

Innovative Teaching Learning Practices

Sanjivani College of Pharmaceutical Education and Research (Autonomous) Kopergaon



“Learning Made Creative: Our Innovation Showcase”



**Innovative
Teaching:**
Preparing Students for
Real-World Problem-Solving



Innovative Teaching Learning Methods



- ▶ **YouTube Channels**
Educational videos for learning
- ▶ **Flipped Classroom**
Students learn at home, practice in class
- ▶ **PPT on Slide Share**
Presentations shared online
- ▶ **Animated Video**
Engaging visuals for learning
- ▶ **Problem Solving**
Students tackle challenges
- ▶ **Demonstrative Learning**
Hands-on activities for understanding
- ▶ **ICT Tools**
Technology for teaching and learning

Innovative Teaching Learning Practices

List of details of slideshare Link:

Sr No.	Name of Faculty	Title of Topic Covered	Views	Link of videos / PPT on slideshare prepared by the faculty
1	DR. Smita Kumbhar	UV-Visible Absorption Spectrophotometry'	3900	https://www.slideshare.net/slideshow/uv-visible-absorption-spectrophotometry/271192650
2	DR. Smita Kumbhar	Instrumental Methods of Analysis Syllabus	2600	https://www.slideshare.net/slideshow/instrumental-methods-of-analysis-syllabus-pptx/271194700
3	DR. Smita Kumbhar	Introduction-to-Infrared-Spectroscopy	2600	https://www.slideshare.net/slideshow/introduction-to-infrared-spectroscopy-pptx/271195551
4	DR. Smita Kumbhar	Fluorimetry-Illuminating-the-Science-of-Light-Emission	2400	https://www.slideshare.net/slideshow/fluorimetry-illuminating-the-science-of-light-emission-pptx/271196523
5	DR. Smita Kumbhar	Flame Emission Spectroscopy: An In-Depth Overview	2300	https://www.slideshare.net/slideshow/flame-emission-spectroscopy-an-in-depth-overview/271197124
6	DR. Smita Kumbhar	Atomic Absorption Spectrophotometry: A Comprehensive Overview	1600	https://www.slideshare.net/slideshow/atomic-absorption-spectrophotometry-a-comprehensive-overview/271197563

7	DR. Smita Kumbhar	Nephelometry-and-Turbidimetry-Understanding-Light-Scattering	1900	https://www.slideshare.net/slideshow/nephelometry-and-turbidimetry-understanding-light-scattering-pptx/271197906
8	DR. Smita Kumbhar	An Introduction to Chromatography: Classifications, Theoretical Foundations, and Key Parameters	4200	https://www.slideshare.net/slideshow/an-introduction-to-chromatography-classifications-theoretical-foundations-and-key-parameters-pptx/272016745
9	DR. Smita Kumbhar	Paper Chromatography an In-Depth Exploration	2900	https://www.slideshare.net/slideshow/paper-chromatography-an-in-depth-exploration-pptx/272040375
10	DR. Smita Kumbhar	From Simplicity to Sophistication the Evolution of TLC to HPTLC	2700	https://www.slideshare.net/slideshow/from-simplicity-to-sophistication-the-evolution-of-tlc-to-hptlc-pptx/272053809
11	DR. Smita Kumbhar	Separation Science Simplified: The Journey of High-Performance Liquid Chromatography	3000	https://www.slideshare.net/slideshow/separation-science-simplified-the-journey-of-high-performance-liquid-chromatography-pptx/272056334
12	DR. Smita Kumbhar	Gas Chromatography: The Invisible Journey of Molecules	3300	https://www.slideshare.net/slideshow/gas-chromatography-the-invisible-journey-of-molecules-pptx/272151397
13	DR. Smita Kumbhar	The Power of Ion Exchange Chromatography	2300	https://www.slideshare.net/slideshow/the-power-of-ion-exchange-chromatography-pptx/272163008

14	DR. Smita Kumbhar	Gel Filtration Chromatography Principles, Stationary Phases, and Applications	2700	https://www.slideshare.net/slideshow/gel-filtration-chromatography-principles-stationary-phases-and-applications-pptx/272420281
15	DR. Smita Kumbhar	Affinity Chromatography Principles, Applications, and Techniques for Molecular Purification	2300	https://www.slideshare.net/slideshow/affinity-chromatography-principles-applications-and-techniques-for-molecular-purification-pptx/272420433
16	DR. Smita Kumbhar	Navigating Pharmaceutical Regulations	925	https://www.slideshare.net/slideshow/navigating-pharmaceutical-regulations-pdf/273797321
17	DR. Smita Kumbhar	Beyond Compliance Embracing Quality by Design (QbD) for Next-Generation Pharmaceutical Excellence.pptx	1200	https://www.slideshare.net/slideshow/beyond-compliance-embracing-quality-by-design-qbd-for-next-generation-pharmaceutical-excellence-pptx/281559797
18	DR. Smita Kumbhar	Decoding the Woodward-Fieser Rules A Comprehensive Guide to UV-Visible Spectroscopy of Conjugated Compounds..pptx	1300	https://www.slideshare.net/slideshow/decoding-the-woodward-fieser-rules-a-comprehensive-guide-to-uv-visible-spectroscopy-of-conjugated-compounds-pptx/281562999

19	DR. Smita Kumbhar	Foundations of Pharmaceutical Quality Assurance and Quality Management Systems.pptx	1100	https://www.slideshare.net/slideshow/foundations-of-pharmaceutical-quality-assurance-and-quality-management-systems-pptx/284666007
20	DR. Smita Kumbhar	ISO 9000 & ISO 14000 in Pharmaceutical Quality and Environmental Management.pptx	280	https://www.slideshare.net/slideshow/iso-9000-iso-14000-in-pharmaceutical-quality-and-environmental-management-pptx/284665015
21	DR. Smita Kumbhar	ICH Harmonization A Global Pathway to Unified Drug Regulation.pptx	1300	https://www.slideshare.net/slideshow/ich-harmonization-a-global-pathway-to-unified-drug-regulation-pptx/284608850
22	DR. Smita Kumbhar	Organization, Personnel, Premises, Equipment and Raw Materials in Pharmaceutical Quality Assurance	806	https://www.slideshare.net/slideshow/organization-premises-equipment-raw-materials-the-pillars-of-pharmaceutical-excellence-pptx/284927649
23	Dr.Poonam Prakash Patil	Gel Filtration Chromatography Principles, Stationary Phases, and Applications	980	https://www.slideshare.net/PoonamPrakashPatilAh/gel-filtration-or-permeation-chromatography
24	Dr.Poonam Prakash Patil	Paper Chromatography	491	https://www.slideshare.net/PoonamPrakashPatilAh/paper-chromatography-or-paper-partition-chromatography

25	Dr.Poonam Prakash Patil	TLC	1300	https://www.slideshare.net/PoonamPrakashPatilAh/thin-layer-chromatography-horizontal
26	Dr.Poonam Prakash Patil	Theories of gas Chromatography	4100	https://www.slideshare.net/PoonamPrakashPatilAh/theories-of-gas-chromatography-rate-theory-and-plate-theory
27	Dr.Poonam Prakash Patil	HPTLC	281	https://www.slideshare.net/PoonamPrakashPatilAh/high-performance-thin-layer-chromatography-c04c
28	Dr.Poonam Prakash Patil	Quenching in Fluorescence	1200	https://www.slideshare.net/PoonamPrakashPatilAh/quenching-of-fluorescence-spectroscopy-ppt
29	Dr.Poonam Prakash Patil	NMR	3100	https://www.slideshare.net/PoonamPrakashPatilAh/nuclear-magnetic-resonance-spectroscopynmr
30	Dr.Poonam Prakash Patil	DSC	1100	https://www.slideshare.net/PoonamPrakashPatilAh/differential-scanning-colorimetry-dsc
31	Dr.Poonam Prakash Patil	TGA	283	https://www.slideshare.net/PoonamPrakashPatilAh/thermal-analysis-differential-thermal-analysis-and-dsc
32	Dr.Poonam Prakash Patil	Sources in analysis	905	https://www.slideshare.net/PoonamPrakashPatilAh/sources-of-impuritiespptx
33	Dr.Poonam Prakash Patil	Significant figures	118	https://www.slideshare.net/PoonamPrakashPatilAh/significant-figurespptx

34	Dr.Poonam Prakash Patil	Different Techniques of analysis	4.6k	https://www.slideshare.net/PoonamPrakashPatilAh/different-techniques-of-analysis-255425297
35	Dr.Poonam Prakash Patil	Methods of expressing Concentration	531	https://www.slideshare.net/PoonamPrakashPatilAh/methods-of-expressing-concentrations-255425298
36	Dr.Poonam Prakash Patil	Introduction of glassware	428	https://www.slideshare.net/PoonamPrakashPatilAh/introduction-of-glasswarespptx
37	Dr.Poonam Prakash Patil	Pharmacopoeia	227	https://www.slideshare.net/PoonamPrakashPatilAh/pharmacopoeiapptx
38	Dr.Poonam Prakash Patil	Reagents	3800	https://www.slideshare.net/PoonamPrakashPatilAh/reagentspptx
39	Dr.Poonam Prakash Patil	Accuracy and precision	980	https://www.slideshare.net/PoonamPrakashPatilAh/introduction-of-accuracy-and-precision
40	Dr.Poonam Prakash Patil	UV Visible spectroscopy	3800	https://www.slideshare.net/PoonamPrakashPatilAh/uv-visible-spectroscopy-9037
41	Dr.Poonam Prakash Patil	Flourimetry	1000	https://www.slideshare.net/PoonamPrakashPatilAh/flouroscencepptx
42	Dr.Poonam Prakash Patil	Flame Emission Spectroscopy: An In-Depth Overview	917	https://www.slideshare.net/PoonamPrakashPatilAh/flamephotometrypptx
43	Dr.Poonam Prakash Patil	Gravimetry	998	https://www.slideshare.net/PoonamPrakashPatilAh/gravimetric-analysis-gravimetric-titration

44	Dr.Poonam Prakash Patil	Non Aqueous Titration	17400	https://www.slideshare.net/PoonamPrakashPatilAh/non-aqueous-titration-definition-principle-and-application
45	Dr.Poonam Prakash Patil	Complexometric titration	893	https://www.slideshare.net/PoonamPrakashPatilAh/complexometric-titration-or-chelatometric-titration
46	Dr.Poonam Prakash Patil	site Acceptance test	1200	https://www.slideshare.net/slideshow/site-acceptance-test/267820737
47	Dr.Poonam Prakash Patil	Factory acceptance test	1900	https://www.slideshare.net/slideshow/factory-acceptance-test-fat-pptx/267821294
48	Dr.Poonam Prakash Patil	Clean in place	920	https://www.slideshare.net/slideshow/clean-in-place-cip-pptx/267821913
49	Dr.Poonam Prakash Patil	Computerized system validation	221	https://www.slideshare.net/slideshow/computerized-system-validation-pptx/267822894
50	Dr.Poonam Prakash Patil	Good automated manufacturing	799	https://www.slideshare.net/slideshow/good-automated-manufacturing-practices-gamp-pptx/267822324
51	Dr.Poonam Prakash Patil	General principle of IPR	4000	https://www.slideshare.net/slideshow/general-principles-of-intellectual-property-concepts-of-intellectual-property-ip-intellectual-property-protection-ipp-intellectual-property-rights-ipr/267823267

52	Dr.Poonam Prakash Patil	Intellectual property and economy	314	https://www.slideshare.net/slideshow/intellectual-property-and-economy-pptx/267823790
53	Ms. Pratiksha Ghodake	Artherosclerosis	857	https://www.slideshare.net/slideshow/pathophysiology-of-atherosclerosis-ppt-pdf/281508422
54	Dr Seema Gosavi	Synthesis in Medicinal Chemistry IV	3400	https://www.slideshare.net/slideshow/synthesis-231424016/231424016
55	Dr Seema Gosavi	Role of Quality System and Audit in Pharmaceutical Manufacturing Environment cGMP Regulations	172	https://www.slideshare.net/slideshow/role-of-quality-system-and-audit-in-pharmaceutical-manufacturing-environment-cgmp-regulations-pptx/280606463
56	Dr Seema Gosavi	Streamlining the qualification and validation processes, along with developing an effective Validation Master Plan (VMP) in the Pharmaceutical Industry	92	https://www.slideshare.net/slideshow/streamlining-qualification-validation-processes-and-developing-an-pptx-c28d/280084021

57	Dr Seema Gosavi	Validation Master Plan (VMP) in Pharmaceutical in the Pharmaceutical Industry	312	https://www.slideshare.net/slideshow/validation-master-plan-vmp-in-pharmaceutical-pptx/279955833
58	Dr Seema Gosavi	Nucleophilic Substitution Reaction SN2 reaction	54	https://www.slideshare.net/slideshow/nucleophilic-substitution-reaction-sn2-reaction/267830519
59	Dr Seema Gosavi	Nucleophilic Substitution Reaction SN1 reaction	27	https://www.slideshare.net/slideshow/nucleophilic-substitution-reaction-sn1-reaction/267830334
60	Dr Nitin Sutar	Drug containing tannins	80	https://www.slideshare.net/NitinSutar3/tanninspptx
61	Dr Nitin Sutar	Infusion, decoction, digestion	256	https://www.slideshare.net/slideshow/extraction-infusion-decoction-digestion-pptx/270459416
62	Dr Nitin Sutar	Maceration, percolation	98	https://www.slideshare.net/slideshow/extraction-by-maceration-percolation-pptx/270460209
63	Dr Nitin Sutar	Craigs method of Counter current extraction	37	https://www.slideshare.net/slideshow/craigs-method-of-counter-current-extraction-pptx/270460256
64	Dr Nitin Sutar	Froth flotation	10	https://www.slideshare.net/slideshow/non-chromatographic-extraction-froth-flotation-pptx/270460330

65	Dr Nitin Sutar	Plant growth regulator (Slide share)	130	https://www.slideshare.net/slideshow/plant-growth-regulator-which-enhances-the-growth-of-plants/266712197?from_search=25
66	Dr Nitin Sutar	Plant growth regulating compound (Slide share)	130	https://www.slideshare.net/slideshow/plant-growth-regulator-which-enhances-the-growth-of-plants/266712197?from_search=24
67	Dr Nitin Sutar	Resins (Slide share)	301	https://www.slideshare.net/NitinSutar3/6-resinpptx?from_search=20
68	Dr Nitin Sutar	Tannins (Slide share)	80	https://www.slideshare.net/slideshow/5tanninspptx/263156082
69	Dr Nitin Sutar	Extraction (Slide share)	37	https://www.slideshare.net/slideshow/detail-about-extraction-mechanism-of-extraction-part-1-pptx/270129496
70	Dr Nitin Sutar	Glycoside	774	https://www.slideshare.net/slideshow/6-glycoside-introduction-and-chemical-tests-d-pptx/271431553
71	Dr Nitin Sutar	Glycoside- Aloe, Senna, bitter almond	2000	https://www.slideshare.net/slideshow/6-glycoside-aloe-senna-bitter-almondpptx/271433206
72	Dr Nitin Sutar	Rauwolfia	110	https://www.slideshare.net/slideshow/1-4-alkaloid-rauwolfia-chotta-chand-pptx/271431693

73	Dr Nitin Sutar	Opium	8	https://www.slideshare.net/slideshow/1-3-opium-morphine-codeine-papaverine-narsine-pptx/271431628
74	Dr Nitin Sutar	Phenyl Propanoid And Flavonoid	858	https://www.slideshare.net/slideshow/1-6-phenylpropanoid-and-flavonoids-pptx/271433111
75	Miss Gauri Borude	Antibiotics	14	https://www.slideshare.net/slideshow/antibioticspptx/265519820
76	Miss Gauri Borude	Elements of Communication	56	https://www.slideshare.net/slideshow/chapter-iipptx/265519713

List of YouTube Link:

Sr. No	Name of Faculty	Title of Topic Covered	Views	Link of videos / PPT on slideshare prepared by the faculty
1	Dr.Poonam Prakash Patil	Isolation of casein from milk	246	https://www.youtube.com/watch?v=ccks6OYN0mA&t=15s
2	Dr.Poonam Prakash Patil	Isolation of starch from potato	638	https://www.youtube.com/watch?v=ac2f4a6X_is
3	Dr.Poonam Prakash Patil	Bioenergetics	241	https://youtu.be/NnopMFt22CI?si=Qm-Xo4zW2ymASL-i
4	Dr.Poonam Prakash Patil	ETC	227	https://youtu.be/hzI-eeRmEak?si=xIGv8QkyKYWBI-Oa
5	Dr.Poonam Prakash Patil	Transcription	113	https://youtu.be/CEkqXeBDOjI?si=inpYTmN2m1rtWHvP
6	Dr.Poonam Prakash Patil	Catabolism of Purine Ribonucleotide Uric Acid Biosynthesis	125	https://youtu.be/8o4gknWY65U?si=FA5dNYbAUKuHPtz1
7	Dr.Poonam Prakash Patil	pyrimidine nucleotide synthesis	147	https://youtu.be/KBr1boyCFXk?si=h8dPMDuaTaVBI-6L
8	Dr.Poonam Prakash Patil	Nucleic acid Introduction	197	https://youtu.be/1tkonBijd28?si=95DUga6KJU1mhQp8
9	Dr.Poonam Prakash Patil	Biosynthesis of purine Ribonucleotide	159	https://youtu.be/sezMUn_ePzA?si=6QFNesaIid-QJChv

10	Dr.Poonam Prakash Patil	Enzyme Regulation	135	https://youtu.be/UoRfW-f9Z0k?si=Z7y_3NpmumTPPH5n
11	Dr.Poonam Prakash Patil	Factors affecting Enzyme Activity	222	https://youtu.be/HaaUB26SVXM?si=W94vda48AgticBPA
12	Dr.Poonam Prakash Patil	Theories of Enzyme Action	155	https://youtu.be/WMNtFdY-98s?si=KW5vIrlj0Q76HYyXd
13	Dr.Poonam Prakash Patil	Coenzyme	105	https://youtu.be/U0JBUohZ5mU?si=fKhyb20y1J_ZrcTv
14	Dr.Poonam Prakash Patil	Enzyme introduction and Classification	269	https://youtu.be/epfCy-NcnUA?si=XtNW0N4iCL2QBDji
15	Dr.Poonam Prakash Patil	Enzyme Inhibition	310	https://youtu.be/cHw-5vJUosg?si=U-K0OcikkIHb6ViE
16	Dr.Poonam Prakash Patil	Disorders of Phenylalanine and Tyrosine Metabolism	357	https://youtu.be/mOyiSB-QOs8?si=8-bDgCOdZMBBxugM
17	Dr.Poonam Prakash Patil	Transamination	341	https://youtu.be/uRdrE1EKrql?si=i4tpCk-FSRklzUzB
18	Dr.Poonam Prakash Patil	Degradation of Cholesterol	215	https://youtu.be/fnmSavWtLso?si=3gPX9C24fqIMxZPz
19	Dr.Poonam Prakash Patil	Biosynthesis of Cholesterol	154	https://youtu.be/GVjKnHC1xUw?si=godXWaj4QWqFJTad
20	Dr.Poonam Prakash Patil	Qualitative tests for Carbohydrate	149	https://youtu.be/56Yn27Dlizg?si=819LA-qujPHnkfU7
21	Dr.Poonam Prakash Patil	Protein Introduction	359	https://youtu.be/LGiZy_MGuWY?si=g3WEjlZEzuhuTzyF
22	Dr.Poonam Prakash Patil	Amino Acid Introduction	204	https://youtu.be/zd25JeBDNCE?si=VwQsfskoFgcO-0BZ
23	Dr.Poonam Prakash Patil	De novo synthesis	282	https://youtu.be/E2Aa2tBl9Pc?si=mPfuJa9m3oCAgtl1

24	Dr.Poonam Prakash Patil	Beta Oxidation of Saturated Fatty acids(Palmitic acid and Propanoic acid)	453	https://youtu.be/3FREmOIDDIE?si=u2rz3NHrUq8yTSIf
25	Dr.Poonam Prakash Patil	Metabolism of Ketone bodies	249	https://youtu.be/ay2_815L4Q4?si=lwUIWekCjFfP_6np
26	Dr.Poonam Prakash Patil	Beta Oxidation of Unsaturated Fatty acid	372	https://youtu.be/4rRHVUtptnw?si=Qj8ZrORT7UgzQ4Ba
27	Dr.Poonam Prakash Patil	Beta Oxidation of Fatty Acids	300	https://youtu.be/V0ITn1QQs1A?si=UAW42SiEOOhgyTJQ
28	Dr.Poonam Prakash Patil	Introduction to Lipid	185	https://youtu.be/NgOFQCxYdVY?si=0joKs8-t81_bLtkd
29	Dr.Poonam Prakash Patil	GLUCOSE HOMEOSTASIS	454	https://youtu.be/qTeOZkH1N-c?si=ze0F01GwMrYCD3Pm
30	Dr.Poonam Prakash Patil	GLYCOGEN STORAGE DISEASE	134	https://youtu.be/zSDpO5dcZfM?si=yGdYGHZJnBkCJyVb
31	Dr.Poonam Prakash Patil	HMP Shunt	99	https://youtu.be/FSdEcES-erU?si=Rr4wWHmh7u6Pu0Bm
32	Dr.Poonam Prakash Patil	GLUCONEOGENESIS	92	https://youtu.be/QOlaXhBLFzk?si=KeaYwwyJTOjml916
33	Dr.Poonam Prakash Patil	GLYCOGENOLYSIS	78	https://youtu.be/QzIYK669XdY?si=14JsFnhuWbhl8AK0
34	Dr.Poonam Prakash Patil	TCA OR KREBS CYCLE	96	https://youtu.be/wzWaDdzh2DY?si=ppSqm0H6Re4ru0TO
35	Dr.Poonam Prakash Patil	Glycogenesis	72	https://youtu.be/WzoOBxUsWik?si=54gmuGyt90j2QjHg
36	Dr.Poonam Prakash Patil	INTRODUCTION OF CARBOHYDRATE	92	https://youtu.be/XVcwRHVcO_w?si=_vNzcnUJEYfYvaKN
37	Dr.Poonam Prakash Patil	Glycolysis	204	https://youtu.be/2Qc8uONYTxE?si=5OWRQQYG2swfvZxD

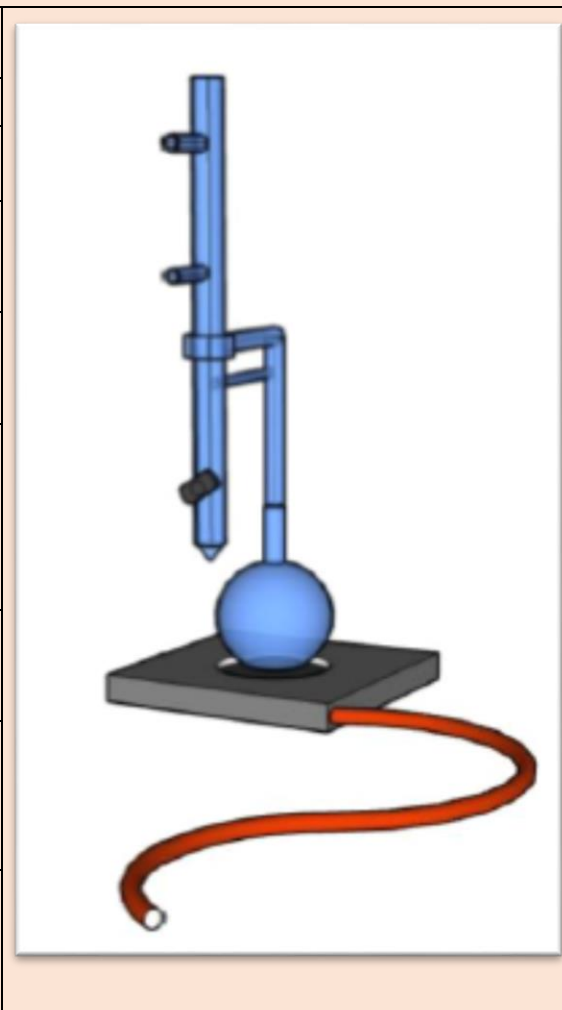
38	Dr.Poonam Prakash Patil	INTRODUCTION TO BIOCHEMISTRY	126	https://youtu.be/H_T_ovGx7Dk?si=Ys2XjKqPwo5_AmXg
		Analysis of crude drug by chemical test	7300	https://youtu.be/PqYfnw3tSf8?si=1Kp_YhY_EDDenWLu
39	Dr N G Sutar	Analysis of unorganized crude drug	450	https://youtu.be/6Fz1LY75Xf8
40	Dr N G Sutar	Determination Foaming index	786	https://youtu.be/uxVdzbmJjD4
41	Dr N G Sutar	Determination of alcohol content	4100	https://youtu.be/2i9CocnKAyM
42	Dr N G Sutar	Determination of ash value		https://youtu.be/7DNrDa7okAk
43	Dr N G Sutar	Determination of moisture content		https://youtu.be/Fl63f6YtrEs
44	Dr N G Sutar	Determination of phenol content		https://youtu.be/MtI4TRkKAoc
45	Dr N G Sutar	How to calibrate eyepiece micrometer	11000	https://youtu.be/i9bFG2xD7TE
46	Dr N G Sutar	How to remember schedules of D & C act	337	https://youtu.be/oNE1LxPUdaw
47	Dr N G Sutar	Isolation and identification of diosgenin from dioscorea	3000	https://youtu.be/vWC8vJ4aZjc
48	Dr N G Sutar	Isolation and identification of sennoside	9800	https://youtu.be/MtHqWgaqlFc
49	Dr N G Sutar	Isolation of atropine from belladonna	13000	https://youtu.be/ZoGoNDWumbM

50	Dr N G Sutar	Isolation of caffeine from tea powder	4900	https://youtu.be/qRh7uty4JPc
51	Dr N G Sutar	Measurement of length, width and diameter	748	https://youtu.be/IhoX9ZZ2P5Y
52	Dr N G Sutar	Swelling index	785	https://youtu.be/a9rKCXwDdb0
53	Dr N G Sutar	TLC of herbal extract	1900	https://youtu.be/sbTsMzluD5s
54	Dr N G Sutar	Total alkaloid content	10000	https://youtu.be/7GorfmTdaWM
55	Dr N G Sutar	Determination of extractive value	472	https://youtu.be/Ioc59v9_hog
56	Dr N G Sutar	Pharmacognosy & photochemistry-II MCQ	1400	https://youtu.be/3K03VRgXWhA
57	Dr N G Sutar	TLC of clove	1100	https://youtu.be/No5Uskv_y4c
58	Dr N G Sutar	Isolation of volatile oil	366	https://youtu.be/bilZF2cf9tI
59	Dr N G Sutar	Analysis of crude drug by chemical test	7300	https://youtu.be/PqYfnw3tSf8
60	Dr N G Sutar	Evaluation of excipients from natural origin	1200	https://youtu.be/00fwjL1JEsY
61	Dr N G Sutar	Aldehyde content	1300	https://youtu.be/-MIa0-yidE0
62	Dr N G Sutar	Analysis of crude drug by chemical test	7300	https://youtu.be/PqYfnw3tSf8
63	Dr N G Sutar	Determination of extractive value	472	https://youtu.be/Ioc59v9_hog
64	Dr N G Sutar	Volatile oil isolation	366	https://youtu.be/bilZF2cf9tI
65	Dr N G Sutar	TLC of herbal extract	1900	https://youtu.be/sbTsMzluD5s
66	Dr N G Sutar	Chromatography	192	https://youtu.be/kYwW1bRV1_U
67	Dr N G Sutar	Phytochemical test for herbs	364	https://youtu.be/0Z-VV5OEUo0
68	Dr N G Sutar	Phytochemical tests for plant material	884	https://youtu.be/jdClMBNZkt0

69	Dr N G Sutar	Virtual pharmacognosy lab	224	https://youtu.be/wl_M4kXklss
70	Dr N G Sutar	Typhoid	26	https://youtu.be/DqgUPtCKM-4
71	Dr N G Sutar	Stroke	27	https://youtu.be/hawenozd9Fw
72	Dr N G Sutar	Hepatitis A	26	https://youtu.be/eNxHNmJfuGw
73	Dr N G Sutar	Hepatitis D & E	9	https://youtu.be/61po1PkyXRQ
74	Dr N G Sutar	Hepatitis C	21	https://youtu.be/ndFXyAN8dn0
75	Dr N G Sutar	Hepatitis B	22	https://youtu.be/rgiSOQYI7PQ
76	Dr N G Sutar	Dengue	13	https://youtu.be/QFiIfEzZuhk
77	Dr N G Sutar	Cancer	8	https://youtu.be/FMinS1qVFic
78	Dr N G Sutar	AIDS	26	https://youtu.be/DW03hleYjNg
79	Dr N G Sutar	How to remember schedules of D & C act	337	https://youtu.be/oNE1LxPUdaw
80	Dr N G Sutar	Tannin details and drug containing tannin	145	https://youtu.be/NETLCaTJD0w
81	Dr N G Sutar	Extraction part 1	245	https://youtu.be/IuEQwLawyZM
82	Dr N G Sutar	Spreadability test for cream	5200	https://youtu.be/RUPAvkYQoZA?si=Fud3Rq7uGIP3aEsF
83	Dr N G Sutar	Ethylene plant growth regulator	73	https://youtu.be/era8tVRQPwA?si=7rYyXLVSbOJpWFgD
84	Dr N G Sutar	Auxin	13	https://youtu.be/oTM62GvZIHs?si=pi7cDONv6Ede3B4f
85	Dr N G Sutar	Abscisic acid	26	https://youtu.be/Addk_6EtnEM?si=8LX30MIkgLodDkeF
86	Dr N G Sutar	Gibberellin	15	https://youtu.be/eCwu_uWfJGA?si=FMNSgwm8x30O0rMX
87	Dr N G Sutar	Plant growth regulator	6	https://youtu.be/Fv1t-9hu0zE?si=TH4V1i0lcFJl6Eu1

88	Dr N G Sutar	Infusion, decoction, digestion, Maceration, percolation	1430	https://youtu.be/atL2WB_ iy0o
89	Dr Smita Kumbhar	Spectroscopy	540	https://youtu.be/Ttw39dmpW_Q?si=Ut2fJ_VhaHFcA7d8
90	Dr Smita Kumbhar	Introduction to Spectroscopy	259	https://youtu.be/kTiX3sJA_AU?si=xILe2RVEutXC0IXL
91	Dr Smita Kumbhar	UV-Visible Spectroscopy	262	https://youtu.be/1J0tzV74jQw?si=F8r4hF5p0xyJa5ld
92	Dr Smita Kumbhar	UV-Visible Spectroscopy: Session 4	197	https://youtu.be/-KBjJPMIeiQ?si=k9SILiIP2oms6Fs5
93	Dr Smita Kumbhar	Spectroscopy	656	https://youtu.be/WcL5btTUcZg?si=sk-yweHI7ZzYFYpK
94	Dr Smita Kumbhar	UV-Spectroscopy	207	https://youtu.be/xDpjcncRfow?si=1oXeFQHgh_jPIFlv
95	Dr Smita Kumbhar	UV- Visible spectroscopy	166	https://youtu.be/oTrq85svxng?si=g29w1d0Xwt9Zwy3x

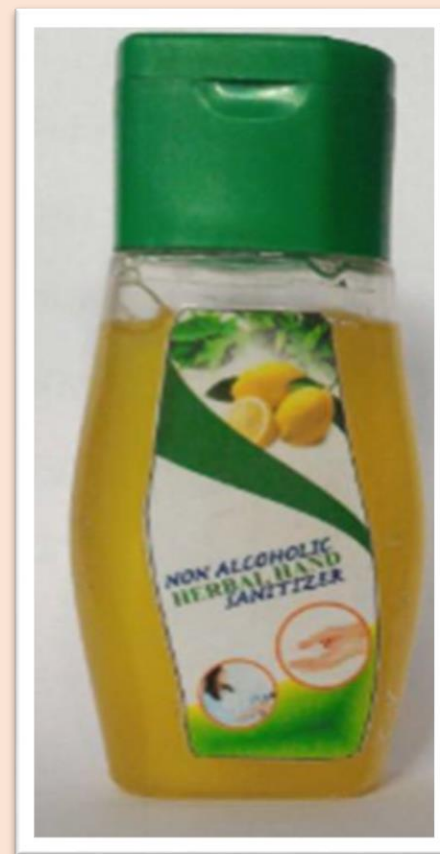
Aspect	Details
Innovation Name	Portable Clevenger Apparatus For Hydro Distillation
Developer / Faculty	Dr. N. G. Sutar , Department of Pharmacognosy, SCPER (registered with Application No. 396258-001)
Purpose / Application	To improve on the classical Clevenger apparatus for hydro distillation and extraction of essential oils or volatile phytochemicals from plant materials
Background – Traditional Clevenger Apparatus	Standard laboratory equipment used for steam distillation to isolate essential oils from plant parts; consists of a boiling flask, condenser, and collection tube
Modification Highlights	Modified design (relative to the conventional setup) to enhance extraction efficiency, ease of use, or integration with research workflows as part of the innovation effort – typically targeting improved performance or practicality in essential oil distillation
Core Functional Principle	Steam distillation of plant material with modification over the traditional Clevenger setup to facilitate better processing of essential oils/volatile compounds
Key Benefits / Advantages	Enhanced essential oil capture/processing; adapted for research/teaching settings; potentially better yield or operational convenience compared to unmodified apparatus
Field / Discipline	Pharmacognosy / Natural Product Chemistry / Herbal Research



Aspect	Details
Innovation Name	Writing Pen-Like Metered Dose Inhaler
Inventors	Mrs. Sutar Umeshwari Nitin and Dr. Nitin Gulab Sutar
Patent Publication	Publication No. 09/2022; Granted on 15 Sept 2022)
Field / Purpose	Biomedical device for asthma therapy; portable metered-dose drug delivery
Shape / Design	Pen-like form factor for discreet, easy carrying and use
Core Functionality	Contains storage for multiple asthma drug capsules, tablet crushing chamber, gas chamber and mouthpiece for inhalation delivery
Key Features	• Looks like a writing pen for convenience and social comfort • Cap and push-button mechanisms to crush and release medication • Internal chambers to hold and deliver multiple doses
Advantages over Conventional MDI	• Eliminates need to carry separate drug capsules • Compact and user-friendly design • Economical and portable compared to standard MDIs
Use Case	Asthma patients inhaling crushed capsule medication via a mouthpiece directly into lungs



Aspect	Details
Innovation Name	Non-Alcohol Pure Poly Herbal Hand Sanitizer – Formulation and Evaluation
Innovator / Faculty	Dr. N. G. Sutar , Department of Pharmacognosy, Sanjivani College of Pharmaceutical Education & Research, Kopergaon
Patent/ Filing Details	Patent/File No.: TEMP/E-1/5514/2016-MUM (Filed in 2016)
Purpose / Application	To develop a herbal, non-alcoholic hand sanitizer for effective hand hygiene with reduced skin irritation compared to conventional alcohol-based sanitizers.
Core Concept	Poly-herbal formulation using plant-based extracts instead of alcohol as the primary antimicrobial agent; designed to maintain hygiene while being gentle on skin.
Key Features	• Non-alcoholic (avoids dryness/irritation) • Poly-herbal formulation leveraging multiple plant actives • Aims for antimicrobial efficacy with skin-friendly properties
Benefits / Advantages	• Safer alternative to alcohol-based sanitizers with less skin irritation • Uses natural plant extracts with potential antimicrobial action • Suitable for frequent use and sensitive skin conditions
Field / Discipline	Natural product formulation; herbal personal care/antimicrobial hygiene product



Aspect	Details
Innovation Name	Pure Aqua Herbal Shampoo (Herbal Shampoo Formulation)
Innovator / Faculty	Dr. N. G. Sutar and research team (Department of Pharmacognosy, Sanjivani College of Pharmaceutical Education & Research)
Purpose / Application	Formulate and scientifically evaluate a herbal shampoo as a natural alternative to synthetic commercial shampoos, targeting hair cleansing and conditioning.
Core Ingredients Used	Extracts from plants such as Acacia concinna (Shikakai) , Sapindus mukorossi (Reetha) , Phyllanthus emblica (Amla) , Aloe barbadensis (Aloe vera) , Citrus aurantifolia , with citric acid for pH balance and methyl paraben as preservative (small amount).
Method / Formulation	Herbal extracts combined into an aqueous base; pH balanced and physicochemical parameters adjusted; evaluated against commercial shampoos.
Key Evaluation Parameters	Visual inspection, pH, foam volume & stability, detergency, surface tension, wetting time, dirt dispersion, percent solid contents.
Benefits / Outcomes	• Comparable cleansing and foam properties vs commercial products • Natural herbal formulation reduces reliance on harsh chemicals • Conditioning and cleansing performance demonstrated in controlled tests
Innovation Highlight	Developed a scientifically tested herbal shampoo formulation showing effective physicochemical properties and potential as a natural alternative in hair care.
Field / Discipline	Herbal cosmetic formulation, Pharmacognosy , cosmetic science.



Aspect	Details
Innovation Name	Herbal Tablet Wipes (Herbal hygiene wipes in tablet form)
Innovator / Faculty	Dr. N. G. Sutar , Department of Pharmacognosy – Sanjivani College of Pharmaceutical Education & Research (context of herbal formulation innovations)
Purpose / Application	To develop herbal wipes in a portable tablet format , intended for personal hygiene / skin cleansing with herbal extracts , combining convenience and herbal benefits
Core Concept / Technology	- Tablets that expand or dissolve into wipes when moistened - Infused with herbal extracts for antimicrobial, soothing, and natural cleansing properties
Key Ingredients / Herbal Actives	Herbal extracts such as Neem, Aloe vera, Tulsi and other botanicals known for antibacterial, anti-inflammatory, and soothing effects (typical in herbal wipes)
Innovative Features	- Tablet-to-wipe concept for portability and zero chemical load Natural, eco-friendly formulation - Suitable for travel, field use, or situations without water availability
Benefits / Advantages	Compact & portable vs conventional wipes - Herbal formulation may reduce irritation and enhance skin care Eco-friendly and biodegradable potential (if biodegradable substrate used)
Possible Evaluation Parameters	- Expansion / dissolution efficiency - Skin sensitivity / safety - Antimicrobial activity - Ease of use and consumer acceptability
Field / Discipline	Pharmacognosy, Herbal Product Development, Cosmetic / Personal Care Formulations



Aspect	Details
Innovation Name	Herbal Mosquito Repellent Dhoop
Innovator / Faculty	Dr. N. G. Sutar (Department of Pharmacognosy / Sanjivani College of Pharmaceutical Education & Research)
Purpose / Application	To develop a herbal, eco-friendly mosquito-repellent dhoop (incense) that repels mosquitoes using natural plant-based ingredients (alternative to synthetic coils/repellents)
Core Concept	Formulation of natural dhoop sticks incorporating plant extracts and aromatic oils that emit repellent smoke when burned, providing mosquito repellence and pleasant fragrance
Typical Ingredients	Herbal components (e.g., neem, citronella, camphor, tulsi, cow dung/resin powders, essential oils — known for repellent properties) (general herb dhoop formulation)
Key Features	• Herbal & non-toxic – avoids harsh chemicals • Eco-friendly smoke – lower toxicity to humans/environment • Aromatic & multifunctional – repels insects, purifies air
Benefits / Advantages	• Natural alternative to chemical mosquito repellents • Safer for indoor use and around children/pets • Pleasant herbal aroma and air purification properties
Mode of Action	Burning the dhoop releases herbal volatile compounds that <i>repel or reduce mosquito presence</i> in the vicinity, often with antimicrobial effects
Field / Discipline	Pharmacognosy / Natural Product Research / Herbal formulation science



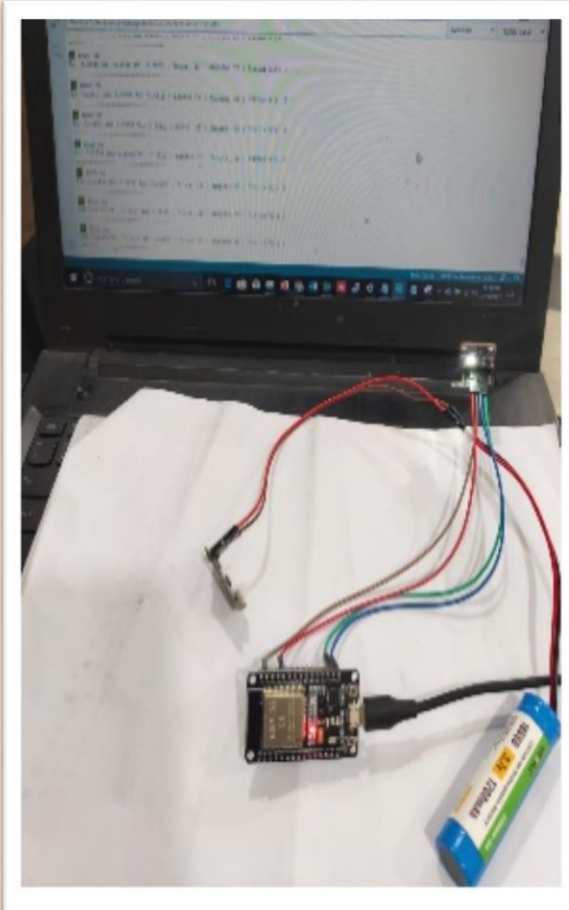
Aspect	Details
Innovation Name	Herbal pH-Sensitive Colour-Changing Lip-Stick
Innovator / Faculty	Dr. N. G. Sutar , Department of Pharmacognosy (Sanjivani College of Pharmaceutical Education & Research)
Purpose / Application	Develop a natural, herbal lipstick that changes colour in response to lip skin pH , enhancing user appeal and personalised shade delivery using plant-based colourants
Core Concept	Lipstick formulation that incorporates natural pigments and pH-responsive extracts so the shade shifts on application, reflecting individual pH differences; herbal and cosmetic function combined .
Key Ingredients / Actives	• Natural colourants (e.g., beetroot, pomegranate extracts) • Herbal emollients & oils (e.g., castor oil, almond oil, vitamin E) • Plant-derived pH-adaptive components for shade change (e.g., anthocyanin-rich extracts).
Mechanism / pH Sensitivity	The lipstick's colour changes due to interaction of natural pigments with the pH of the lips , resulting in personalised tonal variation upon application
Key Features	• Herbal / natural formulation • pH-responsive shade change • Moisturising and nourishing lip care function • Reduced synthetic chemical content.
Benefits / Advantages	• Tailored colour per user pH • Safer & skin-friendly vs synthetic cosmetics • Combines cosmetic appeal with potential lip nourishment.
Field / Discipline	Natural cosmetic formulation, pharmacognosy , herbal innovational cosmetics



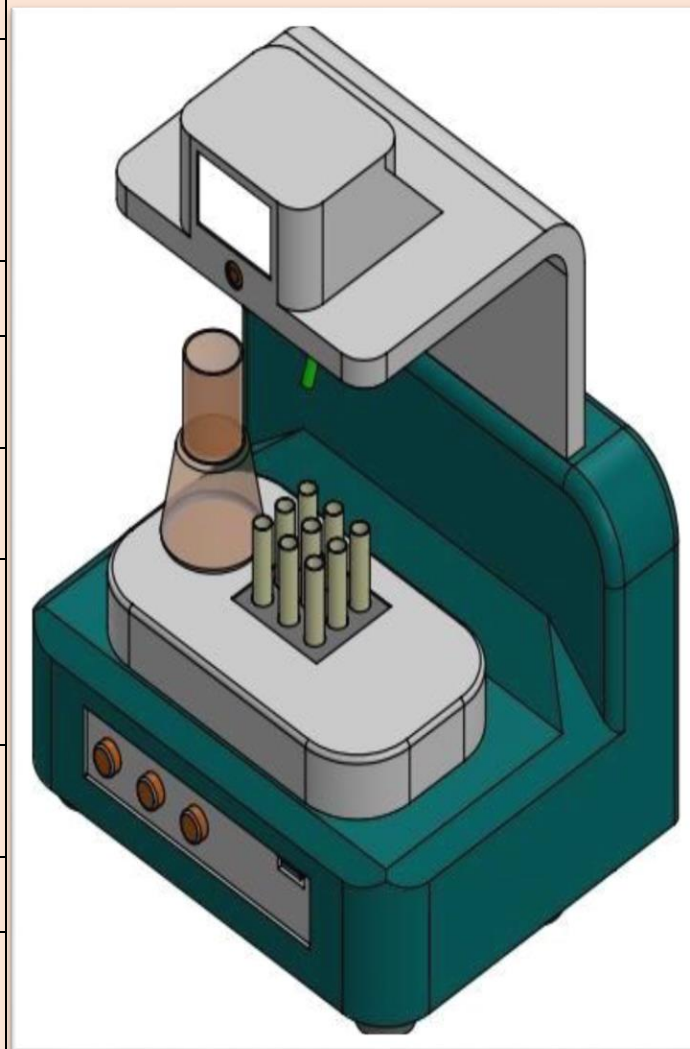
Aspect	Details
Innovation Name	Herbal Indicator (Natural pH/Colour-Changing Indicator)
Innovator / Faculty	Dr. N. G. Sutar , Department of Pharmacognosy, Sanjivani College of Pharmaceutical Education & Research
Purpose / Application	Natural, plant-derived indicator that changes colour with pH for use in acid-base tests and analytical evaluations as an eco-friendly alternative to synthetic indicators.
Core Concept	Utilises natural pigments (anthocyanins/flavonoids) extracted from herbal sources that undergo visible colour changes in response to pH variations in solutions; serves as a pH indicator in titrimetric or analytical chemistry applications.
Likely Key Ingredients / Sources	Pigmented plant materials such as flowers (e.g., rose, hibiscus), leaves, fruits rich in anthocyanins and flavonoids — natural chromophores sensitive to pH.
Mechanism / Action	Natural pigments alter molecular structure in acidic vs basic environments, causing distinct visible colour changes that indicate pH range or equivalence point in titrations.
Key Features	• Herbal and eco-friendly • Non-toxic and biodegradable • Cost-effective alternative to synthetic indicators • Usable in educational and analytical settings.
Benefits / Advantages	• Avoids synthetic chemicals and environmental pollution • Low-cost and readily available • Safe for use in teaching labs and research • Enhances sustainability in analytical methods.
Field / Discipline	Pharmacognosy / Natural Product Chemistry / Analytical Chemistry



Aspect	Details
Innovation Name	Food Spoilage Detector (Herbal/Analytical System)
Innovator / Faculty	Dr. N. G. Sutar , Department of Pharmacognosy / Innovation lead (Sanjivani College of Pharmaceutical Education & Research)*
Purpose / Application	To design a detector/system that identifies food spoilage early , enhancing food safety and reducing waste by detecting chemical or biological changes associated with spoilage.
Core Concept	A detection system that monitors key indicators of spoilage such as pH change, gas emission, colour shifts, or biochemical markers (e.g., microbial metabolites) and provides a visible or instrument-read outcome. <i>(General spoilage detection principle, various research prototypes use sensors or indicators).</i>
Likely Key Features	• Natural/herbal indicator or sensor integration to detect spoilage changes • Portable / easy to use design for kitchens or storage • Rapid indication before visible spoilage appears (e.g., colour change)
Typical Detection Mechanism	Using indicator chemistry or sensors that respond to spoilage-related changes such as acidity increase, release of gases (amines, hydrogen sulfide), or enzymatic by-products <i>(common spoilage detection approach in devices).</i>
Benefits / Advantages	• Early spoilage detection before food becomes unsafe • Reduces food waste by timely alerts • Potentially herbal/natural indicator based, making the system environmentally friendly and less toxic
Field / Discipline	Pharmacognosy / Natural product chemistry / Analytical chemistry / Food safety technology
Potential Output	Visual (colour change, indicator strip) or electronic signal (sensor alert, display) indicating the fresh vs spoiled status of the food item.



Aspect	Details
Name of Innovation	Multi-Chambered Device to Perform Phytochemical Analysis
Role of Dr. N. G. Sutar	Member (faculty contributor in multidisciplinary innovation team — pharmacognosy/plant chemistry context; device relates to plant phytochemical screening where expertise overlaps Dr. Sutar's research area)
Institution / Registered By	R. D. Engineering College (registered with Application No. 391065-001)
Purpose / Field	Device for efficient phytochemical analysis of medicinal plant samples (Chemistry / Plant Medicine / Engineering)
Core Functionality	Integrates multiple stages of phytochemical testing in one unit, including extraction, reaction, and chromatographic analysis (TLC)
Key Components / Chambers	• Drying & powdering chamber for sample preparation • Reaction chamber for color-based phytochemical identification • TLC analysis chamber with scanner and display output
Phytochemicals Identified	Alkaloids, glycosides, flavonoids, tannins, terpenoids, steroids, saponins, phenolics, fats, sugars
Output / Readout	Direct display of phytochemical analysis results on attached screen
Innovation Highlight	Combines multi-stage plant chemical analysis (pre-processing to detection) into a single device platform, streamlining traditional lab workflows for plant phytochemical studies.



Aspect	Details
Innovation Name	Counter-Current Extraction Paper Model (Teaching-Learning Practice)
Innovator / Faculty	Dr. N. G. Sutar , Department of Pharmacognosy (Sanjivani College of Pharmaceutical Education & Research)
Purpose / Application	To create a simple, paper-based physical model that demonstrates the principles of counter-current extraction for students, improving conceptual understanding in lectures/practical labs.
Innovation Type	Teaching-Learning Practice / Educational Aid (hands-on classroom model)
Core Concept Demonstrated	Counter-current extraction theory — teaches how two immiscible liquid phases moving in opposite directions result in efficient solute separation and enhanced extraction efficiency.
Model Medium	Paper fold/strip model simulating multiple extraction stages with directional flows (analogous to extraction columns/tubes), illustrating distribution and partitioning of solutes between phases.
Key Features	• Low-cost and easy to construct using paper/cardboard and markers • Interactive and visual demonstration supports active learning • Helps student understanding of partitioning equilibrium and efficiency
Learning Outcomes	• Students grasp the directionality concept in counter-current systems • Visual reinforcement of equilibrium and extraction stages • Better retention of mass-transfer theory
Benefits / Advantages	• Engages learners in active exploration • Reduces abstraction of liquid-liquid extraction theory • Boosts classroom participation and conceptual clarity
Field / Discipline	Pharmacognosy education, Analytical Chemistry teaching, Natural Product Extraction Concepts



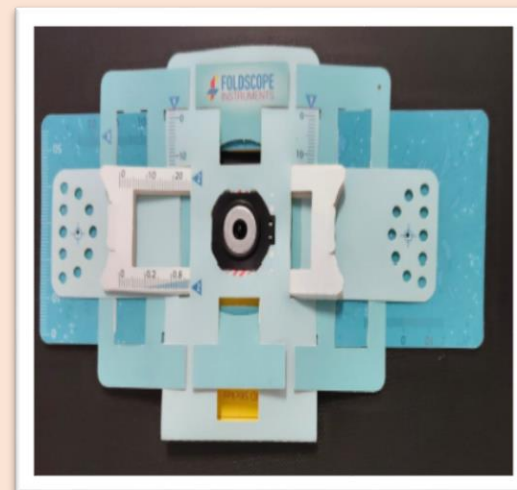
Aspect	Details
Innovation Name	Isolation of Colour by Using Chalk (Teaching-Learning Practice)
Innovator / Faculty	Dr. N. G. Sutar , Department of Pharmacognosy, Sanjivani College of Pharmaceutical Education & Research
Type of Innovation	Teaching & Learning Practice / Educational Demonstration
Purpose / Educational Goal	To visually demonstrate colour separation principles (similar to chromatography) using chalk as a stationary phase, making abstract concepts tangible and easy for students to grasp.
Core Concept Demonstrated	Separation of mixed pigments based on differential adsorption/migration — a simple analogue to chromatographic techniques where components separate due to differences in affinity/mobility.
Model Materials Used	Common chalk sticks , coloured inks/dyes or plant extracts, water/solvent, filter paper, simple containers.
How It Works (Principle)	• Chalk surface adsorbs different colour molecules unevenly • Solvent moves up the chalk by capillary action, carrying colours at different rates • Colours separate spatially along chalk surface, illustrating partition/adsorption differences (like chromatography).
Key Features	• Low-cost and safe materials • Visual, hands-on learning experience • Helps bridge theory (chromatography/adsorption) and observable result
Learning Outcomes	• Understand separation principles (adsorption, capillary action) • Visualize how mixtures can be separated into constituent colours • Boosts student engagement and conceptual clarity
Benefits / Advantages	• Accessible for all classrooms without advanced equipment • Encourages active, inquiry-based learning • Enhances retention of key analytical chemistry concepts
Field / Discipline	Chemical/Pharmacognosy education, Analytical technique fundamentals, Active learning pedagogy



Aspect	Details
Innovation Name	QR Code to Plants (Educational Digital Plant Tagging System)
Innovator / Faculty	Dr. N. G. Sutar , Department of Pharmacognosy (Teaching-Learning Practice)
Type of Innovation	Teaching & Learning Practice / Educational Technology Integration
Purpose / Application	To link living plants to digital educational content using Quick Response (QR) codes, enabling students to learn botanical and phytochemical information interactively by scanning codes with smartphones.
Core Concept	Assign unique QR codes to plants in a garden or campus; scanning the QR code retrieves detailed information such as botanical names, properties, uses, and learning resources — promoting digital literacy and environmental awareness.
Implementation / Method	• Data collection & profiling of plants (names, characteristics) • Generation of QR codes linked to online information or digital profiles • Placement of QR code labels near corresponding plants for easy scanning by students.
Key Features	• Interactive learning by mobile scanning of QR codes • Digital access to plant information on demand • Encourages self-guided exploration and research skills • Bridges botanical learning with technology integration.
Benefits / Advantages	• Enhances student engagement and curiosity • Promotes experiential learning in botany and pharmacognosy • Supports digital literacy and field learning • Makes plant information accessible anytime via smartphones.
Learning Outcomes	• Better understanding of plant taxonomy and phytochemistry • Encourages independent learning and research orientation • Fosters environmental awareness & biodiversity appreciation among learners.
Field / Discipline	Pharmacognosy, Botany, Education Technology



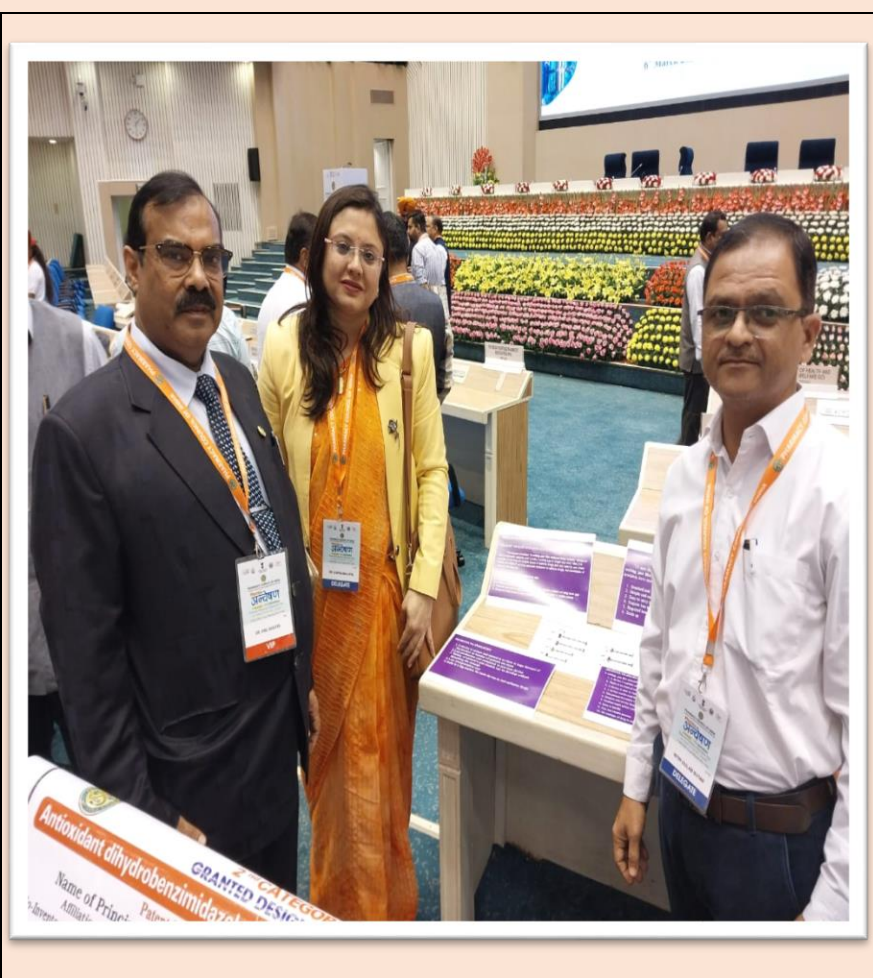
Aspect	Details
Innovation Name	Use of Foldscope Microscope in Practicals (Innovative Teaching–Learning Practice)
Innovator / Faculty	Dr. N. G. Sutar , Department of Pharmacognosy, Sanjivani College of Pharmaceutical Education & Research
Type of Innovation	Teaching–Learning Practice / Educational Innovation
Purpose / Educational Goal	To integrate Foldscope (low-cost paper microscope) into practical classes, enhancing hands-on learning , microscopy skills, and engagement among students.
Core Concept	Use of a portable, affordable paper-based microscope (Foldscope) to observe micro-structures of biological specimens, replacing or supplementing conventional microscopes in classroom/lab settings.
Materials / Tools Used	Foldscope microscope kits, prepared slides or fresh specimens (plants, microorganisms, tissues), smartphone attachment (optional) for image capture.
Implementation Method	• Students assemble and learn to use Foldscope • Conduct microscopy practicals on plant cells, tissues, microorganisms, crystals, pollen, etc. • Integrate observations with theory to reinforce learning.
Key Features	• Affordable, portable microscope for every student • Encourages active participation and curiosity • Can be used outside traditional labs (field, outdoors)
Learning Outcomes	• Improved microscopy skills and observational ability • Better understanding of microstructures in biology, botany, pharmacognosy • Enhanced student engagement and confidence in practical science
Benefits / Advantages	• Makes practicals inclusive and accessible (even with limited lab resources) • Encourages self-directed exploration and scientific inquiry • Bridges gap between theory and practice
Field / Discipline	Pharmacognosy, Biology, Botany, Life Sciences Education



Aspect	Details
Award Name	Kamal Sharma Award
Year	2021
Recipient	Dr. N. G. Sutar
Award Category	Best Teacher Excellence Award
Awarding Organization / Group	Lexicon Group of Institutions <i>(recognition for excellence in teaching)</i>
Purpose / Significance	To recognize distinguished teaching excellence and significant contribution to academic life and student development.
Institutional Affiliation at Time of Award	Sanjivani College of Pharmaceutical Education & Research <i>(Department of Pharmacognosy)</i>
Impact / Recognition	Acknowledges outstanding commitment to teaching, mentorship, and academic leadership among faculty peers and students.



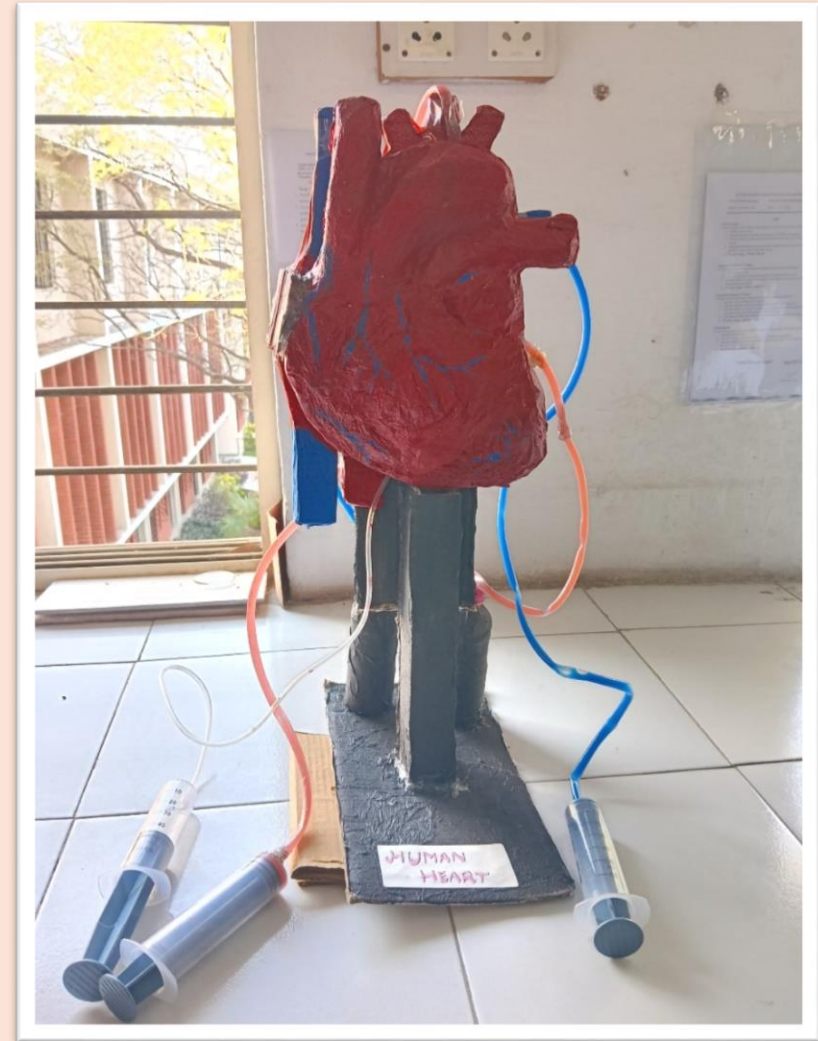
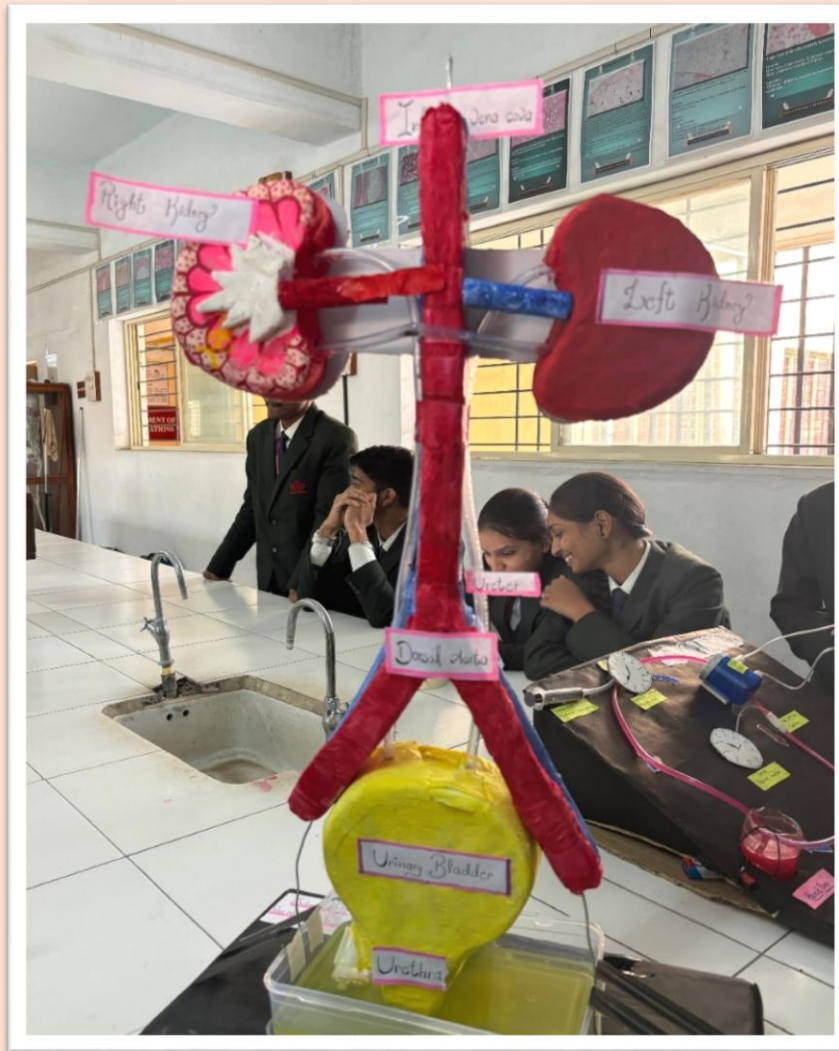
Aspect	Details
Award Title	Best Patent Presentation Award
Awarding Organization	Pharmacy Council of India (PCI) – statutory regulatory body for pharmacy education in India
Year	2023
Recipient	Dr. N. G. Sutar
Category / Recognition	Recognized for outstanding patent presentation at a Council-led event (PCI-sponsored conference / seminar on pharmacy research and innovations)
Significance	Highlights excellence in intellectual property communication , clarity of patent idea, technical depth, and presentation skills in front of expert jury
Impact	Demonstrates Dr. Sutar's contribution to pharmaceutical innovation and patent literacy among academic peers and regulators
Field / Discipline	Pharmacy education, research innovations, and intellectual property advocacy

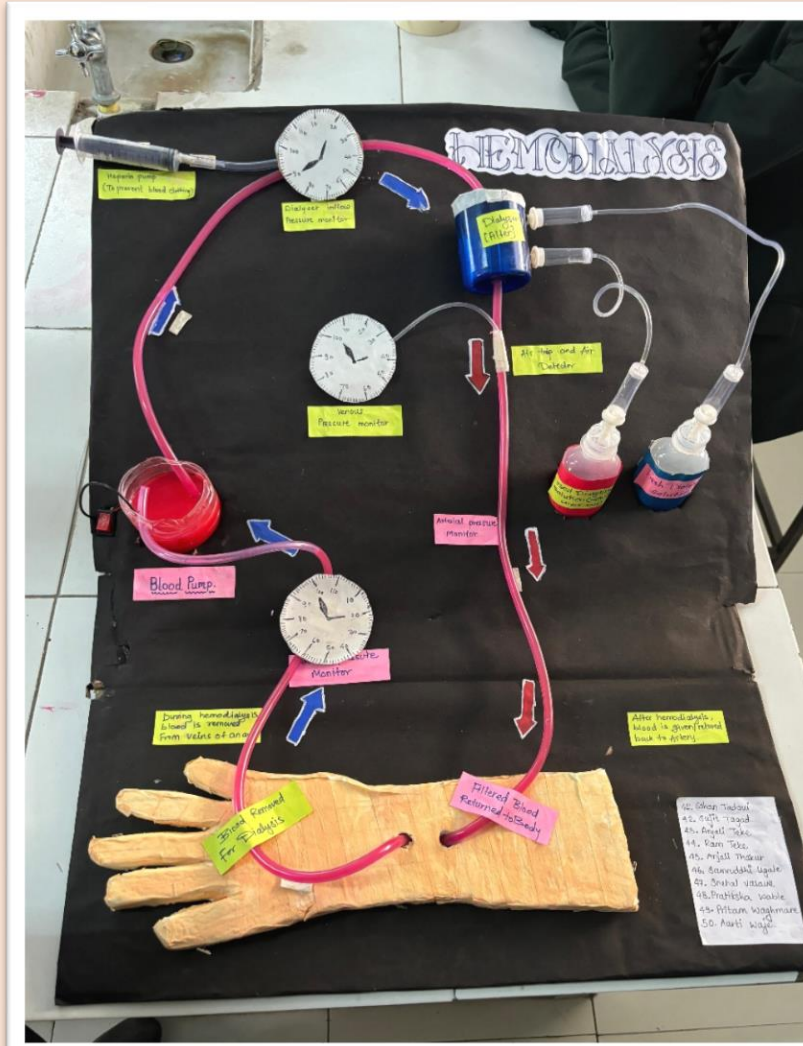


Aspect	Details
Award Title	Best Innovative Teacher Award
Awarding Organization	Savitribai Phule Pune University (SPPU), Pune
Date / Event	10 February 2025 – University Foundation Day celebration
Recipient	Dr. N. G. Sutar
Recognition For	Excellence in innovative teaching practices and methodologies in pharmaceutical education as a faculty member (2024-25 academic year)
Institutional Affiliation	Sanjivani College of Pharmaceutical Education & Research, Kopergaon (Department of Pharmacognosy)
Significance	Acknowledges outstanding creativity and innovation in pedagogy , inspiring students and enhancing learning outcomes through new educational practices
Impact	Highlights leadership in academic excellence , promoting innovative teaching approaches and contributing to quality education within pharmacy teaching communities



Aspect	Details
Innovation Name	Student-Prepared Models in Human Anatomy & Physiology
Innovator / Faculty Guide	Mr. Irfan Malik
Type of Innovation	Teaching–Learning Practice / Active Learning Initiative
Purpose / Educational Goal	To motivate students to create models representing human anatomy and physiological processes, enhancing active participation, creativity, and conceptual understanding .
Core Concept	Students design and prepare tangible models (e.g., organs, systems, or functional diagrams) to visualize complex human anatomy and physiology ; guided mentorship by faculty ensures accuracy and scientific relevance .
Implementation Method	• Students brainstorm and select topics • Prepare models using available materials (clay, cardboard, recycled items, or craft supplies) • Faculty guidance ensures correctness and scientific value • Models are displayed or presented in class or exhibitions
Key Features	• Hands-on, experiential learning • Encourages creativity and innovation • Promotes peer learning and collaborative skills • Models act as visual aids for better comprehension
Learning Outcomes	• Deep understanding of anatomical structures and physiological functions • Improved critical thinking and problem-solving skills • Lifelong retention of concepts through active engagement • Boosts confidence and presentation skills
Benefits / Advantages	• Enhances active learning over passive lectures • Supports visual and kinesthetic learning styles • Fosters long-term understanding and practical knowledge application • Encourages teamwork, innovation, and creativity
Field / Discipline	Human Anatomy & Physiology, Health Sciences Education, Experiential Learning, Active Pedagogy

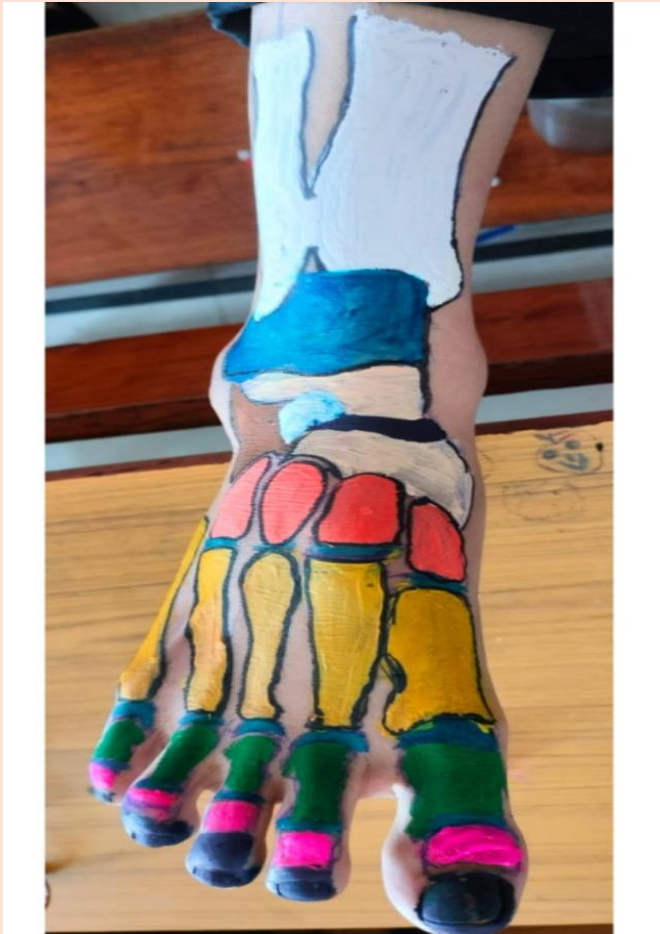




“Active Learning Spotlight: Student Prepared Models”



“Exploring Human Anatomy Through Student Innovation”



“Bringing Anatomy & Physiology to Life”



“Art Meets Anatomy: Human Skeleton Painting Champions” Guided by Irfan Malik Sir



Group Discussion – Fishbowl Model by Dr Seema A. Gosavi

Innovation: Implemented a modified Fishbowl technique for structured group discussions in Pharmaceutical Validation and audit Regulatory Compliance, encouraging inclusive dialogue and critical reasoning.

Outcomes: Notable improvement in communication, argumentation, and active listening



“Experiential Learning in Action: Student Innovations at Sanjivani Business Expo 2025”

Co-ordinated by Dr Seema A. Gosavi