

RKDF University, Bhopal
Faculty Profile



Basic Information				
Name	Dr. Akhilesh Chandra Nayak			
Date of Birth	28st Jan 1972			
Designation	Professor			
Department	Science (Physics)			
Experience	27 Years			
Email ID	dracnayak@ymail.com			
Contact No	9893877564, 6264553101			
Educational Qualifications				
Description	Year	%	Institute/University	
(UG)- B. Sc.	1996	56	Barkatullah University , Bhopal (M.P)	
(PG)- (Physics)	1998	65	Barkatullah University , Bhopal (M.P)	
M. Phil.	-	-	-	
(Ph. D.)- Science	2007		Barkatullha University , Bhopal (M.P)	
Post Doctorate/ D. Sc.	2024		University of Central America (Bolivia)	
NET Qualified/GATE	-	-	-	
Experience Detail				
Experience (Teaching/ Research)	Designation	Duration		Name of Institute/University
		From	To	
12	Professor	24.08.2015	Till date	SSSCE, RKDF University Bhopal
03	Associate Professor & HOD	04.03.2012	23.08.2015	SSSCE, RKDF University Bhopal
02	Assistant Professor	20.09.2008	03.03.2012	Surabhi College of Engineering Sukhi Sewaniya Bhopal

02	Assistant Professor	01.04.2006	12-09-2008	Globus Engineering college Bhopal
02	Senior Research Fellow	27.03.2003	05.12.2005	DRDO SSPL DELHI & Barkatullah University, Bhopal
02	Junior Research Fellow	27.03.2001	27.03.2003	DRDO SSPL DELHI & Barkatullah University Bhopal
01	Senior Project Fellow	08.04.2000	31.03.2001	Regional Research Laboratory
02	Lecturer	05.03.1998	07.07.2000	Oriental Institute of S&T Bhopal

Publications

No. of Papers Published (Attach 39

Annexure of papers published in peer-reviewed or refereed journals)

No. of Books Published -

Books Chapters Published (Provide print of 1st Page of Book -

No. of Patents Published/Grant 02

Ph. D/M. Phil Project supervised

Research Program	Award	Under Supervision	Name of University
Ph. D (Provide detail i.e. name, title etc.) 1-Rothi Paliwal- 2-Nandani Parsai 3-Raghoba Nagpure 4-Abhijit Potle 5-Rajani A. Bhoyar 6-Usha Charavarti 7-Subrat.K. Biswas	07	04	Sri Satya Sai University of Technology and medical Science Sehore & RKDF University, Bhopal
M. Phil	-	-	
PG Thesis/Dissertation	209	10	RKDF University

Development of deposition Techniques and studies of thin film for bi_2Te_3 a position in an established and reputed institution where I can give my best in the frontiers of teaching and

research areas. I will try to demonstrate my technical and experimental skills for the development and growth of the institute and for pursuing better knowledge of Science and Technology among the students

Award and Achievement

Name of Award	Description (With certified of Copy award)
National	-
International	-

Conference/Seminar/Workshops/FDP

Description	No.
Conference/Seminar p a p e r presentation	25
Conference/Seminar attended/ organized	25
Work shop attended/ organized	05
FDP Attended/ organized	05

Research Project

Name of Project	Funding Agencies	Amount

- **Any other Achievement**

List of Publications

S. No.	Title	Authors	Journal Name	Year/Date	ISSN No.	Link of paper	Indexing
1	A System to study and analyze the alloys of Bismuth Telluride for thermoelectric cooler	Dr A.C. Nayak	Patents	12/08/2022	202221005015	-	IGC
2	Mechanism for Secure Key Establishment and Handover Management in Wireless Sensor Network	Dr A.C. Nayak	Patents	29/07/2022	202221007249	-	IGC
3	Incorporation of carbon fibre& carbon Nano tubes for Electrical Conductivity of Cement Composites beneficial for structural Health Monitoring	Akhilesh Chandra Nayak	Applied Science And Engineering	28/05/2022	0972-3641		UGC CARE
4	Luminescence of Trivalent activators in $\text{Na}_3\text{ScSi}_2\text{O}_7$ host Elsevier Optik-	A.C. Nayak	International Jurnal for Light and Electron Optics	26/04/2022	261(2022)169197	https://www.sciencedirect.com/science/article/abs/pii/S0030402622005514	IGC

5	Synthesis and Luminescence of $\text{Li}_3\text{ScCl}_6:\text{Ce}$ AIP Conferenc	A.C. Nayak	Proceeding 2369	13 /09/ 2021	020085 (2021)	https://aip.scitation.org/doi/abs/10.1063/5.0060843	IGC
6	Synthesis and Luminescence of Ba_2ScCl_7	A.C. Nayak	Physics of the Solid State	03 /03/2021	ISSN 1063-7834		IGC
7	Self –sensing Concrete Formed by Nano Alumina ,iron Oxides and Carbon FibreBenifical for structural Helth Monitoring	Akhilesh Chandra Nayak	Disigen Engineering	28/05/ 2021	ISSN-0011-9342		UGC CARE
8	Luminescence of Eu^{3+} in some Scandium Phosphates	A.C. Nayak	International Journalof Scientific Research in Science and Technology	15/06/2021	ISSN: 2395-6011 Online		ISSN: 2395-602X (IJSRT)
9	Luminescence in $\text{Li}_3\text{ScBr}_6:\text{Ce}$	A.C. Nayak	International conference on Research Fortiers in Science	13/09/2021	doi :10.1088/1742-6596/1913/1/012036	https://iopscience.iop.org/article/10.1088/1742-6596/1913/1/012036/pdf	(IJRFS-2021) 1913 (2021) 012036

10	Structural Behavior of Carbon Nanotubes and Its Application	A.C. Nayak.	International Journal of Fundamental.	11-12-2019	ISSN 2320-7973		IGC
11	Regression Analysis in Data Mining–A Survey	DR. A. C. Nayak	Shodh sangam rkdf university bhopal	3, 2020			Others
12	Use Rough Set theory model for NB Tree based Intrusion detection technique	Dr. A. C Nayak		2020	Volume 2, No 1		Others
13	A Brief Survey on Cooperative Spectrum Sharing With RelaySurbhiChaturvedi,	Dr.A.C.Nayak	International.Journal of Scientific Progress And Research	June 2019	Issue 78 Volume542395-294 2019	https://dblp.org/db/journals/ijcomsy/ijcomsys34.html	Others
14	Efficient cooperative Spectrum Sharing MIMO Wireless Relay system with filtering.	Dr.A.C. Nayak	International Journal of Scientific, Progress And Research	1 June 2019	Issue 160 Volume60		Others
15	Analytical studies of Glass system	A,C. Nayak	Journal of Engineering ,Science&social science studies.	June 2019	Vol-05, issue 062394-3084		Others
16	Characterization studies in Glass an Experimental Technique	A,C. Nayak	South Asia Journal of		2395-1079		UGC CARE

			Multidisciplinary studies SAJMS				
17	Land use /Land cover Mapping using Remote Sensing and GIS Techniques.	A.C. Nayak	on line international interdisciplinary Research Journal	Nov 2018 special issue	2249-9598 Volume -08		UGC CARE
18	Review on the B Conducting Filler in Electrical Properties of Composite Concrete Subrat	A.C. Nayak	International conference on Contemporary Technology Solutions towards fulfillment of social needs	August 2018		http://www.shodhsangam.rkdf.ac.in/papers/suvenir/25-29-subrat.pdf	UGC CARE
19	Ultraviolet Beam Applications and operation of X-Ray diffraction Laser ,	A.C. Nayak	,International conference on Contemporary Technology Solutions towards fulfillment of social needs	August 2018	Page-17	http://www.shodhsangam.rkdf.ac.in/papers/suvenir/17-20-rohit.pdf	UGC CARE

20	Cart sat stereo Data For Effective study of Land use change detection in Radhanagari Wild life sanctuary Region in Maharashtra	A.C. Nayak	on line International interdisciplinary Research Journal	Nov 2018 special issue (02	2249-9598	Volume - https://www.researchgate.net/publication/261076240_Moving_object_08	UGC CARE
21	A Review on moving object tracking system using mean shift algorithms and Its FPGA Implementation	, A.C. Nayak		2017		_tracking_based_on_mean_shift_algorithm_and_features_fusion	IRJTS 1 (8),
22	A Real time hardware efficient moving target Target tracking system	A.C. Nayak	Architecture of FPGA	2017		https://www.researchgate.net/publication/256477560_Real-Time_Target_Detection_and_Tracking_A_Comparative_In-depth_Review_of_Strategies	IRJT AS 1 (9),
23	Spray deposited bismuth oxide thin films non- aqueous medium VSRD 2016	A.C. Nayak	VSDR International journals	2016		https://www.researchgate.net/publication/337225782_Utilization_of_marble_dust_powder_in_concrete	UGC CARE
24	Utilization of limestone dust and marble dust on properties of high strength Concrete	A C Nayak		2016		https://www.researchgate.net/publication/337225782_Utilization_of_marble_dust_powder_in_concrete	IJSDR 4, 22-27

25	Effects of limestone dust and marble dust on properties of high strength Concrete	A.C.Nayak		2016		Effects of limestone dust and marble dust on properties of high strength Concrete	IJSRD 4 (6), 22-27
26	A study on synthesis and characterization of Cu/CNT Nano composites etc.	A.C. Nayak	National Conference	2014		https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6541883/	UGC CARE
27	Intellectual property Rights and Biopiracy patent : A case study of neem	Dr. A C Nayak	Journal of innovative trends in science	2014		https://academic.oup.com/book/2137/chapter-abstract/142099885?redirectedFrom=fulltext	UGC CARE
28	Human Ethics of intellectual property.	A.C. Nayak	Int.Con.	SARYC/2012		P-94 https://www.waikato.ac.nz/_data/assets/pdf_file/0007/257749/Appendix-4-Intellectual-Property-in-Research.pdf	UGC CARE
29	Structural characterization of multilayer of Cu/CNT composite material.	A.C. Nayak	Int.Con.	SARYC/2012		https://www.sciencedirect.com/science/article/pii/S026412751930574XP-92	UGC CARE
30	Role of microscopic fungi I biodegradation of cellulose in agricultural wastes for the production of enzymatic glucose.	A.C. Nayak	Int.Con.	SARYC/2012		https://www.researchgate.net/publication/283030799_Biodegradation_of_Cellulose_and_Agricultural_Waste_Material P-66	UGC CARE

31	Structural characterization of electrodeposited Bi ₂ Te ₃ Thin film J/ Nano vision	A.C. Nayak,		2011		https://pubs.acs.org/doi/10.1021/jp909926z P-35-46	UGC CARE
32	Electrochemical metallization of alumina substrate (Al ₂ O ₃) and AFM and XRD Studies.	A.C. Nayak	Search and research	2011		P-104-115	UGC CARE
33	Characterization of electrodeposited semiconductor Nano structured materials.	A.C. Nayak	Int.Con.Search and research	SARYC/2010	https://www.researchgate.net/publication/333101712_Electrodeposition_of_nanostructured_coatings_and_their_characterization-A_review	https://www.researchgate.net/publication/353097193_Effect_of_Al2O3_Coatings_on_Microstructural_and_Optoelectronic_Properties_of_Porous_Si_SnO2_Composites P-122	UGC CARE
34	Deadlock free and collision free coordination of multiple mobile.	A.C. Nayak&	Search and research	2011		https://www.researchgate.net/publication/316474405_Deadlock-Free_and_Collision-Free_Coordination_Of_Multiple_Mobile_Robots P-53-57	UGC CARE
35	Performance degradation in dual Polarize satellite communication system by	A.C. Nayak	International conference on concurrent Techno & Envier Search	Dec-2010.		https://ieeexplore.ieee.org/document/837049 P-11	UGC CARE

36	Study of Composition Modulation in Cu/ Co multilayers electrodeposited using pulse trains	A.C. Nayak	"Thin Solid Films-	Apr. 2006		https://www.sciencedirect.com/science/article/abs/pii/S0040609006002525 P-187-192	IGC
37	"Investigation of Cu & Co/NiMultilayer Deposition in Aqueous Ambient" by , ,	A.C. Nayak,	Jr. Physics and Chemistry of Solids	(2005)		/educationdocbox.com/85271137-College_Life/Ies-college-of-technology.html P- 861-868	IGC
38	"In-situ Atomic Force Microscopic Study of Reverse Pulse Plated Cu/ Co-Ni-Cu Films"	A.C. Nayak	Jr.Material Science	(2004)		https://link.springer.com/article/10.1023/B:JMSE.0000016160.97771.44 P-1615-1620	IGC
39	Life History of Semiconductor	Dr .A. C .Nayak	International. Journal of Scientific Research in Engineering and management Progress And Research	April 2025	Issue 04 Volum09	www.ijrem.com ISSN no 2582-3930	IJSREM