# Dr Ankita Tiwari

M.Sc, M.Phill, Ph.D.(Mathematics)

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# Summary

Over 9 years of experiences in academic with knowledge of content development, research and teaching in Mathematics. Versatile with strong organizational skills and the ability to meet set deadlines. Displays a positive outlook to all challenges and able to work independently.

# Education

* Vikram University, Ujjain(M.P.) Ph.D.(Mathematics) (Awarded on April 2015)
* Vikram University, Ujjain(M.P.) M.Phill(Mathematics), 2009, CGPA 79%
* Vikram University, Ujjain(M.P.)

M. Sc.(Mathematics), 2008, CGPA 78%

* D.A.V.V., Indore M.A.(English Literature)

# Work Experience

**Research**

School of Studies in Mathematics , Vikram University Ujjain (Jul, 2011- Apr, 2015) Role: Research Scholar, Teaching Assistant

Ph.D. Topic : “**A Study on Fixed Point in Fuzzy Metric spaces**”

The aim of the presented paper is to study fixed point in fuzzy metric spaces, its uniqueness with different maps. My specialization includes “ Fixed Point Theory”, which comes under the cadre of Functional analysis.

The major applications of fixed point theorems encompass diverse disciplines of arising in Approximation Theory, Potential Theory, Game Theory, Mathematical Economics, and theory of Differential Equations. My significant contribution to research work is related to fuzzy sets with the compatible mappings . Further my research incorporated with notion of occasionally weakly compatible maps in reference to complete fuzzy metric space. Moreover I worked with the concept of Non Compatible mappings and Intutionistic Fuzzy Metric spaces.

The outcome of my research indicates the uniqueness of a fixed point in all the fuzzy metric spaces with different maps .

**Teaching**

* **Koneru Lakshmaiah Education Foundation., India ( Jul, 2017 onwards)-**

Designation : Assistant Professor, Department of Mathematics,

Role: Teaching, Mentoring, Syllabus Review, Content development, Question paper setting, Conducting Exam and evaluation, Supervising IQAC Files

## N.I.T. Warangal (Telengana), India ( Jul, 2016 – May, 2017)

Designation : Faculty, Department of Mathematics,

Role: Teaching, Syllabus Review, Content development, Question paper setting, Conducting Exam and evaluation

## N.I.T. Warangal (Telengana), India ( Jan, 2016 – May, 2016)

Designation : Faculty, Department of Mathematics,

Role: Teaching, Question paper setting, Conducting Exam and evaluation,

## Govt. Madhav Science P. G. College, Ujjain, India ( Jul, 2013– Dec, 2016)

Designation : Faculty, PG Department of Mathematics, Role: Teaching ,Mentoring, Teaching & Project Guide (UG)

* **Advance College, Ujjain, India ( Jul, 2011– May13)** Designation : Faculty, UG Department of Mathematics, Role: Teaching ,Mentoring

## Teaching Highlights

* Mathematics : Integration Theory & Functional Analysis, Multivariate Calculus, Computational Mathematics
* Computational : Real Analysis, & Programming in C, Topology, Programming in C, Operations Research

**Administrative**

* Worked as “English Speaking Committee **Co-coordinator**” on behalf of Mathematics Department, KLEF.
* Worked as an **Organizing Committee member** in National Workshop on “**Research Initiatives and Proposal Drafting in Mathematical Sciences (RIPDMS)”** Organized by Department of Mathematics, KL University, Greenfields Vaddeswaram (A.P.), India
* Worked as an **Organizing Committee member** in National Conference entitled as “**Essence of Mathematics and Engineering Applications**“ held on 2018 & 2019, Organized by Department of Mathematics, KL University, India
* Worked as an **Organizing Committee member** in National **Essence of Mathematics and Engineering Applications”**Conference entitled as “held on 2017 & 2018, Organized by Department of Mathematics, KL University, India
* Worked as an Organizing Committee member in National Conference “**National Seminar on Contributions of Ramanujan in Mathematics and Its Applications in Mathematical Sciences “**held on March 2014, Department of Mathematics, Govt. Madhav Science P. G. College, Ujjain M.P.

# Skills

**Software** :C, MATLAB, MS Office, R

**Research:** Technical Documentation Writing and Publication

**Administrative** : Organizational and leadership skills. Mentoring, Research consultant

# Publications:

1. Tiwari A., Gupta V. Tiwari S.K., ”Fixed Point Theorem for Compatible Mapping of Type (A-1) in Complete Fuzzy Metric Space.” , International Journal of Engineering & Scientific Research, Vol. 2 issue 7 .
2. Tiwari A., Gupta V. Tiwari S.K.,” Common Fixed Point Theorem in Fuzzy Metric Space with Implicit Relation and Property (E.A.)”, International Organization of Scientific Research”, Vol. 10, Issue 2 Ver. VI (Mar-Apr, 2014), 59-64.
3. Tiwari A. ,Gupta V. Tiwari S.K., “A Fixed-Point Theorem in Fuzzy Metric Space with Semi- Compatible and Reciprocally Continuous Mappings”, International Academy of Science Engineering and Technology, Vol.3, Issue 3, March 2014, 1-8.
4. Tiwari A., Gupta V. Tiwari S.K., “Non-Compatible Mapping in Intuitionistic Fuzzy Metric Space”, “Advances in Fixed Point Theory”, 3(2013), No.1, 383-391.
5. Tiwari A., Gupta V. Tiwari S.K., “Common Fixed Point Theorem in Fuzzy Metric Space with Special Reference to Occasionally Weakly Compatible Mappings”, Journal of Mathematical and Computational Science, Vol. 4 (2014), No. 2 374-383.
6. Tiwari Ankita, Gupta V.K., Bamniya D.S.,” Single and Multi-valued Mappings in G-Metric Space”, has been published in Engineering Science and letters, London.
7. Tiwari A., Gupta V. Tiwari S.K., Weakly Compatible Mappings in Intuitionistic Fuzzy Metric Space," International Organization of Scientific Research "Vol. 12, Issue 3 Version III(May-June 2016) Page 1-09.
8. Tiwari A.," Semi Weakly Compatibility of Maps in Fuzzy Metric Space" Trans Stellar "International Journal Of Mathematics and Computer Application Research "Vol.7, Issue 1Feb 2017,35-40.
9. Tiwari A, P. S.Vijay, J Peter Praveen,” An Application of LPP - Graphical Method for Solving Multi Server Queuing Model” International Journal of Mechanical Engineering and Technology (IJMET)Volume 9,issue 12,DEC.2018,1066-1069.
10. Tiwari A.,K. Rajyalakshmi, G. Charan Kumar,” Modified Taguchi Approach for optimizing the process parameter using the fictitious parameter”, [Journal of Physics: Conference Series](https://iopscience.iop.org/journal/1742-6596), Volume 1344 [International Conference on Recent Inventions and Innovations in Mathematical Sciences 28 February to 1 March 2019, Andhra Pradesh, India](https://iopscience.iop.org/issue/1742-6596/1344/1).
11. Tiwari A, R Sandhya,Y.Hari krishna ,Fixed Point Theorem with Fuzzy and Non Archimedean Space ,Annals of R.S.C.B,vol 25 issue 2, 2021,7158-7162.
12. Tiwari A, R Sandhya,Y.Hari krishna,First and Second Line of Treatment for Tuberculosis: A Mathematical Model with Drug Resistance.Annals of R.S.C.B,vol 25 issue 3 2021,1810-1821.
13. Tiwari A, R Sandhya,Y.Hari krishna, S. ragamayi ,Results on a Chromatic Number of a Bi-polar Fuzzy Complete Bipartite Graphs and Labelling of Tri-Polar Fuzzy Graphs,

 Turkish journal of computer mathematics and education,vol-12,issue 4,1040-1046.

1. Research paper “ Evaluation of customers purchase decision impact on branded over unbranded apparel analysis.” Has accepted for, the journal, Science & Engineering Research Support Society.

# Awards & Scholarship

* Awarded for “ Best Researcher award ” in 2021 from “ institution of scholars(InSc)(upcoming award ,announced ,will be honored in june 2021).
* Awarded for Best Paper Presentation in National Conference sponsored by M.P. Council of Science and Technology, Bhopal) entitled as “National Seminar on Contributions of Ramanujan in Mathematics and Its Applications in Mathematical Sciences” held on 6-7 March 2014, organized by P.G. Department of Mathematics, Govt. Madhav Science P.G. College, Ujjain(M.P.).
* Presented a paper in Young Scientist Award category in 17thInternational Conference of International Academy of Physical Sciences(CONIAPSXVII) on “EMERGING TRENDSINPHYSICAL SCIENCES & TECHNOLOGY” JANUARY16-18,2015

# Paper Presentations, Workshops, Conferences

## Paper Presentations

* Presented a paper titled as “Fixed Point Theorems with Compatible mappings of type (A-2)” in National Conference entitled as “Essence of Mathematics and Engineering Applications “held on 14-15DEC.2018, Organized by department of Mathematics, KL University, Greenfields Vaddeswaram (A.P.),India
* Presented a paper titled as “Fixed Point Theorems with Compatible Mappings” in National Conference entitled as “Essence of Mathematics and Engineering Applications “held on 17-18 Nov.2018, Organized by Department of Mathematics, KL University, Greenfields, Vaddeswaram (A.P.), India
* Presented a paper entitled as “A Fixed-Point Theorem in Fuzzy Metric Space with Semi Compatible and Reciprocally Continuous Maps” in “National Seminar on Contributions of Ramanujan in Mathematics and Its Applications in Mathematical Sciences” held on 6-7 March 2014, organized by P. G. Department of Mathematics, Govt. Madhav Science

P.G. College, Ujjain (M.P.)

* Presented a paper in Research Seminar on Ganitiya Gyan Sandhan-2013, held on 23 march 2013, (Sponsored by M.P. Council of Science and Technology, Bhopal) organized by Govt. Girls P.G. College Ujjain.
* Presented papers in various national and international conferences workshops and seminars.

## Conferences

* Attended 74th Annual Conference of the Indian Mathematical Society organized by the department of Mathematics, University of Allahabad, during 27th to 30th Dec.2008.
* Participated in National Level Symposium on **“ Thought-Experimentation in Humanities, Science and Science Fiction**” organized by Marathwada Shikshan Prasarak Mandal’s SHRI MUKTANAND COLLEGE, GANGAPUR, , during 21-30July,2020.

## ONLINE CERTIFICATION COURSES:

* Successfully completed online certification course “**Data Science with Math Skills**” **conducted by Course Era.**
* Successfully completed online certification course “**Differential equations For Engineers”** conducted by **Course Era.**
* Successfully completed online certification course “**Introduction to Calculus**” conducted by **Course Era.**
* Successfully completed online certification course “**Research Proposals :Initiating Research”** conducted by **Course Era.**
* Successfully completed online certification course “ **English For Teaching Purpose**

”conducted by **Course Era.**

* Successfully completed online certification course “**Mathematical Foundation For Cryptography**” conducted by **Course Era.**
* Successfully completed online certification course “ **Mathematical Methods and Its Applications**” conducted by NPTEL in FEB-APR 2020
* Successfully completed online certification course **“ Introduction to probability and Statistics”** conducted by NPTEL in FEB-APR 2020.
* Successfully completed online certification course “**Descriptive Statistics with R Software** ” conducted by NPTEL in FEB-APR 2019.

**Participation in FACULTY DEVELOPMENT PROGRAMME:**

* Participated in One Week Online Faculty Development Program on “**Mathematica Software - Hands on Experience: Tools & Techniques for Next Generation”** organized by Department of Mathematics, Santhiram Engineering College in association with WOLFRAM Mathematica - AARYAMAN GEO Info, Bangalore during 28.05.2020 to 02.06.2020.
* Participated in One Week Online Faculty Development Program On “ **TAXONOMY OF SOFTWARES RELATED TO MATHEMATICAL SCIENCES**”, organized by Gokaraju Rangaraju Institute of Engineering and Technology (AUTONOMOUS) HYDERABAD, TELANGANA, during 9th June 2020 - 14th June 2020.
* Participated in One Week Online Faculty Development Program on “ **Latex and Technical Report Writing**,25-30may 2020”,organized by, Department of Mathematics, Kaktiya University, Warangal**, In Association with Spoken Tutorial IIT BOMBAY**.
* Participated in National Level faculty Development program on “ **Tools for Online Classroom post COVID”,**HELD ON 18 may-20 may 2020, presented by Codegnan IT Solutions,In Association with Department of Computer Science ,P.B. Siddhardha College of Arts and Science and Computer Society of India, Vijayawada Chapter.
* Participated in One Week Online International Faculty Development Program On

“**Mathematical Modelling in Multidisciplinary Domain**”, organized by, Department of Mathematics, Bannari Aman Institute of Technology during 01-07 june 2020.

* Participated in Five days Online Faculty Development Program on “**Introduction to data Science**”, from 18may-22may,2020,Organizead by department of computer Science and Engineering, Guntur Engineering College, In association with Codegnan IT solutions.
* Successfully completed three days **Short term training program** on **“ LATEX FOR EVERYONE”**, Organized by Department of Engineering Sciences, Ram Rao Adik Institute of Technology, Nerul, Navi Mumbai, From 18-20june 2020.
* Participated in One day Online Faculty Development Program on **“ Effective Research Planning and Technical writing for Engineers”** Organized by Indore Institute of Science and Technology, Supported by ACM Indore chapter under TEQIP-III RGPV BHOPAL.
* Actively participated in the Two Day Online FDP on **“Applications of Mathematics in Engineering”** organized by Department of Mathematics & Humanities, Mahatma Gandhi Institute of Technology (MGIT), Hyderabad during 3rd and 4th July 2020.
* Participated in National Level faculty Development program on “ **Artificial Intelligence Application through Machine Learning** ” organized by Deptt of CS& E,BALAJI INSTITUTE OF TECHNOLOGY & SCIENCE,WARANGAL, during 14-18 july 2020.
* Participated in National Level faculty Development program on **“AI and Data Science** ” organized by Department of MCA, JSPM’s Rajarshi Shahu College of Engineering, Pune, Maharashtra, during 22 -26 July 2020.
* Participated in National Level faculty Development program on **“ Exposure and Rejuvenation of Technologies in changed Era of the World ”** organized by Deptt of ECE, RAJ KUMAR GOEL INSTITUTE OF TECHNOLOGY,GHAZIABAD(U.P.), during 6-10 July 2020.
* Participated in National Level faculty Development program on “**Reecent Trends in Electronics and Communication” ”** organized by Deptt Of ECE ,BALAJI INSTITUTE OF TECHNOLOGY & SCIENCE,WARANGAL, during 13-18 July,2020.
* Participated in National Level faculty Development program on **““Importance of Mathematics in Science and Technology** ” organized by Department of Basic Sciences and Humanities, GMR Institute of Technology, Rajam, AP, India,during 25-29June,2020.
* Participated in National Level faculty Development program on “**Latex And Its Applications for Researchers”** organized by Department of Information Science and Engineering, Vidyavadhaka College of Engineering, Mysuru ,during 20-24 July2020.
* Participated in National Level faculty Development program on” **Climate change Impact on Water Resources Management and Environment** “, organized by, Sponsored by TEQIP-III and in Collaboration with Science City of Andhra Pradesh during 15-19 July,2020.
* Participated in National Level faculty Development program on **“Matlab Statistics and Data Science”**,organized by Department of Applied Science,Sagar Institute of Research and technology ,Bhopal, Sponsored by AICTE during 27 July-01August,2020.
* Participated in National Level faculty Development program on “**Recent Advances in Mathematics & Statistics”** organized by Department of Mathematics, Institute of Science and Centre for Learning & Sustainability, Gitam University. Visakhapatnam during 03-08 August,2020.
* Participated in National Level faculty Development program on **“R for Statistics and Data Analysis** organized by School of Advanced Sciences and School of Computer Science and Engineering, VIT Chennai ,during 01-03 August 2020.
* Participated in National Level faculty Development program on “ **MATHEMATICAL**

**SCIENCES”** organized by Department of Mathematics, Vignana's Foundation for Science and Technology & Research, Guntur during 18-24 July 2020.

**WEBINARS/SEMINARS**

* Participated in one day webinar on **“ How to create Course and Course activities in Open source Online Learning**” organized by department of Mathematics, Hindu College, Guntur.
* Attended one day webinar on **“ Protection Environment-Our Responsibility”** organized by Science City of A.P.,On the eve of World Environment day 5th June 2020.
* Participated in one day National Workshop on **“Mathematical Indulgence: A Journey to Cherish”** organized by Department of Mathematics(Jun082020)
Acropolis Institute of Technology and Research, Indore.
* Participated in “INTERNATIONAL WEBINAR ON **MATHEMATICS : TRACING OF CURVE”** organized by Bharati Vidyapeeth’s College of Engineering Lavale,Pune.
* Participated in ARC Webinar on **“ HIGHER EDUCATION IN POST LOCKDOWN** **SITUATION”**HELD ON 22 MAY 2020,organized by University college of arts and Humanities, Osmania University, Hyderabad.
* Participated in the National Webinar entitled **“ COSMIC COLLISIONS”** on 6th June 2020, organized by AURORA'S DEGREE & PG COLLEGE ,Chikkadpally, Hyderabad.
* Successfully attended **the “India First Leadership Talk “**webinar with Prof D. P. Singh, Chairman UGC.
* Participated in the National Webinar entitled **“ Introduction to Deep Learning & Its Applications in Astronomy” o**n 23th May 2020, organized by AURORA'S DEGREE & P.G. COLLEGE ,Chikkadpally,Hyderabad
* Participated in One Day Webinar entitled as **“ Basic Author Workshop Research Article Writing & Reference Management Using Mendeley”** on 22nd June,2020 , Organized by Faculty of Science, Annamalai University in collaboration with ELSEVIER.
* Participated in two Day Webinar entitled as “**FOSTERING INTERDISCIPLINARY**

**RESEARCH IN APPLIED SCIENCES” ( FIRAS - 2020),** Organized by Department of Mathematics, Periyar Government Arts College, Cuddalore, Tamilnadu during 19th & 20th , June 2020.

* Participated in an International webinar on “ **Laplace Transform and Its Applications**”, on 22nd June 2020, Organized by Department of H.& S,(Engineering Mathematics),Malla Reddy Institute of Technology and Science,Hyderabad.
* Participated in One Day National Webinar On “**The Role of ICT Tools in the Teaching and Learning Process of Social Sciences**” organized by the Department of Social Sciences and IQAC, Venutai Chavan College, Karad on 1st July, 2020.
* Successfully attended National Webinar on **“Effective and efficient writing of research papers for web of science,Scopus indexed journal and Conference papers using Typeset Research Studio”** Organized by Department of Electronics & Telecommunication & Central Library,AISSMS COE, Pune on 1st July 2020.
* Participated in webinar entitles **“ Online and Professional Certification: Does it help in Enhancing Employability”,**organized by Thakur College of Engineering and Technology,Kandivali(E0,Mumbai on 04/07/20.
* Participated in the National Webinar , entitled “**MATLAB and its Applications**” held on 05th July,2020, organized by aurora's degree & P.G.College ,Chikkadpally,Hyderabad.
* Participated in the Webinar on **“Introduction to Data Science using R**” on 03.07.2020 organized by Department of Computer Science and Engineering, SWARNANDHRA INSTITUTE OF ENGINEERING AND TECHNOLOGY Seetharampuram, Narasapur
* Participated in the International Webinar on the Topic “**Offline to Online- Survive in the Virtual World**” on 7th July 2020,organized by HOLY CROSS COLLEGE OF MANAGEMENT AND TECHNOLOGY,PUTTADY,IDUKKI,KERALA 685551,INDIA Department of Computer Applications In Association with Evolution Careers,Salem 636006 , India.
* Successfully Participated in the online National Webinar on” **Mathematica and Its Application in Mathematics**” ,organized by Department of Applied Sciences,Humanities, Mathematics, Pillai college of Engineering, New panvel,Maharashtra.
* Participated in Entitled as “**Data Analysis with R-Programming**” held on 28-Nov.2018, Organized by Academic Staff College, KL University, Greenfields Vaddeswaram(A.P.),India.
* Participated in two days National Workshop on “**Research Initiatives and Proposal Drafting in Mathematical Sciences (RIPDMS)”** Organized by Department of Mathematics, KL University, Greenfields Vaddeswaram (A.P.), India
* Participated in Faculty Development Programme entitled as**” Techniques and Approaches in Effective Student Counseling**” held on 27 Nov.2018, Organized by Academic Staff College, KL University, Greenfields Vaddeswaram(A.P.), India.
* Participated in Faculty Development Programme entitled as” **Effective and Appropriate Teaching Pedagogies**” held on 26 Nov.2018 Organized by Academic Staff College, KL University, Greenfields, Vaddeswaram (A.P.), India.
* Participated in Faculty Development Programme entitled as **“Induction Program and Outcome Based Education**” held on 16-25 Oct 2017, organized by Academic Staff College, KL University, Greenfields, Vaddeswaram (A.P.), India.
* Actively Participated in one day Orientation Program entitled as “**Work Place Dynamics”** held on 05/12/2017, organized by Academic Staff College, KL University, Greenfields, Vaddeswaram (A.P.), India.
* Participated in “**India International Science Festival”,** held on 4-8 December,2015, IIT Delhi, organized by Ministry of Science and Technology and Earth Sciences Government of India & VIBHA with TIFAC.

# Conferences , Professional Memberships

## Professional Memberships

* **Member:** Indian science Congress.
* **Member**: IAENG (International association of Engineers)
* **Member**: IFERP (INSTITUTE FOR ENGINNERING RESEARCH AND PUBLICATION)
* Member: NATIONAL COUNCIL OF TEACHER SCIENTIST INDIA