

# **DESHBANDHU COLLEGE**

# (UNIVERSITY OF DELHI) KALKAJI, NEW DELHI - 110019 Faculty Details Proforma for College Website

Title	First Name	Deepti	Last Name	Goel	Photograph
Designation	Assistant Profe	Assistant Professor			
Address	22/37 First Flo	22/37 First Floor, West Patel Nagar ,New Delhi-110008			
Phone No. Office					
Residence	9312340692	9312340692			
Mobile	9312340692	9312340692			130 D 120 100 100 100 100 100 100 100 100 100
Email	deeptimgoel@	deeptimgoel@gmail.com			
Web-Page					
Educational Qualificati	ons				
Degree	Institution	Institution			Year
Ph.D.					
M.Phil.					
PG	Punjab Agricu	Punjab Agricultural University, Ludhiana			2003
UG	Punjab Univer	sity, Govt. Colle	ge for Women	, Ludhiana	2000
Any other qualification				·	
Career Profile					

# **TEACHING EXPERIENCE:**

INSTITUTION	DESIGNATION	CLASSES	TAUGHT FROM	TAUGH
Khalsa College for Women, Ludhiana,P.U.	Adhoc Lecturer	B.Sc-II, B.Sc-III	22 <sup>nd</sup> Jul,03.	17 <sup>th</sup> M
Guru Nanak Girls College, Ludhiana,P.U.	Permanent lecturer	B.Sc-II, B.Sc-III	1 <sup>st</sup> Jul,04.	31 <sup>st</sup> Ma
Gargi College,	Adhoc Assistant	B.Sc.Phy.(H)-I,	21 <sup>st</sup> Jul,08	20 <sup>th</sup> No
(University of Delhi)	Professor	B.Sc.Phy.(H)-III, B.Sc.Phy.ScI,	22 <sup>nd</sup> Nov,08	23 <sup>rd</sup> De
		B.Sc.Life.ScI, B.Sc.Chem.(H)-I	9 <sup>th</sup> Jan.09	6 <sup>th</sup> Ma
		<i>5.36.6.</i> 1.(11) 1	22 <sup>nd</sup> Jul,09	21 <sup>st</sup> No

			24 <sup>th</sup> Nov,09	30 <sup>th</sup> Ap
Kalindi College,	Guest Lecturer	B.Sc.Phy.(H)-I,	Aug, 09	Mar,
(University of Delhi)		B.Sc.Phy.(H)-II,		
•		B.Sc.Phy.(H)-III		
	2. Adhoc Assistant	B.Sc.Phy.(H)-I,		
	Professor	B.Sc.Phy.(H)-II,		
		B.Sc.Phy.(H)-III		
			21 <sup>st</sup> Jul,10	7 <sup>th</sup> Jur
Daulat Ram College,	Guest	B.Sc.Chem.(H)-II	Feb,11	Apr,
(University of Delhi)	Lecturer	B.Sc.Maths.(H)-II		
Maitreyi College,	Adhoc Assistant	B.Sc.Phy.(H)-I,	28 <sup>th</sup> Jul, 11	21 <sup>st</sup> Ma
(11.1	Professor	B.Sc.Phy.(H)-II,		
(University of Delhi)		B.Sc.Phy.(H)-III,		
		B.Sc. Phy.ScII		
Deshbandhu College,	Adhoc Assistant	B.Sc.Phy.(H)-I,	23 <sup>rd</sup> Jul, 12	Till D
(	Professor	B.Sc.Phy.(H)-II,		
(University of Delhi)		B.Sc.Phy.(H)-III,		
		B.Sc.Phy.ScI,		
		B.Sc.Phy.ScII,		
		B.Sc.Phy.ScIII		
IGNOU	Academic Counsellor	B.Sc.Practicals	Since 2009	201

## **Administrative Assignments**

Member of Cultural Committee 'Sabrang' -2014, 2015 organised by Deshbandhu College.

Member of Physics Science Society 'PHYSICA' of Deshbandhu College.

Participated as **Member Organising Committee** and **Resource Person** in the **'INSPIRE Internship Program-2012 ,2014 AND 2017 organized** by Deshbandhu College, University of Delhi.

## Areas of Interest/Specialization

#### **Condensed Matter Physics**

Research Interest Magnetism in solids is a subject, which continues to demand attention because of its technological and industrial importance. The magnetic material technology is targeted towards providing, "Extra strong magnets having small sizes". One of the possible methods to attain this is to blend two or more appropriate elements so as to increase their molecular magnetic moment, hence it's

#### magnetization.

My research interest is to develop a formalism for spin polarization due to d-band metal impurities in metals where impurity is treated in the tight binding approximation while the host metal is treated in the free electron approximation. The spin polarization caused is used in calculating the magnetic moment on V, Cr and Fe impurities in Cu based alloys. This formalism is used to study other magnetic properties, giant magnetic moment, electronic structures and also electric field gradients.

Modern magnets finds its new application in the field of Recent High Speed Railway Projects, Magnetic Suspension, Current Braking, Rotary Actuators, Magnarails etc. Magnetic material promise of making an even greater impact on the future.

#### **Subjects Taught**

Waves and Optics		
Quantum Mechanics		
Mathematical Physics		
Thermal Physics		
Mechanics		
Solid State Physics		

#### Research Guidance

List against each head (If applicable):

- 1. Supervision of awarded Doctoral Thesis
- 2. Supervision of Doctoral Thesis, under progress
- 3. Supervision of awarded M.Phil. dissertations
- 4. Supervision of M.Phil. dissertations, under progress

NA

## **Publications Profile**

List against each head (If applicable) (as Illustrated with examples)

- 1. Books/Monographs (Authored/Edited)
- 2. Research papers published in Refereed/Peer Reviewed Journals
  - a) Research papers published in Academic Journals other than Refereed/Peer Reviewed Journals
  - b) Research papers published in Refereed/Peer Reviewed Conferences
  - c) Research papers Published in Conferences/Seminar other than Refereed/Peer Reviewed Conferences
- 3. Other publications (Edited works, Book reviews, Festschrift volumes, etc.)

#### REFERRAL JOURNALS.

Magnetic Moments on 3d-impurities in Cu-based alloys.

Deepti Gupta and J. Singh.

J Res Punjab Agric Univ, 42(2):184-96, June 2005. Print ISSN: 00486019, Online ISSN: 2277-1271.

#### Conference Organization/ Presentations

List against each head(If applicable)

1. Organization of a Conference:

Member of Organising Committee of the International Conference on Physics, Society and Technology ICPST-2019, to be held on 17-19Jan, 2019, organised by Department of Physical, Deshbandhu College.

2. Participation as Paper/Poster Presenter

A paper entitled 'Giant magnetic moments in Pd-based alloys' was presented in **Oral Presentation**Category at Sixth Punjab Science Congress held at **Sant Longowala Institute of Engineering and**Technolog, Longowala from 7<sup>th</sup> –9<sup>th</sup> February, 2003.

A paper entitled 'Magnetic moments on 3d-impurities in Cu-based alloys' was presented in Oral Presentation Category at Seventh Punjab Science Congress held at Guru Nanak Dev University, Amritsar from 7<sup>th</sup> –9<sup>th</sup> February 2004.

Participated in the contest for the **Young Scientist Award** and presented **a paper entitled** 'Electronic structure of magnetic and nonmagnetic impurities in metals' at Seventh Punjab Science Congress held at **Guru Nanak Dev University, Amritsar** from  $7^{th}$  – $9^{th}$  February, 2004.

## Research Projects (Major Grants/Research Collaboration)

NA

#### **Awards and Distinctions**

## **AWARDS**

**Bhai Bal Mukand Gold Medal** awarded in Post Graduation by Punjab Agricultural University for securing the first position in **Master of Science (Physics) program**.

Received an **Award of Honor 2001-2002** for good academic performance in Post Graduation by **Saasca** (Society for Advancement of Academics, Sports and Cultural Activities) of Punjab Agricultural University.

Received Merit Certificate in Post Graduation by Punjab Agricultural University.

Awarded **College Color** by **Government College for Women** in Graduation on account of attending the N.C.C's Vayu Sainik Camp held at Yehalanka in Bangalore

Received N.C.C's C-Certificate.

#### **SCHOLARSHIPS**

Received Merit State scholarship for 2 years on the basis of X<sup>th</sup> performance

Received Merit State scholarship for 2 years on the basis of XII<sup>th</sup> performance

Received 3 years scholarship in Graduation under the scholarship scheme by **Nehru Sidhant Kendra Trust.** 

Received PAU merit fellowship for 2 years during Post graduation.

## **EXTRA CURRICULAR ACHIEVEMENTS**

Participated in the (Inter-School) "Gold Spot on the Spot Painting Competition 1993".

Awarded academic prize for standing third in Chemistry in B.Sc-I.

Awarded academic prize for standing second in Chemistry in B.Sc-II.

Bagged the third position in 4x100mts Relay Race in the Annual Athletic Meet, 1995.

Bagged the second place in 500 mts. Sack Race in the Annual Athletic Meet in B.Sc (I).

Awarded Certificate for excellent performance in NCC during the Annual Athletic Meet in B.Sc. (III).

Attended 'Combined Annual Training Camp' held at Ramgarhia Girl College, Ludhiana, 1998 and at BCM Sen. Sec. School, Ludhiana, 2000.

Attended All India Vayu Sainik Camp -99 held at Bangalore.

Participated in the Aero Quiz -99 held at the Aeronautical Society of India, Bangalore Branch.

**Association With Professional Bodies** 

- Editing
- Reviewing
- Advisory
- Committees and Boards
- Memberships
- Office Bearer

NA

#### Other Activities

PARTICIPATION IN CONFERENCES / SYMPOSIA / SEMINARS / WORKSHOPS

Attended the 'GENERAL ORIENTATION COURSE-68' at ASC, Amritsar from

2<sup>nd</sup> June, 2006- 29<sup>th</sup> June, 2006.

- A paper entitled 'Giant magnetic moments in Pd-based alloys' was presented in Oral Presentation Category at Sixth Punjab Science Congress held at Sant Longowala Institute of Engineering and Technolog, Longowala from 7<sup>th</sup> –9<sup>th</sup> February, 2003.
- A paper entitled 'Magnetic moments on 3d-impurities in Cu-based alloys' was presented in Oral Presentation Category at Seventh Punjab Science Congress held at Guru Nanak Dev University, Amritsar from 7<sup>th</sup> –9<sup>th</sup> February 2004.
- Participated in the contest for the **Young Scientist Award** and presented **a paper entitled '**Electronic structure of magnetic and nonmagnetic impurities in metals' at Seventh Punjab Science Congress held at **Guru Nanak Dev University, Amritsar** from 7<sup>th</sup> –9<sup>th</sup> February, 2004.
- Participated in **National Seminar** on '**New trends in Nanotechnology and Applications**'. 'held on 27-28 Sep, 2018 in Atma Ram Sanatan Dharma College, University of Delhi.
- Participated as **Member Organising Committee** and **Resource Person** in the **'INSPIRE Internship Program-2012 ,2014 AND 2017 organized** by Deshbandhu College, University of Delhi.
- Participated in National Workshop on Technical Terminology in Science Teaching by Commission for Scientific and Technical Terminology, Ministry of Human Resource Development, Department of

Higher Education held on October 26-27,2017 in Deshbandhu College, University of Delhi.

Participated in 'International Conference on Light-Cone Physics,' held on Dec 10-15, 2012 at Department of Physics & Astrophysics, University of Delhi.

Participation in 'Indo German Workshop on Advanced Materials for future energy requirements,' held on Nov-29 - Dec 1, 2012, at Delhi University Conference Centre.

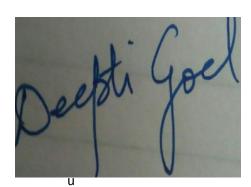
Attended the 'Second National Workshop on Quantum Mechanics: Theory and Application' held at Deen Dayal Upadhyaya College, University of Delhi during October 22-23, 2010.

Attended the 'General Orientation Course – 68' at ASC Amritsar from 2<sup>nd</sup> June 2006 – 29<sup>th</sup> June 2006.

Participation in '*UGC Sponsored National Conference of Physics & Modern Application of Lazer'* held on Nov 17-18, 2006 at Lyallpur Khalsa College, Jullundur.

Participated in seminar on Feb 4, 2006 Organised by Physics Association of SCD Govt. College, Ludhiana, the topics were

- 1.Lazer Studies
- 2. Demonstration & Display of Physics Experiments.



re of Faculty Member

 You are also requested to give your complete resume as a Word or PDF file to be attached as a link on your department page.