

DR. SEEMA KABRA

Dy. Dean, School of Basic & Applied Science

Associate Professor, Mathematics

Sangam University, Bhilwara (Rajasthan)

<https://scholar.google.com/citations?hl=en&user=iqAX0GIAAAAJ>

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Professional Qualification

- **Ph. D (Mathematics)** on Topic “**Study of Fractional Calculus and Integral Transform on Special Functions and Their Applications**” from Sangam University, Bhilwara in 2021.
- **M.Phil.** from Mewar University in 2016.
- **M. Sc. in Mathematics** (2004-06) from M.D.S. University, Ajmer with 68.90% marks.

Educational Qualification

- **B. Sc. in Chemistry, Physics & Mathematics** (2001-2004) from M.D.S. University, Ajmer with 65.48% marks.
- **Sr. Secondary** (2001) in **PCM** from RBSE, Ajmer with 63.23% marks
- **Secondary** (1999) from RBSE, Ajmer with 70.83% marks.

MOOC Course

- 12 Weeks **NPTEL MOOC Course** on “Transform Calculus and its applications in Differential Equations”, secured 73%, Elite certificate, Jan-April, 2025.
- 12 Weeks **NPTEL MOOC Course** on “Regression Analysis”, secured 73%, Elite silver certificate.
- 12 Weeks **NPTEL MOOC Course** on “Mathematical Methods and Its Applications”, secured 90%, Elite gold certificate (Topper).
- 12 Weeks **NPTEL MOOC Course** on “Scientific Computing Using MATLAB”, secured 62% and Elite certificate.
- 12 Weeks **NPTEL MOOC Course** on “Applied Multivariate Statistical Modelling”, secured 77% and Elite silver certificate.

Other

- **PGDBA** from Symbiosis centre for Distance Learning, Pune (2008-2010) with ‘A’ grade

Research Supervisor:

1. Ph. D Awarded-01
2. Guiding 3 research scholars in the field of Mathematics.

Professional Experience

1. **Currently holding the post of Deputy Dean, School of Basic and Applied Science (From December, 2023 till now)**
2. Sangam University, Assistant Dean, School of Basic and Applied Science from September 2021 to December 2023.
3. Sangam University, Bhilwara as Associate Professor from 1st July 2021 to till date.
4. Sangam University, Bhilwara as Assistant Professor from 1st July 2016 to 30 June 2021.
5. Institute of Technology and Management (ITM), Bhilwara, September 27, 2008-June 30, 2016
6. Shri Mahesh Public School – CBSE 9th & 10th (Mathematics), April 2007-September 2008.

Other Professional Responsibilities [at Sangam University]:

1. Compiler of Compendium
 - (a) Compendium of Publications
 - (b) Compendium of projects and Patents
2. Member, Organizing committee, ICAIR-2025.
3. Member, Core committee of AIU-SU-AADC.
4. Co-Convener: Three Days SERB supported International Conference on **“Recent Trends and Innovations in Applied Sciences for Sustainable Development of Environment”** organized by School of Basic and Applied Sciences on 22-24 January, 2024.
5. Member of Editorial Committee for Biannual Newsletter of Sangam University, **PRATIBIMB**.
 - i) Pratibimb, Ed. IV [March 2024]
 - ii) Pratibimb, Ed. V [March 2025]
6. **Abstract Book/ Sovenir** : SERB-DST, Govt. of India, New Delhi, Sponsored International Conference on “Recent Trends & Innovations in applied Sciences for sustainable development of environment” on 22-24 January 2024.
7. Coordinator: National Seminar on **“Common Sense and its Applications**, 5-6 January, 2024.
8. Deputy Dean, School of Basic and Applied Sciences from December 2023 to till date.
9. Convener: Cultural Society, Sangam University, 2023-24.
10. Coordinator, one day “Capacity Building & Personality development Program” supported by National Commission for Women, New Delhi and organized by the Internal Quality Assurance Cell, Sangam University, Bhilwara, 25 April, 2023.
11. Member, Academic Council, 2022-23, 2023-24 till now.
12. Member, Internal Academic Audit Team, from 2022 till now.
13. Member of Scholarship Committee, Sangam University
14. Member, Internal Quality Assurance Cell, Sangam University
15. Member, Tejaswini Cell, Sangam University.

16. Coordinator, NAAC sponsored two Days National Workshop on **Challenges before HEIs in remote areas for achieving Quality Improvement through Assessment and Accreditation Process**, November 24-25, 2022.
17. Organizer, Cultural Events in ICAIR-2022.
18. Head, Registration Team, ICAIR-2022.
19. Convener, Cultural Club, 2022-23.
20. **Assistant Dean**-School of Basic and Applied Sciences from July 2021 to December 2023.
21. Calling Incharge- Campus Office [2021]
22. Program coordinator and mentor of B.Sc (PCM)
23. Program coordinator and mentor of M.SC –Mathematics [Sept 2019-Dec. 2020].
24. SU NAAC Committee Member [2019]
25. Member of NIRF Committee [2021]
26. Convener of Students Cultural Club[2021]
27. Member of Alumni Committee [2020-21]
28. Departmental coordinator for END TERM EXAM (EVEN SEM.) 2020-21
29. Member of Exam Conduction Committee(Paper collection and distribution)
30. Coordinator of Abhivyakti, Cultural Club [2016-2020].
31. Worked as Organizing member in ICAIR-2021
32. Member of Counseling and Telecalling committee of Marketing and Admission Cell.
33. Coordinator of Performing Arts Events (On Stage Events) of La Union, Annual Fest of Sangam University [2019-20]
34. BOS Member of SOBAS

As Member: AIU-SU-AADC (Academic Administrative Development Center)

1. Faculty Development Program on Outcome Based Education: Paradigms Shift in Higher Education, October 14-18, 2024.
2. Faculty Development Program on Integrating Indian Knowledge Systems in Modern Education: An NEP-2020 Perspective, Dates: 16-20, December 2024.
3. Faculty Development Program on "Empowering Research: Tools and Techniques for Effective Research Development," scheduled from February 10-15, 2025
4. Administrative Development program on Effective Governance in Higher Education System, 25April - 2May 2025

Patent

Granted a design patent on **COMPREHENSIVE MATHEMATICS TEACHING KIT FOR STUDENT EDUCATION** International Design Classification: Version: 14-2023.

Research Paper Publications

1. **"Integral Transforms of the Generalized Mittag Leffler Type Function ${}_p^k R_q^{\alpha, \beta, \gamma}(z)$ "**, IJRASET, Vol. 13, Issue 05, May (2025), pp. 3701-3707.
2. **"The Integral Transform of Product of Special Functions"**, SIJMR, Vol. 02, Issue 01, September (2024), pp.19-27.
3. **"Pathway Fractional Integral Operator With Composition Of Generalized Function $G_{p,\eta,r}[a,z]$ "**, YMER, Volume 23 : Issue 08 (August) – 2024, pp.1591-1598.
4. **"Competent Condition For Geometric Properties Q-Starlikeness And Q-Convexity Of Mittag-Leffler Function"**, REDVET, vol. 25, no.1, 2024, pp. 935-941.
5. **"The Fractional Calculus of Product of Special Functions"**, Communications on Applied Nonlinear Analysis, vol.31. no. 5, July 2024, pp.343-351.
6. **"Some Coefficient Inequalities For Q-Starlike And Q-Convex Functions Associated With Normalized Bessel-Struve Kernel Function"**, GANITA, vol.74, no.1, June.2024, pp.73-81.
7. **"Composition of Pathway Integral Operator on Extended Unified Mittag - Leffler Function"**. Mathematical Statistician and Engineering Applications, vol. 71, no. 4, Aug. 2022, pp. 13359-13365.
8. **"Integral Transform of K4-Function"**Journal of Science and Arts, Year 2021, No. 2(55), ISSN: 1844 – 9581 eISSN 2068-3049, Mathematics Section pp. 429-436.
9. **"The Marichev-Saigo-Maeda Fractional Calculus Operators Pertaining to the Generalized K-Struve Function"** Applied Mathematics and Nonlinear Sciences 5(2), 2020, 593–602.
10. **"Marichev-Saigo-Maeda fractional operators on generalized function $G_{p,\eta,r}[a,z]$ "** Mathematics In Engineering, Science And Aerospace Mesa - www.journalmesa.com Vol. 11, No. 2, pp. 371-379, 2020.
11. **"Some Integral Transform Of The Generalized Function $G_{p,\eta,r}[a,z]$ "** Journal of Science and Arts, Year 2019, No. 4(49), ISSN: 1844 – 9581 eISSN 2068-3049, Mathematics Section pp. 859-868.
12. **"The p-k Extended Mittag-Leffler Function and Marichev-Saigo-Maeda Fractional Operators"** International Journal of Research and Innovation in Applied Science (IJRIAS) | Volume IV, Issue VIII, August 2019|ISSN 2454-6194, pp. 12-18.
13. **"Composition of Pathway Integral operator on Generalized k-Wright function"** in International Journal of Scientific Research and Review Volume 8, Issue 6, 2019, ISSN NO: 2279-543X.
14. **"Fractional Calculus of Saigo Fractional Integral Operator on Univalent and p-valent Functions"** in International Journal of Science and Research (IJSR)-August-2015.

Book / Publication

1. **“Compendium of Publications”**, SU Publications, Bhilwara.
2. **“Compendium of Projects and Patents”**, SU Publications, Bhilwara.
3. **“Advanced Statistical Modeling and Inference”** ISBN: 978-81-977885-3-6, REST Publisher, REST Mathematical Society.
4. **“Recent Trends and Innovations in Applied Science”** ISBN: 978-81-970242-3-8, SU Publication.

Book Chapter

1. **“Composition of Univalent and p-valent Functions”** in Coping Change – through Innovation & Value creation for society, December-2017.
2. **“Research and Innovation at Sangam University”** in Sangamotkarsh, *A Saga of Excellence @Sangam University*, ISBN: 978-81-978342-7-1, SU Publication.

Invited Speaker

1. Expert session on **NAAC Criterion II** in Five days Faculty Development Program at **SDM PG Girls College, Bhilwara**, 5 July 2023.
2. Session for Ph.D. Scholars, on Power Point Presentation, Sangam University

Life Membership: Bharat Ganita Parishad

Membership Number: 965/2023

Seminar/Conferences/Workshop

Attended and Presented research papers

1. Attended and Presented Paper in ICAIR-2025.
2. Attended two days National Seminar on **“Common Sense and its Applications”** jointly organized by MLSU, Udaipur and Sangam University, Bhilwara.
3. Attended and Presented Research paper on **“Role of ICT to Achieve Energy Efficient Sustainable Development”** in II International Conference on Engineering, Social Sciences and Management, organized by Sri Balaji College of Engineering and Technology, Jaipur.
4. Participated in the two days **“2nd National Level Workshop on CURRICULUM FRAMEWORK 2023”**, conducted by Institute for Academic Excellence (IAE), Hyderabad in collaboration with Collegiate Education & Technical Education Department, Govt. of Telangana, 17-18 March 2023.

5. Attended NAAC sponsored two Days National Seminar on **“Challenges and Innovative Measures for Enhancement of Education and Research in HEIs of Rural Areas”** at Mewar University, Chittor, October 14-15, 2022.
6. Attended and Presented paper on **“Pathway Integral Operator with Composition of Generalized Function $G_{p,\eta,x}[a,z]$ ”** in International Conference on Analytical Research and Innovations-ICAIR 2022, Sangam University, 6-8 October, 2022.
7. One week International E-workshop on **“Analysis & Modeling of Current Research Areas in Mathematics”**, Rabindranath TAGORE University, Bhopal, 9th August 2021 to 14th August 2021.
8. Two days National Webinar on **Awareness on Covid Pandemic**, SOBAS, Sangam University, 29-30 May 2021.
9. Two days National Webinar on **Chemical Modeling, Design & Developments for Sustainable life**, SOBAS, Sangam University, 27-28 May 2021.
10. Seminar on **National Education Policy2020-Inception to implementation**, MLVTEC, Bhilwara, 23 Feb 2021.
11. Attended and Presented paper on **“Pathway Integral Operator with Composition of Generalized Function $G_{p,\eta,x}[a,z]$ as kernel”** in International Conference on Special Functions and Applications (ICSFA-2020) 22-23 December 2020.
12. Attended and Presented paper on **“The MSM Fractional Integral Operators on Generalized Function $G_{p,\eta,x}[a,z]$ ”** in International Conference Environmental & Climatic consequences: Challenges and Mitigation Strategies(ICECC-19) 21-22 December 2019.
13. Attended IPR workshop at Sangam University on 5th March 2019.
14. Attended two days NAAC awareness Seminar at Sangam University by Dr. Shyam Singh Inda at Sangam University on 26-27 November 2018.
15. Attended IET author’s one day workshop at Sangam University on 14th November 2018.
16. Attended and Presented paper on **“Composition of Marichev-Saigo-Maeda Fractional Operators on Generalized k-Struve Function”** in two days National conference on Emerging Trends in Engineering, Basic and Applied Science, Management and Legal Studies-2018”at Sangam University(22-23 September 2018)
17. Attended and Presented paper **“Composition of p-k extended Mittag-Leffler function”** in National Conference on Research and Innovative Trends in Applied Sciences [NCRIAS18] at Sangam University (22-23 Dec, 2018).
18. Attended and Presented paper **“Fractional Calculus of Univalent and p-valent Functions”** in International Annual Conference **Coping Change – through Innovation & Value creation for society (Pg:74-82)** at Sangam University (22-23 Dec, 2017).

19. Attended National Seminar on **“Interdisciplinary Approaches in Science and Technology (IAST-2017)”** at Mewar University (29-30 May 2017).
20. Attended and presented paper in **“National Conference on Emerging Trends in Mathematics and its Applications in Engineering (NCETMAAE-2016)”** at Mewar University (9 Jan 2016).
21. Attended two weeks **“ISTE workshop on Signals & Systems”** conducted by Indian Institute of Technology, Kharagpur (2-12 January 2014) at Sangam University, ITM Bhilwara.
22. Participated in a **lecture-demonstration session (Online)** organized by the Automation Lab, Chemical Engineering Department, IIT Bombay on 8-9 May 2012.
23. Attended **“National Seminar on Advances in Complex Analysis and Special Functions (ACASF-2011)”** organized by Central University of Rajasthan (12-13 March 2011).
24. Participated in **“i-Robotics”** organized by Technex’ 2011 IT-BHU (25-26 Feb 2011) at ITM, Bhilwara.
25. Attended **“A Workshop on ROBOTICS”** in Electronics Engineering at ITM, Bhilwara (Oct 2010).
26. Participated in two weeks training program on **“Stochastic Process Modeling: Concepts, theory and Applications”** at Apaji Institute of Mathematics & Applied Computer Technology, Banasthali Vidhyapith (2-15 Dec 2006).

Faculty Development Program

1. Successfully completed **NEP 2020 Orientation & Sensitization Programme under Malaviya Mission Teacher Training Programme (MM-TTP)** of University Grants Commission (UGC) Organized by Malaviya Mission Teacher Training Centre, Devi Ahilya Vishwavidyalaya, Indore (M.P) from 20-02-2025 to 28-02-2025.
2. Participated and successfully completed the AICTE recognized one week **Faculty Development Programme** on **“MATLAB for Science and Engineering Teachers”**, at MLVTEC, Bhilwara conducted by Applied Science Department, NITTTR, Chandigarh, Ministry of Education, Govt. of India, 10-14 June, 2024.
3. Participated and successfully completed the AICTE recognized one week **Faculty Development Programme** on **“Vedic vs Classical Mathematics : Applications for Real World Problems”**, conducted by Applied Science Department, NITTTR, Chandigarh, Ministry of Education, Govt. of India, 19 -23 February, 2024.
4. Successfully completed and Qualified the Exam of One Week FDP on **“Emerging Trends in How to do Research Methodology”**, organized by REST Mathematical Society for Research International (RSRI), Krishnagiri, Tamil Nadu, India, September 04-08, 2023.
5. Completed 21 days National Level Faculty Development Program on **"Innovative Teaching Strategies and Tools in the Digital Age"** organized by Scrollwell, in collaboration with

Ministry of Education's, Institution Innovation Council (IIC GGI Ludhiana), Feb 15- March 7, 2023.

6. Participated in the Two days faculty Development Programme on “**Benchmarking Quality Enhancement Initiatives through Innovative Practices**” organized by Internal Quality Assurance Cell [IQAC] held at Sangam University, Bhilwara on 12th & 13th July 2022.
7. Participated in two days faculty Development Programme on “**Outcome based Education & Its Implementation**” IQAC, Sangam University, 12 -13 April 2022.
8. Participated in one week faculty Development Programme organized by IQAC, Sangam University, 23-24 December 2021.
9. Faculty development Program on ICT Teaching Learning Tools, organized by IQAC, Sangam University, Bhilwara from 26th July to 2nd August, 2021.
10. Ten Days Virtual International Faculty Development Program “ **Frontiers of Mathematics**” organized by the department of Mathematics, SRMIST, Ramapuram, Chennai from July 19, 2021 to July 28, 2021
11. National faculty Development Program on making Online classes interactive and ICT Add-ons for teaching organized by NEMCARE Group of Institutions, ASSM in Collaborations with Scrollwell 01-06 July 2021.
12. One week FDP on Science, Engineering and Management Government College Degana, Nagor, Rajasthan in Association with Advance Research Educational Society, 01-05 June 2021.
13. ICT Mode (Online) Short Term Training Program on “Problem Based Learning (ICT03)” NITTTR, Kolkata 20-31 May 2019.
14. Faculty Development program attended on teaching skills and research methodology, Sangam University, 5-7 January 2017.

Achievements

1. Certificate of Appreciation for active and outstanding performance as IQAC member and Head-Criteria 2.
2. Received Research Incentives and letter of appreciation on 26th January, 2024 for grant of an International Design patent on **COMPREHENSIVE MATHEMATICS TEACHING KIT FOR STUDENT EDUCATION**.
3. Certificate of Topper for getting 90% score in **NPTEL MOOC Course** on “Mathematical Methods and Its Applications”, July-October, 2023.
4. Certificate of Appreciation for active and outstanding participation in NAAC sponsored two Days National Workshop on **Challenges before HEIs in remote areas for achieving Quality Improvement through Assessment and Accreditation Process**, November 24-25, 2022.
5. Certificate of Appreciation for taking Competitive Exams Classes 2018.

6. Technical Committee member of National conference on Research and Innovative Trends in Applied Sciences (NCRIAS) on December 22-23, 2018.
7. Certificate of Appreciation for Best Performance 2019.

Webinars

Attended virtual seminars during COVID 19 Lockdown

1. Attended the Scientific Update virtual course on The Magic Methyl in Medicinal Chemistry, 29th April 2020.
2. Webinar: Identifying weaker students and Remedial Action, 04-05-2020
3. National Webinar on Nutrition and Immunity-Simplified and Applied organized by the Department of Food Technology, Bhaskaracharya College of Applied sciences, Delhi, 19 May 2020.
4. Webinar Series: Beyond the Boundaries: Reinventing Horizons”, Organized by SKIT, Jaipur, 16-20 May 2020
5. E-Quiz series on COVID-19 for Spreading Awareness: Level One (Basics), Department of Biotechnology & Microbiology, University College of Science (UCoS), Mohanlal Sukhadia University, Udaipur, Rajasthan-313001, 25 May 2020.
6. "NAAC Accreditation Management System demo: Wed, May 27, 2020 2:00 PM - 3:30 PM IST, webinar@inpods.com

Personal Information

Marital Status	:	Married
Nationality	:	Indian
Language Known	:	English, Hindi
Father's Name	:	Shri R.R. Kabra
Husband's Name	:	Shri Sachin Bhandari
Address	:	11-H-21, Tilak Nagar, Bhilwara

I hereby declare that the information given above is correct to the best of my knowledge.

Dr. SEEMA KABRA