: --	
(62) Divisional to Application No: --	
Filing Date: --	

(57) Abstract:

The present invention discloses a method and system for real-time cognitive load monitoring in workplace environments using multimodal sensor data and ensemble machine learning classification. The system acquires continuous physiological data from wearable sensors including photoplethysmography and electrodermal activity, behavioural data from desktop interaction monitoring including keystroke dynamics and mouse movements, and environmental context data from ambient sensors. A temporal synchronisation engine aligns heterogeneous data streams into analysis windows from which comprehensive feature vectors are extracted. An ensemble classifier comprising parallel convolutional neural network and long short-term memory network branches with attention-weighted fusion classifies cognitive load into four levels. The system incorporates transfer learning with individual personalisation, computes a continuous Cognitive Load Index, and generates context-aware alerts through a three-tier escalation protocol. Privacy preservation is achieved through on-device processing of raw data and differential privacy mechanisms.

- ✓ Mrs. K.Mounika, R.Thirumurthy, K.Mohanapriya, Department of pharmaceutical chemistry, Corresponding authored a review article titled “**Role of Honeybee Venom in Treatment of Various Diseases and Disorders**”, which was published in “International Journal of Creative and Open Research in Engineering and Management”, Volume-2 , Issue 7,July 2026.



- ✓ Mrs. K.Mounika, Associate professor, Department of pharmaceutical chemistry, Corresponding authored a review article titled “**Bridging the Gap between Pharmacy**”

Education and NHS Workforce Needs”, which was published in “ Biopress Journal Of Computational Life Sciences”, Volume-2 , Issue 6,July 2026.



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Bridging the Gap between Pharmacy Education and NHS Workforce Needs

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Abstract

The transformation of pharmacy practice within the National Health Service (NHS) demands a workforce equipped with advanced clinical, prescribing, and digital competencies. However, disparities persist between traditional pharmacy education and contemporary workforce requirements. This article critically examines these gaps and proposes evidence-based strategies, including curricular reform, experiential learning, interprofessional education, and policy alignment, to bridge the divide between academia and practice.

Keywords: Pharmacy education, National Health Service workforce, Clinical pharmacy, Pharmacist prescribing, Healthcare workforce development, Interprofessional education, Experiential learning, Curriculum reform, Digital health, Telepharmacy, Competency-based education, Primary care pharmacy, Medicines optimization, Healthcare policy, Workforce transformation, Patient-centered care

1. Introduction

The role of pharmacists has evolved significantly from dispensing medications to delivering patient-centered clinical care. NHS workforce strategies emphasize integrating pharmacists into multidisciplinary teams and expanding their responsibilities to primary care settings. Recent reforms highlight the need for pharmacists to be practice-ready upon registration, including prescribing competencies and clinical reasoning skills. However, educational systems have been slow to fully align with these expectations.

2. Evolution of Pharmacy Roles in the NHS

Pharmacists now contribute to:

- Medicines optimization
- Independent prescribing
- Chronic disease management
- Public health interventions
- Clinical decision-making

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✓ Mrs. K.Mounika, R.Thirumurthy, K.Mohanapriya, Department of pharmaceutical chemistry, Corresponding authored a review article titled “Early Prediction of Cardiac Diseases Using Artificial Intelligence, Mattibanana Extract, Molecular Docking, and Novel Drug Formulation”, which was published in, Volume-2 , Issue 6,July 2026.



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Early Prediction of Cardiac Diseases Using Artificial Intelligence, Mattibanana Extract, Molecular Docking, and Novel Drug Formulation

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Abstract

Cardiovascular diseases (CVDs), including myocardial infarction and angina pectoris, are major causes of global mortality and morbidity. Early diagnosis, lifestyle changes, stress, diabetes, hypertension, and hyperlipidemia significantly increase cardiac risk. Early prediction and effective treatment are essential for reducing complications and improving patient survival. This article proposes an integrated approach combining Artificial Intelligence (AI), phytopharmaceutical research, molecular docking, and novel drug formulation using Mattibanana plant extract as a natural cardioprotective agent.

The AI-based predictive system analyzes clinical and physiological parameters such as ECG signals, blood pressure, cholesterol levels, glucose levels, heart rate variability, age, family history, obesity, smoking habits, and stress biomarkers. Machine learning and deep learning techniques including Random Forest, Support Vector Machine (SVM), Artificial Neural Networks (ANN), and Convolutional Neural Networks (CNN) are used to identify hidden patterns and predict the risk of myocardial infarction and angina at an early stage. The system aims to provide rapid, accurate, and low-cost cardiac risk assessment.

Simultaneously, phytochemical constituents present in Mattibanana extract are screened for cardioprotective activity. Molecular docking studies are performed against cardiovascular targets such as angiotensin-converting enzyme (ACE), HMG-CoA reductase, and inflammatory proteins to evaluate binding affinity and therapeutic potential. Selected compounds are further analyzed using ADMET prediction to determine drug-likeness and safety profiles. Lead compounds with favorable properties are proposed for development into novel formulations such as tablets, nanoparticles, or transdermal patches. This multidisciplinary approach provides a promising strategy for preventive cardiology and plant-based drug discovery.

Introduction

Cardiovascular diseases are among the leading causes of death worldwide and continue to place a major burden on healthcare systems. Myocardial infarction and angina pectoris are common forms of cardiovascular disorders caused mainly by reduced blood flow to the heart muscles. Lifestyle modifications, stress, obesity, smoking, hypertension, diabetes mellitus, and elevated cholesterol levels contribute significantly to the development of cardiac diseases. Despite advancements in diagnostic techniques and therapeutic approaches, many patients remain undiagnosed until severe cardiac complications occur.

- ✓ K.MOUNIKA - Successfully completed the SWAYAM–NPTEL certification course **"Biostatistics and Mathematical Biology"** by securing **78 marks**, earning the **Elite + Silver** certificate.

          Study Webs of Active–Learning for Young Aspiring Minds (SWAYAM) January 2026 Semester Score Card						
Roll Number	TN2BD100266	Application Number	265610659713	 		
Candidate's Name	MOUNIKA K	Date of Birth	21/10/1992			
Mother's Name	AMLAVALLI	Father's Name	KANDASAMY			
Gender	Female	Nationality	Indian			
PwD/PwBD	No	Category	OBC- NCIL (Central List)			
SCORE DETAILS						
Course Code	Course Name	Date of Exam	Shift of Exam	Maximum Marks	Marks Obtained	Marks Obtained in words
CC26_E01	Biostatistics and Mathematical Biology	19-06-2026	2	100	78	Seventy Eight
Date of declaration of result: 16.07.2026 (CBT Courses) Director, NTA Note: 1. This electronically generated Score Card is the official result declared by NTA and does not require any signatures. 2. Candidate particulars have been indicated as mentioned by her/him in the online application form, which is subject to verification by the admitting authorities. 3. Candidate, if found submitting incorrect information or tampering with the Score Card, will be considered as using unfair means and their candidature will be cancelled. 4. Candidates must preserve this Score Card for future use. 5. Final scores & certificates will be given by respective National Coordinators.						

VISION

To educate, train, and develop professionally competent pharmacists equipped to meet global healthcare challenges.

MISSION

- To offer need-based programs with dynamic and effective implementation.
- To swiftly adapt to changes in the pharmaceutical industry and align resources accordingly.
- To serve as a centre of academic excellence delivering world- class pharmacy education.
- To engage in impactful research focused on discovering life- saving drugs, contributing to the global goal of "Health for All."

COURSES OFFERED

D.PHARM (2 YEARS)

B.PHARM (4 YEARS)

B.PHARM (LATERAL ENTRY) 3 YEARS

DOCTOR OF PHARMACY (PHARM. D) 6 YEARS

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Chairman & Secretary

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- ★ VIVEKANANDHA DENTAL COLLEGE FOR WOMEN
- ★ SWAMY VIVEKANANDHA COLLEGE OF PHARMACY
- ★ VIVEKANANDHA COLLEGE OF NURSING
- ★ SWAMY VIVEKANANDHA PHYSIOTHERAPY COLLEGE
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- ★ KRISHNA INSTITUTE OF OPTOMETRY & RESEARCH
- ★ VIVEKANANDHA COLLEGE OF ENGINEERING FOR WOMEN (AUTONOMOUS)
- ★ VIVEKANANDHA COLLEGE OF TECHNOLOGY FOR WOMEN
- ★ VIVEKANANDHA INSTITUTE OF INFORMATION AND MANAGEMENT STUDIES
- ★ VIVEKANANDHA COLLEGE OF ARTS AND SCIENCES FOR WOMEN (AUTONOMOUS)
- ★ VIVEKANANDHA COLLEGE FOR WOMEN
- ★ VIVEKANANDHA COLLEGE OF EDUCATION FOR WOMEN
- ★ VIVEKANANDHA VIDHYA BHAVAN MATRIC HIGHER SECONDARY SCHOOL
- ★ VIDYAA VIKAS MATRIC HIGHER SECONDARY SCHOOL (MOREPALAYAM)
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