PROFILE OF THE TEACHERS

1. Name: Dr. Nikhil Kumar
2. Father's Name: Late Shri Amar Singh
3. Mother's Name: Smt. Asha Singh
4. Department: Physics
5. Date of Joining the University: 03-07-2018
6. Total Teaching Experience: UG- 3 years 10 months PG- 3 years 10 months (till May 2022)
7. Total Research Experience: PhD (July 2009- Jan. 2016) + PDF (2 years)
8. Area of Specialization: Condensed Matter Physics
9. Academic Qualifications:

UG	Ewing Christian College (University of Allahabad)
PG	Jawaharlal Nehru University (New Delhi)
Ph.D.	Indian Institute of Technology Kanpur
PDF	Tata Institute of Fundamental Research, Mumbai and IIT Bombay
Any Other	N.A.

10. International/National fellowship/financial support for advance studies/research

S. No.	Name of fellowship/financial support	Year of Award	National/International	Awarding Agency
1	SERB-DST NPDF	2016	National	SERB-DST
2	DST Inspire Faculty Research Grant	July 2018	National	INSA-DST
3	International Travel Grant	2015	National	SERB-DST
4	International Travel Grant	2018	National	CSIR

11. International/National award/recognition for academics

S. No.	Name of award/recognition	Year of Award	Title of the innovation	National/International	Awarding Agency

1.	Teaching Excellence Award	Sept. 2021	Teaching Innovation and contribution in implementing NEP 2020	National	Dept of Higher Education, Govt. of Uttar Pradesh & DDUGU
2	Best Teacher's award	Sept. 2021	Innovations in digital teaching	National	ICFAI Business School, ICFAI University, Dehradun (14th best management University in India)

12. Extension activity participation

S.No.	Name of activity	Year

If any award received-

S. No.	Name of activity	Name of award/recognition	Year of Award	National/International	Awarding Agency

13. Ph.D. supervised

S. No.	Name of the Ph.D. scholar	Title of the Thesis	Year of registration of the scholar	Year of award of Ph.D.

14. Research/Review Papers published:

S.No.	Title of paper	Name of the author/s	Name of Journal	Year of publication	ISSN number	Link to the recognition in UGC enlistment of the Journal

						Link to website of journal	Link to article/paper/ abstract of the article	Is it listed in UGC Care list/Scopus/Web of Science/ other, mention
1	Growth of high quality $Bi_2Sr_2CaCu_2O_{8+\delta}$ whiskers and electrical properties of resulting exfoliated flakes	Apoorv Jindal, Digambar A. Jangade, **Nikhil Kumar,** Jay Kumar Vaidya, Ipsita Das, R. Bapat, J.Parmar, Bhagyashree Chalke, A. Tamizhavel & Mandar M. Deshmukh	Scientific Reports	2017	2045 - 2322	https://www.nature.com/articles/s41598-017-03408-2	https://www.nature.com/articles/s41598-017-03408-2	YES
2	Reversibility Of Superconducting Nb Weak Links Driven By The Proximity Effect In A Quantum	**Nikhil Kumar**, T. Fournier, H. Courtois, C. B. Winkelmann, and Anjan K. Gupta	Physical Review Letters	2015	0031 - 9007	https://journals.aps.org/prl/abstract/10.1103/PhysRevLett.114.157003	https://journals.aps.org/prl/abstract/10.1103/PhysRevLett.114.157003	YES

	Interference Device							
3	Controlling hysteresis in superconducting constrictions with a resistive shunt	**Nikhil Kumar**, C. B. Winkelmann, Sourav Biswas, H. Courtois, , and Anjan K. Gupta	Superconductor Science & Techonology as Fast Track Communication	2015	0953-2048	https://iopscience.iop.org/article/10.1088/0953-2048/28/7/072003	https://iopscience.iop.org/article/10.1088/0953-2048/28/7/072003	Yes
4	Temperature and Phase Dynamics in Superconducting Weak Links	Anjan K. Gupta, **Nikhil Kumar** and Sourav Biswas	Journal of Appl. Phys	2014	0021-8979	https://aip.scitation.org/doi/full/10.1063/1.4900742	https://aip.scitation.org/doi/full/10.1063/1.4900742	Yes
5	Fabrication and Characterization of Shunted μ-SQUIDs	**Nikhil Kumar**, T. Fournier, H. Courtois, and Anjan K. Gupta	AIP Conference Proceedings	2014	0094-243X	https://aip.scitation.org/doi/10.1063/1.4873045	https://aip.scitation.org/doi/10.1063/1.4873045	Yes
6	Sourav Biswas, **Nikhil Kumar**, C. B. Winkelmann, Herve Courtois, and Anjan K. Gupta	Random telegraphic voltage noise due to thermal bi-stability in a supercond	AIP Conference Proceedings	2016	0094-243X	https://aip.scitation.org/doi/10.1063/1.4948107	https://aip.scitation.org/doi/10.1063/1.4948107	Yes

		ucting weak link						
7	Effect of constriction width on hysteresis In Superconducting Weak Links and micro-SQUIDs	**Nikhil Kumar**, Bharat K. Gupta, Anjan K. Gupta	AIP Conference Proceedings	2014	0094-243X	https://iopscience.iop.org/article/10.1088/2053-1591/1/4/045003/meta	https://iopscience.iop.org/article/10.1088/2053-1591/1/4/045003/meta	Yes

15. Books and chapters in edited volumes/ books published:

S.No.	Title of the book	Title of the chapter	National /International	Year of Publication	ISBN number	Affiliating institute at the time of publication	Name of the publisher
1	Carbon Quantum Dots for Sustainable Energy and Optoelectronic	Magnetic and Nanophotonics Applications of Carbon Quantum Dots	International	Accepted			Elsevier

16. Papers in national/international conference proceedings:

S.No.	Title of the Proceeding of the conference	Name of the conference	National /International	Year of Publication	ISBN/ISSN Number of the proceeding	Affiliating institute at the time of publication
1	AIP Conference Proceedings	DAE SSPS 2013	NATIONAL	2014	0094-243X	IIT KANPUR
2	AIP Conference Proceedings	DAE SSPS 2016	NATIONAL	2016	0094-243X	IIT KANPUR

3	AIP Conference Proceedings	ICC Bikaner	INTERNATIONAL	2021	0094-243X	DDU GORAKHPUR UNIVERSITY

17. Professional development Programmes, viz Orientation programme, Refresher course, Short term course, Faculty development Programmes

S.No	Year	Title of the Professional Development Programme	Date and Duration (from-to)
1	2020	Teaching Learning Centre, Ramanujan College, University of Delhi, 4 week Induction/Orientation Programme for "Faculties in Universities/Colleges/Institute of Higher Education.	September 1-September 30, 2020
2	2022	JNU HRDC, 2 week long refresher course on Physical Sciences and Nano Sciences.	Jan. 10-22 Jan, 2022

18. Research project sponsored by government agencies

S.No.	Name of the Principal Investigator	Name of the research project	Name of funding agency	Amount/Fund provided	Year of sanction	Duration of project	Status (completed/ongoing)
1	NIKHIL KUMAR		DST INSPIRE	35 LAKH	2018	5 years	ON GOING
2	NIKHIL KUMAR		IUAC	JRF Fellowship	2020	3 years	ON GOING
3	NIKHIL KUMAR		SERB DST	19 LAKH	2016	2 YEARS	Completed

19. Research project sponsored nu non-government sources such as industry, corporate houses, international bodies

S.No.	Name of the Principal Investigator	Name of the research project	Name of funding agency	Amount/Fund provided	Year of sanction	Duration of project	Status (completed/ongoing)

1	Nikhil Kumar	Nano-SQUID Magnetometry for Biomedical Applications	INSA-DST (DST INSPIRE)	35 LAKH (7 LAKH PER YEAR)	2018	5 YEARS	Ongoing
2	Nikhil Kumar	"Ion Beam effect on the properties of High Tc superconducting thin films, Ferromagnetic nano-particles	IUAC NEW DELHI	JRF-SRF	2020	3 YEARS	On going
3	Nikhil Kumar	Fabrication and characterization of 2D layered High Tc BSCCO based devices	SERB-DST NPDF	19 LAKH	2016	2 YEARS	COMPLETED

20. Patents filed/granted

S.No.	Name of Patent filed/granted	Patent number	Year of filling/award/published of patent

21. Collaborative activities with other institutions/ research establishments/ industry for research and academic development

Title of the collaborative activity	Name of the Collaborating agency with contact details	Year of collaboration	Duration	Nature of activity
Collaborative research	IIT Kanpur/ IUC Indore/ IUAC, New Delhi	2018 onwards		Research

22. Functional MoUs with institutions/industries in India and abroad for internship, on the job training, project work, student/faculty exchange and collaborative research

Name of the organisation/industry With whom MoU is signed	Year of signing MoU	Duration of MoU	Actual activities Under each MoU Year wise

23. E-content is developed: Uploaded on e-path shala website of University.

i - For e-PG- Pathshala, ii- For CEC (Under Graduate), iii- For SWAYAM, iv- For other MOOCs platform, v- For NPTEL/NMEICT/any other Government Initiatives

Name of the Module developed	Platform on which module is developed	Date of launching e content	Link to the relevant document and facility available in the institution	List of e-content development facility available	Provide link to videos of the media centre and recording facility

24. Consultancy and corporate training-

Consultancy

Name of consultancy project	Consulting/sponsoring agency with contact details	Year	Revenue generated (Rs.)

Corporate training

Title of corporate training program	Agency seeking training with contact details	Year	Revenue generated (Rs.)	Number of trainees

25. Details of Conference/Seminar attended-

Year	Name of the Conference/workshop	International / National/ State	Name of the professional body for which membership fee provided	Amount support (INR)

2020	67th Accelerator user workshop organized by IUAC, New Delhi from Dec 16-18, 2020.	NATIONAL	IUAC	TRAVEL support
2019	National Conference on 'Advanced Materials : Theory & Applications 2019	NATIONAL	-	-
2018	31st International Superconductivity Symposium held in Tsukuba, Japan from Dec 12-14th, 2018	INTERNATIONAL	INVITED LECTURE FUNDED BY DST Inspire and CSIR	Rs 30000 FROM CSIR
2016	APS March meeting in Baltimore, USA from March 6th to March 11th 2016	INTERNATIONAL	TIFR MUMBAI	FULL FUNDING
2015	European Conference on Applied Superconductivity (EUCAS), held in Lyon, France from September 6th to 11th, 2015	INTERNATIONAL	SERB-DST	FULL FUNDING
2015	International Conference on Condensed Matter and Applied Physics (ICC-2015)	INTERNATIONAL	IIT KANPUR	FULL FUNDING

26. Any other information:

- Invited talk on “” in 31st International Superconductivity Symposium held in Tsukuba, Japan from Dec 12-14th, 2018.
- Invited lecture on “Use of Technology in Education” in a one week long workshop organized by DDU Gorakhpur University, on the first anniversary of National Education Policy-2020 on Aug. 7th ,2021.
- Invited Lecture by Kendriya Vidyalaya, Gorakhpur On the topic “Digital Learning in Covid Era” during in service course of Varanasi region held on 27.12.2020.
- Four Week induction program for faculty in Universities/ Colleges/ Institute of Higher Education from Sep 1-Sep 30, 2020 organized by Ramanujan College, University of Delhi with A+ Grade.
- Delivered an Invited lecture at IUAC New Delhi on the topic "Effect of Ion Beam on the properties of High Tc Superconducting thin films, sensors and Ferromagnetic

nanostructures used for Cancer Therapy" at the 67th Accelerator user workshop organized by IUAC, New Delhi from Dec 16-18, 2020.

- Invited lecture in "National Conference on 'Advanced Materials : Theory & Applications 2019' to be held on September 26-28, 2019 at Hans Raj College, Delhi University on " Controlling Thermal hysteresis in Superconducting Weak Links and nano-SQUIDs".
- Organized One day long "BARC Outreach Program" sponsored by " Bhabha Atomic
- Research Center (BARC), Mumbai and DDU Gorakhpur University on 16 January 2019 as an organizing secretary.
- Oral Presentation on "Controlling Hysteresis in Superconducting Weak Links and micro-SQUIDs" in APS March meeting in Baltimore, USA from March 6th to March 11th 2016.
- Attended and presented the poster entitled "Controlling Hysteresis in Superconducting Constrictions with a resistive shunt" in European Conference on Applied Superconductivity (EUCAS), held in Lyon, France from September 6th to 11th, 2015.
- Poster presentation in International Conference on Condensed Matter and Applied Physics (ICC-2015) Held in Bikaner on the topic " Effect of constriction width on hysteresis in superconducting weak links and micro-SQUIDs" during 30-31st October, 2015.
- Presented paper entitled "Fabrication and Characterization of Shunted μ-SQUIDs" in 58th DAE-Solid State Physics Symposium in Thapar University, Patiala, Punjab, India on Dec. 17th-21st, 2013.
- Visiting fellow in Quantum Nano-Electronics and Spectroscopy – (QNES) lab in CNRS
- Institute Neel, Grenoble, France from May 5th 2012 to July 30th, 2012.
- Presented a poster entitled and "Fabrication and Characterization of micro-Superconducting Quantum Interference Devices (μ-SQUIDs)" in "National Workshop on Applications of Ion Beam in Device Fabrication and Nanotechnology" in DAVV Indore during 5th-6th March 2012.
- Lab visit in CNRS-Institute Neel, Grenoble, France from Nov.22nd to Nov.30th, 2010.
- Attended CFN Summer School in Nanophotonics and Nanoelectronics in Karlsruhe, Germany from Aug.26th -Aug.29th, 2010, organized by CFN and Karlsruhe Institute of Technology.