FACULTY PROFILE

Name: Dr. Seema Agarwal

Designation: Assistant Professor

E.Mail: seemas@srmist.edu.in

Professional Qualification:

Course	Institution/University	Year of Passing	Marks (%)	Remarks
Ph.D.	Dr. B. R .Ambedkar University Agra	2012		Awarded
M.Phil.(Maths)	Dr. B. R .Ambedkar University Agra	2004	83.00%	First Class
M.Sc. (Maths)	Dr. B. R .Ambedkar University Agra	2003	72.67%	First Class
B.Sc.	Dr. B. R .Ambedkar University Agra	2001	63.70%	First Class

Publications (Journals & Conferences):

Publications:

- **Jain M., Agarwal, S. (2010): "**A discrete-time $Geo^X/G/1$ retrial queueing system with starting failures and Optional service"**: Int. J. Operational Research, Vol. 8, No. 4, pp. 428-457.**
- **Jain M., Agarwal, S. (2018):** "Finite buffer queueing system with accessible and non-accessible batches and single vacation": **Jnanabha**, Special Issue, Proceedings: **MSSCID-2017, 20th Annual Conference of VPI, Jaipur, India,** pp. 45-53.
- **Jain M., Agarwal, S. (2019):** "Optional K-Phase Vacation for $M^X/G/1$ Queue with bulk arrival and state dependent rates": **International Journal of Engineering Applied Science and Technology,** Vol. 3, No. 10, pp. 32-43**.**
- **Navin Ahlawat, Seema Agarwal, Tripti Pandey, Ajay Singh Yadav, Aupam Swami (2020):** "White Wine Industry of Supply Chain Management for Ware House Using Neural Networks" **TEST Engineering and Management,** Vol 83, pp. 11259-11266.

- **Ajay Singh Yadav, Navin Ahlawat, Seema Agarwal, Tripti Pandey, Anupam Swami (2020):** "Red Wine Industry of Supply Chain Management for distribution center using Neural Networks", **TEST Engineering and Management**, Vol 83, pp. 11215-11222.
- **Ajay Singh Yadav, Tripti Pandey, Navin Ahlawat, Seema Agarwal, Aupam Swami (2020):** "Rose Wine Industry of Supply Chain Management for Storage using Genetic Algorithm", **TEST Engineering and Management,** Vol 83, pp. 11223-11230.
- **Ajay Singh Yadav, Kapil Kumar Bansal, Shivani, Seema Agarwal, and R. Vanaja (2020):** "FIFO in Green Supply Chain Inventory Model Of Electrical Components Industry With Distribution Centres Using Particle Swarm Optimization", **ADV Maths Sci J.**, Vol. 9, No. 7, pp. 5115-5120.
- **Seema Agarwal, Ajay Singh Yadav, Vennapoosa Dinesh, Kolluru Sai Sri Vatsav, Kolluru Sai Surya Prakash, Sushma Jaiswal:** "By artificial intelligence algorithms and machine learning models to diagnosis cancer", **Materials Today: Proceedings, In Press (from 24 July 2021).**
- **Mohammed Wajeed, Shivam Tiwari, Rajat Gupta, Amir Junaid Ahmad, Seema Agarwal, Sajjad Shaukat Jamal: "**A Breast Cancer Image Classification Algorithm with Multiclass Support Vector Machine Applied to a 2C Algorithm", Journal of Healthcare Engineering, published (Id 3875525)
- **Ronaldo, R., Arora, T.K., Seema Agarwal, Lobanova, A.Vladimirovna, V.T. and Yadav, A.S.(2022): "**AI Based Periodic Forecasting Rate Prediction with Secured Optimized Cryptographic Method Sales Forecasting in Retail Business Sector**,** IEEE International Interdisciplinary Humanitarian Conference for Sustainability (IIHC-2022), November 18th & 19th 2022.

PATENT

- **Title:** Design and Implementation of Convolution Nural Network on Edge Computing Smart Phone for Human Activity Recognition
  Patent Number: 2021101172
  Date of Filing: 04/03/2021
  Grant and Publication date: 21/04/2021
  IP Austrailian

- **Title: Smart data Management system using Big data**
  Application Number: 202111027659
  Date of Filing: 21/06/2021
  Publication date: 16/07/2021
  Intellectual Property of India (Controller General of Patents, Designs and Trademarks)
  Department of Industrial policy and promotion, Ministry of Commerce & Industry

- **Title: The block chain Technology to protect Data Access**
  Application Number: 2022110127681
  Date of Filing: 9/03/2022
  Publication date: 18/03/2022
  Intellectual Property of India (Controller General of Patents, Designs and Trademarks)
  Department of Industrial policy and promotion, Ministry of Commerce & Industry

- **Title: Optional K-Phase Vacation For Mx/G/1 Queue With Bulk Arrival And State Dependent Rate**
  Application Number: 202311003914
  Date of Filing: 20/01/2023
  Publication date: 27/01/2023
  Intellectual Property of India (Controller General of Patents, Designs and Trademarks)
  Department of Industrial policy and promotion, Ministry of Commerce & Industry

- **Title: Magnetic anisotropy in the ferromagnetic Mn and N doped ZnO Nanocrystals**
  Application Number: 202311025404
  Date of Filing: 04/04/2023
  Publication date: 19/05/2023
  Intellectual Property of India (Controller General of Patents, Designs and Trademarks)
  Department of Industrial policy and promotion, Ministry of Commerce & Industry

- **Title: The impact of using Automation is transforming the supply chain industry**
  Application Number: 202321026411
  Date of Filing: 09/04/2023
  Publication date: 12/05/2023
  Intellectual Property of India (Controller General of Patents, Designs and Trademarks)
  Department of Industrial policy and promotion, Ministry of Commerce & Industry

Papers Presented

- National Conference on "Information Technology, Operations Research and Computing" (ITORC-2K4), at Daudayal Institute of Vocational Education, Agra.
- "19th Annual Conference Ramanujan Mathematical Society" in 2004 at I.B.S, Agra.
- 11th Annual Conference of Vijnana Parishad of India (VPI) Symposium on "Mathematical modeling of Real life Problems and Computer Applications" 2005 at Anand Engineering College, Agra.
- Conference on "Differential Geometry and Topology in the perspective of Modern trends" (D.G.T.P.M.T.-2006) at Dayalbagh, Agra.
- "International Congress and 8th Conference of Indian Society of Industrial & Applied Mathematics on Certain Emerging Areas in Applicable Mathematics And 17th Annual Conference of Jammu Mathematical Society" (2007) at Jammu.
- "Vijnana Parishad of India" Society for Applications of Mathematics, held at Jodhpur (2007).
- "Thirteenth Annual Conference & First International Conference on Mathematical Modeling in Engineering and Biosciences", held at Agra (2008).
- International Conference on Modeling of Engineering & Technological Problems and 9th Biennial National Conference of ISIAM, held at Agra (14-16 Jan 2009).
- "20th annual conference of Vijnana Parishad of India" (VPI-2017) to held in Manipal University, Jaipur during Nov 24-26, 2017.
- 21st Annual Conference of Vijnana Parishad of India on Modeling, Optimization and Computing for Technological and Sustainable Development (MOCTSD-2019), held at SRMIST Delhi-NCR Campus, Ghaziabad during 26th-28th April 2019.
- "2nd International Conference on Mathematical Modeling, Applied Analysis and Computation-2019 (ICMMAAC-19)" to held at JECRC University, Jaipur during Aug 8-10, 2019.

- TEQIP-III RTU (ATU) Sponsored International Conference on "Recent Development in Engineering and Technology" to held in Anand International College of Engineering, Jaipur during Sep 14-15, 2019.
- "6th International Conference on Recent Advances in Science (ICRAS-2022)" to held at Invertis University, Bareilly during April 1-2, 2022.
- USTM-AIMT Summer International Conference on "Innovations in Management, Science and Technology (ICIMST-2022)" to held in University of Science and Technology, Meghalaya in Association with American Institute of Management and Technology (AIMT), USA during August 5-6, 2022.
- "International Conference on Advancements and Key Challenges in Green Energy and Computing (AKGEC 2023)" to held in Ajay Kumar Garg Engineering College, Ghaziabad, during 24-25 February 2023.
- "International conference on Modern Engineering, Science and Management (MESM-2023)" to held at Parvatibai Genba Moze college of Engineering, Wagholi, Pune, during June 10-11, 2023.

Awards and Achievements

- Give **Guest Lecture at Amity University** on 27th March 2021 on the topic "Discrete Probability Distribution with Realistic Approach".
- Give **Guest Lecture at Amity University** on 1st Nov 2021 on the topic "Applications of Partial Differential Equations".
- Give **Guest Lecture at Amity University** on 24th Nov 2021 on the topic "Real life Advantages of Partial Differential Equations".
- **NPTEL Certification** for the course "Numerical Methods", 8 week course , Aug-Oct 2019.
- **NPTEL on Swayam** platform Certification for the course "Transform Calculus and its applications in Differential Equations", 12 week course, Jan-April 2020.
- **Design Thinking Trainer** certified by school of Design Thinking, Chennai.

Workshops/Seminars/FDPs

Name of course/conference etc	Name of the organizing institute and place	Period	National / International
Computer Science and Business Systems	Tata Consultancy Services, conducted at Indian Statistical Institute, Kolkata	June 24th-26th, 2019	National
Computer Science and Business Systems	Tata Consultancy Services, conducted at TCS	9th-10th, Dec 2019	National
Faculty Development Program on "LaTeX in Scientific Writing"	Babu Banarasi Das, Northern India Institute of Technology, Lucknow	19th-21st June 2020	National

Workshop on Numerical And Analytical Techniques in Engineering Problem	SRM Institute of Science and Technology, Kattankulathur	19th-21st Jan 2022	International
Faculty Development Program on Mathematics and Its Applications in Science and Technology.	SRM Institute of Science and Technology, Kattankulathur	6th-16th July 2020	International
Short Term Training Program on "MATLAB -Stataitics and data Science"	Sagar Institute of Research and Technology, Bhopal	27thJuly-1st Aug	National
Advanced Security Analytics and Machine Learning	SRMIST, Delhi-NCR Campus, Ghaziabad	18-23rd April 2022	National
Faculty Development Program on "Contemporary Trends and Approaches of English Language Teaching & Soft Skills	SRMIST, Delhi-NCR Campus, Ghaziabad	16-21st May 2022	National
Faculty Development Program on "Research Perspectives in Mathematics and its Applications"	Department of Mathematics, Sathyabama Institute of Science and Technology, Chennai	4-16th July 2022	International
Faculty Development Program on "Tools and Techniques in Translational Research"	Faculty of Science, Invertis University, Bareilly	18-23rd July 2022	National
Faculty Development Program on " Applications of Mathematics in Applied Sciences and Engineering"	GMR Institute of Technology-Rajam & National Institute of Technology, Warangal	30th January-03rd February, 2023	International
Faculty Development Program on " Developing Healthy Work Culture"	NITTR Chandigarh, SRMIST, Delhi-NCR Campus, Ghaziabad	13-17 March 2023	National
Workshop on " Digital Creativity skills"	Adobe Express, AICTE	March, 2023	National
Inculcating Human Values in Technical Education (UHV-1)	AICTE	6-10 Feb	National

Faculty Development Program on" R-Programming for Data Science "	Mizan-Tepi University, Ethiopia in collaboration with poornima University, jaipur; Baba Farid college, Bhatinda, MathTech Thinking Foundation, India	April 24-May 7, 2023	International
Workshop/Training on "Computational Special functions and their Applications	MathTech Thinking Foundation, fazilka India; Malviya National Institute of Technology, Jaipur; Sardar Patel University, Gujarat; Central University of Punjab; Sardar Vallabhbhai National Institute of Technology, Surat	24-30 May 2023	International
Faculty Development Program on "Technology Integration and NEP 2020"	NITTR Chandigarh, SRMIST, Delhi-NCR Campus, Ghaziabad	12-16 June 2023	National
Workshop on "R-programing for Data Science"	Mizan-Tepi university, Ethiopia	24 April-7 May 2023	International
Workshop on "Computational Special Functions and Their Applications	Math Tech Thinking Foundation, Fazilka, India; Malaviya Natinal Institute of Technology, Jaipur; Sardar Patel University, Vallabh Vidyanagar, Gujarat; Central University of Punjab, Bathinda, Punjab, Sardar Vallabhbhai National Institute of Tech Surat	24 May-30 May 2023	International

Courses, Conferences, workshops, seminars etc conducted

Name of Courses, conferences, workshops, seminars	Organizing institute and place	Period	The role played by you – Principle coordinator etc.

21st Annual Conference of Vijnana Parishad of India on Modeling, Optimization and Computing for Technological and Sustainable Development (MOCTSD-2019)	SRMIST Delhi-NCR campus, Ghaziabad	26th-28th April 2019	Organizing Committee Member
Ist International FDP on Role of Optimization in computational Mathematics, Supply Chain Management and Engineering	SRMIST Delhi-NCR campus, Ghaziabad	23rd-28th May 2022	Coordinator

Work Experience:

- **SRMIST**
  Assistant Professor in Maths   **Jan 2018 till present**
- **BBDIT**   **July 2015 to June 2016**
- **Ideal Institute of Management and Technology, Ghaziabad   July 2011 to May 2013**
- **K. P. Engineering College, Agra   Jan 2009 to Jan 2010**
- *Visiting Faculty in RKGIT, 'Nitra' and 'RKGITW'*

Professional Memberships:

➢ Life membership of "Vijnana Parishad of India" (VPI).