


FACULTYPROFILE

Name of the Faculty:		Dr.V.Aruna		
Designation:		Associate Professor & HOD		
Department:		Physics		
Date of Birth:		31.05.1969		
AICTE– ID:	1-430280991			
Education	<ul style="list-style-type: none"> • B.Sc. in M.P.E. from Sri Venkateshwara University in 1989 • M.Sc. (Tech) in _Eng. Physics from S.V.U college of Engineering in 1992 • PhD in Glass science from S.V.University in 1999 			
Experience	Teaching: 30 Years	Industry: ___ Years	Total:33 Years	
	Research: 3 Years	Others: ___ Years		
Research Specialization	Glass science/Material science			
Courses taught	<ol style="list-style-type: none"> 1. Engineering Physics 2. Mathematical physics, 3. Quantum Mechanics I, 4. Quantum mechanics II, 5. Advanced Quantum Mechanics, 6. Atomic and Molecular Physics, 7. Resonance Spectroscopy, 8. Advanced Optics and Material Testing, 9. Semiconductor Physics and Nanomaterials, 10. Computational Methods and Programming 11. Waves and Modern Physics 			

Research contributions

International/national peer reviewed journals

S. No.	Title of paper	Journal	Year	Volume	pages	Indexing (SCI/WoS/SCOPUS, Google scholar)
1.	Influence of V ₂ O ₅ on optical bandgap, Urbach energy, and a.c. conductivity of multi component B ₂ O ₃ -P ₂ O ₅ -CaO-Bi ₂ O ₃ glasses	Physica B: Condensed Matter	2026	730	418476	Scopus
2	Cogency of chromium ions in strengthening spectroscopic and dielectric properties of B ₂ O ₃ -Bi ₂ O ₃ -Al ₂ O ₃ -MgO glass materials	J Mater Sci:Materials in Electronics	2025	36	1790	Scopus
3	Fabrication of InVO ₄ /SnWO ₄ heterostructured Photocatalyst for efficient photocatalytic degradation of tetracycline under visible light	Environmental Research	2023 MAY	220	115191	Scopus
4	Ascendancy of Cr ₂ O ₃ on morphology, spectroscopic and dielectric Properties of GeO ₂ -Li ₂ O-P ₂ O ₅ -MgO glasses.	Materials Chemistry and Physics	2023	304	127889	Scopus
5	Novel Indium Vanadium Oxide Nanosheet-Supported Nickel Iron Oxide Nanoplate Heterostructure for Synergistically Enhanced Photocatalytic Degradation of Tetracycline.	Catalysts	2022	12	1471	Scopus & WOS
6	Impact of copper ions on Physical, Structural ,Spectroscopic and dielectric properties of Bi ₂ O ₃ -CaO-P ₂ O ₅ -B ₂ O ₃ glasses	Materials Chemistry and Physics	2022	290	126584	Scopus
7	Electrical and spectroscopic characteristics of B ₂ O ₃ -Bi ₂ O ₃ -Al ₂ O ₃ -MgO glasses alloyed with MnO	Journal of Physics and Chemistry of Solid	2022	170	110957	Scopus
8	Visible light driven indium vanadium oxide nanosheets supported bismuth tungsten oxide nanoflakes heterostructure as an efficient photocatalyst for the	Chemosphere	2022	299	134477	Scopus

	tetracycline degradation					
9	The influence of Cu ²⁺ ions on the ionic, electronic conductivity and optical characteristics of Li ₂ O-SrO-B ₂ O ₃ system	Journal of Non-Crystalline Solids	2022	575	1210	Scopus
10	The eminence of copper ions on optical, electrical properties and morphology of B ₂ O ₃ -Bi ₂ O ₃ -Al ₂ O ₃ -MgO glasses	Journal of Non-Crystalline Solids.	2021	564	120844	Scopus
11	Influence of chromium ions on photonic applicability of Na ₂ O-Bi ₂ O ₃ -B ₂ O ₃ -SiO ₂ glass system.	Optics Communications	2021	480	126496	Scopus
12	Efficacy of copper ions on lithium ion conductivity, electron hopping, optical band gap, metallization criterion and morphology of Li ₂ O-B ₂ O ₃ -P ₂ O ₅ glasses	J. Non Crystalline Solids.	2020	536	120015	Scopus
13	Effect of Cr ₂ O ₃ on the structural, optical and dielectric studies of LiF-SrO-B ₂ O ₃ glasses.	J.Non Crystalline Solids	2019	520	119428	Scopus
14	Electron Paramagnetic Resonance and Optical absorption studies of Chromium ions doped borophosphate glasses	Pramana Research Journal	2018	8	215	Google scholar
15	Spectroscopic Investigations of Li ₂ O-B ₂ O ₃ -P ₂ O ₅ Glass system doped with V ₂ O ₅	J. Applied science and Computations	2018	5	42	Google scholar
16	EPR, Optical Absorption and FTIR Properties of Cobalt Doped Lithium Borophosphate Glass System	IJSRST3	2017	7	744	Google scholar
17	Fluorescence properties of Nd ³⁺ : B ₂ O ₃ -P ₂ O ₅ -TeO ₂ – Li ₂ SO ₄ glass	Ind. J. Pure & Appl. Phys.	2003	41	206	Scopus
18	Emission properties of Er ³⁺ : B ₂ O ₃ -P ₂ O ₅ -TeO ₂ – Li ₂ SO ₄ glass	Phys. Chem. glasses	2002	43	313	Scopus
19	Absorption and photoluminescence spectra of Sm ³⁺ : B ₂ O ₃ -P ₂ O ₅ -TeO ₂ – Li ₂ O glass	Mater . Res. Bull	2000	35	703	Scopus
20	Spectra of Pr ³⁺ & Ho ³⁺ : B ₂ O ₃ -P ₂ O ₅ -R ₂ SO ₄ glasses	Phys. Chem. Glasses	1998	39	323	Scopus
21	Spectral properties of Tb ³⁺ : B ₂ O ₃ -P ₂ O ₅ -R ₂ SO ₄ glasses	Mater Lett.	1998	36	24	Scopus
22	Photoluminescence spectra of LaOBr: Eu ³⁺ powder phosphors	Mater. Chem. Phys.	1998	52	157	Scopus

23	Spectra of Sm ³⁺ & Dy ³⁺ : B ₂ O ₃ -P ₂ O ₅ -R ₂ SO ₄ glasses	Mater Res. Bull	1998	33	149	Scopus
24	Spectral properties of Pr ³⁺ & Nd ³⁺ - doped lithium borate glass	Phys. Chem. glasses	1997	38	238	Scopus
25	Spectral properties of Eu ³⁺ : B ₂ O ₃ -P ₂ O ₅ -R ₂ SO ₄ glasses	Mater. Lett.	1997	33	201	Scopus
26	Physical properties of (100-X)B ₂ O ₃ + LiF Optical glasses	Ferro electric Lett.	1996	22	15	Scopus

Details of Conferences/FDPs/STTPs/webinars/Workshops Participated

S.No.	Name of the event	Organized by	Dates
1	A Three day International conference on “Bio-Digital Alchemy: Global Innovations in AI-Quantum Enabled Transformation of Next Generation Smart Materials and Life Sciences“ (BAGAQML-2026)	Department of Chemistry, Bapatla Engineering College	23-03-2026 to 25-03-2026
2	EMPOWERING NBA DOCUMENTATION WITH AI (Smart Tools for Smarter Accreditation)	Government Polytechnic, Kamalapuram	26-10-2025
3	International FDP on “Innovative applications of Mathematics” (IAM -2025)	Department of Mathematics, Bapatla Engineering College	17-11-2025 to 22-11-2025
4	A Three-day International Online Conference on “Advancing Innovations through Mathematics: A Journey across Disciplines “ (AITM-2025)	Department of Mathematics, Bapatla Engineering College	08-09-2025 to 10-09-2025
5	A Three-day International conference on “AI- Driven Chemistry: Innovations in Next Generation Smart Materials, Pharmaceuticals and Healthcare” (ACINSPH-2025)	Department of Chemistry ,Bapatla Engineering College	27-03-2025 to 29-03-2025
6	One-week International FDP on “Innovative Applications of Mathematics”	Department of Mathematics, Bapatla Engineering College	18-11-2024 to 23-11-2024
7	One-week International FDP on “Working with Emotional Intelligence and Life skills Management”	Department of English, Bapatla Engineering College	2-12-2024 to 6-12-2024
8	One week Online International workshop on “Mathematics: Bridging Ideas and Innovations” (MBII-2024)	Department of Mathematics, Bapatla Engineering College	16-12-2024 to 21-12-2024

9	National conference on “Synergies in chemistry, Material Science and Quantum Computers-2024” (SCMQ-2024)	Department of Chemistry ,Bapatla Engineering College	29-01-2024 to 31-01-2024
10	National conference on Advances in functional Materials and Photonics (NAFP-2024)	Centre for Emerging Materials, Department of physics, KLU (Deemed to be University), Guntur, A.P.	5-01-2024 to 6-01-2024
11	Enhancing Computational Skills of Mathematics in Various fields of Engineering	Department of Mathematics, Bapatla Engineering College	18-12-2023 to 23-12-2023
12	International Faculty Development “Program on Applications of Mathematics in Various fields with Innovative Approaches”	Department of Mathematics, Bapatla Engineering College	21-11-2023 to 25-11-2023
13	Soft Skills and Class room Teaching	NITTTR, Chandigarh & Bapatla College of Pharmacy, Bapatla, Guntur district	16-10-2023 to 20-10-2023
14	Outcome Based Curriculum Design	NITTTR, Chandigarh & Bapatla College of Pharmacy, Bapatla, Guntur district	05-09-2023 to 09-09-2023
15	FDP on Preparing students for the placements –Resume, GD and Interview	NITTTR ,Chandigarh	17-07-2023 to 21-07-2023
16	Advanced Functional Device Materials	Acharya Nagarjuna University	27-02-2023 to 28-02-2023
17	Ist International Conference on Emerging Trends in science and Technology	PACE INSTITUTE OF TECHNOLOGY & SCIENCES	01-12-2022 to 03-12-2022
18	Outcome Based Curriculum Design	NITTTR ,Chandigarh	05-09-2022 to 09-09-2022
19	Outcome Based Education and Examination Reforms	BEC, Bapatla	03-08-2022 to 5-08-2022
20	Basic Research and analysis in Nanoscience	Acharya Nagarjuna University	18-03-2021 to 19-03-2021
21	Recent Trends in Nanoscience& Nanotechnology	Acharya Nagarjuna University	30-12-2020 to 31-12-2020
22	Inculcating Universal Human values in Technical Education	AICTE, New Delhi	5-10-2020 to 9-10-2020
23	FDP on online Teaching learning and research methodology	NITTTR ,Chandigarh	18-07-2020 to 29-07-2020
24	Material characterization Techniques	KL University	18-04-2019

25	Intellectual Property and Innovation Management	BEC, Bapatla	31-08-2018 to 01-09-2018
26	National seminar on physics and Non-crystalline Materials	K.V.R College, Nandigama	01-12-2017 to 02-12-2017
27	National seminar on Recent Research Developments in Higher Education	A.C. College, Guntur	06-12-2016 to 07-12-2016
28	Nanotechnology in chemical allied Industries	BEC, Bapatla	07-03-2014 to 08-03-2014

Awards/recognitions/achievements

S.No.	Name of the Award	Awarding body/Society/Organization	Year
1	Member, P.G.Board of Studies of physics of Acharya Nagarjuna University	Acharya Nagarjuna University	2023-2025 (08-12-2023 to 08-12-2025)
2	External Member, Board of Studies, Engineering Physics & Engineering Physics Lab for I B.Tech (I ,II Semester) (NRIA23)	NRI Institute of technology ,Pothavarappadu (V), Agiripali (M), Eluru District, A.P.,	2023-2025
3	Best Teacher Award	Bapatla Education Society	2018-2019
4	Member, P.G.Board of Studies of physics of Acharya Nagarjuna University	Acharya Nagarjuna University	2012-2014
5	Research Guideship under Acharya Nagarjuna University	Acharya Nagarjuna University	2013 till today

Details of project proposals submitted/sanctioned/completed

S.No.	Title of the Project	Funding body	Submitted/ Sanctioned/ Completed	Amount Rs.	Year/ duration
1	Spectroscopic properties of Transition ions doped B2O3-P2O5-Li2O glasses	UGC	Completed	3,30,000/-	2017

Student Project/research guidance

S.No	Level	Total number	
1	PG	Completed : 6	Ongoing: 0
2	M.Phil.	Completed: 2	Ongoing: 0
3	Ph.D.	Completed: 2	Ongoing: 1
	Ph.D. Thesis	1. Influence of some transition metal ions on spectroscopic and dielectric properties of B2O3-Bi2O3-	

Titles:	<p style="text-align: center;">Al₂O₃-MgO glasses (2025)</p> <p style="text-align: center;">2. Novel Metal Oxide Nanostructures for the Photo catalytic Degradation of Tetracycline under Visible Light Irradiation (2024)</p>
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Administrative experience

S.No.	Role	Duration (From – to)
1	Head, Dept. of Physics	2023- till today
2	Member of Criteria 7 of NAAC	2022-2023
3	Member of Academic Audit	2020-2022
4	Member of Enquiry Committee of Bapatla Engineering College	2021
5	Member of Women’s Empowerment Cell.	2019 to 2023
6	Stock verification officer	2019 to 2023
7	Member of College Academic Council	2018 to 2021
8	Research Coordinator from Dept. of Physics	2018 to 2023
9	Member of Anti Ragging Committee	2017-2020
10	Convenor of Internal Complaints Committee.	2014 to 2020
11	Squad member for External Examination.	2010 to 2020
12	Class coordinator for 1st B.Tech. and M.Sc. courses	2010-2023

Research credentials

Index/database	ID/Link
Google Scholar	https://scholar.google.com/citations?user=BDH4QpkAAAAJ&hl=en
SCOPUS	6603592986
ORCID	0000-0002-4350-0262
Vidwan ID	324370

Any other relevant information

Dr.V.Aruna
 (Name)
 (Date)

