



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

Title	Dr.	First Name	<b>MANOJ KUMAR</b>	Last Name	<b>SRIVASTAVA</b>	Photograph
Designation	<b>ASSISTANT PROFESSOR</b>					
Address	H. No. 290/4, Second Floor, Gali No. 4, Govindpuri, Kalkaji, New Delhi-110019					
Phone No. Office						
Residence	9899935214					
Mobile	8851263244					
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Web-Page						
<b>Educational Qualifications</b>						
Degree	Institution				Year	
Ph.D.	Deptt. of Physics and Astrophysics, University of Delhi and CSIR-National Physical Laboratory (NPL) New Delhi Title: <b><i>“Effect of substrate induced strain on magnetism and magnetotransport in low bandwidth manganite films”</i></b>				2014	
M.Phil.	<b>NA</b>					
PG	DDU Gorakhpur University Gorakhpur, UP				2007	
UG	DDU Gorakhpur University Gorakhpur, UP				2005	
Any other qualification	CSIR- NET-JRF Graduate Aptitude Test in Engineering (GATE)				2007 2008 & 2009	
<b>Career Profile</b>						
<ul style="list-style-type: none"> <li>• Working as an Assistant Professor (on Adhoc basis) in Deptt. of Physics, Deshbandhu College (University of Delhi) since Jan. 10<sup>th</sup>, 2014 –till date</li> <li>• Senior Research Fellow at CSIR- National Physical Laboratory, New Delhi from 27<sup>th</sup> Aug. 2010- 26<sup>th</sup> Aug 2013</li> <li>• Junior Research Fellow at CSIR- National Physical Laboratory, New Delhi from 27<sup>th</sup> Aug. 2008- 26<sup>th</sup> Aug 2010.</li> </ul>						
<b>Administrative Assignments</b>						
<ul style="list-style-type: none"> <li>❖ <b>Resource person</b> of DST funded ‘INSPIRE’ Internship Programme 2017 organized by Deshbandhu College, University of Delhi, held from December 18-22, 2017.</li> <li>❖ <b>Organizing member</b> of DST funded ‘INSPIRE’ Internship Programme 2015 organized by Deshbandhu College, University of Delhi, held from December 14-18, 2015.</li> <li>❖ <b>Resource person</b> in the DST funded ‘INSPIRE’ Internship Programme 2014 organized by Deshbandhu College, University of Delhi, held from October 08-12, 2014.</li> <li>❖ Member of Discipline Committee of Deshbandhu College.</li> <li>❖ Counting Officer in Deshbandhu College during DUSU Election.</li> </ul>						

Areas of Interest/Specialization

**Experimental Condensed Matter Physics  
(Strongly Correlated Electron System /Functional Materials)**

Subjects Taught

Various undergraduate Hons. and General papers have been taught and lab. have been taken.

<b>Mathematical Physics I</b>	<b>Mathematical Physics II</b>	<b>Thermal Physics &amp; Statistical Mechanics</b>	<b>Electricity and Magnetism</b>
<b>Mechanics</b>	<b>Thermal Physics</b>	<b>Electromagnetic Theory</b>	<b>Optics</b>
<b>Electricity, Magnetism and Electromagnetic Theory</b>			

Research Guidance

List against each head (If applicable):

1. Supervision of awarded Doctoral Thesis NA
2. Supervision of Doctoral Thesis, under progress NA
3. Supervision of awarded M.Phil. dissertations NA
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) NA
2. Research papers published in Refereed/Peer Reviewed Journals
  - a) Research papers published in Academic Journals other than Refereed/Peer Reviewed Journals NA
  - b) Research papers published in Refereed/Peer Reviewed Conferences

1. “Impact of size match induced quenched disorder on phase fluctuation and low field magnetotransport in polycrystalline  $\text{Nd}_{0.58-x}\text{Gd}_x\text{Sr}_{0.42}\text{MnO}_3$ ”

**Manoj K. Srivastava**, Ravikant Prasad, P. K. Siwach, M. P. Singh, and H. K. Singh  
Journal of Applied Physics **107**, 09D726 (2010) (USA) [ISSN No. 0021-8979]

2. “Enhanced ferromagnetic and metal insulator transition in  $\text{Sm}_{0.55}\text{Sr}_{0.45}\text{MnO}_3$  thin films: Role of oxygen vacancy induced quenched disorder”

**M. K. Srivastava**, P. K. Siwach, A. Kaur, and H. K. Singh  
*Applied Physics Letters* **97**, 182503 (2010) (USA) [ISSN No. 0003-6951]

3. “Impact of growth conditions on the nature of magnetism and magnetotransport of  $\text{Sm}_{0.55}\text{Sr}_{0.45}\text{MnO}_3$  thin films”

**Manoj K. Srivastava**, P. K. Siwach, A. Kaur and H. K. Singh  
IEEE Transactions on Magnetics, **47**, 2486 (2011) (USA) [ISSN No. 0018-9464]

4. “Low field anisotropic colossal magnetoresistance in  $\text{Sm}_{0.53}\text{Sr}_{0.47}\text{MnO}_3$  thin films”

**Manoj K. Srivastava**, M. P. Singh, Amarjeet Kaur, F. S. Razavi, and H. K. Singh  
Journal of Applied Physics, **110**, 123922 (2011) (USA) [ISSN No. 0021-8979]

5. “Impact of substrate on magnetic phase coexistence in bicritical  $\text{Sm}_{0.53}\text{Sr}_{0.47}\text{MnO}_3$ ”

**M. K. Srivastava**, M. P. Singh, P. K. Siwach, A. Kaur, F. S. Razavi and H. K. Singh  
Solid State Communications **152**, 138 (2012) (Holland) [ISSN No. 0038-1098]

6. “Carrier localization and out of plane anisotropic magnetoresistance in  $\text{Nd}_{0.55-x}\text{Sm}_x\text{Sr}_{0.45}\text{MnO}_3$  thin films”

**M. K. Srivastava**, A. Kaur and H. K. Singh

*Applied Physics Letters* **100**, 222408 (2012) (USA) [ISSN No. 0003-6951]

7. “Impact of strain on metamagnetic transitions in  $\text{Sm}_{0.5}\text{Sr}_{0.5}\text{MnO}_3$  thin films”

**M. K. Srivastava**, A. Kaur, K. K. Maurya, V. P. S. Awana, and H. K. Singh

*Applied Physics Letters* **102**, 032402 (2013) (USA) [ISSN No. 0003-6951]

8. “Comparative study of magnetic and magnetotransport properties of  $\text{Sm}_{0.55}\text{Sr}_{0.45}\text{MnO}_3$  thin films grown on different substrates”

**Manoj K. Srivastava**, Sandeep Singh, P. K. Siwach, Amarjeet Kaur, V. P. S. Awana, and H. K. Singh

*AIP Advances* **3**, 052118 (2013)(USA)[ISSN No. 2158-3226]

9. “Microstructure, magnetism and magnetotransport of epitaxial  $\text{Sm}_{0.45}\text{Nd}_{0.08}\text{Sr}_{0.47}\text{MnO}_3$  thin films”

**Manoj K. Srivastava**, S. Singh, P. K. Siwach, K. K. Maurya, V. P. S. Awana, Amarjeet Kaur, and H. K. Singh

*Materials Research Express* **1**, 016110 (2014) (UK) [ISSN No. 1361-6463]

10. “Consequences of phase separation on magnetotransport in dc magnetron sputtered  $\text{Sm}_{0.50}\text{Sr}_{0.50}\text{MnO}_3$  thin films on LSAT substrate”

A. Yadav, **M. K. Srivastava**, P. K. Siwach, and H. K. Singh

*Vacuum* **153**, 176-183 (2018) [ISSN No. 0042-207X]

c) *Research papers Published in Conferences/Seminar other than Refereed/Peer Reviewed Conferences*

1. “Huge Anisotropic Magnetoresistance in Epitaxial  $\text{Sm}_{0.53}\text{Sr}_{0.47}\text{MnO}_3$  Thin Films”

**Manoj K. Srivastava**, A. Kaur, and H. K. Singh

*AIP Conf. Proc.* **1304**, 703-704 (2011) (USA) [ISSN No. 1551-7616]

2. “First Order Phase Transition in  $\text{Sm}_{0.53}\text{Sr}_{0.47}\text{MnO}_3$  Films”

**Manoj K. Srivastava**, M. P. Singh, Amarjeet Kaur, and H. K. Singh

*AIP Conf. Proc.* **1447**, 125-126 (2012) (USA) [ISSN No. 1551-7616]

3. “Impact of Quenched Disorder on Magnetotransport Properties in  $\text{Nd}_{0.55-x}\text{Sm}_x\text{Sr}_{0.45}\text{MnO}_3$  Thin Films”

**Manoj K. Srivastava**, Amarjeet Kaur and H. K. Singh

*AIP Conf. Proc.* **1512**, 722-723 (2013) (USA) [ISSN No. 1551-7616]

4. “Colossal Magnetoresistance and Phase Separation in Manganite Thin Films”

**M. K. Srivastava**, V. Agarwal, A. Kaur, and H. K. Singh

*AIP Conf. Proc.* **1832**, 110039 (2017) [ISSN No. 1551-7616]

5. “Observation of Zero Field Charge Order Melting in Oxygen Deficient  $\text{Pr}_{1-x}\text{Ca}_x\text{MnO}_3$  Thin Films”

V. Agarwal, **M. K. Srivastava**, and H. K. Singh

*AIP Conf. Proc.* **1832**, 110046 (2017) [ISSN No. 1551-7616]

3. *Other publications (Edited works, Book reviews, Festschrift volumes, etc.) NA*

## Conference Organization/ Presentations

List against each head(If applicable)

1. *Organization of a Conference: None*
2. *Participation as Paper/Poster Presenter*
  1. “Enhanced magnetoresistance with evidence of micro and macro structural transformation on Gd substitution at A-site in Nd<sub>0.58-x</sub>Gd<sub>x</sub>Sr<sub>0.42</sub>MnO<sub>3</sub>”  
M. K. Srivastava and H. K. Singh  
International Symposium on Nanostructured Material (ISNM-2009), held at Jalandhar, Punjab, India on Oct 28-29, 2009.
  2. “Gd induced phase fluctuation and magneto-electrical properties of polycrystalline Nd<sub>0.58-x</sub>Gd<sub>x</sub>Sr<sub>0.42</sub>MnO<sub>3</sub>”  
Manoj K. Srivastava, Vasudha Agarwal, Ashok Kumar, Amarjeet Kaur, and H. K. Singh  
International conference on Electroceramics (ICE-2009), held at University of Delhi, New Delhi, India on Dec 13-17, 2009.
  3. “Impact of size mismatch induced quenched disorder on phase fluctuation and low field magnetotransport in polycrystalline Nd<sub>0.58-x</sub>Gd<sub>x</sub>Sr<sub>0.42</sub>MnO<sub>3</sub>”  
Manoj K. Srivastava, Ravikant Prasad, P. K. Siwach, M. P. Singh and H. K. Singh  
11th Joint Magnetism and Magnetic Materials INTERMAG conference 2010, held at Washington DC, USA on Jan 18-22, 2010.
  4. “Comparative study of magneto-electrical properties in Nd<sub>0.58-x</sub>Sm<sub>x</sub>Sr<sub>0.42</sub>MnO<sub>3</sub> and Nd<sub>0.58-x</sub>Gd<sub>x</sub>Sr<sub>0.42</sub>MnO<sub>3</sub>”  
M. K. Srivastava, R. Prasad, A. Kaur, and H. K. Singh  
Seventh International Conference on Inorganic Materials (2010) held at Biarritz, France on Sept.12-14, 2010.
  5. “Magneto-electric phase evolution in polycrystalline Nd<sub>0.58-x</sub>Gd<sub>x</sub>Sr<sub>0.42</sub>MnO<sub>3</sub>: Impact of quenched disorder”  
M. K. Srivastava, Ashok Kumar, K. Yadav, G. D. Varma, A. Kaur, and H. K. Singh  
Seventh International Conference on Inorganic Materials (2010) held at Biarritz, France on Sept.12-14, 2010.
  6. “Impact of oxygen vacancy induced quenched disorder on magnetism and magnetotransport in polycrystalline Sm<sub>0.55</sub>Sr<sub>0.45</sub>MnO<sub>3</sub> thin films”  
M. K. Srivastava, R. Prasad, P. K. Siwach, A. Kaur and H. K. Singh  
International Conference on Quantum Effect in Solid of Today (IConQuEST-2010) held at National Physical Laboratory, New Delhi, India on Dec 20-23, 2010.
  7. “Huge anisotropic magnetoresistance in epitaxial Sm<sub>0.53</sub>Sr<sub>0.47</sub>MnO<sub>3</sub> thin films”  
Manoj K. Srivastava, A. Kaur and H. K. Singh  
55th DAE-Solid State Physics Symposium (DAE-SSPS-2010) held at Manipal University, Manipal, Karnataka India on Dec. 26-30, 2010.
  8. “Impact of growth conditions on the nature of magnetism and magnetotransport of Sm<sub>0.55</sub>Sr<sub>0.45</sub>MnO<sub>3</sub> thin films”  
Manoj K. Srivastava, P. K. Siwach, A. Kaur and H. K. Singh  
IEEE International Magnetism Conference (INTERMAG- 2011) held at Taipei, Taiwan on Apr 25-29, 2011.
  9. “First order phase transition in Sm<sub>0.53</sub>Sr<sub>0.47</sub>MnO<sub>3</sub> films”  
Manoj K. Srivastava, M. P. Singh, Amarjeet Kaur, and H. K. Singh  
56th DAE-Solid State Physics Symposium (DAE-SSPS-2011) held at SRM University,

Kattankulathur, Chennai, Tamilnadu, India on Dec.19-23, 2011.

10. “Effect of phase fluctuation on magneto-electrical properties in polycrystalline Nd<sub>0.58-x</sub>AxSr<sub>0.42</sub>MnO<sub>3</sub> (A: Sm, Gd)”

Manoj K. Srivastava, Amarjeet Kaur and H. K. Singh

INDO-GERMAN Workshop on Advance Materials for Future Energy Requirements (WAMFER-2012) held at University of Delhi, New Delhi, India on Nov. 29-Dec. 01, 2012.

11. “Impact of quenched disorder on magnetotransport properties in Nd<sub>0.55-x</sub>Sm<sub>x</sub>Sr<sub>0.45</sub>MnO<sub>3</sub> thin films”

Manoj K. Srivastava, Amarjeet Kaur and H. K. Singh

57th DAE-Solid State Physics Symposium (DAE-SSPS-2012) held at Indian Institute of Technology Bombay, Mumbai on Dec.03-07, 2012.

12. “Oxygen vacancy induced charge order suppression in Sm<sub>0.55</sub>Sr<sub>0.45</sub>MnO<sub>3</sub> manganite thin films”

Manoj K. Srivastava, Vasudha Agarwal, Amarjeet Kaur, H. K. Singh

National Conference on Material Science & Technology (NCMST-2014) held at Indian Institute of Space Science & Technology, Thiruvananthapuram, Kerala on Jul. 28-30, 2014.

13. “Colossal Magnetoresistance and Phase Separation in Manganite Thin Films”

M. K. Srivastava, V. Agarwal, A. Kaur, and H. K. Singh

61st DAE-Solid State Physics Symposium (DAE-SSPS-2016) held at KIIT University, Bhubaneswar, Odisha on Dec.26-30, 2016.

14. “Observation of Zero Field Charge Order Melting in Oxygen Deficient Pr<sub>1-x</sub>CaxMnO<sub>3</sub> Thin Films”

V. Agarwal, M. K. Srivastava, and H. K. Singh

61st DAE-Solid State Physics Symposium (DAE-SSPS-2016) held at KIIT University, Bhubaneswar, Odisha on Dec.26-30, 2016.

15. “An Introduction to Thin Films Growth Process”

M. K. Srivastava, V. Agarwal and A. Kaur

National Workshop on Nanotechnology: Emerging Frontiers & Applications (NEFA-2017) held at University of Delhi, Delhi on Jan. 30-31, 2017.

16. “Magnetic Nanoparticles as Nanomaterials in Cancer Treatment”

V. Agarwal, M. K. Srivastava, Polly Biswas, S. R. Jain

National Conference “Interdisciplinarity: Prospects & Challenges” held at Maitreyi College University of Delhi, Delhi on Apr. 5-7, 2017.

17. “Consequences of phase separation on magnetotransport in dc magnetron sputtered Sm<sub>0.50</sub>Sr<sub>0.50</sub>MnO<sub>3</sub> thin films on LSAT substrate”

A. Yadav, M. K. Srivastava, P. K. Siwach, and H. K. Singh

17th International Conference on Thin Films (IITF-2017) held at CSIR-National Physical Laboratory, New Delhi, India on Nov. 13-17, 2017.

18. “Waste Management: Causes, Awareness and Prevention”

V. Agarwal, M. K. Srivastava, Smriddhi, Shreya

Fourth National Symposium on Environment: Green Technology for Environmental Sustainability held at Deshbandhu College, University of Delhi, Delhi on September 25, 2018.

### 3. Participation in the Conferences/Workshops/Faculty Development Programs

1. Workshop on Advanced Materials and Nanotechnology held in Jaypee Institute of Information Technology, NOIDA, Uttar Pradesh, India on 21<sup>st</sup> November, 2009 organized by Department of Physics and Material Science & Engineering in association with Material Research Society of India (MRSI), Delhi Chapter.
2. HRI School/Conference on Functional Materials held at Harish-Chandra Research Institute (HRI), Allahabad, India from 28 March to 3 April, 2011.
3. Workshop On Nano and Advanced Materials & Their Applications (WONAMA-2012) under UGC Networking Programme held in Department of Physics, Banaras Hindu University, Varanasi-221005, India from April 10-16, 2012.
4. 13<sup>th</sup> International Conference on Magnetic Fluids (ICMF-13) held at National Physical Laboratory, New Delhi, India during January 7-11, 2013.
5. IOP Workshop held at National Physical Laboratory, New Delhi, India on March 12<sup>th</sup>, 2013.
6. Workshop on Advanced Quantum Research and Innovation with Ultra Small Systems (AQuARIUS) held at National Physical Laboratory, New Delhi, India on June 26<sup>th</sup>, 2013.
7. Participated in Young Scientist's Conclave organized as a part of India International Science Festival (IISF-2016) held at CSIR- National Physical Laboratory, New Delhi on Dec. 07-11, 2016.
8. Faculty Development Workshop on "Embedded Systems and Synthesis on Nano-materials" organized by Department of Physics & Electronics & IQAC Hansraj College, University of Delhi, Delhi on Jan. 6-7, 2017.
9. National Workshop on Technical Terminology in Science Teaching held at Deshbandhu College, University of Delhi, New Delhi on Oct. 26-27, 2017.
10. Faculty Development Program on "Multifunctional Materials for Energy Harvesting and Allied Devices" held at Physics Department, Atma Ram Sanatan Dharma College, University of Delhi, New Delhi in collaboration with IQAC under Star College Scheme on Nov. 10, 2017.
11. Faculty Development Program on "Applied Physics and Embedded Systems Design" organized by Department of Physics & Electronics, Rajdhani College, University of Delhi, New Delhi on Dec. 14-15, 2017.
12. Workshop on "Skill Development to build a Clean India" organized by Deshbandhu College, Kalkaji in collaboration with CSR, Oil and Natural Gas Corporation Ltd., New Delhi held on June 7<sup>th</sup> and 8<sup>th</sup>, 2018.
13. Participated in **National Seminar on "New Trends in Nanotechnology and Applications" (NTNA-2018)** organized under Star College scheme (DBT,GOI) by Department of Physics, Atma Ram Sanatan Dharma College, University of Delhi, New Delhi during September 27-28, 2018.

#### Research Projects (Major Grants/Research Collaboration)

NA

Awards and Distinctions
<ul style="list-style-type: none"> <li>➤ Best Poster Award in 61<sup>st</sup> DAE-Solid State Physics Symposium (DAE-SSPS-2016) held at KIIT University, Bhubaneswar, Odisha on Dec.26-30, 2016.</li> <li>➤ Organizing member in the DST funded 'INSPIRE' Internship Programme organized by Deshbandhu College, University of Delhi, held from December 14-18, 2015.</li> <li>➤ National Eligibility Test-Junior Research Fellowship (JRF, <i>F.NO. 102(5)/2007(ii)E.U. (II)</i>) by Council of Scientific and Industrial Research (CSIR), India in Dec. 2007</li> <li>➤ Graduate Aptitude Test in Engineering (GATE) fellowship by Ministry of Human Resource and Development (MHRD), India in 2008 and 2009</li> <li>➤ Senior Research Fellowship (SRF) by Council of Scientific and Industrial Research, India in 2010</li> <li>➤ Achieved the second position in B.Sc. (Physics, Chemistry, Maths group) in M. G. P. G. College, Gorakhpur in 2005</li> <li>➤ Secured second rank in the college in High School in 2000</li> </ul>
Association With Professional Bodies
<ul style="list-style-type: none"> <li>• <i>Editing</i> NA</li> <li>• <i>Reviewing: IEEE Transaction on Magnetics, AIP Conference Proceedings, IOP science- Materials Research Express</i></li> <li>• <i>Advisory</i> NA</li> <li>• <i>Committees and Boards</i> NA</li> <li>• <i>Memberships</i> NA</li> <li>• <i>Office Bearer</i> NA</li> </ul>
Other Activities
<ul style="list-style-type: none"> <li>• Member of various committees in Physics Department.</li> <li>• Coordinated and judged many events in Coherence, Physics Society Festival</li> <li>• Invigilation and evaluation duties during exams</li> <li>• Reformation of Physics Lab</li> </ul>



Signature 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.