

Physics Research group

Today materials play vital role in synthesizing the devices which find potential applications in science and technology.

Objectives:

The objective is to provide research group members with the ability to synthesize, and develop new materials and analysing them.

Physics Group members

S.No	Name	Role in research group
1	Dr. S. Yusub	Coordinator
2	N. Aruna	Member
3	P. Vijaya Sirisha	Member
4	Dr. P.V.N.Kishore	Member
5	N. Timmeswara Sarma	Member

Major Equipment:

S.No.	Name of the Equipment	Qty	Equipment cost(Rs.)
1	Spin coater:	1	Rs. 1,11,300
2	Muffle furnace:	1	Rs. 47,064
3	Hot plate:	1	Rs. 26,500
4	F R Portable film thickness measurement:	1	Rs. 5,04,000
5	Digital Balance:	1	Rs. 10,000

Project details:

Name of Principal investigator or	Duration of project	Name of the research project	Amount /Fund received	Name of Funding agency	Year of sanction
P. Aruna	2011-2016	Some Surface Studies on MEMS PZT Accelerometer Using Surface Profilometer	23,95,000	DST Under Young Women Scientist Scheme	2011

Publications:

2020-21:

S.No.	Name(s) of the Authors	Title of the Paper	Name of the Journal & Details	Indexing
1.	G. KrishnaPriya, S.Yusub , A. RameshBabu, N. SreeRam, K. RamaKrishna, V.Aruna	The eminence of copper ions on optical, electrical properties and morphology of B2O3-Bi2O3-Al2O3-MgO glasses	Journal of Non-Crystalline Solids, 564, 1, October2021, 1-10, 0022-3093.	SCI
2.	Nori.Timmeswara Sarma , Fakruddin BabavaliS.K, Naresh.P, SrinivasuC.H,	Analytical study of thermodynamic quantities with surface tension and Debye temperature variations in Quinoline & p-Xylene at T = 303.15 K to 318.15 K	Materials Today: Proceedings, 43, 5, April-2021, 3125-3128, 2214-7853.	Scopus

Conference Publications:

S.No.	Name(s) of the Authors	Title of the Paper	Name of the Conference & Details	Indexing
1	P.V.N.Kishore , N. Aruna, K. Chitti babu, J. Ashok	Multi U-bent cladded POF sensors for refractive index measurement	Proceedings of SPIE, 11772, 11772-OU-1, April-2021, 1996-756X	Scopus indexed Proceedings
2	N.Aruna , P.V.N.Kishore, K. Chitti babu, J. Ashok	Detection of copper by localized surface plasmon resonance based fiber optic technique	Proceedings of SPIE, 11772, 11772-OI-1, April-2021, 1996-756X	Scopus indexed Proceedings

2019-20

S.No.	Name(s) of the Authors	Title of the Paper	Name of the Journal & Details	Indexing
1	V. Aruna, S. Yusub , M. Venkateswarlu, A. Ramesh Babu, K. Anitha	Efficacy of copper ions on lithium ion conductivity, electron hopping, optical band gap, metallization criterion and morphology of Li2O-B2O3-P2O5 glasses	Journal of Non-Crystalline Solids, Volume 536, 2020, 120015, ISSN 0022-3093.	SCI

2	<u>A.Ramesh Babu,</u> <u>S.Yusub</u>	Ascendancy of iron ions on lithium ion conductivity, optical band gap, Urbach energy and topology of LiF-SrO-B2O3 glasses	<u>Journal of Non-Crystalline Solids</u> <u>Volume 533</u> , 1 April 2020, 119906, 0022-3093	SCI
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S.No.	Name(s) of the Authors	Title of the Paper	Name of the Journal & Details	Indexing
1	A. Ramesh Babu, S. Yusub , P.M. Vinaya Teja, P. Srinivasa Rao, V. Aruna, D. Krishna Rao	Effect of Cr2O3 on the structural, optical and dielectric studies of LiF-SrO-B2O3 glasses	Journal of Non-Crystalline Solids, <u>Volume 520</u> , 15 September 2019, 119428, ISSN 0022-3093.	SCI
2	Bhavani Penmatsa, D Chandra Sekhar, Bhagavathula S Diwakar, TV Nagalakshmi	Effect of Bio-Enzyme in the Treatment of Fresh Water Bodies	International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-8 Issue-1S3, June 2019, 2277-3878	Scopus
3	K. Samaikya	Understanding Albert Namatjira as 'Man of Two cultures' under the light of his poem 'Aboriginal Man'	Anvesha Internal Journal of Research in Education, Literature, Psychology and Library Sciences, Vol-4, Issue-1, Jan/Feb 2019, 21-25, 2456-3897	Open Access
4	D. Vijay Kumar , Ch.V. Ramana Murthy	The Influence of Critical Parameters on the Flow Rate on a Moving Infinite Vertical Plate under the Effect of Thermal Radiation	JASC: Journal of Applied Science and Computations, Volume VI, Issue I, January/2019, Page No:1259-1265, ISSN NO: 1076-5131	Open Access
5.	Y. P. C. S. ANIL KUMAR , CH. V. Ramana Murthy	Effect of Critical Parameters on the Flow Rate for the Case of MHD Flow over an Accelerated Vertical Porous Plate	JASC: Journal of Applied Science and Computations, Volume VI, Issue I, January/2019, Page No:1250-1258, ISSN NO: 1076-5131	Open Access
6	V.Bhagya Lakshmi , M.Raghu Ram and Shaheda Niloufer	A Study On E.Coli Contamination In Drinking Water Resources In And	Eco Chronicle, Vol. 13, No. 4, December, 2018, PP: 197 – 202, ISSN: 0973-4155	UGC

		Around Vijayawada City Of Andhra Pradesh, India		
7	Y. P. C. S. ANIL KUMAR , CH. V. Ramana Murthy	Critical Parameters on MHD Flow Over an Accelerated Vertical Porous Plate	IJR: International Journal of Research, Volume 7, Issue XI, November/2018, Page No:1339-1348, ISSN NO: 2236-6124	Open Access

2016-17:

S.No.	Name(s) of the Authors	Title of the Paper	Name of the Journal & Details	Indexing
1	S. Yusub , P.Srinivasa Rao, D.Krishna Rao	Ionic conductivity, dielectric and optical properties of lithium lead	Journal of Alloys and Compounds, <u>Volume 663</u> , 5 April 2016, Pages 708-717,0925- 8388	SCI