

## **Annual Report**

## Ph.D. Supervision

(To be maintained by those guiding Ph.D.)

**Department: Physics** 

**Academic Year: Till 2022** 

Name of the Teacher: Prof. Monika Tomar

Designation: Professor

Qualifications (Ph.D./D.Sc./D.Litt.): Ph.D. Year of obtaining the above qualification: 2004 Year of recognition as research guide: 2009

Relevant page of the Recognition Letter as supporting document (if any):





## -FACULTY-OF SCIENCE UNIVERSITY OF DELHI **DELHI - 110007**

SF-I/BRS/2010/1118

Dated: 23.4.2010

Ms. Monika Tomar Department of Physics, Miranda House, University of Delhi, Delhi - 110007.

Dear Madam,

The Board of Research Studies (Science) in its meeting held on 20.4.2010 has approved the application of the Ms. Monika Tomar, Department of Physics, Miranda House for your recognition as a Supervisor to guide Ph.D students of the University in your subject. This is only one time recognition for taking two Ph.D students. Any further recognition will be granted only after review by the duly constituted Inspection Committee of the BRS. The students may be provided guidance in your College as well as in the concerned Department of the University.

It may be mentioned here that the registration of the candidate for Ph.D programme will be done strictly in accordance with the guidelines prescribed under Ordinance VI-B duly notified by the Registrar vide letter no. SPA/R/2008/2655 dated 28/4/2008, (copy enclosed). Additional guidelines for the selection of candidates in the Projects for consideration for registration are also enclosed (Dean, Research letter no. R/194 dated 30/6/2008).

Students who are in receipt of any of the following types of fellowships/stipends will only be considered for registration by the BRS.

- 1. University Teaching Assistantships.
- JRF through UGC/NET and CSIR/NET. 2.
- Fellowships of CSIR/ICAR/ICSSR/ICHR/ICMR/DBT/DST or from any 3. other recognized Government institutions/organizations.
  - Rajiv Gandhi Fellowships for SC/ST from UGC.

- SAP Fellowships from UGC.
  Project JRF/Project Assistant. Candidates with UGC (Non -NET) fellowships Rs. 5,000 fellowship under the new scheme.

For selection of candidates in Projects (A6), following is the composition of the Committee:

- An eminent scholar to be nominated by the Vice-Chancellor (DRC member as an outside experts)
- Head of the Department.



:2:

1

3. One professor and one Reader from the parent Department to be nominated by the Vice-Chancellor.

4. PI and Co-PI of the Project or any other member as per the requirement of the funding agency.

(This Selection Committee should clearly mention that the selected candidates be considered for registration by the DRC).

The candidates considered for registration have to do the course work available at the University Department.

Your recognition as a supervisor is also subject to fulfilling the following conditions:

- 1. Having a project from the funding agency for the duration of at least 2 years.
- Undertaking from the Principal of the college that sufficient laboratory space will be provided to the students/supervisor to carry out the research work.
- Any student appointed in the project will not be automatically considered for registration unless or otherwise recommended by the duly constituted committee (6).

The registration of the student and other research activities will be as per the guidelines prescribed under the revised ordinance VI-B.

Yours faithfully,

Dean, Faculty of Science

Rrp Zail



## Part A

## **Currently Enrolled Research Scholars**

Name of the student:	Manisha Bharti
Year of registration:	26-11-2018
Supervisor:	Prof. Monika Tomar
Co-supervisor, if any:	
Title of the thesis:	Development of Acoustic wave based sensing platform
Whether receiving scholarship, Name of the scholarship:	JRF-CSIR



#### D.U.P. 295-12-16-10 Pads X 100 BOARD OF RESEARCH STUDIES (SCIENCE) FACULTY OF SCIENCE UNIVERSITY OF DELHI

Ref. No. Ref. : FOS-I/114/Ph.D./ 78

Physics & Astrophysics

......is hereby informed that the Board of Research Studies for Science in has provisionally selected him/her for registration to Ph.D. Programme and has its meeting held on Physics & Astrophysics Department under the supervision of assigned him/her to ... Prof. Vinay Gupta on the following proposed area of Prof./Dr. "Development of Sensing Platform Based on Acoustic Waves"

- His/her admission to Ph.D. Programme shall be provisional and the same shall be confirmed only when he/she has qualified in the course work and has completed any other requirements, such as passing in the oral test etc., to be laid down by the Departmental Research Committee in each case.
- In case the candidate is employed, provisional admission to Ph.D. would be allowed only if leave requirement is fulfilled.
- At the end of six months, the Advisory Committee shall access the progress of the candidate through a comprehensive written and oral examination/presentation.
- If the Advisory Committee is satisfied, it would recommend confirmation of the provisional admission previously granted and the Board, if satisfied, would confirm the provisional admission.
- If the overall performance in respect of the above is not found to be satisfactory, the candidate shall be required to 5. repeat the same within the next six months when his/her performance would be re-examined. If the performance is again found not to be satisfactory the Advisory Committee may recommend either a further chance to improve his/her performance or cancellation of the provisional admission granted to him/her.

He/she is further informed that the date of his/her joining will be treated from the date of submission of fees in this University. A blank form for joining Report is enclosed herewith which should be returned to this office duly filled in and signed by his/her supervisor and Head of the Department to enable him/her to deposit the prescribed supervision and other fees with the Cashier, Delhi University, within 15 days from the date of issue of this letter i.e. ... 2 2 11 2 18 5 failing which his/her selection to the course shall be deemed as cancelled.

His/her registration is governed by the provisions of Ordinance VI-B relating to Doctorate of Philosophy (Ph.D.) of this University.

In case the candidate has passed the M.Sc. Examination form a University other than Delhi University, he/she is required to be enrolled as student of this University. An enrolment form is enclosed which must be sent to Academic Branch duly filled and signed by the Head of the Department immediately after joining the Ph.D. Course. The original certificate may also be produced.

Encl.: As above.

Assistant Registrar(Science)

Ms. Manisha Bharati 33/32; Old Rajinder Nagar,





# <u>विज्ञान संकाय</u> दिल्ली विश्वविद्यालय

FACULTY OF SCIENCE UNIVERSITY OF DELHI

Porta Cabin, Near Department of Zoology, University of Delhi, Delhi - 110007, Ph. : 011-27666601/27662825 पोर्टा केबिन नजदीक प्राणी विज्ञान विभाग, दिल्ली विश्वविद्यालय, दिल्ली-110007 दूरभाष: 011-27666601/27662825

Email- office\_fsc@admin.du.ac.in

12-769 52|5|21

Ref.: FOS-1/114/2021/9774

The Head Department of Physics & Astrophysics, University of Delhi, Delhi-110007,

Sir.

This is with reference to the minutes of DRC dated 27/07/2021 regarding change of Supervisor of the following Ph.D. scholars due to sudden demise of Prof. Vinay Gupta.

In this connection, this is to inform you that the Board of Research Studies (Science) in its meeting held on 09/08/2021 considered & approved the following Supervisor/s to guide the following Ph.D. scholars under supernumerary Quota:

S.No.	Name of the Scholar	New Supervisor(s)
1.	Ms Manisha Bharati	Dr. Monika Tomar (Miranda House)
2.	Ms. Gunjan Yadav	Dr. Monika Tomar (Miranda House)
3.	Mr. Shiva Laichhane	Dr.Arijit Chowdhuri (A.N.D. College)
4.	Mr. Puneet Sagar	Prof. Binay Kumar
5.	Ms. Akanksha Motla	Prof. S. Annapoorni
6.	Mr. Rohit	Dr. Arijit Chowdhuri (A.N.D College)

The concerned scholars may please be informed accordingly.

Yours faithfully,

Dated: 20/09/2021

Section Officer

#### Copy to:

J. Dr. Monika Tomar, Supervisor, Miranda House, University of Delhi, Delhi-110007.

- 2. Dr. Arijit Chowdhuri, Supervisor, Acharya Narendra Dev College, Govindpuri, Kalkaji, New Delhi- 110019.
- 3. Prof. Binay Kumar, Supervisor, Deptt. of Physics & Astrophysics, University of Delhi, Delhi-110007.
- 4. Prof. S. Annapoorni, Supervisor, Deptt. of Physics & Astrophysics, University of Delhi, Delhi-110007.

Section Officer



Name of the student:	Gunjan Yadav
Year of registration:	07-01-2019
Supervisor:	Prof. Monika Tomar
Co-supervisor, if any:	
Title of the thesis:	Wide band-gap semiconducting thin films for photonic devices
Whether receiving scholarship, Name of the scholarship:	JRF-UGC



Subject to Submirsion Selection Committee Minutering Dp. MonBOARD OF RESEARCH STUDIES (SCIENCE)

FACULTY OF SCIENCE
UNIVERSITY OF DELHI

Ph.D/8074

Dated: 07-01-2019
Physics and Astrophysics

BOARD	FACULTY OF SCIENCE	
	UNIVERSITY OF DELHI	Dated: 07-01-2019
Ref. No. Ref. : FOS-V114/Ph.D./ 80 74		Physics and Astrophysics
With reference to his/her application	on for admission to Ph.D./ Programme in	
Ms. Cuman Tagay	is baseles informed that the	Board of Research Studies for Science in
06.11.2018	the state of the state for	registration to Ph.D. Programme and has
is meeting new on	Physics and Astrophysics	Department under the supervision of
Prof. Vinay Gupta	Physics and Astrophysics	on the following proposed area of
"Wide band gap semiconde	ucting thin films for photonic devices"	
research	***************************************	
qualified in the course work ar down by the Departmental Rese	ogramme shall be provisional and the same ad has completed any other requirements, such arch Committee in each case.	
2. In case the candidate is emplo	oyed, provisional admission to Ph.D. would	i be allowed only if leave requirement is
fulfilled.	1	
written and oral examination/pro	dynory Committee shall access the progress of esentation.	
granted and the Board, if satisfic	satisfied, it would recommend confirmation ed, would confirm the provisional admission.	
repeat the same within the no again found not to be satisfactor performance or cancellation of t	respect of the above is not found to be satisf- test six months when his/her performance won- ty the Advisory Committee may recommend e- the provisional admission granted to him/her.	ither a further chance to improve his/her
University. A blank form for joining	at the date of his/her joining will be treated for Report is enclosed herewith which should be d of the Department to enable him/her to dep within 15 days from the date of issue of this be teemed as cancelled.	well the persorihed supervision and other
. His/her registration is govern this University.	ed by the provisions of Ordinance VI-B relati	ing to Doctorate of Philosophy (Ph.D.) of
	ssed the M.Sc. Examination form a Univer- this University. An enrolment form is en- to-the Department immediately after	
**		R
		Assistant Registrar(Science)
Encl.: As above.  Ms. Gunjan Yadav  G-Block, Prem Nagar  Najafgarh		and a company parameters and a communication
Delhi1-10043		





#### विज्ञान संकाय दिल्ली विश्वविद्यालय FACULTY OF SCIENCE UNIVERSITY OF DELHI

Porta Cabin, Near Department of Zoology, University of Delhi, Delhi - 110007, Ph. : 011-27666601/27662825 पोर्टा केबिन नजदीक प्राणी विज्ञान विभाग, दिल्ली विश्वविद्यालय, दिल्ली-110007 दूरआप: 011-27666601/27662825

Email- office fsc@admin.du.ac.in

Ref.: FOS-1/114/2021/9774

Dated: 20/09/2021

22

The Head Department of Physics & Astrophysics, University of Delhi, Delhi-110007.

Sir.

This is with reference to the minutes of DRC dated 27/07/2021 regarding change of Supervisor of the following Ph.D. scholars due to sudden demise of Prof. Vinay Gupta.

In this connection, this is to inform you that the Board of Research Studies (Science) in its meeting held on 09/08/2021 considered & approved the following Supervisor/s to guide the following Ph.D. scholars under supernumerary Quota:

S.No.	Name of the Scholar	New Supervisor(s)
1.	Ms Manisha Bharati	Dr. Monika Tomar (Miranda House)
2.	Ms. Gunjan Yadav	Dr. Monika Tomar (Miranda House)
3.	Mr. Shiva Laichhane	Dr.Arijit Chowdhuri (A.N.D. College)
4.	Mr. Puneet Sagar	Prof. Binay Kumar
5.	Ms. Akanksha Motla	Prof. S. Annapoorni
6.	Mr. Rohit	Dr. Arijit Chowdhuri (A.N.D College)

The concerned scholars may please be informed accordingly.

Yours faithfully,

Section Officer

Copy to:

V. Dr. Monika Tomar, Supervisor, Miranda House, University of Delhi, Delhi-110007.

- 2. Dr. Arijit Chowdhuri, Supervisor, Acharya Narendra Dev College, Govindpuri, Kalkaji, New Delhi- 110019.
- 3. Prof. Binay Kumar, Supervisor, Deptt. of Physics & Astrophysics, University of Delhi, Delhi-110007.
- 4. Prof. S. Annapoorni, Supervisor, Deptt. of Physics & Astrophysics, University of Delhi, Delhi-110007.

Section Officer



Name of the student:	Babita Sharma
Year of registration:	13-04-2021
Supervisor:	Prof. Monika Tomar
Co-supervisor, if any:	
Title of the thesis:	Development of Functional materials for energy applications
Whether receiving scholarship, Name of the scholarship:	JRF-CSIR



#### BOARD OF RESEARCH STUDIES (SCIENCE)

FACULTY OF SCIENCE UNIVERSITY OF DELHI

9/4/21

P. No. Ref.: FOS-1/114//Ph.D./9337

Dated: 08.04.2021

With reference to his/her application for admission to Ph.D. Programme in Physics & Astrophysics Ms. Babita Sharma is hereby informed that the Board of Research Studies for Science in its meeting held on 19.03.2021 has provisionally selected him/her for registration to Ph.D. Programme and has assigned him/her to Physics & Astrophysics Department under the supervision of Dr. Monika Tomar on the following proposed area of research Development of Functional materials for energy applications.

- His/her admission to Ph.D. Programme shall be provisional and the same shall be confirmed only
  when he/she has qualified in the course work and has completed any other requirements, such as
  passing in the oral test etc., to be laid down by the Departmental Research Committee in each case.
- In case the candidate is employed, provisional admission to Ph.D. would be allowed only if leave requirement is fulfilled.
- At the end of the six months, the Advisory Committee shall access the progress of the candidate through a comprehensive written and oral examination/presentation.
- If the Advisory Committee is satisfied, it would recommend confirmation of the provisional admission previously granted and the Board, if satisfied, would confirm the provisional admission.
- 5. If the overall performance in respect of the above is not found to be satisfactory, the candidate shall be required to repeat the same within the next six months when his/her performance would be re-examined. If the performance is again found not to be satisfactory the Advisory Committee may recommend either a further chance to improve his/her performance or cancellation of the provisional admission granted to him/her.

He/she is further informed that the date of his/her joining will be treated from the date of submission of fees in this University. A blank form for joining Report is enclosed herewith which should be returned to this office duly filled in and signed by his/her supervisor and Head of the Department to enable him/her to deposit the prescribed supervision and other fees on online portal in the concerned deptt, university of delhi within 15 days from the date of issue of this letter i.e.24. 4.12.1 failing which his/her selection to the course shall be deemed as cancelled.

His/her registration is governed by the provisions of Ordinance VI-B relating to Doctorate of Philosophy (Ph.D.) of this University.

In case the candidate has passed the M.Sc. Examination from a University other than Delhi University, he/she is required to be enrolled as a student of this University. An enrolment form is enclosed which must be sent to Academic Branch duly filled and signed by the Head of the Department immediately after joining the Ph.D. Course. The original certificates may also be produced.

Encl.: As above. Ms. Babita Sharma A-220 Sangam Vihar, New Delhi, Opp. To Batra Hospital, Delhi-110080 Section Officer (Science)

Copy forwarded for information to:-

1. The Head, Department of Physics & Astrophysics University of Delhi, Delhi-110007.

Supervisor, Dr. Monika Tomar, Department of Physics & Astrophysics, University of Delhi, Delhi-110007.

Section Officer (Science)



Name of the student:	Amit Kumar
Year of registration:	08-03-2022
Supervisor:	Dr. Mahipal Singh, Kumaon University
Co-supervisor, if any:	Prof. Monika Tomar
Title of the thesis:	Polymer composites as advanced EMI shielding material for electromagnetic pollution
Whether receiving scholarship, Name of the scholarship:	





कुमाऊँ विश्वविद्यालय, नैनीताल-263001(उतराखण्ड)

KUMAUN UNIVERSITY, NAINITAL-263001 (UTTARAKHAND), INDIA

Office: 05942-236856 (Extn-328), Mobile CAO-Research: 9719919043, Fax: 05942-235213 Office: 05942-236856 (Extn-328), Mobile CAO-Research: Www.kunainital.ac.io Email:caoresearchku@gmail.com & sriccku@gmail.com, Website:www.kunainital.ac.io Revised Letter

Research Section

पत्रांक-शोध/43/भौतिक विज्ञान/2021

Amit Kumar Village - jajal P.O - Jhandupur Distt - Sonipat Haryana Pin - 131023

विश्वविद्यालय शोध उपाधि समिति (R.D.C.) भौतिक विज्ञान(Physics) की बैठक दिनांक 29.12. 2021 को सम्पन्न हुई, बैठक में आपके शोध आवेदन पत्र से सम्बन्धित निम्नांकित निर्णय लिया गया है। (सम्बन्धित क्रमों पर सही का चिन्ह लगा है) यह निर्णय आपकी सुविधा को ध्यान में रखते हुए विद्धत परिषद एवं कार्यपरिषद की स्वीकृति की प्रत्याशा में प्रसारित किया जा रहा है। इसे अन्तिम तब ही माना जायें जबकि इसे विद्धत तथा कार्यपरिषद् की स्वीकृति प्राप्त हो जाये।

शोध कार्य का शीर्षक / रूपरेखा एवं निर्देशक स्वीकार किये गये

शोध कार्य की रूपरेखा निम्न संशोधन के साथ स्वीकार की गई -

Name of Candidate	Topic	Name of Supervisor
Amit Kumar	Co-supervision is not approved. Scientific gaps and lacuna in existing knowledege associated with the Propose study are missing. The objectives of the proposed study are unclear and need to be more elaborated. No relation to the previous studies is mentioned and needs to be addressed. Materials to be used remain underfined. Needs thorough revision.	Dr.Mahipal Singh

अतः उपरोक्त संशोधन शीषक के अनुरूप संशोधित रूपरेखा की दो प्रतियां अपने शोध निर्देशक से अग्रसारित कर संयोजक / विभागाध्यक्ष द्वारा अनुमोदन करने के उपरांत पत्र निर्गत की तिथि से तीन माह के अन्दर विश्वविद्यालय कार्यालय में जमा करें। बिना संयोजक के अनुमोदन के संशोधित रूपरेखा स्वीकार नहीं की जायेगी।

- 3- शोध कार्य की रूपरेखा निम्न कारणों से अस्वीकार की गई-जपरोक्त सूचना के आधार पर आप शोध कार्य की संशोधित रूपरेखा पाँच प्रतियों में अपने शोध निर्देशक एवं विषय संयोजक द्वारा अनुमोदित करवाने के उपरान्त CAO-SRICC (शोध अनुभाग) कार्यालय कक्ष संख्या–114 में शीधातिशीध जमा करवाने का कष्ट करें, ताकि आपकी संशोधित रूपरेखा को सम्बन्धित विषय की शोध उपाधि समिति की अगली बैठक में निर्णय हेतु प्रस्तुत किया जा सके।
- 4- आपके आवेदन पत्र पर निम्नांकित कारणों से विचार अगली बैठक के लिये स्थगित किया गया है।

आपकी शोध पंजीयन तिथि दिनांक 30-08-2017 है।

6- UGC ordinance -2016 के अनुसार शोध ग्रंथ जमा करने की न्यूनतम समयाविध 3 वर्ष है, इस समयाविध में प्री पी०एच0डी0 कोर्स वर्क की समयाविध भी सिम्मिलित है। शोध कार्य की अधिकतम अविध 6 (छ:) वर्ष है एवं महिला शोधार्थियों के लिए शोध कार्य की अधिकतम अविध 8 वर्ष है। यह तिथि शोध कार्य की रूपरेखा के पंजीकरण की तिथि (उपरोक्त) से मान्य होगी। उक्त तिथि के उपरान्त एक वर्ष का समय विस्तारण एवं एक वर्ष का पुनः पंजीकरण विशेष परिस्थितियों में क्लपति जी द्वारा स्वीकृत किया जा सकता है। इसके लिये आपको प्रार्थना पत्र अपने शोध निर्देशक से अग्रसारित करवाकर 6 वर्ष (महिला शोधार्थियों के लिए 8 वर्ष) की अधिकतम अवधि पूर्ण होने के तीन माह के भीतर विश्वविद्यालय को भेजना होगा। यदि उपरोक्त अवधि तक समय विस्तारण के सम्बन्ध में आपसे कोई प्रार्थना पत्र प्राप्त नहीं होता है तो आपका शोध पंजीकरण शोघ अधिनियम की धारा 6 (4) के अन्तर्गत निरस्त कर दिया जायेगा। इसकी कोई पूर्वसूचना विश्वविद्यालय द्वारा नहीं भेजी जायेगी।

विश्वविद्यालय के शोध नियमों के अनुसार पी०एच०डी० Pre-Submission Viva के उपरान्त शोध ग्रंथ को विश्वविद्यालय में 60 दिनों की समयावधि में जमा करना अनिवार्य है।

> निदेशक एस०आर०आई०सी०सी०

दिनांक : 04.10.2021

प्रतिलिपि- निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित :--

Dr.Mahipal Singh, Deptt.of Physics, R.H.P.G.College, Kashipur.

संयोजक एवं विभागाध्यक्ष, भौतिक विभाग, डी०एस०बी० परिसर, नैनीताल।

एस०आर०आई०सी०सी०



	ertificate of Supervisor
1 De partal Spl (nan	ne of the supervisor) certify that Mr//Ms/- Arroll Kurr
***************************************	has been carrying on his/ her research work under me
for registration of his/ her name for the	e Ph.D. programme in-Physics (name of the
subject). I have no objection to guide	Mr//Ms/ Amad Ruboay
The number of enrolled Ph.D. candida	ates working under my supervision till date is0.3
***I recommend Prof./ Dr. Mani	Ka TD that A88+ A00 of Dobt The
***(Strike out if not applicable).	
Date: - 02/2019	AAR_
Date: 05/07/2019	Full signature of Supervisor with Official Seal
Date: 06/07/2019	Full signature of Supervisor with Official Seal of designation  Dr. Makipal Singh Associate Professor-Physics R.H.Govi.P.G.College, Kashipur (U.K.)
Date: 06/07/2019	of designation  Dr. Makipal Singh Associate Professor-Physics R.H.Govi.P.G.College, Kashipur (U.K.)
Date: 05/07/2019	of designation Dr. Mahipal Singh



Name of the student:	Nidhi Dhull
Year of registration:	22-12-2016
Supervisor:	Prof. Monika Tomar
Co-supervisor, if any:	
Title of the thesis:	Growth of functional oxide thin films for device applications
Whether receiving scholarship, Name of the scholarship:	



	CONT.				
		,			
1	DUP-2	95-12-16-10 Pads X 100	4-11	TO COLE	NCE
	P.O 2	BOAR	D OF RESEARCH S	TUDIES (SCIE	NCE)
			FACULTY OF S	SCIENCE DE DEL HI	
	D-C N	o. Ref. : POS-I/114/Ph.D./ 6	UNIVERSITY C	The Day	Dated:20.12.2016
	Rei. No	O. Kei.: POS-I/114/Ph.D./ O	cation for admission to Ph.D./	Programme in !	Physics & Astrophysics
		- Ms. Nidhi Dhull	is hereby	informed that the Boar	d of Research Studies for Science
	MIT./MI	rs/Miss	has provisionally se	lected him/her for regis	stration to Ph.D. Programme and h
	its mee	25:11:20	16		Department under the supervision
	assigne	ed him/her to	Physics & Astro	pnysics	Department under the supervision
	Prof./D	DrDr.: Monika Tomar			on the following proposed area
	researc	h	21 - 6 - Davisa applicatio	ne .	
		"Growth of Oxide thin !	rims for Device application		
	1.	qualified in the course wor	Drogramme shall be provisi	ional and the same shall requirements, such as	l be confirmed only when he/she he passing in the oral test etc., to be la
	2.	In case the candidate is enfulfilled.	nployed, provisional admission	on to Ph.D. would be	allowed only if leave requirement
	3.	At the end of six months, th written and oral examination	e Advisory Committee shall ac /presentation.	cess the progress of the	e candidate through a comprehensi
	4.	If the Advisory Committee granted and the Board, if sat	is satisfied, it would recom- isfied, would confirm the provi	mend confirmation of sional admission.	the provisional admission previous
	5.	repeat the same within the	next six months when his/he	may recommend either	ry, the candidate shall be required be re-examined. If the performance a further chance to improve his/
	signed fees wi	sity. A blank form for join	lead of the Department to enaity, within 15 days from the date	th which should be ret	the date of submission of fees in the turned to this office duly filled in a the prescribed supervision and other
		His/her registration is gove	erned by the provisions of Oro	dinance VI-B relating to	o Doctorate of Philosophy (Ph.D.)
	this Un	niversity.			
	Branch	d to be enrolled as student	of this University. An enro	lment form is enclose	other than Delhi University, he/she ed which must be sent to Acader bining the Ph.D. Course. The orig
					Ashing
	Encl : /	As above.			Assistant Registrar(Scie
		s. Nidhi-Dhull			
	TATE	OF A TABLES OF SALES			

H.No. 771/21, Barahi Road, Teacher Colony, Bahadurgarh, Haryana.



#### Part B

## Research Scholars who have completed Ph.D.

Name of the student:	Akshta Rajan
Year of registration:	15-10-2010
Year of obtaining Ph.D.:	
Supervisor:	Prof. Monika Tomar
Co-supervisor, if any:	
Title of the thesis:	Development of ZnO thin films for UV photo detectors

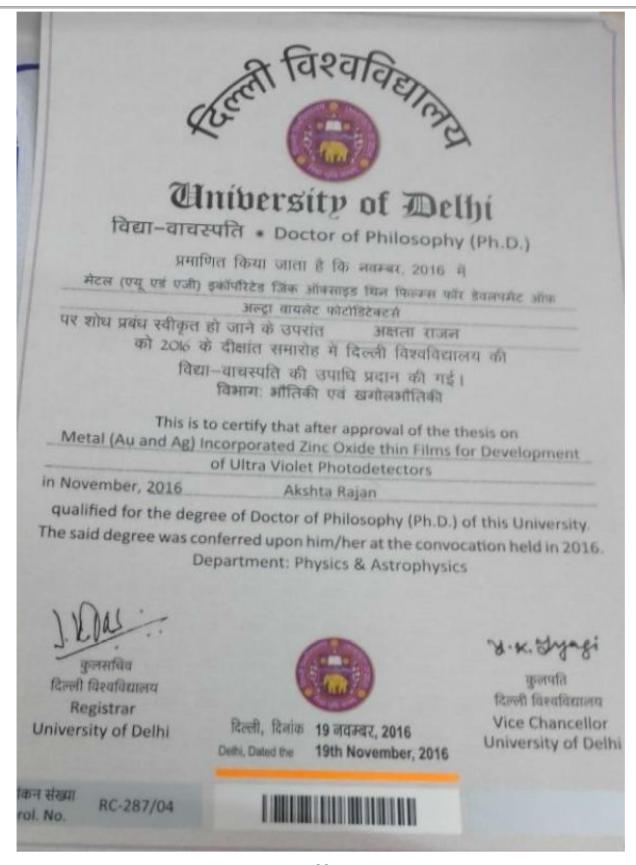


ì	THE FORLECTURESHIP	=3.0
	HIS WORK IS COMPULSORY FOR EVERY CANDIDATE UNLESS NOT ELIGIBLE FOR LECTURESHIP	)
	BOARD OF RESEARCH STUDIES (SCIENCE)  FACULTY OF SCIENCE  UNIVERSITY OF DELHI	
	Ref. No. SE-I-Ph.D. 12. 2.5.3 Dated 15.19.2010	
	A Astrophysics	
	With reference to his/her application for admission to Ph. D. Programme in Nr. Mrs. Akisha Rajim is hereby informed that the Board of Research Studies for Science in its meeting held on 01.10.2010 has provisionally selected him/her for registration to Ph.D. Programme and has assigned him/her to Physics Astrophysics Department under supervision of Prof. Dr. Monika Tomar 2002 Calculate 10.20.82 on the following title of thesis	
	"Structural & Optical Studies of Metal & Metal Oxide Nanostructures for Photonic Devices"	
	I His her admission to Ph.D. Programme shall be provisional and the same shall be confirmed only when he/she has qualified in the course work and has completed other requirement such as passing in the oral test etc. to be laid down by the Departmental Research Committee in each case.	
	2 At the end of the six months, the Advisory Committee shall assess the progres after comprehensive written and or oral examination.	
	If the Advisory Committee is satisfied, it would recommed confirmation of the provisional admission previously granted and the Board if satisfied would confirm the provisional admission.	
	a If the overall performance in respect of the above is found not to be satisfactory he she shall be required to repeat the same within the next six months when his/her performance would be re-examined if the performance is again found not to be satisfactory the Advisory Committee may recommend either a further chance to improve his/her performance or cancellation of the provisional admission granted to him her	
	He She is further informed that the date of his/her joining and starting research in the Department will be his her date of registration. He She is therefore, requested to intimate this office the date from which he she started his her research in the Department. A blank form for joining Report is enclosed herewith which should be returned in this office duly tilled in and signed by his her supervisor and Head of the Department to enable his her to deposit the presented supervision and other fees with the Cashier. Delhi University, within 15 days from the date of issue of this letter (e. till \$50,000). Offailling which his her selection to the course shall be deemed as cancelled.	
	His her registration is governed by the provisions of Ordinace VI-B relating to Doctorate of Philosophy.  (Ph.D.) of this University	1
	in-case he she passed the M/Sc. Examination from a University other than Delhi University he she is required to be enrolled as a student of this University. An enrollment form is enclosed which must be sent to Academic fistanch duly filled and signed by the fread of the Department immediately after joining the Ph.D. Course. The original certificates may also be produced.	
	Erel Veabove	
	Ms. Akshta Rajan 71. Plot No26/3. Saraswati Unclave. Sector-19, Robini.	
	Delhi-110085.	1
	Topy torwarded for information to .  1 The Head of the Department of Physics & Astrophysics by the Delhi. Delhi.?	
	2 Supervisor, Prof/Dr. Dr. Monika Toman, University of Deini, Deini-7	
	3 The Finance Officer, University of Delhi, Delhi-110007	
	4 Co It Supervisor, Prof. Dr	
	Rosel	
	Section Officer (See 5)	



Relevant supporting document for award of Ph.D. (Certificate/Degree/Result issued to student on successfully completing Ph.D.):







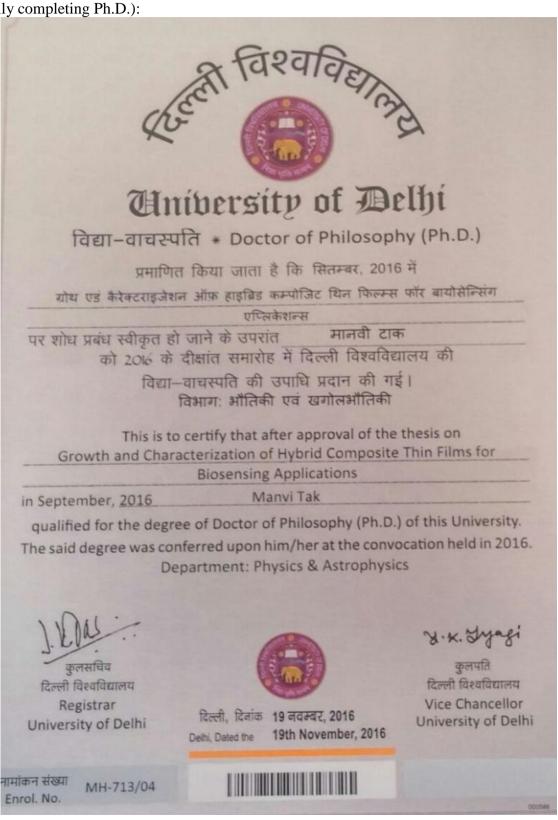
Name of the student:	Manvi Tak
Year of registration:	01-03-2011
Year of obtaining Ph.D.:	
Supervisor:	Prof. Monika Tomar
Co-supervisor, if any:	
Title of the thesis:	Growth of metal oxide nanostructures for detection of Urea and Manengities



COURSE WOD	CRY CANDIDATE UNLESS NOT ELIGIBLE FOR LECTURESHIP D.U.P. 407-7-07-50Px200
WORK IS COMPUTED	
ESORY FOR EVI	RY CANDIDATE UNLESS NOT ELIGIBLE FOR LECTURESHIP
	D.U.P. 407-7-07-50Px200
BOARDOERE	(2)
UNI	EARCH STUDIES (SCIENCE) CULTY OF SCIENCE VERSITY OF DELHI
Ref. No. SF-1/Ph.D./ 20562	01.03.2011
	Dated :
Francisco Contraction of the Con	admission to Ph. D. Programme in Physics & Astrophysics  is hereby informed that the Board of Research Studies has provisionally selected him/her for registration to Ph.D. Physics & Astrophysics Department under supervision on the following title of thesis:
"Growth And Characterization of Hybr Device Applications"	id-Composit Thin Films For Electronic
His/her admission to Ph.D. Programme has qualified in the course work and to be laid down by the Departmental F	shall be provisional and the same shall be confirmed only when he'she has completed other requirement such as passing in the oral test etc. lesearch Committee in each case.
2. At the end of the six months, the Adv and or oral examination	isory Committee shall assess the progress after comprehensive written
If the Advisory Committee is satisf     previously granted and the Board if sa	ied. it would recommed confirmation of the provisional admission tisfied would confirm the provisional admission.
repeat the same within the next si	of the above is found not to be satisfactory he/she shall be required to a months when his/her performance would be re-examined, if the satisfactory the Advisory Committee may recommend either a further e or cancellation of the provisional admission granted to him/her.
his/her date of registration. He/She is therefore his/her research in the Department. A blank to this office duly filled in and signed by his the prescribed supervision and other fees we of this letter i.e. till 25/2 Wailling which	date of his her joining and starting research in the Department will be one, requested to intimate this office the date from which he/she started form for joining Report is enclosed herewith which should be returned ther supervisor and Head of the Department to enable his her to deposi the the Cashier. Delhi University, within 15 days from the date of issue a his/her selection to the course shall be deemed as cancelled.
and a second by	the provisions of Ordinace VI-B relating to Doctorate of Philosoph
(Ph.D.) of this University	
In case he/she passed the M/Sc. If required to be enrolled as a student of this L	examination from a University other than Delhi University he/she iniversity. An enrolment form is enclosed which must be sent to Academ d of the Department immediately after joining the Ph.D. Course. The
original certificates may also be produced	
	Sell
Encl - As above.	Assit/Dy Registrar (Scient
Manyi Tak. F-79, UG-L	· Att
Dilshad Colony,	
Delhi-95	
Copy forwarded for information to: - Phys.  1. The Head of the Department of Dr. Monika T	0 0 10 101 101
2 1415 2 Supervisor Prof/Dr	HILL AND DESCRIPTION OF THE PARTY OF THE PAR
3 The Finance Officer. University of	Delhi. Delhi-110007.
4 Co./Jt Supervisor, Prof. Dr	
4, 60.01 - 900	not
and the same of th	Section Officer (Se



Relevant supporting document for award of Ph.D. (Certificate/Degree/Result issued to student on successfully completing Ph.D.):





Name of the student:	Surbhi Gupta
Year of registration:	29-12-2015
Year of obtaining Ph.D.:	2019
Supervisor:	Prof. Monika Tomar
Co-supervisor, if any:	
Title of the thesis:	Development of multi-component thin film for energy harvesting applications



J.U.P73	BOARD OF RESEARCH STUDIES (SC	CIENCE)
	FACILITY OF SCIENCE	
	UNIVERSITY OF DELHI	Dated: 06.01.2016
Ref. N	o, Ref.: FOS-I/114/Ph.D./ \$82-4	Physics & Astrophysics
,	UNIVERSITY OF DELHI  o. Ref.: FOS-I/114/Ph.D./ \$\frac{5}{2}\text{4} With reference to his/her application for admission to Ph.D./ Programme in  Ms. Surbhi Gupta	Research Studies for Science in
Mr./M	With reference to his/her application for admission to Ph.D. 110gtanate 22  rs./Miss. Ms. Surbhi Gupta is hereby informed that the	Board of resources to Ph D. Programme and has
	20 12 2015 · · · · · · · · · · · · · · · · · · ·	Lichibaa
	Dhusias & Astrophysics	D op.
Icscar	chDevelopment of Multicomponent thin films for energy harvesting	
*********		
***************************************	His/her admission to Ph.D. Programme shall be provisional and the san	ne shall be confirmed only when he/she has
1.	anolitied in the course work and has complete	ich as passing in the star
2.	In case the candidate is employed, provisional admission to Ph.D. wo	ould be allowed only it leave require
201		
3.	At the end of six months, the Advisory Committee shall access the progress	es of the candidate through a comprehensive
٥.		
	- would recommend confirma	tion of the provisional admission previously
4.		
5.	If the overall performance in respect of the above is not found to be sa repeat the same within the next six months when his/her performance	would be re-examined. If the performance deither a further chance to improve his/her
*	repeat the same within the next six months when his/her performance again found not to be satisfactory the Advisory Committee may recommendation of the provisional admission granted to him/h	ner.
	performance or cancellation of the provisional	the date of submission of fees in this
	He/she is further informed that the date of his/her joining will be treat versity. A blank form for joining Report is enclosed herewith which show that the date of his/her joining will be treat versity. A blank form for joining Report is enclosed herewith which show that the date of the Department to enable hm/her to	ald be returned to this office duly filled in and
Uni	versity. A blank form for joining Report is enclosed herewith which show the by his/her supervisor and Head of the Department to enable hm/her to the by his/her supervisor and Head of the Department to enable hm/her to	deposit the prescribed supervision and other
sign	ed by his/her supervisor and redd of the days from the date of issue of t	his letter i.e.
his/	her selection to the course shall be deemed as cancelled.	in a mi Dia
	His/her registration is governed by the provisions of Ordinance VI-B	relating to Doctorate of Philosophy (Ph.D.)
this	TT investigation	
	· · · · · · · · · · · · · · · · · · ·	niversity other than Delhi University, he/she i
222	In case the candidate has passed the M.Sc. Examination form a University of the Constitution of this University. An enrolment form the University of the Department immediately the Head of the Department immediately the Head of the Department immediately	is enclosed which must be sent to rendering
Bra	anch duly filled and signed by the front	y after joining are a
cer	tificate may also be produced.	
		Solli
*		Assistant Registrar(Science
En	cl.: As above. Ms. Surbhi Gupta,	
	79" Sawan Park Extension,	
*****	Ashok-Wihar; Phase-HI,	

Delhi-110052.



Relevant supporting document for award of Ph.D. (Certificate/Degree/Result issued to student on successfully completing Ph.D.):





# University of Delhi

विद्या-वाचस्पति 🖈 Doctor of Philosophy (Ph.D.) प्रमाणित किया जाता है कि अक्टूबर, 2020 में

डिवेलप्मेंट ऑफ स्ट्रॉटीयम बैरियम नीयोबेट (एसबीएन) थिन फिल्म बेस्ड इलेक्ट्रो-ऑप्टिक मॉड्यूलेटर

पर शोध प्रबंध स्वीकृत हो जाने के उपरांत

स्रभि गुप्ता

को 2021 के दीक्षांत समारोह में दिल्ली विश्वविद्यालय की विद्या-वाचस्पति की उपाधि प्रदान की गई | विभाग: भौतिकी एवं खगोल भौतिकी

This is to certify that after approval of the thesis on

Development of Strontium Barium Niobate (SBN) thin film based Electro-optic

modulator

in October, 2020

Surbhi Gupta

qualified for the degree of Doctor of Philosophy (Ph.D.) of this University. The said degree was conferred upon him/her at the convocation held in 2021.

Department: Physics & Astrophysics

Yiles cople

कुलसचिव दिल्ली विश्वविद्यालय Registrar University of Delhi

दिल्ली, दिनांक 27 फरवरी, 2021 Delhi, Dated the 27th February, 2021 Ron

कुलपति दिल्ली विश्वविद्यालय Vice Chancellor University of Delhi

90575

नामांकन संख्या Enrol.No. HR-670/2010





Name of the student:	Surbhi Jain
Year of registration:	29-12-2015
Year of obtaining Ph.D.:	2022
Supervisor:	Prof. Monika Tomar
Co-supervisor, if any:	
Title of the thesis:	Growth of thin films for optical device applications



	SANSETE TO	1	- Laboratoria	
4		(	1 1	Total Shares
I.P732-03-15-10 Pads X 100 PO A PD OF 1	RESEARCH S	TUDIES (S	CIENCE)	2 4
Tr.	ACHILTY OF	SCHENCE		
II	NIVERSITY O	OF DELHI		07,12.2016 Astrophysics
7. —			Dated :	Astrophysics
ef. No. Ref. : FOS-I/114/Ph.D./ 6475	to look to Ph D /	Programme in		
ef. No. Ref. : FOS-I/114/Ph.D./ 6 475  With reference to his/her application for	admission to Finds	to forward that th	Board of Reses	rch Studies for Science in
With reference to his/her application for Ir./Mrs./Miss	is hereby	informed that d	detection to	Ph.D. Programme and has
Ir./Mrs./Miss	has provisionally s	elected him/her	or registration to	sunder the supervision of
s income need on		WHEN THE THE	Departmen	it under the separate area of
s meeting held on	Physics & Asu		on the	following proposed area of
rof./Dr. Dr. Monika Tölhar esearch GROWTH Of V				
esearch	DETTO AL P	PPLYCATIO	DEVICE	9 APPLICATION
GROWTH OF V.	51170VC			
Late	O. T. 12.13		1	and only when he/she has
and a sample of the Ph D. Progra	mme shall be prov	isional and the s	ame shall be conf	the oral test etc., to be laid
1. His/her admission to Find.	as completed any oth	er requirements,	such as passing -	
down by the Departmental Research	Committee in each	case.		- wirement is
	isional admis	ssion to Ph.D.	would be allowed	only if leave requirement is
down by the Departmental Research  2. In case the candidate is employed	d, provisional domai			
fulfilled.			of the candid	ate through a comprehensive
fulfilled.  3. At the end of six months, the Advi	sory Committee shall	access the prog	less of the carre	
written and oral examination/preser	ntation.			
	. c. 4 is would rec	ommend confirm	mation of the prov	Isional aumission pro-
<ol> <li>If the Advisory Committee is satisfied, granted and the Board, if satisfied,</li> </ol>	would confirm the p	rovisional admis	sion.	
granted and the Board, it sures		and found to be	satisfactory, the	candidate shall be required to
5. If the overall performance in re repeat the same within the next	spect of the above is	is/her performan	ce would be re-ex	amined. If the performance is
repeat the same within the month	· Alicam Commi	ttee may recomn	nend elmer a rai	ther chance to
again found not to be satisfactory performance or cancellation of the	provisional admission	on granted to him	Milet.	
He/she is further informed that	a deep of ble/her i	oihing will be tre	eated from the dat	e of submission of fees in the
He/she is further informed that University. A blank form for joining I	eport is enclosed h	erewith which sh	hould be returned	to this office duly income
He/she is further informed that University. A blank form for joining I signed by his/her supervisor and Head fees with the Cashier, Delhi University, where the course shall be de-	of the Department	td enable hm/her	to deposit the pr	4.1.20.17failing whic
signed by his/het supervisor	ithin 15 days from th	ne date of issue of	of this letter i.e	
fees with the Cashier, Deini Oniversity, his/her selection to the course shall be de	emed as cancelled.		10 11	c pt : I comby (Ph D.) (
Institut state of the state of	by the provisions	of Ordinance VI-	B relating to Doc	torate of Philosophy (1 h.D.)
his/her selection to the course shall be de			4	
this University.		· · · · · · · · · · · · ·	University other	han Delhi University, he/she
In case the candidate has pass required to be enrolled as student of	sed the M.Sc. Exan	enrolment for	n is enclosed w	hich must be sent to Academ
In case the candidate has pass required to be enrolled as student of Branch duly filled and signed by the	this University. An	rtment immedia	tely after joining	the Ph.D. Course. The origin
Deanch dilly filled and signer.	ricad of the 2-1			
certificate may also be produced.				. of Calon S
	18 1	1000	i illiani	Assistant Registrar(Scien
				Assistant Registrat (octon
Encl.: As above.		1 T		
		34 90 10		
Ms. Surbhi Jain				
Hausa No.3791				
Street No4, Namialy				
Tri Nagar, Delhi-110035.				



Relevant supporting document for award of Ph.D. (Certificate/Degree/Result issued to student on successfully completing Ph.D.):





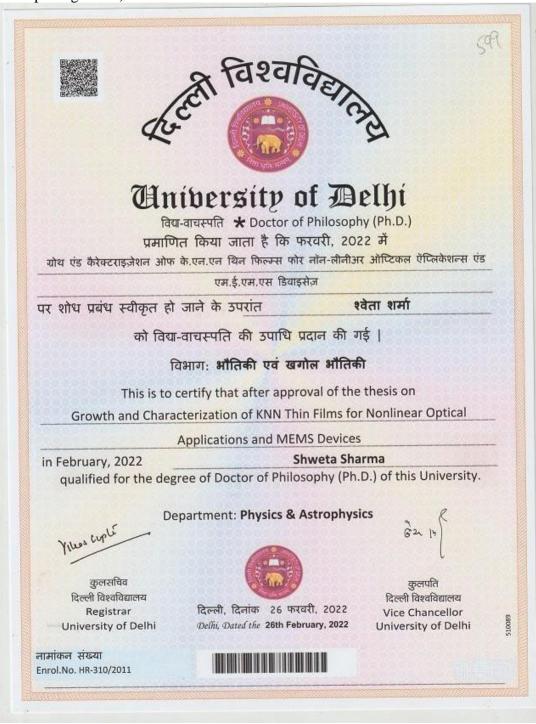
Name of the student:	Shweta Sharma
Year of registration:	20-12-2016
Year of obtaining Ph.D.:	2022
Supervisor:	Prof. Monika Tomar
Co-supervisor, if any:	
Title of the thesis:	Development of Lead Free Ferroelectrics based energy harvesters



BOARD OF RESEARCH STUDIES (SCIENCE) FACULTY OF SCIENCE UNIVERSITY OF DELHI  With reference to his/hi application for admission to Ph.D./ Programme in  Ms. Shweta Sharma  is meeting held on  26.1.1.2016  has provisionally selected him/hif for registration to Ph.D. Programme and I assigned him/her to  Physics & Astrophysics  Mr. Arts. Alias.  Prof. Dr.  Prov. Moniker Towns:  ENE ROY  PARTIESTERS  1. His/her admission to Ph.D. Programme shall be provisional and the same shall be confirmed only when he/she I qualified in the course work and has completed any other requirements, such as passing in the oral test etc., to be II down by the Departmental Research Committee in each case.  2. In case the candidate is employed, provisional admission to Ph.D. would be allowed only if leave requirement fulfilled.  3. At the end of six months, the Advisory Committee shall access the progress of the candidate through a comprehensi written and oral examination/presentation.  4. If the Advisory Committee is satisfied, it would recommend confirmation of the provisional admission previous granted and the Board, if satisfied, would confirm the provisional admission.  5. If the overall performance in respect of the above is not found to be satisfactory, the candidate shall be required to repeat the same within the next six months when his/her performance would be re-examined. If the performance cancellation of the provisional admission of the provision and other the same within the next six months when his/her performance would be re-examined. If the performance again found not to be satisfactory the Advisory Committee in any recommend either a further chance to improve his/her performance or cancellation of the provisional admission of the provision and other fees with the Cathlery, Delh Livingersity, within 15 days from the date of issue of this letter i.e. St.A.R	15	1	
Ref. No. Ref.: FOS-U114/Ph.D. / 65-20  With reference to his/her application for admission to Ph.D / Programme in Physics & Astrophysics Mr. Mr. Shweta Sharma is hereby informed that the Board of Research Studies for Science its meeting held on	,9.U.P	BOARD OF RESEARCH STUDIES (SCIENCE)	172
With reference to his/her application for admission to Ph.D./ Programme in  Dated:		FACULTY OF SCIENCE	
With reference to his/her application for admission to Ph.D./ Programme in Physics & Astrophysics Mr./Mrs. Miss. Ms. Sinveta Sharma is hereby informed that the Board of Research Studies for Science its meeting held on	D 6 1	UNIVERSITY OF DELHI	MAN
Mr. Mrs. Miss. Ms. Shweta Sharma its meeting held on	Ret. I	L/41/03	2.2016
assigned him/her to		Vith reference to his/her application for admission to Ph.D./ Programme in	sics
assigned him/her to	Mr./N	s./Missis hereby informed that the Board of Research Studies	for Science
De Nelson Many Cornell (1987)  1. His/her admission to Ph.D. Programme shall be provisional and the same shall be confirmed only when he/she't qualified in the course work and has completed any other requirements, such as passing in the oral test etc., to be lidewn by the Departmental Research Committee in each case.  2. In case the candidate is employed, provisional admission to Ph.D. would be allowed only if leave requirement fulfilled.  3. At the end of six months, the Advisory Committee shall access the progress of the candidate through a comprehensity written and oral examination/presentation.  4. If the Advisory Committee is satisfied, it would recommend confirmation of the provisional admission previous granted and the Board, if satisfied, would confirm the provisional admission.  5. If the overall performance in respect of the above is not found to be satisfactory, the candidate shall be required to repeat the same within the next six months when his/her performance would be re-examined. If the performance again found not to be satisfactory the Advisory Committee may recommend either a further chance to improve his/he performance or cancellation of the provisional admission granted to him/her.  He/she is further informed that the date of his/her joining will be treated from the date of submission of fees in thi University. A blank form for joining Report is enclosed herewith which should be returned to this office duly filled in an signed by his/her supervisor and Head of the Department to enable him/her to deposit the prescribed supervision and other fees with the Cashier, Delhi University, within 15 days from the date of issue of this letter it. Shalland, falling which his/her selection to the course shall be deemed as cancelled.  His/her registration is governed by the provisions of Ordinance VI-B relating to Doctorate of Philosophy (Ph.D.) or this University.  In case the candidate has passed the M.Sc. Examination form a University other than Delhi University, he/she is required to be enrolled as st	its me	ting held on	amme and l
De Note Committee of the statisfied, would confirm the provisional admission of the provisional admission of the provisional admission.  1. His/her admission to Ph.D. Programme shall be provisional and the same shall be confirmed only when he/she't qualified in the course work and has completed any other requirements, such as passing in the oral test etc., to be it down by the Departmental Research Committee in each case.  2. In case the candidate is employed, provisional admission to Ph.D. would be allowed only if leave requirement fulfilled.  3. At the end of six months, the Advisory Committee shall access the progress of the candidate through a comprehensity written and oral examination/presentation.  4. If the Advisory Committee is satisfied, it would recommend confirmation of the provisional admission previous granted and the Board, if satisfied, would confirm the provisional admission.  5. If the overall performance in respect of the above is not found to be satisfactory, the candidate shall be required to repeat the same within the next six months when his/her performance would be re-examined. If the performance again found not to be satisfactory the Advisory Committee may recommend either a further chance to improve his/her performance or cancellation of the provisional admission granted to him/her.  He/she is further informed that the date of his/her joining will be treated from the date of submission of fees in this University. A blank form for joining Report is enclosed herewith which should be returned to this office duly filled in an signed by his/her supervisor and Head of the Department to enable him/her to deposit the prescribed supervision and other fees with the Cashier, Delhi University, within 15 days from the date of issue of this letter i.e. Sha.D	assign	d him/her to	supervision
1. His/her admission to Ph.D. Programme shall be provisional and the same shall be confirmed only when he/she t qualified in the course work and has completed any other requirements, such as passing in the oral test etc., to be li down by the Departmental Research Committee in each case.  2. In case the candidate is employed, provisional admission to Ph.D. would be allowed only if leave requirement fulfilled.  3. At the end of six months, the Advisory Committee shall access the progress of the candidate through a comprehensi written and oral examination/presentation.  4. If the Advisory Committee is satisfied, it would recommend confirmation of the provisional admission previous granted and the Board, if satisfied, would confirm the provisional admission.  5. If the overall performance in respect of the above is not found to be satisfactory, the candidate shall be required to repeat the same within the next six months when his/her performance would be re-examined. If the performance again found not to be satisfactory the Advisory Committee may recommend either a further chance to improve his/he performance or cancellation of the provisional admission granted to him/her.  He/she is further informed that the date of his/her joining will be treated from the date of submission of fees in thi University. A blank form for joining Report is enclosed herewith which should be returned to this office duly filled in an signed by his/her supervisor and Head of the Department to enable har/her to deposit the prescribed supervision and other fees with the Cashier, Delhi University, within 15 days from the date of issue of this letter i.e. Advisory. Advisory Committee with the Cashier, Delhi University, within 15 days from the date of issue of this letter i.e. Advisory. Advisory Committee with the Cashier, Delhi University, within 15 days from the date of issue of this letter i.e. Advisory. Assistant Registrar(Science Philosophy (Ph.D.) o this University.  In case the candidate has passed the M.Sc. Examination form a Universi	Prof./	r. Dr. Monika Tomar	oposed area
1. His/her admission to Ph.D. Programme shall be provisional and the same shall be confirmed only when he/she t qualified in the course work and has completed any other requirements, such as passing in the oral test etc., to be li down by the Departmental Research Committee in each case.  2. In case the candidate is employed, provisional admission to Ph.D. would be allowed only if leave requirement fulfilled.  3. At the end of six months, the Advisory Committee shall access the progress of the candidate through a comprehensi written and oral examination/presentation.  4. If the Advisory Committee is satisfied, it would recommend confirmation of the provisional admission previous granted and the Board, if satisfied, would confirm the provisional admission.  5. If the overall performance in respect of the above is not found to be satisfactory, the candidate shall be required to repeat the same within the next six months when his/her performance would be re-examined. If the performance again found not to be satisfactory the Advisory Committee may recommend either a further chance to improve his/he performance or cancellation of the provisional admission granted to him/her.  He/she is further informed that the date of his/her joining will be treated from the date of submission of fees in thi University. A blank form for joining Report is enclosed herewith which should be returned to this office duly filled in an signed by his/her supervisor and Head of the Department to enable har/her to deposit the prescribed supervision and other fees with the Cashier, Delhi University, within 15 days from the date of issue of this letter i.e. Advisory. Advisory Committee with the Cashier, Delhi University, within 15 days from the date of issue of this letter i.e. Advisory. Advisory Committee with the Cashier, Delhi University, within 15 days from the date of issue of this letter i.e. Advisory. Assistant Registrar(Science Philosophy (Ph.D.) o this University.  In case the candidate has passed the M.Sc. Examination form a Universi	resear	h DEVELOPMENT OF LEAD FREE FERROELECTRIC	C32A8
1. His/her admission to Ph.D. Programme shall be provisional and the same shall be confirmed only when he/she t qualified in the course work and has completed any other requirements, such as passing in the oral test etc., to be he down by the Departmental Research Committee in each case.  2. In case the candidatu is employed, provisional admission to Ph.D. would be allowed only if leave requirement fulfilled.  3. At the end of six months, the Advisory Committee shall access the progress of the candidate through a comprehensity written and oral examination/presentation.  4. If the Advisory Committee is satisfied, it would recommend confirmation of the provisional admission previous granted and the Board, if satisfied, would confirm the provisional admission.  5. If the overall performance in respect of the above is not found to be satisfactory, the candidate shall be required to repeat the same within the next six months when his/her performance would be re-examined. If the performance again found not to be satisfactory the Advisory Committee may recommend either a further chance to improve his/he performance or cancellation of the provisional admission granted to him/her.  He/she is further informed that the date of his/her joining will be treated from the date of submission of fees in thi University. A blank form for joining Report is enclosed herewith which should be returned to this office duly filled in an signed by his/her supervisor and Head of the Department to enable hm/her to deposit the prescribed supervision and other fees with the Cashier, Delhi University, within 15 days from the date of issue of this letter i.e. Advanced the Philosophy (Ph.D.) or this University.  In case the candidate has passed the M.Sc. Examination form a University other than Delhi University, he/she is required to be enrolled as student of this University. An enrolment form is enclosed which must be sent to Academic Branch duly filled and signed by the Head of the Department immediately after joining the Ph.D. Course. The ori	*******	ENERGY HARVESTERS"	
down by the Departmental Research Committee in each case.  2. In case the candidatu is employed, provisional admission to Ph.D. would be allowed only if leave requirement fulfilled.  3. At the end of six months, the Advisory Committee shall access the progress of the candidate through a comprehensi written and oral examination/presentation.  4. If the Advisory Committee is satisfied, it would recommend confirmation of the provisional admission previous granted and the Board, if satisfied, would confirm the provisional admission.  5. If the overall performance in respect of the above is not found to be satisfactory, the candidate shall be required to repeat the same within the next six months when his/her performance would be re-examined. If the performance again found not to be satisfactory the Advisory Committee may recommend either a further chance to improve his/her performance or cancellation of the provisional admission granted to him/her.  He/she is further informed that the date of his/her joining will be treated from the date of submission of fees in thi University. A blank form for joining Report is enclosed herewith which should be returned to this office duly filled in an signed by his/her supervisor and Head of the Department to enable hm/her to deposit the prescribed supervision and otheress with the Cashier, Delhi University, within 15 days from the date of issue of this letter i.e. Shallow	********		DATE OF THE PROPERTY OF THE PR
fulfilled.  3. At the end of six months, the Advisory Committee shall access the progress of the candidate through a comprehensive written and oral examination/presentation.  4. If the Advisory Committee is satisfied, it would recommend confirmation of the provisional admission previous granted and the Board, if satisfied, would confirm the provisional admission.  5. If the overall performance in respect of the above is not found to be satisfactory, the candidate shall be required to repeat the same within the next six months when his/her performance would be re-examined. If the performance again found not to be satisfactory the Advisory Committee may recommend either a further chance to improve his/he performance or cancellation of the provisional admission granted to him/her.  He/she is further informed that the date of his/her joining will be treated from the date of submission of fees in thi University. A blank form for joining Report is enclosed herewith which should be returned to this office duly filled in an signed by his/her supervisor and Head of the Department to enable hm/her to deposit the prescribed supervision and otherwish with the Cashier, Delhi University, within 15 days from the date of issue of this letter i.e. Ala Alam Alam Alam Alam Alam Alam Alam	1.	quantied in the course work and has completed any other requirements, such as passing in the oral tes	hen he/she h t etc., to be h
written and oral examination/presentation.  4. If the Advisory Committee is satisfied, it would recommend confirmation of the provisional admission previous granted and the Board, if satisfied, would confirm the provisional admission.  5. If the overall performance in respect of the above is not found to be satisfactory, the candidate shall be required t repeat the same within the next six months when his/her performance would be re-examined. If the performance again found not to be satisfactory the Advisory Committee may recommend either a further chance to improve his/her performance or cancellation of the provisional admission granted to him/her.  He/she is further informed that the date of his/her joining will be treated from the date of submission of fees in thi University. A blank form for joining Report is enclosed herewith which should be returned to this office duly filled in an signed by his/her supervisor and Head of the Department to enable hm/her to deposit the prescribed supervision and other fees with the Cashier, Delhi University, within 15 days from the date of issue of this letter i.e. As A.	2.	In case the candidate is employed, provisional admission to Ph.D. would be allowed only if leave fulfilled.	requirement
granted and the Board, if satisfied, would confirm the provisional admission.  5. If the overall performance in respect of the above is not found to be satisfactory, the candidate shall be required to repeat the same within the next six months when his/her performance would be re-examined. If the performance again found not to be satisfactory the Advisory Committee may recommend either a further chance to improve his/he performance or cancellation of the provisional admission granted to him/her.  He/she is further informed that the date of his/her joining will be treated from the date of submission of fees in thi University. A blank form for joining Report is enclosed herewith which should be returned to this office duly filled in an signed by his/her supervisor and Head of the Department to enable hm/her to deposit the prescribed supervision and other fees with the Cashier, Delhi University, within 15 days from the date of issue of this letter i.e. ASALAL	3.	At the end of six months, the Advisory Committee shall access the progress of the candidate through a written and oral examination/presentation.	comprehensi
repeat the same within the next six months when his/her performance would be re-examined. If the performance again found not to be satisfactory the Advisory Committee may recommend either a further chance to improve his/he performance or cancellation of the provisional admission granted to him/her.  He/she is further informed that the date of his/her joining will be treated from the date of submission of fees in thi University. A blank form for joining Report is enclosed herewith which should be returned to this office duly filled in an signed by his/her supervisor and Head of the Department to enable hm/her to deposit the prescribed supervision and other fees with the Cashier, Delhi University, within 15 days from the date of issue of this letter i.e. Sharm. Committee which his/her registration is governed by the provisions of Ordinance VI-B relating to Doctorate of Philosophy (Ph.D.) of this University.  In case the candidate has passed the M.Sc. Examination form a University other than Delhi University, he/she is required to be enrolled as student of this University. An enrolment form is enclosed which must be sent to Academic Branch duly filled and signed by the Head of the Department immediately after joining the Ph.D. Course. The original certificate may also be produced.  Encl.: As above.  Assistant Registrar (Science)  Copy forwarded for information to:-	4.	If the Advisory Committee is satisfied, it would recommend confirmation of the provisional admisgranted and the Board, if satisfied, would confirm the provisional admission.	sion previous
University. A blank form for joining Report is enclosed herewith which should be returned to this office duly filled in an signed by his/her supervisor and Head of the Department to enable hm/her to deposit the prescribed supervision and other fees with the Cashier, Delhi University, within 15 days from the date of issue of this letter i.e. Shalland falling which his/her selection to the course shall be deemed as cancelled.  His/her registration is governed by the provisions of Ordinance VI-B relating to Doctorate of Philosophy (Ph.D.) of this University.  In case the candidate has passed the M.Sc. Examination form a University other than Delhi University, he/she is required to be enrolled as student of this University. An enrolment form is enclosed which must be sent to Academic Branch duly filled and signed by the Head of the Department immediately after joining the Ph.D. Course. The original certificate may also be produced.  Encl.: As above.  Assistant Registrar(Science)  Ms. Shweta Sharma	5.	repeat the same within the next six months when his/her performance would be re-examined. If the again found not to be satisfactory the Advisory Committee may recommend either a further chance to	performance
In case the candidate has passed the M.Sc. Examination form a University other than Delhi University, he/she is required to be enrolled as student of this University. An enrolment form is enclosed which must be sent to Academic Branch duly filled and signed by the Head of the Department immediately after joining the Ph.D. Course. The origina certificate may also be produced.  Encl.: As above.  Assistant Registrar(Science)  Agra, U.P.  Copy forwarded for information to:-	fees v	by his/her supervisor and Head of the Department to enable hm/her to deposit the prescribed super the Cashier, Delhi University, within 15 days from the date of issue of this letter i.e.	uly filled in an
required to be enrolled as student of this University. An enrolment form is enclosed which must be sent to Academic Branch duly filled and signed by the Head of the Department immediately after joining the Ph.D. Course. The origina certificate may also be produced.  Encl.: As above.  Assistant Registrar(Science)  Ms. Shweta Sharma  26-HIG, Taj Nagri, Phase 1,  Agra, U.P.  Copy forwarded for information to:-	this U	His/her registration is governed by the provisions of Ordinance VI-B relating to Doctorate of Philoiversity.	sophy (Ph.D.) o
Encl.: As above.  Assistant Registrar(Science)  Ms. Shweta Sharma  26-HIG, Taj Nagri, Phase 1,  Agra, U.P.  Copy forwarded for information to :-	Branc	d to be enrolled as student of this University. An enrolment form is enclosed which must be study filled and signed by the Head of the Department immediately after joining the Ph.D. Cou	ent to Academic
Encl.: As above.  Assistant Registrar(Science)  Ms. Shweta Sharma  26-HIG, Taj Nagri, Phase 1,  Agra, U.P.  Copy forwarded for information to :-			-01
Ms. Shweta Sharma	Fncl -		
26-HIG, Taj Nagri, Phase 1, Agra, U.P.  Copy forwarded for information to :-	Liter.	Assistant P	ogisual (Science
26-HIG, Taj Nagri, Phase 1, Agra, U.P.  Copy forwarded for information to :-	N	Shweta Sharma	
Dharing 9. A. a. 1. '.	20	HIG, Taj Nagri, Phase 1,	
Dharing 9. A. a. 1. '.	Copy	rwarded for information to :-	
/ L. Ally Alving a Dypartition.			



Relevant supporting document for award of Ph.D. (Certificate/Degree/Result issued to student on successfully completing Ph.D.):





Name of the student:	Rakesh Sonkar ( M.Phil)
Year of registration:	09-01-2011
Supervisor:	Prof. Monika Tomar
Co-supervisor, if any:	-
Title of the thesis:	Growth and Characterization of nanostrucutured thin film for gas sensor applications
Whether receiving scholarship, Name of the scholarship:	-







# BUNDELKHAND UNIVERSITY, JHANSI

## DEPARTMENT OF PHYSICS

M. Phil. (Physics) 2010-11

W. Fill. (Flysics) 2010-11
TOPIC APPROVAL OF DISSERTATION/THESIS
I. The Scholar  1. Name Rakesh Kymar Sonker  2. Address Mo-Sukkhipur, Post-Sadar, Distt-Jaunpur (O.P.), Pincola 222001
11. Supervisor  1. Name Dr. MONIKA TOMAR  2. Designation Assistant Professor  3. Institute address Department of Physics, Mirounda House, Univ. of Delhi  4. Academic Qualification M. Sc., Ph.D. Physics
III. Co-supervisor  1. Name  2. Designation  3. Institute address  4. Academic Qualification  IV. Topic Chosen Growth and Characterization of tin oxide (sn02)  thin film for gas sensor application.
1 Dr. Monika Torrar prepared to guide  Mr/Ms/Mrs. Rakesh Kumar Sonkar a M. Phil
Scholar of the department of physics, Bundelkhand University, Jhansi-284128  Representation of Scholar Sign. of Co-supervisor Sign. of Supervisor
Signature of Head Department of Physics, Bundelkhand university, Jhansi-284128