




## Dr. Ompal Singh

Title	Prof. (Dr.)	First Name	OMPAL	Last Name	SINGH	Photograph
Designation	<b>Professor, Department of Operational Research</b>					
Address	<b>Room No. 207, 2<sup>nd</sup> Floor, Department of Operational Research, Faculty of Mathematical Sciences, University of Delhi, Delhi – 110007</b>					
Phone No. Office	<b>+91-11- 27666672</b>					
Residence Mobile	<b>+91-11-27666699 +91-9971999999</b>					
Email	<b><u><a href="mailto:drompalsingh1@gmail.com">drompalsingh1@gmail.com</a></u></b>					
<b>Education Qualifications</b>						
Degree	Institution				Year	
<b>Ph.D.</b>	<b>University of Delhi</b>				<b>2004</b>	

## Career Profile

**Dr. Ompal Singh** is a Professor in the Department of Operational Research, University of Delhi. He is currently a member 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.

**Dr. Ompal Singh** has guided fourteen Ph.D. Scholars and twelve M.Phil Research Scholars in Operational Research. He is presently guiding six Ph.D. Scholars and two M.Phil Research Scholars.

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

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

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

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

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

## Administrative Assignments

- Member, Faculty of Mathematical Sciences, University of Delhi
- Member, Board of Research Studies (BRS) Mathematical Sciences, Faculty of Mathematical Sciences, University of Delhi
- Member, Department Research Committee (DRC), Department of Operational Research, University of Delhi

- Member, M.Phil Committee, Department of Operational Research, University of Delhi
- Worked as a **Deputy Proctor** University of Delhi, Delhi for more than 12 years.
- Involved in Assessment of Colleges & Departments NAAC Preparation, **2016**.
- Involved in Admission Process of University of Delhi for the session **2013-14, 2014-15, 2015-16 & 2016-17**.
- Assisted the Joint Control Room of University of Delhi during the Holi festival & anti-ragging campaign.
- Involved as a member in the Inspection Committee, University of Delhi, Delhi and assisted the conduct of Board of Residence, Health and Discipline visits during **2013-14, 2014-15 & 2015-16**.
- Assisted the Proctor's office of University of Delhi for a key event the "**Gyanodaya Express**" in **2013, 2014 & 2015**.
- Security In Charge of Antardhavni – **2013, 2014 & 2015** festival, University of Delhi, Delhi.
- Appointed as a Member, Committee of Courses for Post-Graduate & Research Studies, Department of Operational Research, University of Delhi, Delhi, **2014-16**.
- Appointed as a Member, Committee of Courses & Under-Graduate Studies, Department of Operational Research, University of Delhi, Delhi, **2015-17**.
- Resident Tutor in Mansarowar Hostel, University of Delhi, resigned due to an accident in September **2006**
- Active member in "Campus improvement committee", "Extracurricular Committee" and "Discipline Committee" of Maharaja Agrasen College.
- General Secretary of Delhi University Research Association (DURA), during **2001 to 2003**.

Areas of Interest / Specialization
Software Reliability, Optimization, Innovation Diffusion Modeling, Marketing Management, and Data Analysis
Editorial Work
<ul style="list-style-type: none"> <li>• Associate Editor of International Journal of System Assurance Engineering and Management, Springer</li> <li>• Co-edited a book titled “Strategic System Assurance and Business Analytics”, Asset Analytics Series, Springer Publications, published on June 2020</li> <li>• 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</li> <li>• Editor of Conference Proceeding of Quality, Reliability, Infocom Technology and Industrial Technology Management, ISBN: 978-93-84588-57-1, 2015</li> <li>• Co-Editor of Special Issue of CDQM-An International Journal, January 2015</li> <li>• Guest Editor of Special Issue of CDQM-An International Journal, January 2013.</li> <li>• Co-editor of Special Issue of International Journal of System Assurance Engineering and Management, Springer (Scopus, ESCI indexed), December 2013.</li> <li>• Editor of Book containing proceedings of ICQRIT-2009, November 2012</li> </ul>
Subjects Taught
Software Reliability, Marketing Research, Marketing Management, Reliability and Maintenance Theory, Database Management Systems & Visual Basic, Industrial Project

**1. Supervision of Doctoral Thesis, awarded: 14**

- 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, **Jyotish Nendra 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.
- 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: 4**

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

- 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>.
- 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., 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.
- 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.
- Kaur, J., Anand, A., & **Singh, O.** (2019). Modeling Software Vulnerability Correction/Fixation Process Incorporating Time Lag. *Recent Advancements in Software Reliability Assurance*, 39.
- 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](https://doi.org/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.**, & 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.
- 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., 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., Das S., **Singh O.**, (2018). Patching: A Requirement for Complete Software Testing. *International Journal of Software Engineering (IJSE)*, 11(1), 3-14.

- 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.
- 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.
- 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.
- 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.
- 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.
- 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, **ISSN: 2455-7749**.

- 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)**.
- 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**.
- 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., DOI 10.1007/s13198-016-0455-x.
- 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).

- 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.
- 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.
- 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.
- **Singh, O.**, Kapur, P.K., Sachdeva, N., (2015). Technology Management in Segmented Markets. Quality, Reliability and Infocom Technology and Industrial Technological Management, I.K. International Publishing House Pvt. Ltd., 78-89.

- Kapur, P.K., Khatri, S. K., **Singh, O.**, Sachdeva, N., (2015). Multi Criteria Based Optimal Launch Time of a New Product. *Quality, Reliability and Infocom Technology and Industrial Technological Management, I.K. International Publishing House Pvt. Ltd.*, pp. 289-306.
- 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.
- 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, 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).
- Anand, A., **Singh, O.**, Agarwal, M., & Aggarwal, R. (2014, October). Modeling adoption process based on awareness and motivation of consumers. In *Reliability, Infocom Technologies and Optimization (ICRITO)(Trends and Future Directions), 2014 3rd International Conference on* (pp. 1-6). IEEE, Print ISBN: 978-1-4799-6895-4.

- **Singh, O.,** Kapur, P. K., Sachdeva, N., & Bibhu, V. (2014, October). Innovation diffusion models incorporating time lag between innovators and imitators adoption. In *Reliability, Infocom Technologies and Optimization (ICRITO)(Trends and Future Directions), 2014 3rd International Conference on* (pp. 1-6). IEEE. DOI: 10.1109/ICRITO.2014.7014710, 2014, Print **ISBN: 978-1-4799-6895-4**
- **Singh, O.,** Kapur, P. K., Shrivastava, A. K., & Das, L. (2014, October). A unified approach for successive release of a software under two types of imperfect debugging. In *Reliability, Infocom Technologies and Optimization (ICRITO)(Trends and Future Directions), 2014 3rd International Conference on* (pp. 1-6). **IEEE**. Print **ISBN: 978-1-4799-6895-4**
- **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.
- 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**
- 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.
- 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., & Paptic, 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.
- **Singh, O.**, Kapur, P. K., Sachdeva, N., Shrivastava, A.K. (2014). Optimizing Software Multiple Versions Testing Time under Budget and Reliability Constraint. In *Proceedings of the 5th International Conference on Life Cycle Engineering and Management (ICDQM)* (pp. 51-69), Serbia.
- Kapur, P. K., **Singh, O.**, & Shrivastava, A. K. (2014). Optimal price and testing time of a software under warranty and two types of imperfect debugging. *International Journal of System Assurance Engineering and Management*, 5(2), 120-126.
- 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.
- 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.
- **Singh, O.**, Anand, A., Aggrawal, D., & Singh, J. (2014). Modeling multi up-gradations of software with fault severity and measuring reliability for each release. *International Journal of System Assurance Engineering and Management*, 5(2), 195-203.



- 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.
- **Singh, O.**, Singh, J. N. P., Anand, A., Kapur, P. K. (2013). Optimal Release time of software: An integrated approach. *In the proceeding of 4th International DQM conference on life cycle engineering and management (ICDQM)*(pp-148-161), Serbia.
- 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.
- Anand, A., Kapur, P. K., **Singh, O.**, Sachdeva, N. (2013). Optimal Warranties and Two Dimensional Innovation Diffusion. Available at SSRN: <http://ssrn.com/abstract=2267825> or <http://dx.doi.org/10.2139/ssrn.2267825>
- **Singh, O.**, Aggrawal, D., & Kapur, P. K. (2012). Reliability analysis and optimal release time for a software using multi-attribute utility theory. *Communications in Dependability and Quality Management-An International Journal*, Serbia, 5(1), 50-64.
- **Singh, O.**, Anand, A., Kapur, P. K., & Aggrawal, D. (2012). Consumer behaviour-based innovation diffusion modelling using stochastic differential equation incorporating change in adoption rate. *International Journal of Technology Marketing*, 7(4), 346-360.
- Singh, J., **Singh, O.**, Aggrawal, D., Anand, A., & Singh, I. (2012). A flexible reliability growth model for various releases of software under the influence of testing resources. *J Pure Appl Sci Technol NLSS*, 2(2), 23-35.
- **Singh, O.**, Aggrawal, D., Kapur, P. K. (2012). Simultaneous Consideration of Time & Price for Adoption of Consumer Durables. In the proceedings of 6th International Conference on Quality, Reliability, Infocom Technology and Industrial Technology Management (ICQRITITM-2012).

- **Singh, O.,** Kapur, P. K., & Anand, A. (2012). A multi-attribute approach for release time and reliability trend analysis of a software. *International Journal of System Assurance Engineering and Management*, 3(3), 246-254.
- 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.
- Kapur, P. K., Singh, G., **Singh, O.,** & Anand, A. (2012). Assessing diffusion process in context of customer behaviour based on fluctuation in adoption rate. *International Journal of Mathematical Modelling, Simulation and Applications*, 5(1), 1-10.
- **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, O.,** Singh, J., Anand, A., Singh, I. (2012). Software Metrics and Reliability. In *Proceedings of the 6th National Conference; INDIACom 2011*, Eds. Prof M.N. Hoda ,Bharati Vidyapeeth's Institute of Computer Applications and Management, New Delhi.
- 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.

- **Singh, O.,** Kapur, P. K., Anand, A., Kumar, J. (2012). A Software Reliability Growth Model Embodying Features Intensification” Accepted for publication in International Business Horizon (INBUSH), Amity University, Noida, UP, India.
- **Singh, O.,** Kapur, P. K., Singh, J. N. P. (2012). Software Multi upgradation model for successive release. In *proceedings of Fourth International Conference on Quality, Reliability and Infocom Technology ( ICQRIT), Trends And Future Directions, Narosa Publications* (pp 77-87).
- **Singh, O.,** Kapur, P. K., Singh, G., Singh, J. N. P. (2012). Testing Effort Based Multi-up Gradation Software Reliability Growth Model” Communications in Dependability and Quality Management-An International Journal (CDQM), 15(1), 88-100.
- **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.
- **Singh, O.,** Kapur, P. K., & Anand, A. (2011, December). A stochastic formulation of successive software releases with faults severity. In Industrial Engineering and Engineering Management (IEEM), 2011 IEEE International Conference on (pp. 136-140). **IEEE**.
- Kapur, P. K., Anand, A., **Singh, O.,** & Hoda, M. N. (2011). Modeling successive software up-gradations with faults of different severity. In *Proceedings of the 5th national conference, INDIA Com* (pp.351-356).
- **Singh, O.,** Kapur, P. K., Anand, A., & Singh, J. (2011). Stochastic differential equation based modeling for multiple generations of software and optimal release planning. In *Proceedings of 5th international conference on quality, reliability and infocom technology (ICQRIT), trends and future* (Vol. 8). Nepal, SN-19, pc-19.

- **Singh, O.**, Kapur, P. K., Khatri, S. K., Singh, J N P. (2011). Testing Domain Based Software Reliability Growth Model incorporating the effect of imperfect debugging and error generation” *proceedings of 5th International Conference on Quality, Reliability and Infocom Technology (ICQRIT), Trends and Future Directions*, Kathmandu, Nepal, SN-21, pc-21.
- Kapur, P. K., **Singh, O.**, & Singh, J. (2011) Stochastic Differential Equation Based Software Reliability Growth Modeling With Change Point and Two Types of Imperfect Debugging. in Proceedings of the 5th National Conference; INDIACom, Eds. Prof M.N. Hoda ,Bharati Vidyapeeth’s Institute of Computer Applications and Management, New Delhi.605-612.
- **Singh, O.**, Kapur, P. K., & Anand, A. (2011). A dynamic potential adopter diffusion model incorporating change in the adoption rate. In *Proceedings of the International Congress on Productivity, Quality, Reliability, Optimization and Modeling (ICPQROM-2011)* (Vol. 1, pp. 593-604). New Delhi: ISI, Allied Publishers Pvt. Ltd.
- 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 Dependability And Quality Management-An International Journal*, Serbia, 13(3), 46-60.

- **Singh, O.,** Kapur, R., & Singh, J. (2010). Considering the effect of learning with two types of imperfect debugging in software reliability growth modeling. *Communications in Dependability and Quality Management*, 13, 29-39.
- Kapur, R., **Singh, O.,** & Singh, J. (2010). An Irregular Fluctuation Based multi up-gradation software reliability model. In Proceedings of the International Conference on Reliability, Infocom Technology and Optimization” (ICRITO), vol.-I, Eds.: S. K. Khatri and Brijesh Kumar, Lingya’s University, Faridabad, 734-741.
- Kapur, P. K., **Singh, O.,** Tandon, A. (2010). Bi criterion Release Policy for a Software Reliability Growth Model Incorporating the Effect of Change point” In Proceedings of the International Conference on Reliability, Infocom Technology and Optimization” (ICRITO) vol. I, eds.: S. K. Khatri and Brijesh Kumar, Lingya’s University, Faridabad, 214-226.
- **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.
- Kapur, P. K., **Singh, O.,** Chanda, U., & Basirzadeh, M. (2010). Determining adoption pattern with pricing using two-dimensional innovation diffusion model. *The Journal of High Technology Management Research*, 21(2), 136-146.
- **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.
- **Singh, O.**, Singh, V.B., Kumar J., Kapur, P.K. (2009). Generalized modeling framework for fault detection–correction process incorporating change-point. *Communication in Dependability and Quality Management: An International Journal*, Serbia, 12(1), 35-46.
- Kapur, P. K., Khatri, S. K., Johri, P. & **Singh, O.** (2009). Incorporating Concept of Two Types of Imperfect Debugging for Developing Flexible Software Reliability Growth Model in Distributed Development Environment. *Journal of Technology and Engineering Sciences*, 1(1), 9-19.
- 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.
- Kapur, P. K., Goswami, D. N., Bardhan, A., & **Singh, O.** (2008). Flexible software reliability growth model with testing effort dependent learning process. *Applied Mathematical Modelling*, 32(7), 1298-1307.
- Kapur, P.K., **Singh, O.**, Kumar, A., Yamada, S. (2007). Discrete software reliability growth models for distributed systems. In *Quality 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.**, Shatnawi, O., & Gupta, A. (2006). A discrete NHPP model for software reliability growth with imperfect fault debugging and fault generation. *International Journal of Performability Engineering*, 2(4), 351-368.
- 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.
- **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., **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.
- 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.

- Kapur, P. K., Gupta, A., & **Singh, O. (2005)**. On Discrete Software Reliability Growth Model & Categorization of Faults. *OPSEARCH-NEW DELHI-*, 42(4), 340-354.

#### Publications in the Last one year

1. 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**
2. 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>. Indexed in Scopus
3. 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>. **Impact Factor: 5.846**, Indexing: Scopus, SSCI.
4. 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>. Indexed in Scopus, ESCI.
5. 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. Indexed in Scopus, ESCI.



6. 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. Indexed in Scopus, ESCI.
7. 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. Indexed in Scopus.
8. 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. Indexed in Scopus, ESCI.
9. **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>. Indexed in Scopus, ESCI.
10. **Singh, O.**, Singhal, S., & Anand, A. (2020). Multigenerational modeling incorporating time lag in innovation adoption, *International Journal of Services Operations and Informatics*, In press. Indexed in Scopus.
11. 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. Indexed in Scopus, ESCI.
12. 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. Indexed in Scopus, ESCI

13. 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.
14. 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.
15. Kaur, J., Anand, A., & **Singh, O.** (2019). Modeling Software Vulnerability Correction/Fixation Process Incorporating Time Lag. *Recent Advancements in Software Reliability Assurance*, 39.
16. 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](https://doi.org/10.1080/23270012.2019.1702904). Indexed in Scopus, ESCI.
17. 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. Indexed in Scopus, ESCI.
18. 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>
19. 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>. Indexed in SCI, Scopus, **Impact Factor: 2.583**.

20. 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.
21. 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. Indexed in Scopus, ESCI.
22. 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. Indexed in Scopus, ESCI.

#### Conference Organization and Session Chair

#### ***Participation and Organization of a Conference***

- 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, 24 Bedford Square, Fitzrovia, London WC 1B 3HN, 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 10<sup>th</sup> International Conference On Quality, Reliability, Infocom Technology And Business Operations, Lalitpur, Nepal, June 18–21, **2019**.
- Co-Chair, Conference Organizing Committee, in 1<sup>st</sup> 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 International Conference on Automation and Computational Engineering (ICACE), Amity University, Greater Noida, India, Oct. **2018**
- Conference Secretary in 9<sup>th</sup> International Conference On Quality, Reliability, Infocom Technology And Business Operations, University of Delhi, Delhi, Dec 28-30, **2018**.
- Conference Co- Chair in 8<sup>th</sup> International Conference On Quality, Reliability, Infocom Technology And Business Operations, Amity University, Feb 8-10, **2017**.
- Conference Secretary in 7<sup>th</sup> International Conference On Quality, Reliability, Infocom Technology And Business Operations, University of Delhi, Dec 28-30, **2015**.
- Participated in 5<sup>th</sup> DQM International Conference on Life Cycle Engineering and Management, (ICDQM), Belgrade, Serbia, 27-28 June, **2014**.

- Worked as Conference Secretary in 6<sup>th</sup> 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**.
- Participated in 5<sup>th</sup> 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 2<sup>nd</sup> International Conference on Reliability, Safety and Hazard” (ICRESH), Bombay, **2010**.
- Participated in International Conference on Reliability, Infocom Technology and Optimization” (ICRITO), Faridabad, **2010**.
- Participated in the 4<sup>th</sup> 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 11<sup>th</sup> 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**.
- 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**.
- Member, Organizing Committee, International Conference on Quality, Reliability and 'IT' held at Indian National Science Academy, New Delhi during December 21-23, **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 10<sup>th</sup> International Conference On Quality, Reliability, Infocom Technology And Business Operations, Lalitpur, Nepal, June 18–21, **2019**.
- Chaired a session, in 9<sup>th</sup> International Conference On Quality, Reliability, Infocom Technology And Business Operations, University of Delhi, Delhi, Dec 28-30, **2018**
- Chaired a session, in 8<sup>th</sup> International Conference On Quality, Reliability, Infocom Technology And Business Operations, Amity University, Feb 8-10, **2017**.
- Chaired a session, in 7<sup>th</sup> International Conference On Quality, Reliability, Infocom Technology And Business Operations, University of Delhi, Dec 28-30, **2015**.
- Chaired a session, in 5<sup>th</sup> DQM International Conference on Life Cycle Engineering and Management, (ICDQM), Belgrade, Serbia, 27-28 June, **2014**.

- Chaired a session, in 6<sup>th</sup> International Conference on Quality Reliability Infocom Technology and Industrial Technology Management, (ICQRITITM), University of Delhi, Delhi, Nov. **2012**.
- Chaired a session, in 5<sup>th</sup> International Conference on Quality Reliability and Infocom Technology, (ICQRIT), Kathmandu, Nepal, 8-10 Dec. **2011**.
- Chaired a Session at 23<sup>rd</sup> 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 7<sup>th</sup> 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 7<sup>th</sup> 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 7<sup>th</sup> 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**.

- “Optimizing Software Multiple Version Testing Time under Budget and Reliability Constraint”, presented a paper in the 5<sup>th</sup> 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)

- Modeling Up-gradations and Release Time Problems of Software & Successive Generations of Technologies in Marketing: **Principal Investigator, DU-DST PURSE-II Grant**. 2014-2015
- 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 inter-disciplinary 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 5<sup>th</sup> 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

Foreign Research Visit/ Collaboration
<ul style="list-style-type: none"><li>• 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 research center managers to explore the possibilities of future research collaborations on the topic of mutual interest.</li></ul>



Signature of Faculty Member