



PROF. OMPAL SINGH

Title	Prof.	First Name	Ompal	Last Name	Singh	Photograph
Designation	Professor, Department of Operational Research					A portrait photograph of Prof. Ompal Singh, a man with dark hair, wearing a blue suit jacket, a white shirt, and a dark tie.
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Education Qualifications:						
Degree	Institution				Year	
Ph.D.	University of Delhi, Delhi				2004	

Career Profile

Prof. Ompal Singh is a Professor in the Department of Operational Research, Faculty of Mathematical Sciences, University of Delhi, Delhi. He is currently a Joint Secretary-Cum-Treasurer of Society for Reliability Engineering, Quality and Operations Management (Regd.). He obtained his Ph.D. degree in Software Reliability (Operational Research) from University of Delhi in 2004. He has published extensively in Indian journals and abroad in the areas of Marketing, Software Reliability and Optimization. He has more than 21 years of experience in Teaching, Research and Consultation in the area of Data-Handling, Data-Analysis and Modeling in the various field of Operational Research.

Prof. Ompal Singh has guided sixteen Ph.D. Scholars and twelve M.Phil. Research Scholars in Operational Research. He is presently guiding three Ph.D. Scholars and two M.Phil. Research Scholars.

Academic/Teaching Experience

Professor: 2018 – till date, Department of Operational Research, University of Delhi, Delhi

Associate Professor: 2013 – 2018, Department of Operational Research, University of Delhi, Delhi

Assistant Professor: 2005 – 2013, Department of Operational Research, University of Delhi, Delhi

Lecturer: 2003-2005, Maharaja Agrasen College, University of Delhi, Delhi

Lecturer (Adhoc): 2001-2003, Maharaja Agrasen College, University of Delhi, Delhi

Project Fellow: 2000-2001, Department of Operational Research, University of Delhi, Delhi

Administrative Assignments

- Deputy Proctor, University of Delhi, Delhi 2007-2019.
- University Representative, Governing Body, Delhi College of Arts and Commerce, University of Delhi, Delhi w.e.f. 06-03-2021.
- VC's Nominee, Project Appointment Committee (PAC), EEQ/2020/000238 project entitled: "Study of the dynamics of exact solutions for the nonlinear evolution equations using Lie symmetry analysis" sanctioned by SERB (Science and Engineering Research Board), DST Government of India under Empowerment and Equity Opportunities for Excellence in Science (EEQ) Scheme, Department of Mathematics, University of Delhi, Delhi w.e.f. 02-03-2021
- VC's Nominee, Selection Committee (Promotion for Professor), Bhagini Nivedita College, University of Delhi, Delhi w.e.f. 06-07-2021
- Subject Expert, Selection Committee (Promotion), Department of Mathematics, Deen Dayal Upadhyay College, University of Delhi, Delhi w.e.f. 03-09-2021.
- Subject Expert, Selection Committee (Promotion), Department of Mathematics, Maharaja Agrasen College, University of Delhi, Delhi w.e.f. 05-08-2021.

- Subject Expert, Selection Committee (Promotion), Department of Mathematics, Kalindi College, University of Delhi, Delhi w.e.f. 19-07-2021.
- Subject Expert, Selection Committee for the post of Assistant Professor, Bharati College, University of Delhi, Delhi w.e.f. 13-04-2021.
- Member, Assessment of Colleges & Departments NAAC Preparation, 2010-2019.
- Acted as an External Expert of Board of Studies, IFTM, Moradabad, U.P. for the academic years 2019-2020, 2020-2021, and 2021-2022.
- Acted as a Member of NAAC Peer team for various colleges of University of Delhi, Delhi 2010-2019.
- Assisted the Committee, University of Delhi as a member for the conduct of Health and Hygiene during 2013-2019.
- Involved in the smooth conduct and induction of new students during the admission process of University of Delhi for the new sessions 2007-2019.
- Assisted the Joint Control Room of University of Delhi to curb hooliganism during the Holi Festival & Anti-ragging campaign.
- Member in the Inspection Committee, University of Delhi, Delhi from 2013-2015.
- Assisted the conduct of Board of Residence, University of Delhi as a committee member during 2007-2019.
- Involved as a committee member to assist the University of Delhi in the conduct of Health and Discipline during 2013-2019.

- Assisted the Proctor's office of University of Delhi for a key event the "**Gyanodaya Express**" in 2012-2015.
- Security in Charge of Antardhavni –festival, University of Delhi, Delhi 2013-2015.
- Appointed as a Member, Faculty of Mathematical Sciences, University of Delhi, Delhi 2016-2019.
- Appointed as a Member, Board of Research Studies (BRS) Mathematical Sciences, Faculty of Mathematical Sciences, University of Delhi 2015-2017.
- Appointed as a Member, Department Research Committee (DRC), Department of Operational Research, University of Delhi 2008-10, 2010-12, 2012-14, 2015-16, 2017-18, 2019-21, and 2021-23.
- Appointed as a Member, Committee of Courses for Post-Graduate, Department of Operational Research, University of Delhi, Delhi, for the years 2007-09, 2012-14, 2014-16, and 2019-2021.
- Appointed as a Member, M.Phil. Committee, Department of Operational Research, University of Delhi, Delhi, for the years 2011-13, 2013-15, 2015-17, 2017-2019, 2019-21, and 2021-23.
- Appointed as a Member, Committee of Courses for Research Studies, Department of Operational Research, University of Delhi, Delhi, for the years 2007-09, 2012-14, 2014-16, and 2019-2021.
- Appointed as a Member, Committee of Courses for Under-Graduate Studies, Department of Operational Research, University of Delhi, Delhi, for the years 2007-08, 2008-09, 2015-17, and 2019-2021.

- Assisted the University of Delhi every year since 2007 in the conduct of Delhi University Student Union (DUSU) election as an Election Officer/observer.
- Appointed as an observer for the conduct of School of Open Learning Examinations from 2013-2017.
- Assisted the University of Delhi as Election Officer/Observer in the UG/PG Hostels Election from 2007-2019.
- Appointed as an observer/committee member to organize the Flower Show of the University of Delhi held during February-March from 2007-2019.
- Resident Tutor in Mansarowar Hostel, University of Delhi, Delhi 2005-06 resigned due to an accident in September 2006.
- Active member in “Campus improvement committee”, “Extracurricular Committee” and “Discipline Committee” of Maharaja Agrasen College, University of Delhi, Delhi 2002-05.
- General Secretary of Delhi University Research Association (DURA), during 2001-03.
- Joint Secretary-Cum-Treasurer, Society for Reliability Engineering, Quality and Operations Management SREQOM, India 'Registered' 2000- till date.
- Observer, UGC NET Entrance Examination, Conducted by the Central Board of Secondary Education (CBSE) 2015.
- Paper Setter and Examiner M.Sc. (Marketing Management), Department of Operational Research, University of Delhi, Delhi 2014, 2015, 2016, 2017.

- Paper Setter and Examiner M.Sc. (Marketing Research), Department of Operational Research, University of Delhi, Delhi 2014, 2015, 2016, 2017.
- Convener and Joint Examiner M.Sc. (Project Work), Department of Operational Research, University of Delhi, Delhi 2014, 2015, 2016,2017.
- Paper Setter and Examiner M.Sc. (Software Reliability), Department of Operational Research, University of Delhi, Delhi 2014, 2015,2016, 2017.
- Paper Setter and Examiner M.Sc. (DBMS & Visual Programming), Department of Operational Research, University of Delhi, Delhi 2015,2016, 2017.
- Convenor M.Sc. Examination (DBMS & Visual Programming), Department of Operational Research, University of Delhi, Delhi 2015, 2016, 2017.

Areas of Interest / Specialization

Software Reliability, Optimization, Innovation Diffusion Modeling, Marketing Management, Data Analysis, Decision Sciences

Editorial Work

- Associate Editor of International Journal of System Assurance Engineering and Management, Springer, Indexed in Scopus, ESCI.
- Co-edited a book titled “Strategic System Assurance and Business Analytics”, Asset Analytics Series, Springer Publications, published on June 2020 (<https://doi.org/10.1007/978-981-15-3647-2>).

- Co-editor of Special Issue of International Journal of System Assurance Engineering and Management, Springer (Scopus, ESCI indexed) entitled “Quality, Reliability, IT and Business Operations”, published on July 2020 (<https://link.springer.com/journal/13198/volumes-and-issues/11-2/supplement>)
- Co-editor of Special Issue of International Journal of Reliability Quality & Safety Engineering, World Scientific (Scopus, ESCI indexed) entitled “Quality, Reliability, Infocom Technology and Business Operations”, published on December 2016 (<https://doi.org/10.1142/S0218539316020022>)
- Editor of Conference Proceeding of Quality, Reliability, Infocom Technology and Industrial Technology Management, ISBN: 978-93-84588-57-1, 2015.
- Co-Editor of Special Issue of CDQM-An International Journal, December 2015.
- Guest Editor of Special Issue of CDQM-An International Journal, January 2013.
- Co-editor of Special Issue of International Journal of Reliability Quality Safety Engineering, World Scientific Scopus, ESCI indexed entitled 'Quality, Reliability, Infocom Technology and Business Operations', December 2016.
- Co-editor of Special Issue of International Journal of System Assurance Engineering and Management, Springer (Scopus, ESCI indexed) entitled 'Software Testing, Reliability and Successive Releases', March 2015.
- Editor of Book containing proceedings of ICQRIT-2009, November 2012.

Subjects Taught

Software Reliability, Marketing Research, Marketing Management, Reliability and Maintenance Theory, Database Management Systems & Visual Basic, Industrial Project

Research Guidance

1. Supervision of Doctoral Thesis, awarded: 16

- Diffusion Models and Optimization Problems for New Product Development, **Shakshi Singhal**, 2021
- Some Contributions to Multi Up-gradation Modeling and Software Testing Schedule, **Subhrata Das**, 2020
- Some Modeling Peculiarities in Innovation Diffusion Process of Marketing, **Richie Aggarwal**, 2019
- Modeling Awareness based Innovation Adoption In Marketing & Economic Analysis Of Software Patching, **Mohini Agarwal**, 2018
- Quantitative Assessment of Software Warranty, Innovation & Big Data Projects Adoption, **Nitin Sachdeva**, 2018
- Analytical Study of Pricing, Warranty, Release and Testing Stop Time of a Software, **Avinash Kumar Shrivastava**, 2017
- Modeling Innovation Adoption for Successive Generations in Marketing & Its Interdisciplinary Nature with Software Reliability, **Deepti Aggarwal**, 2015
- Software Reliability Growth Modeling Multi Up-Gradations and their Release, **Jyotishendra Pratap Singh**, 2014.

- A Study of Innovation Adoption & Warranty Analysis in Marketing and Successive Software Releases, **Adarsh Anand**, 2013.
 - A Generalized Modeling Framework in Software Reliability and Related Problems, **Jyotish Kumar**, 2013.
 - A Study of Discrete and Continuous Software Reliability Growth Models, **Inderpal Singh**, 2013 (External Supervisor).
 - Optimal Component Selection for Designing Fault Tolerant Modular Software System under Recovery Block Scheme, **Ritu Arora**, 2012.
 - Contribution to Stochastic Mathematical Modeling and Optimization Problems in Software Reliability and Marketing, **Kuldeep Chaudhary**, 2012.
 - Contribution to Some Optimization Problems of Component Selection for Modular Software System and Release Time for System Testing, **Indumati**, 2012.
 - Modeling Quality Assessment of Software Reliability and Multi up-gradations, **Jagvinder Singh**, 2011.
 - Modeling and Allocation Problems in Software Reliability and Marketing, **Mashaallh Basirzadeh**, 2010.
2. **Supervision of Doctoral Thesis, under progress: 3**
 3. **Supervision of Doctoral Thesis, Viva-voce awaited: 2**
 4. **Supervision of M.Phil Dissertation, awarded: 12**
 5. **Supervision of M.Phil Dissertation, under progress: 2**

Publications Profile

Research Papers published in Refereed/Peer Reviewed Journals and Conferences

Publications Profile (Journal Papers)

- Panwar, S., Kumar, V., Kapur, P. K., & Singh, O. (2021). Software Reliability Prediction and Release Time Management with Coverage. *International Journal of Quality & Reliability Management* (Submitted: 27 May, 2021)
- Anand, A., Kaur, J., Singh, O., & Alhazmi, O. H. (2021). Optimal Sprint Length Determination for Agile-Based Software Development. *CMC-COMPUTERS MATERIALS & CONTINUA*, 68(3), 3693-3712. (Accepted 22 March, 2021; published 06 May 2021) Indexed in SCI and Scopus, DOI: 10.32604/cmc.2021.017461
- Singh, O., Singhal, S., & Anand, A. (2021). Multigenerational modeling incorporating time lag in innovation adoption, *International Journal of Services Operations and Informatics*, Indexed in Scopus. DOI: <https://doi.org/10.1504/IJSOI.2021.10039376>
- Jasmine, K., Anand, A., Singh, O., & Kumar, V. (2021). Measuring Software Reliability under the Influence of an Infected Patch. *Yugoslav Journal of Operations Research*, 31(2)), 249-264. Indexed in Scopus, DOI: <http://yujor.fon.bg.ac.rs/index.php/yujor/article/view/897>
- Anand, A., Singh, O., & Kapur, P. K. (2021). Three-dimensional wiener process based entropy prediction modelling for OSS. *International Journal of System Assurance Engineering and Management*, 12(1), 188-198. Indexed in ESCI and Scopus, DOI: <https://doi.org/10.1007/s13198-020-01040-4>

- Panwar, S., Kapur, P. K., & Singh, O. (2021). Predicting diffusion dynamics and launch time strategy for mobile telecommunication services: An empirical analysis, *Information Technology and Management*, DOI: <https://doi.org/10.1007/s10799-021-00323-x>
- Kumar, V., Panwar, S., Kapur, P. K., & Singh, O. (2021). Optimal decisions on software release and post-release testing: a unified approach. *Yugoslav Journal of Operations Research*, ISSN 2334-6043. DOI: <http://yujor.fon.bg.ac.rs/index.php/yujor/article/view/891>.
- Singhal, S., Anand, A., & Singh, O. (2020). Studying dynamic market size-based adoption modeling & product diffusion under stochastic environment, *Technological Forecasting and Social Change*, 161, 120285, DOI: <https://doi.org/10.1016/j.techfore.2020.120285>.
- Panwar, S., Kapur, P. K., & Singh, O. (2020). Technology diffusion model with change in adoption rate and repeat purchases: a case of consumer balking. *International Journal of System Assurance Engineering and Management*, DOI: <https://doi.org/10.1007/s13198-020-01028-0>.
- Kumar, S., Singh, J. & Singh, O. Ensemble-based extreme learning machine model for occupancy detection with ambient attributes. *Int J Syst Assur Eng Manag* **11**, 173–183 (2020).
- Kapur, P. K., Panwar, S., Kumar, V., & Singh, O. (2020). Entropy-Based Two-Dimensional Software Reliability Growth Modeling for Open-Source Software Incorporating Change-Point. *International Journal of Reliability, Quality and Safety Engineering*, 2040009.

- Panwar, S., Kapur, P. K., & Singh, O. (2020). Modeling technology diffusion: a study based on market coverage and advertising efforts. *International Journal of System Assurance Engineering and Management*, 1-9.
- Panwar, S., Kapur, P. K., Sachdeva, N., & Singh, O. (2020). Multi-generational technology management in a segmented environment. *International Journal of Product Development*, 24(1), 1-29.
- Shrivastava, A. K., Kumar, V., Kapur, P. K., & Singh, O (2020). Software release and testing stop time decision with change point. *International Journal of System Assurance Engineering and Management*, 1-12.
- Singh O., Panwar S., Kapur P. K. (2020). Determining Software Time-to-Market and Testing Stop Time when Release Time is a Change-Point. *International Journal of Mathematical, Engineering and Management Sciences*, pp-208-224; <https://doi.org/10.33889/IJMEMS.2020.5.2.017>
- Aggarwal, R., Singh, O., Anand, A., & Kapur, P. K. (2019). Modeling innovation adoption incorporating time lag between awareness and adoption process. *International Journal of System Assurance Engineering and Management*, 1-8.
- Anand, A., Aggarwal, R., & Singh, O. (2019). Using Weibull Distribution for Modeling Bimodal Diffusion Curves: A Naive Framework to Study Product Life Cycle. *International Journal of Innovation and Technology Management (IJITM)*, 16(07), 1-17.

- Anand, A., Singhal, S., & Singh, O. (2019). Optimal advertising duration for profit maximization, *Journal of Management Analytics*, 7(3), 458-480, DOI: 10.1080/23270012.2019.1702904.
- Singhal, S., Anand, A., & Singh, O. (2019). SDE based generalized innovation diffusion modeling. *International Journal of Mathematical, Engineering and Management Sciences*, 4(3), 697-707.
- Singhal, S., Anand, A., & Singh, O. (2019). Understanding Multi-Stage Diffusion Process in Presence of Attrition of Potential Market and Related Pricing Policy. *Yugoslav Journal of Operations Research*, 29(3), 393-413. DOI: <https://doi.org/10.2298/YJOR180315001S>
- Kapur, P. K., Panwar, S., Singh, O., & Kumar, V. (2019). Joint optimization of software time-to-market and testing duration using multi-attribute utility theory. *Annals of Operations Research*, 1-28. DOI: <https://doi.org/10.1007/s10479-019-03483-w>
- Kapur, P. K., Panwar, S., & Singh, O. (2019). Modeling two-dimensional technology diffusion process under dynamic adoption rate. *Journal of Modelling in Management*. 14(3), 717-737
- Kapur, P. K., Panwar, S., & Singh, O., (2019). Modeling Technological Substitution by Incorporating Dynamic Adoption Rate. *International Journal of Innovation and Technology Management*, 16(1), 1950001-19500024.
- Anand A., Das S., Singh O., (2018). Patching: A Requirement for Complete Software Testing. *International Journal of Software Engineering (IJSE)*, 11(1), 3-14.

- Anand, A., Agarwal, M., Aggrawal, D., & Singh, O. (2018). Queuing theory-based innovation diffusion modelling incorporating change in adoption rate. *International Journal of Mathematics in Operational Research*, 12(1), 102-116.
- Anand, A., Agarwal, M., Aggrawal, D. and Singh, O. (2018), "Innovation diffusion modeling considering the time lag between awareness and eventual adoption", *Journal of Advances in Management Research*, Vol. 15 No. 1, pp. 4-16.
- PK Kapur., O Singh., AK Shrivastava., (2018), "A unified approach for optimal release, patching and testing time of a software", *International Journal of Mathematics in Operational Research* 13 (4), 471-491
- Sachdeva, N., Kapur, P. K., & Singh, O. (2018). Generalised framework for optimal pre and post release software testing in presence of warranty. *International Journal of Procurement Management*, 11(2), 172-200.
- Agarwal, M., Aggrawal, D., Anand A., Singh, O., (2017). Modeling Multi-generation Innovation Adoption based on Conjoint effect of Awareness Process. *International Journal of Mathematical, Engineering and Management Sciences*, 2(2), 74-84.
- Singh. O., Kapur, P. K. & Shrivastava, A.K. & Mishra, G. (2017). A multi release cost model in distributed environment, *International Journal of Reliability, Quality and Safety Engineering*, 24(1), 1750001. Indexed in ESCI and Scopus.

DOI: <https://doi.org/10.1142/S0218539317500012>

- Deepika, Singh, O., Anand A., Singh J. N. P. (2017). Testing Domain Dependent Software Reliability Growth Models. *International Journal of Mathematical, Engineering and Management Sciences*, 2(3), 140-149, ISSN: 2455-7749.
- Kapur, P. K., Sachdeva, N., & Singh, O. (2017). Optimal profit for manufacturers in product remanufacturing diffusion dynamics. *Journal of Industrial and Production Engineering*, 1-12, Print ISSN: 2168-1015 Online ISSN: 2168-1023.
- Kapur, P. K., Shrivastava, A. K., & Singh, O. (2017). When to Release and Stop Testing of a Software. *Journal of the Indian Society for Probability and Statistics*, 18(1), 19-37, ISSN: 2364-9569 (Online).
- Sachdeva, N., Kapur, P. K., & Singh, O. (2016). An innovation diffusion model for consumer durables with three parameters. *Journal of Management Analytics*, 3(3), 240-265.
- Anand, A., Agarwal, M., Aggrawal, D., & Singh, O. (2016). Unified approach for modeling innovation adoption and optimal model selection for the diffusion process. *Journal of Advances in Management Research*, 13(2), 154-178.
- Anand, A., Singh, O., Aggarwal, R., & Aggrawal, D. (2016). Diffusion Modeling Based on Customer's Review and Product Satisfaction. *International Journal of Technology Diffusion (IJTD)*, 7(1), 20-31.
- Adarsh, A., Richie, A., Ompal, S., & Deepti, A. (2016). Understanding diffusion process in the context of product dis-

adoption. St. Petersburg State Polytechnical University Journal. Economics, 240(2), 7-18.

- Sachdeva, N., Singh, O., Kapur, P. K., & Galar, D. (2016). Multi-criteria intuitionistic fuzzy group decision analysis with TOPSIS method for selecting appropriate cloud solution to manage big data projects. International Journal of System Assurance Engineering and Management, 7(3), 316-324.,
- Aggrawal, R., Singh, O., Anand, A., Yadavalli, V. S. S., (2016). Market Expansion Based Innovation Diffusion Modeling and Optimal Timing for Changing Management Strategy. CDQM-An International Journal, volume 19, No. 1, pp. 27-35.
- Anand, A., Deepika, Singh, O., (2016). Incorporating Features Enhancement Archetype in Software Reliability Growth Modeling and Optimal Release Time Determination. International Journal of Computer Applications (0975-8887), 139(4).
- Das, S., Anand, A., Singh, O., Singh, J., (2015). Influence of Patching on Optimal Planning for Software Release & Testing. CDQM-An International Journal, 18(4), 81-92.
- Anand, A., Singh, O., & Das, S. (2015). Fault Severity based Multi Up-gradation Modeling considering Testing and Operational Profile. International Journal of Computer Applications, 124(4).
- Sachdeva, N., Singh, O., & Kapur, P. K. (2015). Optimal launch of a new generation of technology: a multi attribute approach discrete

time diffusion process. *International Journal of Technology Marketing*, 11(1), 3-23.

- Sachdeva, N., Singh, O., & Kapur, P. K. (2015). Modeling critical success factors for adoption of big data analytics project: an ISM-MICMAC based analysis. *Communication Dependability Quality Management International Journal*, 18(4), 93-110.
- Aggrawal, D., Anand, A., Singh, O., & Kapur, P. K. (2015). Modelling successive generations for products-in-use and number of products sold in the market. *International Journal of Operational Research*, 24(2), 228-244.
- Kapur, P. K., Singh, J. N., & Singh, O. (2015). Application of multi attribute utility theory in multiple releases of software. *International Journal of System Assurance Engineering and Management*, 6(1), 61-70.
- Singh, J., Singh, O. & Kapur, P.K. Multi up-gradation software reliability growth model with learning effect and severity of faults using SDE. *Int J Syst Assur Eng Manag* 6, 18–25 (2015). <https://doi.org/10.1007/s13198-014-0238-1>
- Singh, O., Kapur, P. K., Shrivastava, A. K., & Kumar, V. (2015). Release time problem with multiple constraints. *International Journal of System Assurance Engineering and Management*, 6(1), 83-91, ISSN: 0975-6809 (print version), ISSN: 0976-4348 (electronic version).
- Singh, O., Aggrawal, D., Anand, A. *et al.* Fault severity based multi-release SRGM with testing resources. *Int J Syst Assur Eng Manag* 6, 36–43 (2015). <https://doi.org/10.1007/s13198-014-0241-6>

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- Aggrawal, D., Anand, A., Singh, O., & Singh, J. (2014). Profit maximization by virtue of price & warranty length optimization. *The Journal of High Technology Management Research*, 25(1), 1-8, ISSN: 1047-8310
- Aggrawal, D., Singh, O., Anand, A., & Agarwal, M. (2014). Optimal introduction timing policy for a successive generational product. *International Journal of Technology Diffusion (IJTD)*, 5(1), 1-16, ISSN (printed): 1947-9301. ISSN (electronic): 1947-931X.
- Singh, O., Anand, A., Aggrawal, D., & Papic, L. (2014). Uncertainty Based Fault Removal Phenomenon and Successive Software Releases Planning. *Communications in Dependability and Quality Management-An International Journal, Serbia*, 17(1), 5-17.
- Singh, O., Singh, J. N., Tickoo, A., & Kapur, P. K. (2014). Fault Removal Phenomenon Using Different Distribution Functions for Each Release. *International Journal of Modeling and Optimization*, 4(1), 5-9.
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- Anand, A., Singh, O., Aggrawal, D., & Singh, J. (2014). An interactive approach to determine optimal launch time of successive

generational product. *International Journal of Technology Marketing*, 9(4), 392-407.

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- Kapur, P. K., Singh, O., & Singh, J. N. (2013). Software Release Time Based on Multi Attribute Utility Theory. *Communication in dependability and quality management-An International Journal*, Serbia, 16(4), 5-16.
- Kapur, P. K., Singh, V. B., Singh, O., & Singh, J. N. (2013). Software release time based on different multi-attribute utility functions. *International Journal of Reliability, Quality and Safety Engineering*, 20(04), 1350012.
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- Singh, O., Kapur, P. K., Singh, JNP., Testing-Effort Based Multi Up-Gradation Software Reliability Growth Model. *Communications in Dependability And Quality Management* 15 (1), 88-100.
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- Kapur, P. K., Singh, O., Anand, A. (2012). Two Dimensional Software Reliability Modeling and Related Allocation Problems using Genetic Algorithm. *Journal of Life Cycle Reliability and Safety Engineering*, 1(2), 44-60.
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- Singh, O., Singh, J. N. P., Kapur, P. K. (2012). Two Dimensional Software Reliability Growth Model under the Effect of Imperfect Debugging and Error Generation. Accepted for publication in *International Journal of Mathematical Modeling Simulation and Applications (IJMMSA)*.
- Singh, O., Anand, A., Singh, J., & Kapur, P. K. (2012). Assessment of Distribution Based SRGM with the Effect of Change-Point and

Imperfect Debugging incorporating Irregular Fluctuations. *Journal of Pure and Applied Science & Technology*, 2(1), 37-50.

- Singh, J., Singh, O., Aggrawal, D., & Singh, I. (2012). On the Development of Software Reliability Growth Model Based on Features Enhancement. *Journal of Pure & Applied Science & Technology*, 2(1). 23-31.
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- Singh, O., Singh, J. N., Kumar, J., & Kapur, P. K. (2012). Some Flexible Software Reliability Growth Models Using Two-Dimensional Approach. *Journal of Pure and Applied Science & Technology*, 3(1), 13-22.
- Jha, P. C., Indumati, Singh, O., & Gupta, D. (2011). Bi-criterion release time problem for a discrete SRGM under fuzzy environment. *International Journal of Mathematics in Operational Research*, 3(6), 680-696.
- Kapur, P. K., Singh, O., Garmabaki, A. S., & Singh, J. (2010). Multi up-gradation software reliability growth model with imperfect debugging. *International Journal of System Assurance Engineering and Management*, 1(4), 299-306.
- Kapur, P.K., Singh, O., Yadav, K., Singh, J. (2010). Component Specific Testing-Effort functions based Software Reliability Growth Modeling for Distributed Environment. *Communications in*

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- Kapur, P.K., Singh, O., Yadav, K. (2006). Software reliability growth model Incorporating testing coverage and testing effort control problem. *Communication in Dependability and Quality Management: An International Journal*, Serbia, 9(4), 132-147.
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Publications Profile (Book Chapter)

- Anand, A., Deepika & Singh, O. (2019). Formulation of Error Generation-Based SRGMs under the Influence of Irregular Fluctuations. In *System Performance and Management Analytics* (pp. 103-117). Springer, Singapore.

- Kaur, J., Anand, A., & Singh, O. (2019). Modeling Software Vulnerability Correction/Fixation Process Incorporating Time Lag. *Recent Advancements in Software Reliability Assurance*, 39.
- Kapur, P. K., Panwar, S., Singh, O., & Kumar, V. (2019). Joint Release and Testing Stop Time Policy with Testing-Effort and Change Point. In *Risk Based Technologies* (pp. 209-222). Springer, Singapore.
- Anand, A., Deepika, Singh, O. & Kapur, P.K. (2018). Stochastic Differential Equation based Formulation for Multiple Software Release Considering Fault Detection & Correction Process. accepted for *Mathematics applied and Information Systems- Bentham Science* as a chapter
- Anand, A., Aggarwal, R., & Singh, O. (2018). Market segmentation based modeling: An approach to understand multiple modes in diffusion curves. In *Advanced Mathematical Techniques in Engineering Sciences* (pp. 165-176). CRC Press.
- Shrivastava, A. K., Das, S., Anand, A., & Singh, O. (2018). Optimizing price, release, and testing stop time decisions of a software product. In *System Reliability Management* (pp. 189-203). CRC Press.
- Anand, A., Aggarwal, R., & Singh, O. (2018). Market segmentation-based modeling: An approach to understand multiple modes in diffusion curves. *Advanced Mathematical Techniques in Engineering Sciences*, 165.

- Anand, A., Singhal, S., & Singh, O. (2018). Revisiting Dynamic Potential Adopter Diffusion Models under the Influence of Irregular Fluctuations in Adoption Rate. In Handbook of Research on Promoting Business Process Improvement Through Inventory Control Techniques (pp. 499-519). IGI Global.
- Sachdeva, N., Kapur, P. K., & Singh, O. (2018). Two-Dimensional Framework to Optimize Release Time and Warranty. In Quality, IT and Business Operations (pp. 383-404). Springer, Singapore.
- Sachdeva, N., Kapur, P. K., & Singh, O. (2018). When to Start Remanufacturing Using Adopter Categorization. In Quality, IT and Business Operations (pp. 443-465). Springer, Singapore.
- Anand A., Singhal, S., Panwar, S., Singh, O. (2018). Optimal Price and Warranty Length for Profit Determination: An Evaluation based on Preventive Maintenance. In Quality, IT and Business Operations (pp. 265-277), Springer, Singapore.
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Reliability and Infocom Technology Editors P.K. Kapur and A.K. Verma, 101-115, McMillan Delhi.

- Kapur, P.K., Singh, O., Kumar, A., Yadavalli, V.S.S. (2007). Testing domain dependent software reliability growth models with power logistic function. In Quality Reliability and Infocom Technology Editors P.K. Kapur and A.K. Verma, 284-294, Mcmillan Delhi.
- Kapur, P. K., Singh, O., & Bardhan, A. (2005). A software reliability growth model for operational use with testing coverage. Quality, reliability and IT (trends and future directions). Narosa Publications Pvt. Ltd., New Delhi, 60-73.
- Kapur, P. K., Shatnawi, O., & Singh, O. (2005). Discrete Time Software Fault Classification Model. Quality, Reliability and Information Technology: Trends and Future Directions, 132-145.

Publications Profile (Conference Proceedings)

- Anand, A., Das, S., Singh, O., & Kumar, V. (2019, February). Resource allocation problem for multi versions of software system. In 2019 Amity International Conference on Artificial Intelligence (AICAI) (pp. 571-576). IEEE.
- Anand, A., Das, S., & Singh, O. (2016, September). Modeling software failures and reliability growth based on pre & post release testing. In Reliability, Infocom Technologies and Optimization (Trends and Future Directions) (ICRITO), 2016 5th International Conference on (pp. 139-144) IEEE, Electronic ISBN: 978-1-5090-1489-7 Print on Demand (PoD) ISBN: 978-1-5090-1490-3.

- Anand, A., Singhal, S., & Singh, O. (2016, September). Multi-stage diffusion dynamics based on optimal control theory. In Reliability, Infocom Technologies and Optimization (Trends and Future Directions) (ICRITO), 2016 5th International Conference on (pp. 100-106). IEEE, ISBN: 978-1-5090-1489-7.
- Anand, A., Singh, O., Aggarwal, R., & Kapur, P. K. (2015, February). Customer behavior dependent diffusion process & optimal model selection using distance based approach. In Futuristic Trends on Computational Analysis and Knowledge Management (ABLAZE), 2015 International Conference on (pp. 711-716). IEEE
- Kapur, P. K., Singh, O., Shrivastava, A. K., & Singh, J. N. (2015, February). A software up-gradation model with testing effort and two types of imperfect debugging. In Futuristic Trends on Computational Analysis and Knowledge Management (ABLAZE), 2015 International Conference on (pp. 613-618). IEEE.
- P. K. Kapur, N. Sachdeva and O. Singh, Generalized discrete time model for multi generational technological products, *2015 International Conference on Futuristic Trends on Computational Analysis and Knowledge Management (ABLAZE)*, 2015, pp. 717-723, doi: 10.1109/ABLAZE.2015.7154952.
- Kapur, P. K., Singh, O., & Shrivastava, A. K. (2015, September). A generalized framework for multi release of a software under Distributed Environment. In Reliability, Infocom Technologies and Optimization (ICRITO) (Trends and Future Directions), 2015 4th International Conference on (pp. 1-6). IEEE.

- Kapur, P. K., Sachdeva, N., & Singh, O. (2015, February). Generalized discrete time model for multi generational technological products. In *Futuristic Trends on Computational Analysis and Knowledge Management (ABLAZE)*, 2015 International Conference on (pp. 717-723). IEEE.
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- Adarsh Anand, Ompal Singh, Mohini Agarwal, Richie Aggarwal, "A Discrete Innovation Diffusion Model Incorporating Change in the Adoption Rate", In *Futuristic Trends on Computational Analysis and Knowledge Management (ABLAZE)*, International Conference, pp.73-79, 25-27 Feb. 2015, DOI: 10.1109/ABLAZE.2015.7154973.
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- Singh, O., Anand, A., Aggrawal, D., Agarwal, M. (2014) “Utility Based Assessment of Attributes for Software Quality” proceeding of 5th International DQM conference on life cycle engineering and management (ICDQM-2014), 95-110, Serbia.
- Anand, A., Singh, O., Kapur, P. K., & Das, S. (2014). Modeling Conjoint Effect of Faults Testified from Operational Phase for Successive Software Releases. In Proceedings of the 5th International Conference on Life Cycle Engineering and Management (ICDQM) (pp. 83-94), Serbia.
- Kapur, P. K., Khatri, S. K., Singh, O., & Shrivastava, A. K. (2014, March). When to stop testing under warranty using SRGM with change-point. In IT in Business, Industry and Government (CSIBIG), 2014 Conference on (pp. 1-7). IEEE.
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Reliability, Infocom Technology and Industrial Technology Management (ICQRITITM-2012).

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- Singh, O., Anand, A., Kapur, P.K., Singh, J. (2010). Mathematical Modeling of Multi-Upgradation in Software Considering Faults severity. Presented at International Conference on Development and Applications of Statistics in Emerging Areas of Science and Technology (ICDASEAST), Jammu.
- Singh, O., Kapur, P. K., Anand, A., & Singh, J. (2009). Stochastic Differential Equation based Modeling for Multiple Generations of Software. In Proceedings of Fourth International Conference on Quality, Reliability and Infocom Technology (ICQRIT), Trends and Future Directions, Narosa Publications (pp. 122-131).
- Jha, P.C., Singh, O., Indumati, Kapur, P.K. (2009). Bi-Criteria Release Time Problem on Two Types of Imperfect Debugging on Release Time under Fuzzy Environment” Presented at 11th National Conference of Indian Society of Information Theory and Application (ISITA) Sarhali (Tarantaran) Amritsar.
- Jha, P.C., Singh, O., Chaudhary, K., Kapur, P.K. (2009). Adoption of Never Successive Technology Using Stochastic Differential Equation” Presented at 11th National Conference of Indian Society of Information Theory and Application (ISITA) Sarhali (Tarantaran) Amritsar.
- Kapur, P.K., Prashant, J., Singh, O. (2008). Modelling in Software reliability growth in distributed environment using Unified approach. Presented in International Conference on Operations Research for a growing Nation, Tirupati.
- Singh, O., Gupta, A., Kapur, P.K. (2006). A flexible software reliability growth model with two type of imperfect debugging”, proceeding of the Conference on Contribution of Mathematics in Technology Development, ITM-Gurgaon 2(4),351-368.

- Kapur, P.K., Gupta, A., Singh, O. (2005). On Discrete Software Reliability Growth Models” presented at the 37th Annual Convention of the Operational Research Society of India, Indian Institute of Management, Ahmadabad.

Publications in the Last One Year

1. Panwar, S., Kumar, V., Kapur, P. K., & **Singh, O.** (2021). Software Reliability Prediction and Release Time Management with Coverage. *International Journal of Quality & Reliability Management* (Submitted: 27 May, 2021)
2. Anand, A., Kaur, J., **Singh, O.**, & Alhazmi, O. H. (2021). Optimal Sprint Length Determination for Agile-Based Software Development. *CMC-COMPUTERS MATERIALS & CONTINUA*, 68(3), 3693-3712. (Accepted 22 March, 2021; published 06 May 2021) Indexed in SCI and Scopus, DOI: 10.32604/cmc.2021.017461
3. **Singh, O.**, Singhal, S., & Anand, A. (2021). Multigenerational modeling incorporating time lag in innovation adoption, *International Journal of Services Operations and Informatics*, Indexed in Scopus. DOI: <https://doi.org/10.1504/IJSOI.2021.10039376>
4. Jasmine, K., Anand, A., **Singh, O.**, & Kumar, V. (2021). Measuring Software Reliability under the Influence of an Infected Patch. *Yugoslav Journal of Operations Research*, 31(2)), 249-264. Indexed in Scopus, DOI: <http://yujor.fon.bg.ac.rs/index.php/yujor/article/view/897>
5. Anand, A., Singh, O., & Kapur, P. K. (2021). Three-dimensional wiener process based entropy prediction modelling for OSS. *International Journal of System Assurance Engineering and*

- Management*, 12(1), 188-198. Indexed in ESCI and Scopus, DOI: <https://doi.org/10.1007/s13198-020-01040-4>
6. Panwar, S., Kapur, P. K., & **Singh, O.** (2021). Predicting diffusion dynamics and launch time strategy for mobile telecommunication services: An empirical analysis, *Information Technology and Management*, DOI: <https://doi.org/10.1007/s10799-021-00323-x>
Indexing: SSCI, SCOPUS, **Impact Factor (2020 JCR): 1.222**
 7. Kumar, V., Panwar, S., Kapur, P. K., & **Singh, O.** (2021). Optimal decisions on software release and post-release testing: a unified approach. *Yugoslav Journal of Operations Research*, ISSN 2334-6043. DOI: <http://yujor.fon.bg.ac.rs/index.php/yujor/article/view/891>.
 8. Singhal, S., Anand, A., & **Singh, O.** (2020). Studying dynamic market size-based adoption modeling & product diffusion under stochastic environment, *Technological Forecasting and Social Change*, 161, 120285, **Impact Factor: 5.846**, Indexing: Scopus, SSCI. DOI: <https://doi.org/10.1016/j.techfore.2020.120285>.
 9. Kumar, S., Singh, J. & Singh, O. Ensemble-based extreme learning machine model for occupancy detection with ambient attributes. *Int J Syst Assur Eng Manag* **11**, 173–183 (2020).
 10. Panwar, S., Kapur, P. K., & **Singh, O.** (2020). Technology diffusion model with change in adoption rate and repeat purchases: a case of consumer balking. *International Journal of System Assurance Engineering and Management*, DOI: <https://doi.org/10.1007/s13198-020-01028-0>.
 11. Kapur, P. K., Panwar, S., Kumar, V., & **Singh, O.** (2020). Entropy-Based Two-Dimensional Software Reliability Growth Modeling for

- Open-Source Software Incorporating Change-Point. *International Journal of Reliability, Quality and Safety Engineering*, 2040009.
12. Panwar, S., Kapur, P. K., & **Singh, O.** (2020). Modeling technology diffusion: a study based on market coverage and advertising efforts. *International Journal of System Assurance Engineering and Management*, 1-9.
 13. Panwar, S., Kapur, P. K., Sachdeva, N., & **Singh, O.** (2020). Multi-generational technology management in a segmented environment. *International Journal of Product Development*, 24(1), 1-29.
 14. Shrivastava, A. K., Kumar, V., Kapur, P. K., & **Singh, O.** (2020). Software release and testing stop time decision with change point. *International Journal of System Assurance Engineering and Management*, 1-12.
 15. **Singh O.**, Panwar S., Kapur P. K. (2020). Determining Software Time-to-Market and Testing Stop Time when Release Time is a Change-Point. *International Journal of Mathematical, Engineering and Management Sciences*, pp-208-224; <https://doi.org/10.33889/IJMEMS.2020.5.2.017>

Conference Organization and Session Chair

Participation and Organization of a Conference

- Member, Technical Program Committee in 2nd International Conference on Information Technology- InCITe 2022 Next Generation Information Technology Summit, Amity University, Noida, India, Mar. **2022**

- General Co-Chair in the International Conference on Innovation Practices in Technology and Management (ICIPTM-2021 & INBUSH ERA-2021), Amity University, Noida, India, Feb. **2021**
- General Co-Chair in the International Conference on Intelligent engineering and Management (ICIEM), Amity University, London WC, UK, June **2020**
- Technical Chair, in International Conference on Computation, Automation and Knowledge Management (ICCAKM), Amity University Dubai, International Academic City, Dubai – United Arab Emirates, Jan. **2020**
- General Co-Chair, in International Conference on Automation, Computational and Technology Management (ICACTM), Amity University, 24 Bedford Square, Fitzrovia, London WC 1B 3HN, UK, April. **2019**
- Member, International Advisory Committee, in International Conference on Recent Trends in Engineering, Technology and Business Management (ICRTETBM), Amity University, Noida, India, Feb. **2019**
- Conference Co-Chair in 10th International Conference on Quality, Reliability, Infocom Technology and Business Operations, Lalitpur, Nepal, June 18–21, **2019**.
- Co-Chair, Conference Organizing Committee, in 1st International Conference on Emerging Trends in Inventory, Supply Chain & Reliability Modeling (ETISCRM), Department of Operational Research, University of Delhi, Delhi, India, Dec. **2018**
- General Co-Chair in the International Conference on Automation and Computational Engineering (ICACE), Amity University, Greater Noida, India, Oct. **2018**

- Conference Secretary in 9th International Conference on Quality, Reliability, Infocom Technology and Business Operations, University of Delhi, Delhi, Dec 28-30, **2018**.
- Conference Co- Chair in 8th International Conference on Quality, Reliability, Infocom Technology and Business Operations, Amity University, Feb 8-10, **2017**.
- Conference Secretary in 7th International Conference on Quality, Reliability, Infocom Technology and Business Operations, University of Delhi, Dec 28-30, **2015**.
- Participated in 5th DQM International Conference on Life Cycle Engineering and Management, (ICDQM), Belgrade, Serbia, 27-28 June, **2014**.
- Conference Secretary in 6th International Conference on Quality Reliability Infocom Technology and Industrial Technology Management, (ICQRITITM), University of Delhi, Delhi, Nov. **2012**.
- Participated in The IEEE International Conference on Industrial Engineering and Engineering Management (IEEM), Singapore, 6-9 December **2011**.
- Conference Secretary in 5th International Conference on Quality Reliability and Infocom Technology, (ICQRIT), Kathmandu, Nepal, 8-10 Dec. **2011**.
- Participated in International Conference on Development and Applications of Statistics in Emerging Areas of Science and Technology (ICDASEAST), Jammu, **2010**.
- Participated in 2nd International Conference on Reliability, Safety and Hazard” (ICRESH), Bombay, **2010**.

- Participated in International Conference on Reliability, Infocom Technology and Optimization” (ICRITO), Faridabad, **2010**.
- Conference Secretary in the 4th International Conference on Quality, Reliability and Information Technology (Trends and Future directions), University conference hall, University of Delhi December 18-20, **2009**.
- Participated in the International workshop on Mathematical Modelling and related optimization techniques, seminar hall University of Delhi, December 14-17, **2009**.
- Participated in the 11th National Conference of Indian Society of Information Theory and Application (ISITA) Sarhali (Tarantaran) Amritsar, **2009**
- Participated in the International conference on operations research application in engineering and management (COREM Tiruchirapalli), **2009**
- Participated in Partners in *Learning Teacher Training Program (TTP)* conducted by Microsoft and ILLL Delhi University, from April 20 to April 24, **2009**.
- Pre-ICM International Convention on Mathematical Sciences, Department of Mathematics, University of Delhi, 18-20 December, **2008**.
- Conference Treasurer in the 3rd International Conference on Quality, Reliability and Information Technology (Trends and Future directions), University conference hall, University of Delhi, Delhi December, **2006**.
- Member, Program Committee, Second International Conference on Quality, Reliability and 'IT' will be held at Indian National Science Academy, New Delhi during December 18-20, **2003**.

- Conference Treasurer in the 2nd International Conference on Quality, Reliability and Information Technology (Trends and Future directions), University of Delhi, Delhi December, **2003**.
- Member, Organizing Committee, International Conference on Quality, Reliability and 'IT' held at Indian National Science Academy, New Delhi during December 21-23, **2000**.
- Conference Treasurer in the 1st International Conference on Quality, Reliability and Information Technology (Trends and Future directions), University of Delhi, Delhi December, **2000**.

Session Chair

- Chaired a session in the International Conference on Recent Trends in Engineering, Technology and Business Management (ICRTETBM), Amity University, Noida, India, Feb. **2019**
- Chaired a session in the 10th International Conference on Quality, Reliability, Infocom Technology and Business Operations, Lalitpur, Nepal, June 18–21, **2019**.
- Chaired a session, in 9th International Conference on Quality, Reliability, Infocom Technology and Business Operations, University of Delhi, Delhi, Dec 28-30, **2018**
- Chaired a session, in 8th International Conference on Quality, Reliability, Infocom Technology and Business Operations, Amity University, Feb 8-10, **2017**.
- Chaired a session, in 7th International Conference on Quality, Reliability, Infocom Technology and Business Operations, University of Delhi, Dec 28-30, **2015**.

- Chaired a session, in 5th DQM International Conference on Life Cycle Engineering and Management, (ICDQM), Belgrade, Serbia, 27-28 June, **2014**.
- Chaired a session, in 6th International Conference on Quality Reliability Infocom Technology and Industrial Technology Management, (ICQRITITM), University of Delhi, Delhi, Nov. **2012**.
- Chaired a session, in 5th International Conference on Quality Reliability and Infocom Technology, (ICQRIT), Kathmandu, Nepal, 8-10 Dec. **2011**.
- Chaired a Session at 23rd International Conference of Jangjeon Mathematical Society, Ahvaz, Iran, and Feb 8-10, **2010**.

Conference Paper Presentations

- “Conjoint Effect of Awareness and Adoption Process for Modeling Sales of Successive Generational of Technological Product”, presented a paper in the 7th International Conference on Quality, Reliability, Infocom Technology and Business Operations (ICQRIT-2015) Trends and Future Directions, Conference Centre, University of Delhi, Delhi, **2015**.
- “Modeling Multi-Stage Diffusion Process Incorporating Price: A Study under Dynamic Environment”, presented a paper in the 7th International Conference on Quality, Reliability, Infocom Technology and Business Operations (ICQRIT-2015) Trends and Future Directions, Conference Centre, University of Delhi, Delhi, **2015**.
- “Optimal Price and Warranty Length for Profit Determination: An Evaluation Based on Preventive Maintenance”, presented a paper in 7th International Conference on Quality, Reliability, Infocom Technology and Business Operations (ICQRIT-2015) Trends and Future Directions, Conference Centre, University of Delhi, Delhi, **2015**.

- “Innovation Diffusion Modeling incorporating Time Delay in the Adoption Process”, presented a paper in the International Business School Conference (IBSCON-2014), Amity University, Noida, U.P, **2014**.
- Presented a paper in the Joint 9th national Conference of the vigyan parishad of india on applied and industrial mathematics and 5th annual conference of indian society of information theory and applications, NSIT Dwarka, New Delhi, India 2002.
- Presented a paper in the National conference on modern trends I software engineering MOTSE-2003, Department of Computer Science and applications, Dr. Harisingh Gour Vishwavidyalaya, Sagar M.P, India 2003.
- Presented a paper in the 5th International Conference of th International Academy of Physical Sciences, Department of Mathematica Sciences and Computer Applications Bundelkhand University, Jhansi, India 2002.
- Presented a paper in the International Conference on Operations Research for Development, Anna University, Chennai, India 2022.
- “Optimizing Software Multiple Version Testing Time under Budget and Reliability Constraint”, presented a paper in the 5th International DQM conference on life cycle engineering and management (ICDQM-2014), DQM Research Center, PO Box 132, 32102 Cacak, Belgrade, Serbia, **2014**.

Research Projects (Major Grants/Research Collaboration)

- Minor Research Project under faculty research programme Grant (FRP) funded by Institute of Eminence, University of Delhi, Delhi, 31 December 2020 – 15 March 2021.

- Modeling Up-gradations and Release Time Problems of Software & Successive Generations of Technologies in Marketing: **Principal Investigator, DU-DST PURSE-II Grant.** Nov, 2014- Nov, 2018.
- Optimal Testing Stop Time & Warranty Length of Software: **Principal Investigator, R & D Research Project sponsored by University of Delhi.** 2015-2016.
- Analyzing Warranty Based Single & Multi Generational Diffusion of Products: **Principal Investigator, R & D Research Project sponsored by University of Delhi.** 2014-2015.
- On Modeling Reliability Growth & Multi up-gradations of Software: **Principal Investigator, R&D Research Project sponsored by University of Delhi.** 2013-2014.
- Worked as a “Project fellow” in the UGC sponsored project “Mathematical Modelling and its Validation: Allocation of resources and their control in software reliability and marketing (An interdisciplinary approach)” in the Department of Operational Research. (April – August 2001).

Awards and Distinctions

- Conferred with Diploma of Excellence for the research paper Presented on the occasion of 5th DQM International Conference on Life Cycle Engineering and Management, (ICDQM), **2014.**
- Conferred with Award by Research Center of Dependability and Quality Management for the contribution to the development DQM Research Center. **2014.**
- Conferred with Amity Award for **Best Academician Research Paper** Presentation on the occasion of International Business School

Conference IBSCON **2014** by Amity International Business School, Amity University.

- Qualified National Eligibility Test for Lecturer-ship in Mathematical Sciences (examination held in June **2000**) conducted jointly by CSIR and UGC.

Associations with Professional Bodies

Memberships

- Senior Life Member, Operational Research Society of India (ORSI)
- Life Member, Society for Reliability Engineering, Quality and Operations Management (SREQOM)
- Life time Member of the Indian Science Congress Association

Ph.D. External Examiner

- Acted as an External Examiner of Ph.D. thesis from IIM Calcutta; Jaypee Institute of Information Technology, Noida; Rohilkhand University, Bareilly; and IFTM, Moradabad; LPU, Punjab.

Foreign Research Visit/ Collaboration

- Visited Nepal in 2019 to execute my duties as a Conference Co-chair for the International Conference on Quality, Reliability, Infocom Technology and Business Operations (Towards Smart, Reliable and Sustainable Future), Hotel Himalaya, Lalitpur, June 19-21, 2019

- Visited Serbia in the year 2014 for research collaboration Conferred with the Research Excellence Award for exemplary contribution in the area of Software Reliability.
- Visited South Africa for research collaboration with Prof. V. S. S. Yadavalli, Department of Industrial & Systems Engineering, University of Pretoria in the area of software reliability and marketing management in 2005.
- Visited Dubai in February 2019 to attend the International Conference on Artificial Intelligence – AICAI'19 organized by Amity University, Dubai, UAE.
- Visited Division of Operation and Maintenance, Lulea University of Technology, Sweden in 2014 for a period of three weeks to interact and work with senior researchers and eminent academicians/ research center managers to explore the possibilities of future research collaborations on the topic of mutual interest.

A handwritten signature in blue ink that reads "Sampal Singh". The signature is written in a cursive style and is underlined with a single horizontal stroke.

Signature of Faculty Member