### **RESUME**

#### **TARUN KUMAR GARG**

HOUSE NO. 369, SECTOR – 29 FARIDABAD – 121008 INDIA



## **Area of Specialization: Applied Mathematics**

**Objective:** Seeking a position which will provide an opportunity for personal growth and professional advancement.

#### **PERSONAL DATA**

Address : House No. 369, Sector 29, Faridabad -121008, INDIA

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Civil Status : Married

Sex : Male

#### **EDUCATIONAL BACKGROUND**

1995 – 1998 **Ph. D. Mathematics,** 

Jamia Millia Islamia

New Delhi, India .

1990 – 1992 **Master of Science in Mathematics** 

M.D. University, Rohtak , Haryana, India

1987 -1990 Bachelor of Science, G.G.D.S.D. College,

Palwal, Haryana, India.

1995 PASSED Junior Research Fellowship Test

Conducted by CSIR in 1995.

#### **ACADEMIC WORK EXPERIENCE**

PRESENT POSITION: Associate Professor in Mathematics since July1, 2009

2006 - 2009 : Reader in Mathematics, Satyawati college (University

of Delhi) Ashok Vihar, Phase III, DELHI -110052

2001 – 2006 : Sr. Lecturer in Mathematics, Satyawati college

(University of Delhi) Ashok Vihar, Phase III,

DELHI -110052

1998 - 2001 : Lecturer in Mathematics, Satyawati college

(University of Delhi) Ashok Vihar, Phase III,

DELHI -110052

1997- 1998 : Lecturer in Mathematics, Dayal singh college

(University of Delhi) Lodhi Road, DELHI -110052

1996 - 1997 : College of applied Sciences for Women, Jhilmil Colony,

Vivek Vihar, Delhi

1993 – 1994 : Aggrawal P. G. College Ballabgarh, Haryana

#### **ADMINISTRATIVE EXPERIENCE**

- 1. Associate NCC Officer (Naval) of college NCC since Oct 2011 till date.
- 2. Caretaker NCC Officer (Naval) of college NCC from July 2000 to 2011.
- 3. Convenor of the sports committee of the College from April 2003 to March 2005
- Convenor of the Computer Lab committee of the College from April 2005 to March 2007
- 5. Convenor of Time Table Committee of the College from April2004 to March2006.
- 6. Convenor of Students Advisory Committee of the College from 2016- to 2017.
- 7. Member of the Annual Day committee from 2000 to till date.

#### **REFRESHER / ORIENTATION COURSES ORGANIZED**

Programme Co-Convener, 4 weeks Orientation Programme (OR-91) from November 21,2017 to December 19,2017, organized by CPDHE, University of Delhi, Delhi

#### LIST OF RESEARCH PAPERS PUBLISHED

- 1. Garg, Tarun Kumar., Abdullah., Ahmad, K., "Characterization of Lebesgue Spaces L<sup>p</sup>(R) using Wavelet Packets", Modern Mathematical Models, Methods and Algorithms for Real World Systems, ISSN-190479864, (A.H. Siddiqi et el. Eds.), pp. 302-17, Anamaya Publishers, New Delhi, (2006) and Anshan Ltd., U.K. (2006).
- 2. Garg, Tarun Kumar., Abdullah., Ahmad, K., "Characterisation of Hardy Space H<sup>1</sup>(R) using wavelet packets" in Modern Methods in Analysis and its Applications (Mursaleen, Ed.), pp. 274-288, Anamaya Publishers, new Delhi (2011).
- 3. Rakesh Kumar, Yogendra Singh, Garg, Tarun Kumar., "Periodic Walsh type Wavelet Packets expansion with representation of Differential Equations Using Periodic Wavelet Packets", Advances in Applied Mathematics and Computational Physics, pp. 266-279, World Education Publishers, New Delhi- 110032(2013).
- 4. Markov modeling and reliability analysis of urea synthesis system of a fertilizer plant (with Anil Kumar, Sanjeev Kumar and vikram Singh) in "Journal of Industrial Engineering International", Springer(2014).,pp., 1-14.
- 5. Garg, Tarun Kumar, Application of CAS Maxima to the Availability Analysis of screening Unit in a paper Plant, IJCMS, ISSN 2347-8527, Volume 4., Issue 6., June 2015.,pp.,50-57
- 6. Garg, Tarun Kumar, Application of CAS Maxima to the Reliability of skimmed Milk Powder Production System of a Dairy Plant, IJETSR, ISSN 2394-3386, Volume 5, Issue 1, January 2018.,pp.,27-39
- 7. Garg, Tarun Kumar, Convergence of Wavelet Packet Series of Convolution Bound of the Kernel Q<sub>i</sub><sup>n</sup>(x,y), IJCMS,ISSN 2347-8527, Volume 7., Issue 2., February 2018.,pp.,527-537
- 8. Garg, Tarun Kumar, Moments of Wavelet Packets Approximations of some Smooth Functions, IJETSR, ISSN 2394-3386, Volume 5, Issue 3, March 2018.,pp.,143-154

#### **BOOK PUBLISHED**

**Vedic Mathematics,** Anuradha Prakashan, ISBN No. 978-93-86498-73-1, 1193, Pankha Road, Nangal Raya, Janakpuri, New Delhi. Delhi, 2018

### RESEARCH GUIDANCE TO STUDENTS FOR M. PHIL/ PH.D. DEGREE

One scholar has been awarded M.Phil. under my supervision.

Pushpa Rani, on "Elastic waves in prestressed Media" from Vinayaka mission University Salem, Tamilnadu, India in July, 2008

One scholar is doing Ph. D. under my supervision.

Shalini Jindal, on "Reliability of Machenical Systems" from YMCA University Faridabad, India, since July, 2018

# TALKS PRESENTED IN SEMINARS/ WORKSHOPS/ CONFERENCES

- 1. Talk with title "Characterization Of Lebesgue Spaces Lp(R) Using Wavelets Packets" in Fourth Annual Conference of the Indian Society of Industrial and applied Mathematics(ISIAM), April 6-8, 1996, (Jamia Millia Islamia, New Delhi)
- 2. Talk with Title "Wavelet Analysis", in CONFERENCE ON FUNCTIONAL ANALYSIS AND ITS APPLICATIONS August 19 22, 1996 (Jamia Millia Islamia, New Delhi)
- 3. Talk with title " An Introduction To The Wavelets" in Workshop on Industrial Mathematics organized by Indian Society Of Industrial And Applied Mathematics (ISIAM), April11-12, 1998, Dept. of Mathetics, Jamia Millia Islamia, New Delhi
- 4. Talk with Title "Convergence Properties Of Wavelet Packet Series", in Conference On "Functional Analysis And Its Applications", January 22-25, 1999 (University of Delhi, Delhi)

- 5. Talk with Title "Periodic Walsh Type Wavelet Packet Expansion And Their Properties", IN National Conference on "Applied Mathematics and Computational Physics", from Feb25-26, 2012, at Hindu College, Moradabad.
- 6. Talk with Title "Availability Analysis Of Screening Unit In A Paper Plant Using Runge Kutta Method", IN 2<sup>nd</sup> National Conference on "Applications of Mathematics in Science, Technology & Management", January24-25, 2014, organized by Department of Mathematics SRMS College of Engg. & Technology, Bareilly
- 7. Talk with Title "Markov Modelling and reliability Analysis Of Urea synthesis System of Fertilizer Plant", IN 3<sup>rd</sup> National Conference on "Applications of Mathematics in Science, Technology & Management", January22-23, 2016, organized by Department of Mathematics SRMS College of Engg. & Technology, Bareilly
- 8. Talk with Title "Reliability of Machenical Systems", in "National Conference On Modern Trends In Analytical And Environtal Physics", October 17-18, 2016, at Hindu College, Moradabad.
- **9.** Talk with title "An Introduction To Vedic Mathematics", in Orientation Programme (OR-90), Nov25,2017, CPDHE, University of Delhi, Delhi.
- **10.** Talk with title "Vedic Mathematics to create interest in today's students", in Orientation Programme (OR-90), Dec01,2017, CPDHE, University of Delhi, Delhi.
- 11. Talk with Title "Some Aspects of Weightage in NAAC Accrediation", in "National Seminar on Quality Improvement in Higher Education: In Perspective of NAAC", March11,2018, IQAC, Hindu College, Moradabad.

#### **SESSIONS CHAIRED IN CONFERENCES**

- 1. Chaired a session in 2<sup>nd</sup> National Conference on "Applications of Mathematics in Science, Technology & Management", January24-25, 2014, organized by Department of Mathematics SRMS College of Engg. & Technology, Bareilly
- 2. Chaired a session in National Conference on Advances in Mathematics & Computing (AMC- 2017) organized by YMCA University of Science and Technology, Faridabad, Haryana.

### PAPER PRESENTATION IN SEMINARS/ WORKSHOPS/ CONFERENCES

- 1. Presented a research paper entitled " **Characterization Of Lebesgue Spaces Lp(R) Using Wavelets Packets** " in the National conference on History of Mathematics and Recent Development held at Department of Mathematics M. D. University, Rohtak, Haryana
- 2. Presented a research paper entitled "Periodic Walsh Type Wavelet Packet Expansion", IN National Conference on "Applied Mathematics and Computational Physics", from Feb25-26, 2012, at Hindu College, Moradabad.
- 3. Presented a research paper entitled "Application of CAS Maxima to the Reliability of skimmed Milk Powder Production System of a Dairy Plant", in ICAEASM-2018, Jan7,2018, Maharashtra State Centre, Khadye Marg, Mumbai, India
- Presented a research paper entitled "Convergence of Wavelet Packet Series of Convolution Bound of the Kernel Q<sub>j</sub><sup>n</sup>(x ,y )", in ICNFESMH-2018, Feb18,2018, Senapati Bapat Road Pune, Maharashtra, India
- 5. Presented a research paper entitled "Moments of Wavelet Packets Approximations of some Smooth Functions", in ICRTESM-2018, March11, 2018, Punjab University Campus Chandigarh, India

# SEMINARS/ WORKSHOPS/ CONFERENCES ATTENDED

- 1. 61<sup>st</sup> Annual Conference Of The **INDIAN MATHEMATICAL SOCIETY** DECEMBER 27-30, 1995 (Aligarh Muslim University, Aligarh, India)
- 2 Fourth Annual Conference Of The Indian Society of Industrial and Applied Mathematics(ISIAM) April 6 8, 1996(Jamia Millia Islamia, New Delhi, India)
- 3. CONFERENCE ON FUNCTIONAL ANALYSIS AND ITS APPLICATIONS August 19 22, 1996 (Jamia Millia Islamia, New Delhi)
- 4. International Conference On "Function Spaces and Applications to Partial Differential Equations" December 15-19, 1997, University of Delhi, Delhi.
- 5. Workshop on "Industrial Mathematics" Under the auspices of Indian Society of Industrial and Applied Mathematics(ISIAM) April 11-12, 1998 (Jamia Millia Islamia, New Delhi, India).
- 6. Conference On "FUNCTIONAL ANALYSIS AND ITS APPLICATIONS", January 22-25,1999 (University of Delhi, Delhi)
- 7. International Instructional Workshop On "WAVELETS AND APPLICATIONS" August 16 27, 1999 (University Of Delhi, Delhi)
- 8. Advanced Training in Mathematics Schools ATM School for Lecturers in "Algebra and Linear Algebra" June 5 July1, 2006 (I.I.T. Bombay, Powai, Mumbai, India)
- 9. National Conference On "HISTORY OF MATHEMATICS AND RECENT DEVELOPMENTS" December 20 22, 2006( Maharshi Dayanand University, Rohtak, India)

10. Workshop Cum Training Programme on "Modern Trends in Celestial Mechanics and Astronomy", March 17-19, 2010 (Deshbandhu College)
<b>11.</b> National Workshop on " <b>Scilab Advanced</b> " at Bhaskaracharya Pratishthana, Pune from Sep27 – Oct1,2010.
<b>12.</b> National Seminar on "Recent Development in Mathematics and its Applications" held on Feb3, 2012, at Govt. P. G. College, Gurgaon.
13. National Conference on "Applied Mathematics and Computational Physics", from Feb25-26, 2012, at Hindu College, Moradabad.
14. ATM workshop and conference on "Development of Mathematics in India", from Feb06-15, 2013., held at IIT Bombay.
15. Personality Dep and Life Skill Capsule (PDLS) from May13-16, 2013, at NCC Gp HQ Delhi 'B', Kirti Nagar, New Delhi.
16. 2 <sup>nd</sup> National Conference on "Applications of Mathematics in Science, Technology & Management", organized by Department of Mathematics SRMS College of Engg. & Technology, Bareilly.
(Dr. Tarun Kumar Garg