



*Academic*      *P/L*

**DEPARTMENT OF PHYSICS**  
**GURU JAMBHESHWAR UNIVERSITY OF SCIENCE & TECHNOLOGY**  
**HISAR - 125 001, HARYANA (INDIA)**

No. PHY/2022/ 283  
Dated:- 03/03/2022

To

The Deputy Registrar (Academic),  
GJUS&T, Hisar.

Sub: **Annual Report for the year 2020-21 (01.07.2020 to 30.06.2021).**

Kindly refer to your office letter No. Acad/ AC-1/2022/641-657 dated: 11.02.2022 on the subject cited above.

The requisite information, as desired by you, on the prescribed format is enclosed herewith along with the soft copy (~~sent~~ to e-mail [academicbranch@rediffmail.com](mailto:academicbranch@rediffmail.com)).

*[Signature]*  
03/3/22  
CHAIRPERSON

**ANNUAL REPORT PROFORMA**  
**(01.07.2020 TO 30.06.2021)**

(I) Name of the Department: PHYSICS

(II) Year of Establishment: 1996

(III) (a) State the vision of the Department:

To inspire the young students towards understanding and learning the fundamental concepts of Physics and their applications for the development of new technologies in the national interests.

(b) State the mission of the Department:

The mission of the Department of Physics is to provide strong qualitative and quantitative knowledge along with developing a problem-solving aptitude among the students that may open up a wide range of career choices to them. This also includes continuous refinement of quality research, development of frequently updated research-based innovative curricula and techniques to impart greater visibility to the learner and global recognition of the department. The department strives to achieve its mission by executing novel research ideas with an emphasis on interdisciplinary and applied research. The faculty members promote the highest ethical principles in scientific research and are open to scientific and technological changes.

(c) State the objective of the Department: (As resolved by Staff Council)

- (i) To impart research as well as career-oriented quality education and training to young minds in Physics by offering a mixture of Pure and Applied Physics with state-of-the art facilities.
- (ii) The students in the department are trained and prepared according to the needs of current research, academics and industry requirements.
- (iii) The courses provide the basic knowledge in Physics and offer various options of specializations in Photonics, Laser Physics, Opto-electronics, Materials Science (Nanomaterials, Thin films and Glasses), Nuclear Physics etc.
- (iii) To strengthen the research facilities in the areas of Materials Science, Opto-Electronics, Lasers and Optics, Photonics and Computational Physics. The department procures grants from various funding agencies such as DST, UGC, CSIR, DRDO, AICTE & DAE-BRNS etc.
- (iv) For the job-placement of students, training and placement cell invites industries for the campus interviews.

(IV) Programme(s) offered in the department

Programme	Sanctioned intake	Present students' strength
Ph.D.	10	90
P.G	55 each year	101
5 year Dual Degree B.Sc.-M.Sc.	45 each year	158 (five classes)
Teaching Physics in B.Tech. Courses		

(V) Faculty details

(Attach a list of the Faculty along with their qualifications, teaching and research experiences, and any specific achievements (if any))

Professor		Associate Professor		Assistant Professor	
Sanctioned	Filled	Sanctioned	filled	Sanctioned	Filled
2	---	4	1	15	6

(VI) Office staff details

Designation	Sanctioned	Filled
Tech. Asstt. (G-I)	1	1
Assistant	---	1
Steno Typist	1	---
Clerk cum DEO	1	1
Store Keeper	1	
Lab. Attendant	5	7
Peon	1	1

(VII) a. Students detail in respect of M.Sc. Programme

Programme	Sanctioned Intake	Students admitted 1 <sup>st</sup> Year	Students Present in Final Year
M.Sc. (Physics)	55	51	49

- b. Students' detail in respect of MCA Programme - NIL
- c. Students' detail in respect of B.Tech , B.Pharm. and B.P.Th. Programmes - NIL
- d) Detail of Foreign Students if any, admitted in the Department

Sr. No.	Name of Course	No. of students Admitted	Name of Country

(VIII) Research Scholars

Intake capacity	Total no of Ph.D. students	Registered during the year	Thesis completed during the year	Specify number of different fellowships
107	90	10		

(IX) Sponsored Research/ Consultancy Projects

Sr. No	Title of the Project	Name of the Investigator	Project in process	Awarded during the current year	Completed during the current year	Nature: Research/ Consultancy
1	INDIGENOUS DEVELOPMENT BRIDGMAN TECHNIQUE TO GROW LASER CRYSTALS	Dr David Joseph	Process	2020		Research
2	Synthesis and characterization of oxide glasses for IR applications	Dr. Rajender Kundu	Process	2020		Research
3	Thermo electric energy harvesting	Dr. Vivek Gupta	Process	2020		Research
4	"Synthesis of TMDs and their Heterostructures for their Possible Applications in FETs, Photo detectors and Solar Cells"	Dr. NVSP Sameera Ivaturi	Process	2018		Research
Total = 04						

## (X) Number of Publications of the Faculty (in Total)

Books and Book Chapters/Monographs etc		Research papers			
International	National	International		National	
		Refereed	Non refereed	Refereed	Non refereed
		50	-	-	-

## (XI) Faculty wise detail of publication during the period

## a) Books/Book Chapters/ Monograph etc. NIL

Authors	Title	Year of publication	Type of books (Text/Reference/Report)

## b) Papers/ Articles in Journals:

Sr No	Authors	Year	Title of paper	Name of journal	Publishers	Vol. & No.	Pages	Impact factor
1	Poonam Yadav, V.K. Garg, Balvinder Singh, Suman Mor	2020	Assessment of Arsenic in Groundwater of Southwestern Haryana, India and Chemical Body Burden Caused by its Ingestion	Journal of the geological society of India	<a href="https://link.springer.com/article/10.1007/s12594-020-1591-0">https://link.springer.com/article/10.1007/s12594-020-1591-0</a>	96	521-525	1.45
2	Meenu Sharma, KP Maity, Sonam Rani, V Prasad, I Sameera, Ravi Bhatia	2020	Temperature dependent charge transport of acid-treated poly (3, 4-ethylenedioxythiophene): poly (styrenesulfonate)(PEDOT: PSS) thin films	Journal of Applied Physics	<a href="https://aip.scitation.org/doi/abs/10.1063/5.0021528">https://aip.scitation.org/doi/abs/10.1063/5.0021528</a>	128	155901	2.56
3	R. Dalal	2020	SRC based model for the nuclear structure	J. Phys.: Conf. Ser. 1643 012126	<a href="https://iopscience.iop.org/article/10.1088/1742-6596/1643/1/012126/meta">https://iopscience.iop.org/article/10.1088/1742-6596/1643/1/012126/meta</a>	1643		0.55
4	Nisha,, Hardev S.Saini, Narender Kumar, Satyender Singhmar, Jyoti Thakur, Sunita Srivastava, Manish K.Kashyap, Ali H.Reshak	2020	Structural, electronic and thermoelectric properties of topological semimetal lanthanum monopnictide LaBi	Phys. Lett. A 384, (2020) 126789	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0375960120306563">https://www.sciencedirect.com/science/article/abs/pii/S0375960120306563</a>	384	126789	4.77

5	S. YADAV, S. KUMARI, S. K CHAUDHARY, D. MOHAN, M. BARALA, A. K. YADAV, R. DHAR	2020	Estimation of optical parameters in tin oxide thin films by UV exposure for photonic applications	Journal of Optoelectronics and Advanced Materials	<a href="https://www.researchgate.net/profile/Sandeep-Yadav-44/publication/344138434-Estimation-of-optical-parameters-in-tin-oxide-thin-films-by-UV-exposure-for-photonic-applications/links/5fb40efe92851cf24cdda58/Estimation-of-optical-parameters-in-tin-oxide-thin-films-by-UV-exposure-for-photonic-applications.pdf">https://www.researchgate.net/profile/Sandeep-Yadav-44/publication/344138434-Estimation-of-optical-parameters-in-tin-oxide-thin-films-by-UV-exposure-for-photonic-applications/links/5fb40efe92851cf24cdda58/Estimation-of-optical-parameters-in-tin-oxide-thin-films-by-UV-exposure-for-photonic-applications.pdf</a>	22	279-383	0.62
6	Rishi Pal, Sneha Goyal and Ishpal Rawal	2020	Transition of Charge Transport Phenomena from 3D to 1D Hopping at Low Temperature in PANI/Graphene Composites	Journal of Applied Physics	<a href="https://aip.scitation.org/doi/abs/10.1063/5.0020745">https://aip.scitation.org/doi/abs/10.1063/5.0020745</a>	128	175108	2.546
7	Kirti Nanda, R.S.Kundu, R.Punia, Devendra Mohan, N.Kishore	2020	Resonant and Non-resonant Nonlinear Optical Properties of Er <sup>3+</sup> modified BaO-ZnO-B <sub>2</sub> O <sub>3</sub> Glasses at 532 and 1550 nm	Journal of Non-Crystalline Solids	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0022309320302684">https://www.sciencedirect.com/science/article/abs/pii/S0022309320302684</a>	541		2.6
8	Poonam Mehra, Hardev S Saini, Satyender Singhmar, Jyoti Thakur, Manish K Kashyap	2020	Induction of half-metallic ferromagnetism in BaS semiconductor via Cr-doping	Vacuum	<a href="https://www.sciencedirect.com/science/article/abs/pii/S002207X20306217">https://www.sciencedirect.com/science/article/abs/pii/S002207X20306217</a>	182		
9	Hardev S Saini, Narender Kumar, Satyender Singhmar, Jyoti Thakur, Sunita Srivastava, Manish K Kashyap, Ali H Reshak	2020	Structural, electronic and thermoelectric properties of topological semimetal lanthanum mononictide LaBi	Physics Letters A	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0375960120306563">https://www.sciencedirect.com/science/article/abs/pii/S0375960120306563</a>	384		4.77
10	Bhasin T., Agarwal A., Sanghi S., Yadav M., Tuteja M., Meenal, Arya E.	2020	Relative study of MFe <sub>2</sub> O <sub>4</sub> (M=Ni, Co and NaO.5BiO.5TiO <sub>3</sub> based multiferroic composite	AIP Conference Proceedings	<a href="https://aip.scitation.org/doi/abs/10.1063/5.0017584">https://aip.scitation.org/doi/abs/10.1063/5.0017584</a>	2265	030513	
11	Tuteja M., Sanghi S., Agarwal A., Yadav M., Bhasin T.	2020	Crystal structure and dielectric analysis of BiPrO <sub>0.05</sub> FeO <sub>3</sub> and BiPrO <sub>0.10</sub> FeO <sub>3</sub> multiferroic ceramics	AIP Conference Proceedings	<a href="https://aip.scitation.org/doi/abs/10.1063/5.0023192">https://aip.scitation.org/doi/abs/10.1063/5.0023192</a>	2265	030550	

12	Malik M., Dagar S., Hooda A., Agarwal A., Khasa S.	2020	Effect of magnetic ion, Fe <sup>3+</sup> on the structural and dielectric properties of Oxychloro Bismuth Borate Glasses	Solid State Sciences	<a href="https://www.sciencedirect.com/science/article/abs/pii/S1293255820313637">https://www.sciencedirect.com/science/article/abs/pii/S1293255820313637</a>	110		3.05
13	Bhasin T., Agarwal A., Sanghi S., Yadav M., Tuteja M., Meenal, Arya E.	2020	Relative study of MFe <sub>2</sub> O <sub>4</sub> (M=Ni, Co and Na <sub>0.5</sub> Bi <sub>0.5</sub> TiO <sub>3</sub> based multiferroic composite	AIP Conference Proceedings	<a href="https://aip.scitation.org/doi/abs/10.1063/5.0017584">https://aip.scitation.org/doi/abs/10.1063/5.0017584</a>	118	153301	
14	Tuteja M., Sanghi S., Agarwal A., Yadav M., Bhasin T.	2020	Crystal structure and dielectric analysis of BiPr <sub>0.05</sub> FeO <sub>3</sub> and BiPr <sub>0.10</sub> FeO <sub>3</sub> multiferroic ceramics	AIP Conference Proceedings	<a href="https://aip.scitation.org/doi/abs/10.1063/5.0017584">https://aip.scitation.org/doi/abs/10.1063/5.0017584</a>	2265	030513	
15	Shah J., Verma K.C., Agarwal A., Kotnala R.K.	2020	Novel application of multiferroic compound for green electricity generation fabricated as hydroelectric cell	Materials Chemistry and Physics	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0254058419308648">https://www.sciencedirect.com/science/article/abs/pii/S0254058419308648</a>	239	122068	4.094
16	Dr. Ravi Bhatia	2021	Multi-walled carbon nanotubes doping for fast and efficient hybrid solid state electrochromic device	Appl. Phys. Lett.	<a href="https://aip.scitation.org/journal/apl">https://aip.scitation.org/journal/apl</a>	118	153301	3.791
17	Dr. Ravi Bhatia	2021	Temperature dependent AC conductivity of multiwall carbon nanotube-polystyrene micro-thick composite films	AIP Conference Proceedings	<a href="https://aip.scitation.org/journal/apc">https://aip.scitation.org/journal/apc</a>	2369	020041	
18	Dr. Ravi Bhatia	2021	Temperature dependent Raman modes of reduced graphene oxide: Effect of anharmonicity, crystallite size and defects	Carbon	<a href="https://www.journals.elsevier.com/carbon">https://www.journals.elsevier.com/carbon</a>	184	437-444	9.5
19	Dr. Sahil Saini	2021	Primordial power spectrum from a matter-ekpyrotic bounce scenario in loop quantum cosmology	Physical Review D	<a href="https://journals.aps.org/prd">https://journals.aps.org/prd</a>	103	066020	5.2
20	Prof Devender Mohan	2021	Effect of ultraviolet radiation exposure on optical nonlinearity and switching traits of SnO <sub>2</sub> thin films deposited by thermal evaporation	Optics & Laser Technology	<a href="https://www.journals.elsevier.com/optics-and-laser-technology">https://www.journals.elsevier.com/optics-and-laser-technology</a>	133	106575	3.867
21	Prof Sujata Sanghi	2021	Crystal structure, dielectric and magnetic properties of BaTiO <sub>3</sub> -CoFe <sub>2</sub> O <sub>4</sub> multiferroic composites	AIP Conference Proceedings	<a href="https://aip.scitation.org/journal/apc">https://aip.scitation.org/journal/apc</a>	2369	020114	
22	Prof Sujata Sanghi	2021	Investigation of crystal structure, dielectric properties, impedance spectroscopy and magnetic properties of (1-x)BaTiO <sub>3</sub> - (x)Ba <sub>0.9</sub> Ca <sub>0.1</sub> Fe <sub>12</sub> O <sub>19</sub> multiferroic composites	Ceramics International	<a href="https://www.journals.elsevier.com/ceramics-international">https://www.journals.elsevier.com/ceramics-international</a>	47	23088-23100	

23	Prof Sujata Sanghi	2021	Structural, dielectric and magnetic characteristics of Mn-substituted Bi <sub>0.80</sub> Nd <sub>0.20</sub> FeO <sub>3</sub> multiferroics	Applied Physics A: Materials Science and Processing	<a href="https://www.springer.com/journal/339">https://www.springer.com/journal/339</a>	127	534	
24	Prof Ashish Aggarwal	2021	Crystallization of BaFe <sub>12</sub> O <sub>19</sub> magnetic particles in Fe <sub>2</sub> O <sub>3</sub> -B <sub>2</sub> O <sub>3</sub> -Bi <sub>2</sub> O <sub>3</sub> -BaO-LiCl glass ceramics	Bulletin of Materials Science	<a href="https://www.springer.com/journal/12034">https://www.springer.com/journal/12034</a>	44	147	1.783
25	Prof Sujata Sanghi	2021	Crystal structure and improved dielectric, magnetic, ferroelectric and magneto-electric properties of xCoFe <sub>2</sub> O <sub>4</sub> -(1-x)BaTiO <sub>3</sub> multiferroic composites	Journal of Materials Science: Materials in Electronics	<a href="https://www.springer.com/journal/10854">https://www.springer.com/journal/10854</a>	32	05925	2.478
26	Prof Ashish Aggarwal	2021	Production of green electricity from strained BaTiO <sub>3</sub> and TiO <sub>2</sub> ceramics based hydroelectric cells	Materials Chemistry and Physics	<a href="https://www.journals.elsevier.com/materials-chemistry-and-physics">https://www.journals.elsevier.com/materials-chemistry-and-physics</a>	262	124277	4.094
27	Prof Ashish Aggarwal	2021	Sintering time dependent structural and magnetic phase transformations in Pr doped BiFeO <sub>3</sub> multiferroics	Journal of Magnetism and Magnetic Materials	<a href="https://www.journals.elsevier.com/journal-of-magnetism-and-magnetic-materials">https://www.journals.elsevier.com/journal-of-magnetism-and-magnetic-materials</a>	519	167412	2.993
28	Prof Sujata Sanghi	2021	Crystal Structure, Rietveld Refinement and Improved Dielectric and Magnetic Properties of Ti Doped Bi <sub>0.90</sub> Pr <sub>0.10</sub> Fe <sub>1-x</sub> Ti <sub>x</sub> O <sub>3</sub> Multiferroic Ceramics	Integrated Ferroelectrics	<a href="https://www.tandfonline.com/toc/ginf20/current">https://www.tandfonline.com/toc/ginf20/current</a>	221	110-113	0.836
29	Prof Ashish Aggarwal	2021	Crystal structure, dielectric and magnetic properties of xBaFe <sub>12</sub> O <sub>19</sub> -(1-x)Na <sub>0.5</sub> Bi <sub>0.5</sub> TiO <sub>3</sub> composites	Ferroelectrics	<a href="https://www.tandfonline.com/toc/gfer20/current">https://www.tandfonline.com/toc/gfer20/current</a>	583	183-197	0.60
30	Prof Ashish Aggarwal	2021	Improved dielectric and magnetic properties of Co doped Bi <sub>0.80</sub> Ba <sub>0.10</sub> Nd <sub>0.10</sub> Fe <sub>1-x</sub> CoxO <sub>3</sub> (x = 0.00, 0.01, 0.03, 0.05 & 0.07) multiferroic	Journal of Magnetism and Magnetic Materials	<a href="https://www.journals.elsevier.com/journal-of-magnetism-and-magnetic-materials">https://www.journals.elsevier.com/journal-of-magnetism-and-magnetic-materials</a>	517	167337	2.99
31	Dr Hardev Saini	2021	Assessment of Mo <sub>2</sub> N Monolayer as Li-ion battery anodes with high cycling stability	Materials Today Communications	<a href="https://www.journals.elsevier.com/materials-today-communications">https://www.journals.elsevier.com/materials-today-communications</a>	26	102100	
32	Dr Hardev Saini	2021	Effect of hydrostatic pressure on thermoelectric performance of topological half-Heusler LuPdBi compound	Physica Scripta	<a href="https://iopscience.iop.org/journal/1402-4896">https://iopscience.iop.org/journal/1402-4896</a>	96	125702	2.487



33	Dr Hardev Saini	2021	Enhanced figure of merit of Ta <sub>1-x</sub> Ge Half-Heusler alloy for thermoelectric applications under the effect of isotropic strain	Journal of Solid State Chemistry	<a href="https://www.sciencedirect.com/journal/journal-of-solid-state-chemistry">https://www.sciencedirect.com/journal/journal-of-solid-state-chemistry</a>	303	122524	3
34	Prof. Neetu Ahlawat	2021	Effect of conventional and microwave sintering on microstructure and ferroelectric properties of sodium bismuth titanate (NBT) perovskite ceramics	Materials Today: Proc.	<a href="https://www.journals.elsevier.com/materials-today-proceedings">https://www.journals.elsevier.com/materials-today-proceedings</a>			
35	Dr. Vivek Gupta	2021	Improvement in structural properties of SnTe by Co doping for thermoelectric applications	Materials Today: Proc.	<a href="https://www.journals.elsevier.com/materials-today-proceedings">https://www.journals.elsevier.com/materials-today-proceedings</a>	46	5857-5860	
36	Dr. Vivek Gupta	2021	Efficient energy storage performance of poly-aniline based supercapacitor	AIP Conference Proc.	<a href="https://aip.scitation.org/journal/apc">https://aip.scitation.org/journal/apc</a>	2369	020051	
37	Dr. Vivek Gupta		Modelling and simulation of silicon solar cells using PC1D	Materials Today: Proc.	<a href="https://www.journals.elsevier.com/materials-today-proceedings">https://www.journals.elsevier.com/materials-today-proceedings</a>			
38	Dr. Vivek Gupta		Defect engineering in Te rich SnTe via solvothermal method	Materials Today: Proc.	<a href="https://www.journals.elsevier.com/materials-today-proceedings">https://www.journals.elsevier.com/materials-today-proceedings</a>	1016	348	
39	Dr. Vivek Gupta		Structural and morphological properties of nanostructured Bi <sub>2</sub> Te <sub>3</sub> with Mn-doping for thermoelectric applications	Materials Today: Proc.	<a href="https://www.journals.elsevier.com/materials-today-proceedings">https://www.journals.elsevier.com/materials-today-proceedings</a>	1016	101	
40	Dr. Ramesh Bibiyan		Surface engineering of Pt thin films by low energy heavy ion irradiation	Applied Surface Science	<a href="https://www.journals.elsevier.com/applied-surface-science">https://www.journals.elsevier.com/applied-surface-science</a>	540	148338	6.77
41	Dr. Ramesh Bibiyan		Roughening and Sputtering Kinetics of Pt Thin Films at different Angles of Ion Irradiation	Materials Letters	<a href="https://www.journals.elsevier.com/materials-today-proceedings">https://www.journals.elsevier.com/materials-today-proceedings</a>	303	130474	3.4
42	Dr. Ramesh Bibiyan		Investigation of CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> and CH <sub>3</sub> NH <sub>3</sub> SnI <sub>3</sub> based perovskite solar cells with CuInSe <sub>2</sub> nanocrystals	Optik	<a href="https://www.journals.elsevier.com/optik">https://www.journals.elsevier.com/optik</a>	246	167839	2.44
43	Dr. Ramesh Bibiyan		Structural, electronic and topological properties of NaCaBi and KBaBi compounds	Journal of Physics and Chemistry of Solids	<a href="https://www.journals.elsevier.com/journal-of-physics-and-chemistry-of-solids">https://www.journals.elsevier.com/journal-of-physics-and-chemistry-of-solids</a>	161	110416	3.99

44	Dr. Ramesh Bibiyan		Theoretical study of highly efficient CH <sub>3</sub> NH <sub>3</sub> SnI <sub>3</sub> based Perovskite solar cell with CuInS <sub>2</sub> quantum dot	Semiconductor Science and Technology	<a href="https://iopscience.iop.org/journal/0268-1242">https://iopscience.iop.org/journal/0268-1242</a>	37	025010	2.352
45	Dr. Ramesh Bibiyan		Structural, electronic and elastic properties of topological pyrite-type OsSe <sub>2</sub> semimetal	Materials Today: Proc.	<a href="https://www.journals.elsevier.com/materials-today-proceedings">https://www.journals.elsevier.com/materials-today-proceedings</a>	46	5823-5826	
46	Dr. Ramesh Bibiyan		Enhancement of thermoelectric performance of ZrO <sub>2</sub> via Titanium doping	Materials Today: Proc.	<a href="https://www.journals.elsevier.com/materials-today-proceedings">https://www.journals.elsevier.com/materials-today-proceedings</a>	51	699-702	
47	Dr. Vivek Gupta		Modelling and simulation of silicon solar cells using PC1D	Materials Today: Proc.	<a href="https://www.journals.elsevier.com/materials-today-proceedings">https://www.journals.elsevier.com/materials-today-proceedings</a>	1016	377	
48	Dr. Ramesh Bibiyan		Band gap engineering of 2H-MX <sub>2</sub> (M = Mo; X = S, Se, Te) monolayers using strain effect	Materials Today: Proc.	<a href="https://www.journals.elsevier.com/materials-today-proceedings">https://www.journals.elsevier.com/materials-today-proceedings</a>	1016	380	
49	Pinki Punia , Manish Kumar Bharti , Sonia Chalia , Rakesh Dhar , Blaise Ravelo , Preeti Thakur , Atul Thakur		Recent advances in synthesis, characterization, and applications of nanoparticles for contaminated water treatment- A review	Ceramics International	<a href="https://www.sciencedirect.com/science/article/pii/S027284220327474">https://www.sciencedirect.com/science/article/pii/S027284220327474</a>	47	1526-1550	4.5
50	Pardeep Kumar, Satya.Dev, Atul Kumar, RajeshThakur, Rakesh Dhara		Impact of indium doping on the anti-biofilm activity of ZnO thin films against Escherichia coli and Staphylococcus aureus	Superlattices and Microstructures	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0749603620312908">https://www.sciencedirect.com/science/article/abs/pii/S0749603620312908</a>	150	106741	2.6

(XII) Participation of faculty in Seminars/Conferences/Workshops/Webinars and Refresher Courses etc. during the period

(a) Total Number of Seminars/Conferences attended by faculty and papers presented

Positions	Attended			Papers presented		
	International	National	Total	International	National	Total
	00	03	03	00	00	00

(b) International Conferences/ Seminars/ Workshops/Webinars

Name of the Teacher/Faculty	Title of paper presented	Theme of conference/ Seminar/ Workshop	Name of Host organization	Place	Dates

(c) National Conferences/ Seminars/ Workshops NIL

(d) Regional/ State Level Conferences/ Seminars/ Workshops –

(e) Refresher Courses/ Orientation Courses

Name of Teacher/Faculty	Title of Refresher Course	Host organization	Dept. and University	Place	Date
Dr. Vivek Gupta	Faculty Induction Programme- I conducted by UGC-HRDC, GJUS&T, Hisar	HRDC, GJU	Physics, GJU	Hisar	21-09-2020 to 24-10-2020
Dr. Ranjeet	Faculty Induction Programme- I conducted by UGC-HRDC, GJUS&T, Hisar	HRDC, GJU	Physics, GJU	Hisar	21-09-2020 to 24-10-2020
Prof. Devendra Mohan	ATAL Academic Programme Photonics	GJU	Physics, GJU	Hisar	02-11-2020 to 06-11-2020
Dr. Ramesh Kumar	Refresher Course in Physics, HRDC, GJUST, Hisar	HRDC, GJU	Physics, GJU	Hisar	14-10-2020 to 27-10-2020
Dr. Ramesh Kumar	Faculty development program on development and management of MOOCS and online courses using LMS-MOODLE	SGTV Khalsa College, DU, Delhi	---	Delhi	30-06-2020 to 04-07-2020

(f) National/International Webinars Attended - 03

Name of Teacher/Faculty	Title of Webinar	Host organization	Date
Dr. Vivek Gupta	How to Teach Online?	IIM Indore	06-07-2020 to 11-07-2020
Dr. Vivek Gupta	Faculty Development Program on Photonics	AICTE ATAL Online FDP	Nov. 02-06, 2020
Dr. Vivek Gupta	Faculty Training Program on Recent Trends in Physics of Engineering Materials	DCRUST Murthal	07-12 June, 2021

(g) Total number of Refresher/ Oriented Courses attended:

i)	Refresher Courses	:	3
ii)	Oriented Courses	:	2
iii)	Webinars	:	3
iv)	Total	:	8

(XIII) Association with National and State Level Bodies (Give teacher-wise details)

i. Membership of Professional Bodies:

Prof. Devendra Mohan: Indian Laser Association

Prof. Sujata Sanghi: Indian Laser Association, Optical Society of India, Materials Research Society of India

Prof. Ashish Aggarwal: Materials Research Society of India

Prof. Sunita Srivastava: IPA, IAPT

Dr. Vivek Gupta: IAPT, Indian Science Congress Association (ISCA), Vijnana Bharti

Prof. R S Kundu: Materials Research Society of India, Electron Microscope Society of India.

Prof. Neetu Ahlawat: Materials Research Society of India, Electron Microscope Society of India

(ii) Member of Expert Committees:

(iii) Member of Academic Bodies of the University

(iv) Member of Academic Bodies of other institutions:

1. Prof. Sunita Srivastava: Panjab University, MDU Rohtak

(XIV) Detail of Consultancy Project/Work in Department NIL

Name of Teacher	Title of the project/work	Name of Agency	Total Amount

(XV) Lectures (other than class) delivered (Give teacher wise detail)

Type	Faculty	Topic/ Subject	Institution	Dates
Invited talk delivered in refresher courses	Dr. Vivek Gupta	MOOCs: Academic Indices	UGC-HRDC GJUST Hisar	14-15 July, 2020
	Dr. Vivek Gupta	MOOC	UGC-HRDC GJUST Hisar	27 Feb. 2021
Any other				

(XVI) Additional Duties Performed/Positions held in the University  
(Teacher-wise)

Sr. No.	Name of Teacher	Additional Positions	Duration From To
1.	Prof. Sujata Sanghi	Chairperson, Dept. of Physics	01-12-2018 till date
2.	Prof. Ashish Agarwal	Director, IQAC, GJUST, Hisar	22-05-2018 till date
3.	Dr. Hardev Singh	Warden (Boys Hostel)	Since March 2017
4.	Dr. Vivek Gupta	Warden (Boys Hostel)	Since October, 2018
5.	Dr. Vivek Gupta	UGC SWAYAM Co-ordinator	Since May, 2018
6.	Dr. Ranjeet	Departmental Coordinator of Training and Placement Cell, GJUST	Since 01-01-2018

(XVII) Training/Internship & Placement activity Information of the Department

Activity (Training/Internship /Placement)	No. of Students placed	No. of Companies in which placed*
Held at central level		

\*Note:- Please attach a list of companies along with number of students placed and dates of placement.

(XVIII) Detail of Academic Activities/Professional Activities/ Programmes Organized in Department during the year:

i. Seminar /Conference/Refreshers course/Workshop/Training Programme

Name of the Event	National/ International	Number of Participants	Duration	Dates of the Event
Webinar on Role of Physics in Global Response to Covid				

ii. Extension lecture: (with resource person & date) Nil

Topic	Resource Person	Number of Participants	Dates of the Event

iii. Students tour - NIL

Places Visited	Number of Participants	Duration	Dates of the Event

iv. Industry interaction programs : (with name of company & date) - NIL

Name of the Event	Name of the Industry	Number of Participants	Duration	Dates of the Event

v. Teacher's day celebration organized by the Physics Association of the Department on 5 Sept. 2021.

vi. Alumni Meet was conducted.

(XIX) Awards/ Honours received by Faculty (Give teacher-wise details about title of award, awarding agency and date of conferment) NIL

Name of Teacher	Title of Award	Name of Awarding Agency	National/ International	Date Conferred

(XX) Any other important Information/ Achievement of the Department

- The Department is empowered with modern laboratories and has a vibrant research environment for conducting high quality programs at all levels.
- Faculty is actively involved in scientific research. The number of research publications of the department is 50 in Scopus database with a total of 400 citations and h-index is 35
- The department encourages various interdisciplinary collaborations with universities and industries in India and abroad. The alumni of the department are well placed in different Government and industrial/Academic organizations Globally.

  
Signature of the Chairperson

ANNEXURE

DEPARTMENT OF Physics

- (I) TOTAL No. OF RESEARCH PAPERS PUBLISHED: 50  
NATIONAL:  
INTERNATIONAL: 50
- (I) TOTAL NO. OF FUNDED RESEARCH PROJECTS: 04  
COMPLETED: 03  
ON GOING: 01
- (III) TOTAL NO. OF PARTICIPATED AND CONTRIBUTED RESEARCH PAPERS:  
50  
SEMINARS & CONFERENCES: NIL  
INTERNATIONAL LEVEL: NIL
- (IV) TOTAL NO. OF BOOKS PUBLISHED: NIL
- (V) NUMBER OF SCHOLARS COMPLETED THEIR PH.D. DEGREE:
- (VI) TOTAL NUMBER OF SCHOLARS REGISTERED TOPH.D. PROGRAMME:  
90

*Handwritten signature*  
03/0/22



GURU JAMBHESHWAR UNIVERSITY OF SCIENCE & TECHNOLOGY, HISAR  
(Established by State Legislature Act 17 of 1995)  
'A' Grade, NAAC Accredited

No. Acad./AC-I/2021/ 5117-5140  
Dated: 24/9/21

To

All the Chairpersons of the University Teaching Departments  
Guru Jambheshwar University of science & Technology  
Hisar

**Subject:- Annual Report for the year 2020-21 (01.07.2020 to 30.06.2021).**

Sir/ Madam,

We are in process of preparing the Annual Report of the University for the Calendar Year 2020-21 (01.07.2020 to 30.06.2021) which is to be presented before the statutory bodies of the University.

You are, requested to supply the information complete in all respect in the enclosed proforma alongwith a soft copy in CD to this office latest by 06.10.2021 for incorporation in the Annual Report.

Your kind co-operation is solicited.

Yours faithfully

Assistant Registrar (Academic)  
For Registrar

DA/As above  
Prad Neeva  
Dr Vivek