

**Dr. Rakesh K Sindhu, Professor, SOP**

**Details of Publications.**

S.No.	Title of paper	Authors	Journal, ISSN, Volume number, Page number	Impact Factor / Citation n	Publisher/ Indexing
1.	Angiogenic footprints in diabetic retinopathy: opportunities for drug development	Bhatia S, Babbar R, Zehravi M, Singh B, Chandel P, Hasan MM, Arora R, Gill NS, <b>Sindhu RK</b> , Ahmad Z, Khan FS, Rahman MH.	Biotechnol Genet Eng Rev. & 0264-8725, <b>2022</b> ;25, 35876332.	4.103	SCI, Pubmed, Scopus
2.	Scrutinizing the Role of Genetically Modified Herbs (GMHs) in The Treatment of Various Diseases	<b>Sindhu RK</b> , Verma R, Salgotra T, Madaan P, Chandel P, Batiha GE, Cavalu S	Recent Patents on Biotechnol 1872-2083, <b>2022</b> , 16	2.00	SCI, Pubmed, Scopus
3.	Bioactive Loaded Novel Nano-Formulations for Targeted Drug Delivery system and Their Therapeutic Potential	Kumari S, Goyal A., Eda Sönmez Gürer, EvrenYaparEA,Garg M, Sood M, <b>Sindhu, Rakesh K.</b>	Pharmaceutics 999-4923, 14, <b>2022</b> 1091.	<b>6.734</b>	SCI, Pubmed, Scopus
4.	Supersaturation-Based Drug Delivery Systems: Strategy for Bioavailability Enhancement of Poorly Water-Soluble Drugs.	Sharma, A.; Arora, K.; Mohapatra, H.; <b>Sindhu, Rakesh K.</b> ; Bulzan, M.; Cavalu, S.; Paneshar, G.; Elansary, H.O.; El-Sabrout, A.M.; Mahmoud, E.A.; Alaklabi, A.	Molecules 1420-3049, <b>2022</b> , 27, 2969.	5.110	SCI, Pubmed, Scopus
5.	Bioactive Based Nanocarriers for the Treatment of Viral Infections and SARS-CoV-2	Goyal, R.; Bala, R.; <b>Sindhu, Rakesh K.</b> ; Zehravi, M.; Madaan, R.; Ramproshad, S.; Mondal, B.; Dey, A.; Rahman, M.H.; Cavalu, S.	Nanomaterials 2079-4991, <b>2022</b> , 12, 1530	<b>5.076</b>	SCI, Pubmed, Scopus

6.	Therapeutic Approaches for the Management of Autoimmune Disorders via Gene Therapy: Prospects, Challenges and Opportunities	<b>Sindhu, Rakesh K.</b> , Madaan, P, Chandel, P, Akter, R, Adilakshmi, G, Rahman, MH.	Current Gene Therapy 1566-5232, <b>2022</b> ;22(3), 245–261	4.391	SCI, Pubmed, Scopus
7.	Bioactive-Based Cosmeceuticals: An Update on Emerging Trends	Goyal, Anju, Aditya Sharma, <b>Sindhu Rakesh K.</b> , Md. H. Rahman, and Mohamed M. Abdel-Daim	Molecules 1420-3049, <b>2022</b> ;27(3), 00828.	5.110	SCI, Pubmed, Scopus
8.	Modern Herbal Nanogels: Formulation, Delivery Methods, and Applications.	<b>Sindhu, Rakesh K.</b> , Rubal Gupta, GaurishWadhera, and Pradeep Kumar.	Gels,2310-2861 , <b>2022</b> (8)2,97.	4.702	SCI, Pubmed, Scopus
9.	Exploring Multifunctional Antioxidants as a Potential agents for Management of Neurological Disorders	<b>Sindhu Rakesh K.</b> , Prabhjot Kaur, Parneet Kaur, Harmanpreet Singh, Gaber El-SaberBatiha, <b>Inderjeet Verma</b>	Environmental Science and Pollution Research, 0944-1344, <b>2022</b> ; 29(17): 24458-24477	4.309	SCI, Pubmed, Scopus
10.	Arbutin attenuates monosodium L-glutamate induced neurotoxicity and cognitive dysfunction in rats	Kumar M, Kumar A, <b>Sindhu Rakesh K.</b> , AS Kushwah	Neurochemistry international 1872-9754, <b>2021</b> , 151, 105217.	4.291	SCI, Pubmed, Scopus
11.	Bioactive Compounds and Nanodelivery Perspectives for Treatment of Cardiovascular Diseases	<b>Sindhu, Rakesh K.</b> , Annima Goyal, EvrenAlginYapar, and Simona Cavalu.	Applied Sciences, 2076-3417, <b>2021</b> ,11(22): 11031.	2.679	SCI, Pubmed, Scopus
12.	The ameliorating approach of nanorobotics in the novel drug delivery systems: a mechanistic review.	<b>Sindhu RK</b> , Kaur H, Kumar M, et al. doi:10.1080/1061186X.2021.1892122	Journal of Drug Targeting 1029-2330, <b>2021</b> ;29(8):822-833.	<b>5.119</b>	SCI, Scopus
13.	The prospective of liquid crystals in nano formulations for drug delivery systems,	Rajni Bala, <b>Rakesh K.</b> <b>Sindhu</b> , Bharti Kaundle, ReechaMadaan, Simona	Journal of Molecular Structure,	3.19	SCI, Scopus

		Cavalu	0022-2860, <b>2021</b> ,1245, 131117.		
14.	Perspectives on the Combined Effects of Ocimumbasilicum and Trifolium pratense Extracts in Terms of Phytochemical Profile and pharmacological Effects.	Antonescu A-I, Miere F, Fritea L, Ganea M, Zdrinca M, Dobjanschi L, Antonescu A, Vicas SI, Bodog F, <b>Sindhu RK</b> , Cavalu S.	Plants.2223-7747, <b>2021</b> ; 10(7): 1390.	3.954	SCI, Pubmed, Scopus
15.	Revisiting Therapeutic Strategies for H. pylori Treatment in the Context of Antibiotic Resistance: Focus on Alternative and Complementary Therapies.	Cardos, I.A.; Zaha, D.C.; <b>Sindhu, R.K.</b> ; Cavalu, S.	Molecules 1420-3049, <b>2021</b> , 26, 6078.	5.110	SCI, Pubmed, Scopus
16.	Potentiality of Nanoenzymes for Cancer Treatment and Other Diseases: Current Status and Future Challenges.	<b>Sindhu, R.K.</b> ; Najda, A.; Kaur, P.; Shah, M.; Singh, H.; Kaur, P.; Cavalu, S.; Jaroszuk-Sierocińska, M.; Rahman, M.H.	Materials 1996-1944, <b>2021</b> , 14, 5965.	3.623	SCI, Pubmed, Scopus
17.	Impacting the Remedial Potential of Nano Delivery Based Flavonoids for Breast Cancer Treatment.	<b>Sindhu, R.K.</b> ; Verma, R.; Salgotra, T.; Rahman, M.H.; Shah, M.; Akter, R.; Murad, W.; Mubin, S.; Bibi, P.; Qusti, S.; Alshammari, E.M.; Batiha, G.E.-S.; Tomczyk, M.; Al-kuraishy, H.M.	Molecules 1420-3049, <b>2021</b> , 26(17), 5163.	5.110	SCI, Pubmed, Scopus
18.	Hp- $\beta$ -CD-voriconazole in situ gelling system for ocular drug delivery: In vitro, stability, and antifungal activities assessment	Pawar, P., Kashyap, H., Malhotra, S., <b>Sindhu, R.</b>	Bio Med Research International & 2314-6141, 1-9, <b>2013</b> .	3.411	SCI, SCOPUS, Pubmed
19.	Therapeutic Monoclonal Antibodies in Clinical Practice against Cancer	Navgeet Kaur, Anju Goyal, <b>Rakesh K Sindhu</b>	Anti-Cancer Agents in Medicinal Chemistry	2.3	SCI, Scopus

			1875-5992, <b>2020</b> , 20(16), 1895 – 1907.		
20.	Anti-inflammatory potential of various extract fractions of Ficus lacor aerial roots and Murrayakoenigii roots.	<b>Sindhu., RK.,</b> Arora S	Archives of Biological Sciences &1821-4339, 66 (3), 1261-1270, <b>2014</b> .	0.960	SCI, SCOPUS
21.	Hypolipidemic activity of ethanolic extract of VerbesinaencelioidesBenth. Roots.	<b>Sindhu, R.K.,</b> Sharma, S.K., Vasudeva N.	Acta Pol. Pharm.Science& 0001-837, 68 (2) 301-304, <b>2011</b> .	0.877	SCI, SCOPUS
22.	Honey Collected from Different Flora of Chandigarh Tricity: A Comparative Study involving Physico-chemical Parameters and Biochemical activities.	Kumar, P., <b>Sindhu, R.K.,</b> Singh, I.B., Arora S.	Journal of Dietary Supplements &1939-0211, 7(4): 303-313, <b>2010</b> .	2.27	SCI, SCOPUS
23.	Therapeutic effect of Ficus lacor aerial roots of various fractions on Adjuvant-Induced Arthritic rats.	<b>Rakesh K</b> <b>Sindhu</b> and S Arora.	ISRN Pharmacology &2090-5173, 1-8, <b>2013</b> --.		SCI, SCOPUS
24.	Skin Penetration Enhancer's in Transdermal Drug Delivery Systems	<b>Sindhu, R.K.,</b> Chitkara, M., Kaur, G., Jaiswal, P., Kalra, A., Singh I., Sriamornsak, P.	Research Journal of Pharmacy and Technology & 0974- 360X, 10(6), 1809-1815, <b>2017</b> --.		SCOPUS, UGC
25.	Antioxidant and free radical scavenging potential of ethanolic	Pant M, Basu, S., <b>Sindhu, R.K.,</b> Rachana	Asian Journal of Pharmaceutical and		SCOPUS, UGC

	fraction of Adhatodavasica in A549 cell line		Clinical Research & 0974-2441, 8 (6), 244-249, <b>2015.</b> --.		
26.	Free radical scavenging and antioxidant potential of Ficus lacor Buch. Hum.	<b>Sindhu, R.K.,</b> Arora, S	Asian Journal of Pharmaceutical and Clinical Research & 0974-2441, 6 (5), 184-186, <b>2013.</b> --.		SCOPUS, UGC
27.	Phytochemical and pharmacognostical investigations on aerial roots of Ficus iacor Buch. Ham	<b>Sindhu, R.K.,</b> Arora, S.	International Journal of Phytomedicine &0975-0185, 5(3), 267-277, <b>2013.</b>		SCOPUS
28.	Evaluation of phenolic contents and antioxidant potential of MurrayaKoenigii (L) spreng roots	<b>Sindhu, R. K.,</b> Arora, S.	Journal of Applied Pharmaceutical Sciences &2231-3354, 2(11), 120-122, <b>2012.</b>		SCOPUS, UGC
29.	Phytochemical and pharmacognostical studies on Murrayakoenigii (L)spreng. Roots	<b>Sindhu, R.K.,</b> Arora, S.	Drug Invention Today 0975-7619, 4(1), 325-333, <b>2012.</b>		SCOPUS
30.	Investigations into the anti-ulcer activity of Rheum ribeslinn leaves extracts	<b>Sindhu, R.K.,</b> Kumar, P., Kumar, J., Kumar, A., Arora, S.	International Journal of Pharmacy and Pharmaceutical		SCOPUS

			Sciences 0975-1491, 2(4): 90-93, <b>2010.</b>		
31.	Santalum albumlinn: A review on morphology, phytochemistry and pharmacological aspects	<b>Sindhu, R.K.,</b> Upma, Kumar, A., Arora, S.	International Journal of PharmTech Research, 0974-4304, 2(1): 914-919, <b>2010.</b>		SCOPUS
32.	Anti-psoriatic and phytochemical evaluation of Thespesia populnea bark extracts.	Shrivastav, S., <b>Sindhu, R.K.,</b> Kumar, S., Kumar, P.	International Journal of Pharmacy and Pharmaceutical Sciences, 0975-1491, 1(1): 176-185, <b>2009.</b>		SCOPUS
33.	Development and characterization of chitosan and polymethylmethacrylate interpenetrating polymer network ophthalmic inserts	Kumar, P., Singh, I., <b>Sindhu, R.K.,</b> Arora, S.	International Journal of Pharm Tech Research, 0974-4304, 1(4): 1241-1246, <b>2009.</b>		SCOPUS
34.	Formulation Development and Evaluation of Polyherbal Bath Soap	<b>Sindhu, R.K.,</b> Kaur, G.	Scholars Bulletin, 2412-9771, 4(12), 899-904, <b>2018.</b>		ESCI
35.	Formulation Development and Standardization of Herbal Face Pack	<b>Sindhu, R.K.</b> Suryamani	Saudi Journal of Medical and Pharmaceutical Sciences, <b>2413-</b>	--	

			<b>4910</b> , 4(11), 1343-1349, <b>2018</b> .		
36.	Mineral Content Analysis of Polyherbal Energy Bar Using X-Ray Fluorescence Technique	Chitkara1, M., <b>Sindhu, R.K.</b> , Kohli, R., Sandhu1, I.S., Didar Singh, D., Kaur, G.	Pharmacognosy Journal, 0975-3575, 11(1), 53-56, <b>2019</b> .		Scopus
37.	Simultaneous Analysis of Paracetamol and Tramadol – Analytical method development & validation.	Narayan, S., Kumar, P., <b>Sindhu, R.K.</b> , Tiwari, A., Ghosh, M.	Der Pharma Chemica, 0975-413X, 1(2): 72-78, <b>2009</b> .		SCOPUS
38.	Taste Sensor: The Pharmaceutical Taste Analyzer.	Singh, I., Kumar, P., <b>Sindhu, R.K.</b> ,,Aboul-Ein., H.Y.	Archives of Applied Science Research, 0975-508X, 1(2): 72-78, <b>2009</b> .		SCOPUS
39.	Phytochemical, Nutritional and Pharmacological evidences for Abelmoschus esculentus (L.).	<b>Sindhu, R.K.</b> , Puri V.	The Journal of Phytopharmacology, 2230-480X, 5(6):248-252, <b>2016</b> .		--
40.	Various animal models for preclinical testing of anti-inflammatory agents.	<b>Sindhu, R.K.</b> ,Sood, N., Puri, V., Arora,S.	Int. Journal of Pharmaceutical Sciences Research, 0975-8232, 8(2), 1550-1557, <b>2017</b> .		ESCI, SCOPUS
41.	Development And Nutritional, Organoleptic, Biochemical Analysis of Polyherbal (Stevia, Banana, Cocoa Butter, Oats) Energy Bar,	Chitkara, M.,Kohli, R., Sandhu, I.S., Singh, D., <b>Sindhu, R.K</b> .	Journal of Advance Food Science & Technology, 2425-4213, 4(2), 62-66, <b>2017</b> .		--

42.	Pharmacognostical and Preliminary Phytochemical screening of VerbesinaencelioidesBenth. Roots.	<b>Sindhu, R.K.,</b> Sharma, S.K., Vasudeva, N..	Journal of Herbal Medicine and Toxicology, 0973-4643, 4 (2): 113-118, <b>2010.</b>		--
43.	Hypoglyceamic potential of VerbesinaencelioidesBenth. roots.	<b>Sindhu, R.K.,</b> Kumar, P., Singh, I., Arora, S.	Research Journal of Pharmacognosy and Phytochemistry, 0975-4385, 2(1): 41-45, <b>2010.</b>		--
44.	Herbs for the treatment of arthritis and inflammation: A review.	<b>Sindhu, R.K.,</b> Arora, S.	Planta activa, 2249-3948, 3, 1-6 <b>2012.</b>		--
45.	Current Approaches In Targeting Cancerous Cells And Novel Anticancer Drug Designing.	Kumar S, Goyal S., Mukhija, M., <b>Sindhu, R.K.</b>	International Journal of Pharma Professional's and Research. 2249-3948, 7(2), 1346-1360, <b>2016.</b>		--
46.	Immunomodulatory potential of polysaccharides derived from plants and microbes: A narrative review	Rakesh K Sindhu, Annima Goyal, Jaya Das, SangayChoden, Pradeep Kumar	Carbohydrate Polymer Technologies and Applications 2666-8939, 2, 2021, 100044.		Scopus
47.	Pharmacodynamic and pharmacokinetic interactions of herbs with prescribed drugs: a review	Vanny Sharma, ReechaMadaan, Rajni Bala, Anju Goyal, Rakesh K. Sindhu	Plant Archives, 21(2)185189; 2021.		UGC

48.	Regulatory Requirements and Stability Testing of Ethnomedicinal Plant Products	Rakesh K Sindhu and Praneet Kaur	Research Journal of Pharmacy and Technology 0974-360X, 13(3)1538-1542, 2020.		UGC, Scopus
49.	Formulation and Evaluation of Essential Oils based Liquid Herbal Hand Wash	Mansi Chitkara, Rakesh K. Sindhu, Inderbir Singh, Deepak Kumar, Inderjit Singh Sandhu, Sandeep Arora	Research Journal of Pharmacy and Technology 0974-360X, 2020; 13(4):1917-1920.		UGC, Scopus
50.	Exploring Anti-Inflammatory Potential Of Ethnomedicinal Plants: An Update	F Sultana, RK Sindhu,.	Plant Archives, 09725210, 25816063, 21 (1), 1818-1824,2021		Scopus, UGC
51.	,Phytochemicals: Extraction, Isolation Methods,Identification And Therapeutic Uses: A Review	RK Sindhu, P Kaur, Sanjana, Manshu, P Kaur, A Goyal, R Bala, A Sandhu	Plant Archives 09725210, 25816063, 21 (Suppl 1), 174-184,2021, 2.		Scopus, UGC
52.	Updated Review On Coumarin With Special Emphasis On Anticancer Activity	Astha, A Goyal, M Gupta, RK Sindhu, AN, Plant	Plant Archives 09725210, 25816063, 21 (Suppl 1), 408-415, 2021.		Scopus, UGC
53.	Standardization and Evaluation of Herbal Drugs Is Need of The Hour in Present Era	P Chopra, Narish, RK Sindhu,	Plant Archives 09725210, 25816063, 20 (2), 7883-7889,2020.		Scopus, UGC
54.	Phyto-phospholipids complexes as a potential carrier for bioactives having hepatoprotective activity	V Saini, R Bala, S Arora, RK Sindhu	Plant Archives 09725210, 25816063, 20 (2), 3835-3844, 2020.		Scopus, UGC

55.	Phytoalexins: Sources and Their Pharmacological Potential	RK Sindhu, B Arora, S	Journal of Pharmaceutical Technology, Research and Management; 2321-2217, 8 (1), 1-8, 2020.		
56.	Standardization And Preliminary Phytochemical Screening of Ficus Benjamina Aerial Roots	D Sharma, A Verma, G Kaur, <b>RK Sindhu</b>	Plant Archives 09725210, 25816063, 19 (2), 1366-1372, 2019.	Scopus, UGC	
57.	Formulation development and antimicrobial evaluation of polyherbal soap,	<b>RK Sindhu</b> , M Chitkara, G Kaur, A Kaur, S Arora, IS Sandhu,	Plant Archives 09725210, 25816063, 19 (2), 1342-1346, 2019.	Scopus, UGC	
58.	Comprehensive Review on Ayurvedic Formulations and Herbal Medicines for Treatment of Rheumatoid Arthritis	Farha Sultana, Bhavika Arora, Sandeep Arora, Rakesh K. Sindhu	Journal of University of Shanghai for Science and Technology, 1007-6735, 23. (7)771-790, 2021.	Scopus, UGC	
59.	The Role of Ethnomedicinal Plants for Treatment and Management of Diabetes Mellitus: An Updated Review	<b>Rakesh K Sindhu</b> , Balraj Saini, Prabhjot Kaur, Sandeep Arora, Gaber El-SaberBatiha	Journal of University of Shanghai for Science and Technology, 1007-6735, 23. (7)1014-1049, 2021.	Scopus, UGC	
60.	Comparison And Evaluation of Pharmacopoeial Methods For The Assessment of Potency of	Cengiz, G., E. A. Yapar, B. A. Kara, and <b>R. K. Sindhu</b> .	Universal Journal of Pharmaceutical Research, 2456-	CAS	

	Antibiotics		8058, 6(3)37-45, 2021.		
61.	Cosmetotextiles and Evaluation of Their Performance	Yapar, E. A., İmrenEsentürk, A. Şahiner, E. Halat, B. A. Kara, R. Bala, and <b>R. K. Sindhu.</b>	Universal Journal of Pharmaceutical Research, 2456-8058, 6(3)64-67, 2021		CAS
62.	Evaluation of Multifunctionality in Cosmetics	Yapar, E. A., A. Şahiner, B. A. Kara, S. T. Yıldırım, E. Halat, R. Bala, and <b>R. K. Sindhu</b>	Universal Journal of Pharmaceutical Research, 2456-8058, 6(3)50-54, 2021.		CAS
63.	Potential Animal Poisons for Development of Antiviral Therapeutics	CENGİZ, G., A. ŞAHİNER, E. A. YAPAR, B. A. KARA, and <b>R. K. Sindhu.</b> “	Universal Journal of Pharmaceutical Research, 2456-8058, 6(2)50-54, 2021.		CAS

Books Published					
S No	Authors	Title of the Book	Place of Publication	ISBN & Publisher	Year of Publication
1	<b>Rakesh K Sindhu</b> , Virender Ranga, Gopal Singh, Ridhima	<b>Text book of Computer Application in Pharmacy</b>	India	978-81938912-3-0 <b>Paging Publisher, India</b>	<b>2019</b>
2.	Navgeet Kaur, Aju Goyal, <b>Rakesh K Sindhu</b>	<b>Text book on Synthesis and Biological Aspects of Pyrimidine Derivatives</b>	Germany	978-620-0-07819-3 <b>Lambert Academic Publisher, Germany</b>	<b>2019</b>
3.	Rakesh K Sindhu, Sumitra Singh	<b>Herbal Drug Technology</b>	India	978-8194191292 <b>Paging Publisher, India</b>	<b>2020</b>
4.	Rakesh K Sindhu, Varinder Ranga	<b>Practical Book of Computer Application</b>	India	9788194454373 <b>Paging Publisher, India</b>	<b>2020</b>
5.	Rakesh K Sindhu, Mansi Chitkara, IS sandhu	<b>Nanotechnology: Principles and Applications</b>	Singapore	9789814877435 <b>Jenny Stanford Publishing, Singapore</b>	<b>2021</b>
6.	Inderbir Singh, <b>Rakesh K Sindhu</b> , Rajni Bala, Reechamadan	Herbal Bioactives for Developing Drug Delivery Systems: Challenges and Opportunities		9780128243855 <b>Elsevier (Academic Press)</b>	<b>2022</b>

7.	Inderbir Singh, <b>Rakesh K. Sindhu</b> , Atul Shirkhedkar, PharkphoomPanichayupakaranant	Herbal Drugs for the Management of Infectious Diseases	USA	9781119818724, <b>Wiley-Skrivener, USA</b>	<b>2022</b>
8.	<b>Rakesh K Sindhu</b>	Nanotechnology and Drug delivery Systems: Applications	Singapore	<b>Jenny Stanford Publishing, Singapore</b>	(In Process)
9.	<b>Rakesh K Sindhu</b> , LuxmiSapra	AI in Healthcare	Singapore	<b>Jenny Stanford Publishing, Singapore</b>	(In Process)

Book Chapters						
S No	Authors	Title of the Book	Title of the Chapter	Place of Publication	ISBN & Publisher	Page No. Year
1	<b>Rakesh K Sindhu</b> and Sandeep Arora.	Recent Progress on Medicinal Plants	Sandal wood oil: phytochemical and pharmacological updates	USA	1-933699-96-5 Stodium Press LLC.	Vol. 36, 181-191, <b>2013</b>
2.	<b>Rakesh K. Sindhu</b> , Gagandeep Kaur and Arashmeet Kaur	Zero Waste Management Practices for Environmental Sustainability Editor Dr. Ashok K. Rathoure	Biomedical Waste Disposal and Treatment	UK	9780367180393 CRC, Taylor and Francis	75-90, <b>2019</b>
3.	<b>Rakesh K. Sindhu</b> ,	Zero Waste	Industrial Waste	UK	9780367180393	115-

	Gagandeep Kaur and Arashmeet Kaur	Management Practices for Environmental Sustainability Editor Dr. Ashok K. Rathoure	Management System..		CRC, Taylor and Francis	130, <b>2019</b>
<b>4.</b>	<b>Rakesh K Sindhu,</b> Gagandeep Kaur, Arashmeet Kaur, Shivam Garg, Shantanu K Yadav, Sumitra Singh	Application of Nanotechnology in Pharmaceutical Sciences	Nanotechnology Principles and Applications	Singapore	9789814877435 Jenny Stanford Publishing	41-69, <b>2021</b>
<b>5.</b>	TapanBehl, Priya Nijhawan, Arun Kumar, <b>Rakesh K Sindhu</b>	Nanobiotechnology: Applications and Future Prospects	Nanotechnology Principles and Applications	Singapore	9789814877435 Jenny Stanford Publishing	183-199, <b>2021</b>
<b>6</b>	<b>Rakesh K. Sindhu,</b> Harnoor Kaur, Kritika Sharma, Chander Parkash Dora, Gaber El-SaberBatiha	Green Technologies for Handling and Management of Biomedical Waste	Green Technological Innovation for Sustainable Smart Societies		978-3-030-73294-3 Springer	169-189, <b>2021</b>
<b>7</b>	<b>Rakesh K Sindhu&amp; Poonam Jindal</b>	Artificial Intelligence and the Fourth Industrial Revolution	Role of Artificial intelligence (AI) in Advancement of Drug Discovery and Development	Singapore	9789814800792 Jenny Stanford	2022
<b>8</b>	Poonam Jindal & <b>Rakesh K Sindhu</b>	Artificial Intelligence and the Fourth Industrial Revolution	Opportunities and Challenges of the Fourth Industrial Revolution	Singapore	9789814800792 Jenny Stanford	2022

<b>9</b>	Gagandeep Kaur, Prabhjot Kaur, Harnoorkaur, <b>Rakesh K. Sindhu</b>	Herbal bioactives in transdermal drug delivery system	Herbal Bioactives for Developing Drug Delivery Systems: Challenges and Opportunities		9780128243855 Elsevier (Academic Press)	2022, 93-110, I
<b>10</b>	Navgeet Kaur, Anju Goyal, <b>Rakesh K Sindhu</b>	X-Ray Fluorescence in Biological Sciences: Principles, Instrumentation, and Applications	Basics and Fundamentals of X-rays	UK	978-1-119-64558-0, Wiley	April, 2022; 271-277.
<b>11</b>	<b>Rakesh k Sindhu</b> , Shantanu K Yadav, Arashmeetkaur, Mansi Chitakar, Sandeep Arora	X-Ray Fluorescence in Biological Sciences: Principles, Instrumentation, and Applications	General Principle, Procedures and Detectors of X-ray Fluorescence	UK	978-1-119-64558-0, Wiley	April, 2022; 278-285.
<b>12</b>	Kamya Goyal, Navgeet Kaur, Anju Goyal, <b>Rakesh K. Sindhu</b> ,Rajwinder Kaur	X-Ray Fluorescence in Biological Sciences: Principles, Instrumentation, and Applications	Toxic and Essential Elemental Studies of Human Organs Using X-Ray Fluorescence	UK	978-1-119-64558-0, Wiley	pril, 2022; 371-385.
<b>13</b>	Harinderjit Singh, <b>Rakesh K Sindhu</b>	X-Ray Fluorescence in Biological Sciences: Principles, Instrumentation,	X-ray Fluorescence Analysis in Medical Biology	UK	978-1-119-64558-0, Wiley	April, 2022; 467-473.

		and Applications				
<b>14</b>	<b>Rakesh k Sindhu,</b> Shantanu K Yadav, Arashmeetkaur, Manish Kumar, Pradeep Kumar	X-Ray Fluorescence in Biological Sciences: Principles, Instrumentation, and Applications	X-ray Fluorescence: Current Trends and Future Scope	UK	978-1-119- 64558-0, Wiley	April, 2022; 623- 646.
<b>15</b>	<b>Rakesh K Sindhu,</b> Rubal Gupta	Nanotechnology and Drug delivery: Applications	Basics of Nanotechnology and drug delivery	Singapore	Jenny Stanford, Singapore	
<b>16</b>	Arvind Sharma, <b>Rakesh K Sindhu,</b> HarpriyaMahapatra, Kanika Arora	Nanotechnology and Drug delivery: Applications	Nano-based drug delivery for GIT	Singapore	Jenny Stanford, Singapore	

#### PATENTS / Technology Transfer

S No	Inventors	Application no	Title of the Patent	Date
1	<b>Rakesh K Sindhu,</b> Mansi Chitkara, Inderbir Singh, Deepak Kumar IS Sandhu, Sandeep Arora	201811018673	Herbal Hand Wash Composition and Method of Preparation thereof.	18/05/2018
2	<b>Rakesh K Sindhu,</b> Mansi Chitkara, Inderbir Singh,	201811031508	Nontoxic Antimicrobial Floor Cleaner Composition	22/08/2018

	Deepak Kumar, IS Sandhu, Sandeep Arora			
<b>3</b>	<b>Rakesh K Sindhu,</b> Mansi Chitkara, Rajnit Kohli, IS Sandhu, Didar Singh.	201711007090	Compact Nutrition and Energy Bar and method Thereof.	28/02/2017 <b>Patented</b>
<b>4</b>	<b>Rakesh K Sindhu,</b> Mansi Chitkara, IS Sandhu, Rajneet Kohli, Didar Singh	201611040424	Therapeutically beneficial fruit concentrate Syrup/molasses for use in bakery products and a method	25/11/2016
<b>5</b>	<b>Rakesh K Sindhu,</b> Mansi Chitkara, Rajnit Kohli, IS Sandhu, Didar Singh.	201711007084	Novel Dehydrated Fat Free Marinade	15/02/2018
<b>6.</b>	<b>Rakesh K Sindhu,</b> Mansi Chitkara, Gagandeep Kaur, Arashmeet Kaur, IS Sandhu, Sandeep Arora	201911011586	Antimicrobial Polyherbal Soap Composition	26/03/2019
<b>7.</b>	Suryamani, <b>Rakesh K Sindhu</b> , Inderbir Singh	202011056362	Oil Pulling Composition for Oral Care	24/12/2020
<b>8.</b>	Suryamani, <b>Rakesh K Sindhu</b> , Inderbir Singh	332130-001 (Design)	Snacks serving carton	19/08/20 <b>Patented</b>
<b>9.</b>	<b>Rakesh K Sindhu</b> , Inderbir Singh,	202111000759	Edible Wrapping Film Composition Comprising Gelatin and	07/01/2021

	Sachin Kalra, Bhogal Sachin		Lactobacillus plantarum	
<b>10</b>	<b>Rakesh K Sindhu,</b> Arvind Sharma, TG Singh, Sandeep Arora	202111062181	Bicontinuous microemulsion-based topical composition for hair care	31/12/2021
<b>11</b>	Arvind Sharma, <b>Rakesh K Sindhu,</b> TG Singh, Sandeep Arora	202211000231	Oleic acid liposome-based topical composition for hair care	03/01/2022
<b>12</b>	Saurabh Gupta, Arvind Sharma, <b>Rakesh K Sindhu,</b> MVNL Chaitanya,	202211001807	A pharmaceutical gel formulation for wound healing comprising nanoliposomal <i>Mimosa pudica</i>	12/01/2022
<b>13</b>	<b>Rakesh K Sindhu,</b> Arvind Sharma, Sandeep Arora	202211003726	Alcohol-free herbal hand sanitizer gel composition	22/01/2022
<b>14</b>	Ashok Kumar, Munish Ahuja, <b>Rakesh K Sindhu</b>	202211016726	A process of synthesizing of quaternized gum kondagogu	24/03/22
<b>15</b>	Ashok Kumar, Munish Ahuja, <b>Rakesh K Sindhu</b>	202211022488	An interpenetrating polymer network hydrogel composition and methods of preparation thereof	15/04/2022