



## **Dr. Praveen Agarwal**

(M.Sc., M. Phil., Ph. D)

*Associate Professor*

### **Bio & Contact**

#### Birth

- Place: Jaipur, Rajasthan, INDIA
- Nationality: India

#### **Address**

- **Home:** P. No, 3 Maruti Colony, Diggi Malpura Road, Sanganer, Jaipur, Rajasthan India.  
[Postal code: 302029] [Home Phone: +91-141-2732603]
- **Office:** Department of Mathematics, Anand International College of Engineering, Jaipur, Near Kanota, Agra Road, Bassi, Jaipur, Rajasthan, India.  
[Postal code: 303012] [Office Phone: +91-9694097809]
- **E-mails:** [praveen.agarwal@anandice.ac.in](mailto:praveen.agarwal@anandice.ac.in) [goyal.praveen2011@gmail.com](mailto:goyal.praveen2011@gmail.com)

#### **Education**

- Ph.D. in Mathematics, January 2002--August 2006, Rajasthan University, Jaipur
- M. Phil in Mathematics, July 2001-June 2002, Rajasthan University, Jaipur
- M.Sc. in Mathematics, July 1998- June 2000, Rajasthan University, Jaipur
- B.Sc. in Mathematics, July 1995-June 1998, Rajasthan University, Jaipur

#### **Research Interest**

- **Broadly:** Special Functions, Fractional Calculus, Integral Transform and Mathematical Physics.



## **Experience**

### **Professional Experience**

- Associate Professor, July 2010--Present, Anand International College of Engineering Jaipur
- Associate Professor, July 2008-- June 2010, Global Institute of Technology, Jaipur
- Assistant Professor, July 2005-- June 2008, Global Institute of Technology, Jaipur
- Assistant Professor, July 2005-- June 2008, Global Institute of Technology, Jaipur
- Guest faculty, Assistant Professor, January 2002-- December 2004, Malviya National Institute of Technology, Jaipur.

### **Teaching Experience**

- Engineering Mathematics
- Advanced Engineering Mathematics
- Higher Engineering Mathematics
- Operation Research
- Statistics & Probability Theory

## **Activities**

### **Membership of Professional Bodies**

- A Member of Who's Who in the World 2014 (31th pearl Anniversary Edition).
- A Member of Who's Who in the World 2013 (30th pearl Anniversary Edition).
- A Member of the American Biographical Institute's prestigious honor "MAN OF THE YEAR 2012". Of ABI.
- A Member of "The Cambridge Certificate for Outstanding Educational Achievement" 2012, of IBC.
- A Member of "2000 Outstanding Intellectuals of the 21<sup>st</sup> Century 2012" International biographical centre, Cambridge, England.
- A Member of Governing Body of Anand International College of Engineering 2011.
- A Member of Who's Who in Science and Engineering 2011-2012 (11th Edition).
- A Member of Who's Who in the World 2012 (29th Edition).
- A Life member of the International Association of Engineers, (IAENG/1112298).
- A Senior member of the International Association of Computer Science and Information Technology.( IACSIT/80345446)
- A Member of the IAENG Society of Scientific Computing.(IAENG/SSC/ 111229).

## Membership of Mathematical societies

- A Life member of “Rajasthan Academy of Physical Sciences”.
- A Life member of “Society for Special Function and their Applications”.
- A Life member of “Ramanujan Mathematical Society”.
- A Senior Member of Science and Engineering institute (SCIEI). (M.No. 20130311002).
- Member, American Mathematical Society (AMS)

## Experience as a Reviewer and Referee

- Reviewer: AMS-Mathematical Review (Reviewer No. 90881).
- Reviewer: Zentralblatt MATH (Reviewer No. 14485).
- Reviewer: European Journal of Pure and Applied Mathematics (SCI Journals).
- Acting as a referee for some of the reputed Indian and foreign journal

## Editorial Board Member in International Journals

- **Editor-in-Chief**, International Journal of Mathematical Research (IJMR).
- **Managing Editor**, American Journal of Applied Mathematics and Statistics.
- **Managing Editor**, American Journal of Mathematical Analysis.
- **Managing Editor**, Applied Mathematics and Physics.
- **Chief Technical Advisor**, International Journal of Soft Computing and Engineering.
- **Chief Technical Advisor**, International Journal of Innovative Sciences and Modern Engineering (IJISME).
- **Technical Editor**, Journal of Applied Sciences.
- **Technical Editor**, Trends in Applied Sciences Research.
- **Technical Editor**, Asian Journal of Scientific Research.
- **Technical Editor**, Asian Journal of Mathematics & Statistics.
- **Technical Editor**, Asian Journal of Applied Sciences.
- **Member, Editorial Board**, South Asian Journal of Mathematics.
- **Member, Editorial Board**, Pure and Applied Mathematics Journal.
- **Member, Editorial Board**, International Journal of Pure Mathematics.
- **Member, Editorial Board**, International Journal of Basic, Applied & Social Sciences.
- **Member, Editorial Board**, Discovery publication.
- **Member, Editorial Board**, Open Journal of Mathematical Modeling.
- **Member, Editorial Board**, International Journal of Statistika and Matematika.
- **Member, Editorial Board**, Global Open Research Journal of Mathematics.
- **Member, Editorial Board**, International Journal of Physics, Chemistry and Mathematics.
- **Member, Editorial Board**, International Journal of Scientific and Innovative Mathematical Research.
- **Member, Editorial Board**, Global Journal of Theoretical and Applied Mathematical Sciences.
- **Member, Editorial Board**, American Journal of Mathematics and Statistics.
- **Member, Editorial Board**, Asian Journal of Current Engineering & Math's.
- **Member, Editorial Board**, Shiv Shakti International Journal in Multidisciplinary and Academic Research.
- **Member, Editorial Board**, World Science Publisher.



- **Member, Editorial Board**, International Journal of Engineering and Advanced Technology.
- **Member, Editorial Board**, International Journal of Soft Computing and Engineering.
- **Member, Editorial Board**, Indian Journal of Engineering.
- **Member, Editorial Board**, Indian Journal of Science.
- **Member, Editorial Board**, International Journal of Scientific Research and Application.
- **Member, Editorial Board**, International Journal of Advance Mathematics and Statistics.
- **Member, Editorial Board**, Walaik Journal of Science and Technology.
- **Member, Editorial Board**, International Journal of Scientific and Engineering Research.
- **Member, Editorial Board**, Lecture Notes in Information Science and Technology.
- **Member, Editorial Board**, CSCanada Studies in Mathematical Sciences.
- **Member, Editorial Board**, Asian Journal of Mathematical Sciences.
- **Member, Editorial Board**, International Journal of Advanced Research in Management and Social Sciences.
- **Member, Editorial Board**, International Journal of Statistika and Matematika.
- **Member, International Scientific Committee**, International scientific Academy of Engineering & technology.
- **Member, International Scientific Committee**, World Congress on Engineering (WCE) 2013,
- **Member, International Scientific Committee**, The International Conference of Applied and Engineering Mathematics (ICAEM).

## **Guest Editor**

- **The Scientific World Journal**, Special Issue on Swarm Intelligence and Its Applications, 2014.
- **The Scientific World Journal**, Special Issue on Swarm Intelligence and Its Applications, 2013.
- **Mathematical Problems in Engineering**, Special Issue on Artificial Intelligence and Its Applications, 2013.

## **Visits to Foreign Countries**

- Invited by The Professor Junesang Choi, Department of Mathematics, Dongguk University, Republic of Korea, for 10 days during January and February of 2013 in order to talk about and work the common research parts.
- Invited by TOBB University of Economics and Technology in Ankara, to give a talk at the International Conference on Applied Mathematics & Approximation Theory, (AMAT 2012) held from 17-20 May 2012 in the TOBB University of Economics and Technology in Ankara, (Turkey).



## **Award of Fellowships and Gold Medals**

- Awarded the International Travel Grant from Human Resource Development Group Council of Scientific & Industrial Research (CSIR), to attend International Congress on Honor of Prof. H.M.Srivastava 2012 held from 23-26 July 2012 in the Uldag University, Bursa, (Turkey).
- Awarded the International Travel Grant from Ministry of Science and Technology, Department of Science and Technology Government of India (ITS) to attend International Conference on Applied Mathematics & Approximation Theory, AMAT 2012 held from 17-20 May 2012 in the TOBB University of Economics and Technology in Ankara, (Turkey).
- Awarded Research Fellowship from Malviya National Institute of Technology of Jaipur for three years during the session 2002-2004.

## **Invited talk in Seminar/Conferences/STTP/QIP**

- Invited by TOBB University of Economics and Technology in Ankara, to give a talk at the **International Conference on Applied Mathematics & Approximation Theory, (AMAT 2012)** held from 17-20 May 2012 in the TOBB University of Economics and Technology in **Ankara, (Turkey)**.
- Invited by University of Delhi, Delhi, to participate at the International Conference in Honour of Ramanujan of title "**The Legacy of Srinivasa Ramanujan**" to be organized by the University of Delhi during Dec 17-22, 2012. **(INDIA)**.
- Invited by Indian Institute of Science, Bangalore, to participate at the **Conference in Honour of Sixth Birthday of Rajendra Bhatiya** held from 27-30 December 2012 in the Mathematics Department of **Indian Institute of Science, Bangalore (INDIA)**.
- International Conference on the Legacy of Srinivasa Ramanujan held from 17-22 December 2012 in the University of Delhi, (India).
- International Conference on Applied Mathematics & Approximation Theory, (AMAT 2012) held from 17-20 May 2012 in the TOBB University of Economics and Technology in Ankara, (Turkey).
- International Conference On Special Functions & Their Applications (ICSF 2011) & Symposium on Works of Ramanujan (Xth Annual Conference of SSFA) to be held in Department of Mathematics & Statistics, J. N. Vyas University, Jodhpur (Rajasthan), India, from July 28-30, 2011.
- "Workshop on Ramanujan's Mathematics" to be held in The National Academy of Sciences India, Allahabad from December 22-24, 2010.
- National Conference on Advances in Wireless and Optical Communication Technologies 2010 to be held in Poornima College of Engineering, Jaipur from August 7-8, 2010.



- 21<sup>st</sup> National Conference of Rajasthan Ganita Parishad on Recent Trends in Mathematics & Actuarial Sciences held at Department of Mathematics, Malviya National Institute of Technology, Jaipur from February 20 - 21, 2010
- National Conference on “Recent Developments in Engineering Mathematics & Information Technology” held at Department of Mathematics, Poornima College of Engineering, Jaipur from December 25-26, 2009.
- Workshop on Developing Core Teaching and Learning Competencies, held at Global Institute of Technology, Jaipur from June 8-13, 2009.
- International Conference on “Special Functions and their Engineering Applications” ” held at Department of Mathematics, Malviya National Institute of Technology, Jaipur from December 15-16, 2007.
- Workshop on Enrichment of Teaching-Learning Skills, held at Global Institute of Technology, Jaipur from December 13-15, 2007.
- 12<sup>th</sup> Annual Conference of Vijnana Perished of India and National Symposium on Applications of Special Functions organized by the Dept. of Mathematics & Statistics, Jai Narain Vyas University Jodhpur, Rajasthan, India, between October 25-27, 2007.
- AICTE-STAFF Development Programme on “Application Orientation in Engineering Mathematics” ” held at Department of Mathematics, Malviya National Institute of Technology, Jaipur from June 25<sup>th</sup> to July 6<sup>th</sup> 2007.
- International Conference on “Advanced Manufacturing Technologies” held at Jagan Nath Gupta Institute of Technology, Jaipur from December 15, 2006.
- International Conference on “Special Functions and their Applications” ” held at Department of Mathematics, University of Pune, and Maharashtra from February 21-23, 2006.
- 4<sup>th</sup> Annual Conference of “Society for Special Functions and their Applications” held at Department of Mathematics, University of Rajasthan, Jaipur from February 20-22, 2003.

## **Publications**

### **Books**

- P. Agarwal, A Study of New Trends and Analysis of Special Function LAP LAMBERT Academic Publishing is a trademark of: AV Akademikerverlag GmbH & Co. KG ( ISBN 978-3-659-312861).
- P. Agarwal, Engineering Mathematics-I, Published in Paragon International Publishers, New Delhi, 2007.
- P. Agarwal and S. Jain, Advanced Mathematics (EC, EIC, EE) Published in Paragon International Publishers, New Delhi, 2008.
- P. Agarwal and S. Jain, Advanced Engineering Mathematics-IV, Published in Nandani Prakashan Pvt. Ltd., 2011.

## Research Papers

1. **Praveen Agarwal**, Certain properties of the Generalized Gauss Hypergeometric Functions, *J. Appl. Math. Statist. Inform.* (Accepted).
2. **Praveen Agarwal**, M. Chand and S.D. Purohit, A note of generating functions involving the generalized Gauss hypergeometric functions, *Nat. Academy Sci. Letters* (Accepted).
3. J. Choi and **P. Agarwal**, Certain generating functions involving Appell series, *Far East J. Math. Sci.* (Accepted).
4. D. Baleanu, S.D. Purohit and **Praveen Agarwal**, On fractional integral inequalities involving Hypergeometric operators, *Chinese Journal of Mathematics* (Accepted).
5. D. Baleanu, **Praveen Agarwal** and S.D. Purohit, Certain fractional integral formulas involving the product of generalized Bessel functions, *The Scientific World Journal* (Accepted).
6. J. Choi and **P. Agarwal**, Certain Classes of Infinite Series Deducible from Mellin-Barnes Type of Contour Integrals, *J. Korea Soc. Math. Educ. Ser. B Pure Appl. Math.* (Accepted).
7. J. Choi and **P. Agarwal**, Certain unified integrals involving a product of Bessel functions, *Honam Math. J.* (Accepted).
8. **P. Agarwal** and M. Chand, A New Sequence of Functions Involving Product of the  ${}_pF_q$ , *Mathematical Sciences & Applications E-Notes (MSAEN)* (Accepted).
9. J. Choi and **P. Agarwal**, Note on the Classical Watson's Theorem for the series  ${}_3F_2$ , *Honam Math. J.* (Accepted).
10. D. Kumar, **Praveen Agarwal** and S.D. Purohit, Generalized fractional integration of the H-function involving general class of polynomials, *Walailak J. Sci. & Tech.* (Accepted).
11. **Praveen Agarwal**, Certain multiple integral relations involving generalized Mellin-Barnes type of contour integral, *Acta Univ. Apulensis Math. Inform.* 33 (2013), 257-268.





12. J. Choi and P. Agarwal, Certain Unified Integrals Associated with Bessel Functions, *Boundary Value Problems* 2013, **2013:95**.
13. P. Agarwal and M. Chand, On new sequence of functions involving  $pFq$ , *South Asian Journal of Mathematics*. **3 (3)** (2013), 199-210.
14. P. Agarwal, Fractional Integration of the Product of Two Multivariable H-Functions and a General Class of Polynomials, *Advances in Applied Mathematics and Approximation Theory*, **Springer Proceedings in Mathematics & Statistics** **41**( 2013), 359-374.
15. P. Agarwal and M. Chand, Graphical interpretation of new sequence of function involving Mittag-Leffler functions using Matlab, *American Journal of Mathematics and Statistics* **3(2)** (2013), 73-83.
16. P. Agarwal and SD Purohit, The Unified Pathway Fractional integral Formulae, *J. Fract. Calc. Appl.*, **4(9)** 2013, 1-8.
17. P. Agarwal, Further Results on Fractional Calculus of Saigo operator, *Appl. Appl. Math.* **7(2)** (2012), 585-594.
18. P. Agarwal and M. Chand, Graphical Analysis of Kampé De Fériet's Series with Implementation of Matlab, *International Journal of Computer Applications* **59(4)** (2012), 1-10.
19. P. Agarwal, Fractional integration of the product of two H-functions and a general class of polynomials, *Asian Journal of Applied sciences* (2012), 1-10.
20. P. Agarwal and M. Chand, New finite integrals involving product of  $\overline{H}$ -function and Srivastava Polynomials, *Asian Journal of Mathematics & Statistics*, 2012.
21. P. Agarwal, On a New Theorem Involving Generalized Mellin-Barnes type of Contour Integral and Srivastava Polynomials, *J. Applied Mathematics, Statistics and Informatics* **8(2)** (2012), 29-35.
22. P. Agarwal, New Unified Integral Involving A Srivastava Polynomials and  $\overline{H}$ -function, *J. Fract. Calc. Appl.* **3(3)** (2012), 1- 7.
23. P. Agarwal and S. Jain, New Integral Formulas Involving Polynomials and  $\overline{I}$ -function, *J. Applied Mathematics, Statistics and Informatics* **8(1)** (2012), 79-88.
24. P. Agarwal, Generalized Fractional Integration of the  $\overline{H}$ -Function, *Le Matematiche*. **LXVII** (2012), 107–118
25. P. Agarwal, On Applications of Fractional Calculus Involving Summations of Series, *American Journal of Mathematics and Statistics* **2(6)** (2012), 221-225.





26. **P. Agarwal** and M. Chand, A Study of New Euler Type Integrals, *International Journal of Scientific Research and Application* **1** (1) (2012), 20-29.
27. **P. Agarwal**, On a Unified Integral Involving the Product of Srivastava's Polynomials and Generalized Mellin-Barnes Type Contour Integral, *Advances in Mechanical Engineering and its Applications* **2**(2) (2012), 158-161.
28. **P. Agarwal**, On A New Unified Integral Involving Hypergeometric Functions, *Advances in Computational Mathematics and its Applications* **2**(1) (2012), 239-242.
29. **P. Agarwal**, On New Unified Integrals involving Appell Series, *Advances in Mechanical Engineering and its Applications* **2**(1) (2012), 115-120.
30. **P. Agarwal** and M. Chand, New finite integrals involving product of  $\overline{H}$ -function and Srivastava Polynomials, *Asian J. Math. Stat.* **5**(4) (2012), 142-149.
31. **P. Agarwal**, Integral Formulae's Involving Two  $\overline{H}$ -function and Multivariable Polynomials, *Global Journal of Science Frontier Research Mathematics & Decision Sciences* **12**(4) (2012).
32. **P. Agarwal** and M. Chand, New Finite Integrals of Generalized Mellin-Barnes Type of Contour Integrals, *Global Journal of Science Frontier Research Mathematics & Decision Sciences* **12**(3) (2012).
33. **P. Agarwal** and M. Chand, New Theorems Involving the Generalized Mellin-Barnes Type of Contour Integrals and General Class of Polynomials, *Global Journal of Science Frontier Research Mathematics & Decision Sciences* **12**(3) (2012).
34. **P. Agarwal**, Fractional integration of the product of two H-functions and a general class of polynomials, *Asian Journal of Applied sciences* **5**(3) (2012), 144-153.
35. **P. Agarwal**, On multiple integral relations involving generalized Mellin-Barnes type of contour integral, *Tamsui Oxf. J. Math. Sci.* **27**(4) (2011), 449-462.
36. **P. Agarwal** and M. Chand, Certain Integral Properties of Generalized Class of Polynomials and Generalized contour integral Associated with Feynman Integrals, *International Journal of Physics and Mathematical Sciences* **1** (1) (2011), 1-8.
37. **P. Agarwal** and S. Jain, Further Results on Fractional Calculus of Srivastava Polynomials, *Bull. Math. Anal. Appl.* **3**(2) (2011), 167-174.
38. **P. Agarwal** and S. Jain, New Finite Double Integral Formulae Involving Polynomials and Functions of General Nature, *Journal of Applied Mathematics, Statistics and Informatics*, **7**(2), 2011.



39. **P. Agarwal**, S. Jain and M. Chand, Finite Integrals Involving Jacobi Polynomials and I-function, *Theoretical Mathematics & Applications* **1(1)** (2011), 115-123.
40. **P. Agarwal** and S. Jain, On integrals involving product of  $H[x_1, \dots, x_r]$  and the generalized polynomials  $S_{n_1, \dots, n_r}^{m_1, \dots, m_r}[x]$ , *Acta Cienc. Indica Math.* **XXXVII (1)** (2011), 167-174.
41. **P. Agarwal**, S. Jain and M. Chand, Integrals involving product of  $H[x_1, \dots, x_r]$  and the generalized polynomials  $S_{n_1, \dots, n_r}^{m_1, \dots, m_r}[x]$ , *Int. Math. Forum* **6(11)** (2011), 529-539.
42. **P. Agarwal**, On Integrals involving product of  $H[x_1, \dots, x_r]$ ,  $R_n^{(\alpha, \beta)}[x]$  and  $S_{n_1, \dots, n_r}^{m_1, \dots, m_r}[x]$ , *Rev. Bull. Calcutta Math. Soc.* **18(1)** (2010), 13-20.
43. **P. Agarwal**, S. Jain and M. Chand, New integral formulas involving polynomials and I-functions, *Proc. of Math. Soc.* **26** (2010), 61-68.
44. **P. Agarwal** and S. Jain, On unified finite integrals involving a multivariable polynomial and a generalized Mellin Barnes type of contour integral having general argument, *Nat. Acad. Sci. Lett.* **32(9-10)** (2009), 281-286.
45. **P. Agarwal**, On Certain Functional Relations, *Bull. Pure. Appl. Math.* **2(2)** (2008), 199-205.
46. **P. Agarwal** and C. L. Koul, Relations Involving  $\Psi$ -Functions and H-functions of Several Variables, *J. Indian Acad. Math.* **28(1)** (2006), 63-72
47. **P. Agarwal** and C. L. Koul, Relations Involving  $\Psi$ -Functions and H-functions, *South East Asian J. Math. Math. Sci.* **3(2)** (2005), 1-8.
48. **P. Agarwal** and C. L. Koul, Integrals involving product of  $H[x, y]$  and the generalized polynomials  $S_{n_1, \dots, n_r}^{m_1, \dots, m_r}[x]$ , *Proc. Nat. Acad. Sci. India*, **74(A) IV** (2004), 507-514.
49. **P. Agarwal** and C. L. Koul, Summation Formulae Involving  $F^{(3)}$ , *Ganita Sandesh* **18(2)** (2004), 125-132.
50. **P. Agarwal** and C. L. Koul, On Generating Functions, *J. Rajasthan Acad. Phys. Sci.* **2(3)** (2003), 173-180.



## Editorials

- Yudong Zhang, **Praveen Agarwal**, Vishal Bhatnagar, Saeed Balochian and Jie Yan, Swarm Intelligence and its Applications, *The Scientific World Journal*, 2013.

## Ph. D. and Master's Students

**Name:** Mr. Mehar Chand

**Current designation and Employment:** Assistant Professor, Department of Mathematical Sciences, G. G. S. Group of Institutions, Talwandi Sabo, Bathinda-151302, India.

**Registration in University:** Sighania University, Rajasthan.

**Area:** Special Functions, fractional Calculus

**Title of Ph.D. thesis:** Investigations in Generalized Hypergeometric Functions, Special Functions and Generating Functions (**Submitted**)

**Name:** Mr. Saket Kumar Dwivedi

**Current designation and Employment:** Assistant Professor, Department of Mathematical Sciences, Anand International College of Engineering, Jaipur-303012, India.

**Registration in University:** Suresh Gyan Vihar University, Rajasthan.

**Area:** Special Functions, Integral Transform

**Title of Ph.D. thesis:** Investigation in Generalized Special Functions and Fractional Calculus (**On going**).