

Name : Prof. M.P. Singh  
Designation : Professor, (Dean), Faculty of Science  
Pay-Scale : 37400-67000  
Total Salary : 90630=00  
Working Experience : (a) Teaching: 34 years  
(b) Research: 25 years  
Qualification : 1. M.Sc. (1974)  
2. Ph.D. (1990)  
Research Area : Optimization Theory, Networks,  
Mathematical Modelling .  
Date of Birth : 12-01-1950  
E-Mail : [mpsinghgkv@rediffmail.com](mailto:mpsinghgkv@rediffmail.com)  
Contact No. : 9412931284, 01334-212068  
Paper Published : 34

### **RESEARCH PUBLICATIONS NATIONAL / INTERNATIONAL JOURNALS**

1. J. S. Tomar, D. C. Gupta and M. P. Singh, "Vibration Analysis of a Non-Uniform Circular Plate Subjected to One-Dimensional Steady-State Temperature Distribution", *Jñānābha*, Vol. 22, pp. 61 – 77, 1992.
2. Sharma V.K., Singh, M.P. & Yadav P.K., "A Fast Algorithm for Allocating Task in Distributed processing System" XXX Annual Convention of the Computer Society of India. Held at Hyderabad. From 9-12 Nov PP 347-357, 1995.
3. Sharma V.K., Singh, M.P., and Yadav P.K., "On the Design of an Efficient Generalized Processor - Distance Based Task Allocation Model for Distributed Computing System", Published and Presented in National Conference on Information Technology at M.A.C.T. Organised by Local Chapter of Computer Society of India., Bhopal from 25-26 June, pp. 203-210, 1995.

4. Sharma V.K., Singh, M.P., and Yadav P.K., "An Efficient Algorithm for Allocating Task to Processors in a Distributed System", Ninth National Systems Conference held at PSG College of Technology, Coimbatore from 14-16 Dec. PP 82-87, 1995.
5. Sharma V.K., Singh, M.P., and Yadav P.K., "An Efficient Algorithm for Multi-processor Scheduling with Dynamic Reassignment", Published in the Sixth National Seminar on Theoretical Computer Science, held at Vanasthali Vidyapith from 5-6 Aug., 1996.
6. Kumar, Avanish, Singh, M. P. and Kumar, Vinod, "Performance Evaluation for Response Time Analysis", Journal of International Academy of Physical Sciences, Vol. 2, pp. 35-41, 1998.
7. Kumar, Avanish, Singh, M. P. and Kumar, Vinod, "An Efficient Modified Load Balancing approach for Task –Allocation in Distributed Systems", Journal of International Academy of Physical Sciences, Vol. 3, pp. 41-52, 1999.
8. Singh, M. P., Kumar, Vinod and Kumar, Avanish, "An Efficient Algorithm for Optimizing Reliability Index in Task Allocation" Journal of ACI (Mathematics) Vol. XXVM, No. 4, pp. 437 – 444, 1999.
9. Kumar, Vinod, Singh, M. P. and Kumar, Avanish, "An efficient modified load balancing approach for task allocation in distributed systems", Proceedings of the fifth conference of the International Academy of Physical Sciences held at Jhansi, April 07-09, 2002, Published by Academic Excellence, Delhi, , pp. 401-411, 2004.
10. Yadav P. K., Sharma A. K. and Singh M.P., "A Novel Clustering Based Load Balancing Algorithm for Allocating Tasks to processors in Distributed Computing Systems", Fifth Conference of the International Academy of Physical Sciences CONIAPS-V held at Bundelkhand University, Jhansi, PP. 6, 2002.
11. Parul Rani, M.P.Singh, Rashid Ali, "Stresses in a Thin Isotropic Elastic Infinite Plate with an Epitrochoidal Hole", Far East Journal of Applied Mathematics, Vol. 13, No. 1, pp. 31-38, 2003.

12. Yadav, P. K., Singh, M. P., Kumar, Avanish and Sharma, Manisha, "An optimal sequencing strategy to module execution in computer communication systems", *Varahmihir Journal of Mathematical Sciences*, Ujjain, Vol. 3, No. 1, 2003, pp. 175-187.
13. Parul Rani, M.P.Singh, Rashid Ali, "Analysis of stress-intensity factor for an epitrochoidal disc under two concentrated forces", *Bulletin of Pure and Applied Sciences*, Vol. 20, No. 2, pp. 239-246, 2004.
14. Singh, M. P., Yadav, P. K., Kumar, Avanish and Gupta, A. R., "An Efficient Allocation Model for Distributed Systems", published in the proceedings of Sixth International Conference of the Association of Asia-Pacific Operational Research Societies within IFORS 'APORS-2003' held at New Delhi from December 08-11, 2003, published by Allied Publisher Pvt. Ltd., New Delhi, pp. 29-39, 2004
15. Yadav, P. K., Kumar, Avanish and Singh, M. P., "An Algorithm for Solving the Unbalanced Assignment Problems", *The International Journal of Mathematical Sciences*, Varanasi, Vol. 3, No. 2, pp. 447-461, 2004.
16. V. K. Verma, V. K. Katiyar and M.P. Singh, "Analytical Study of Blood Flow Through and Artery with Mild Stenosis ", *Acta Cinecia Indica*, Vol. XXXM, No. 2, pp. 28-, 2004.
17. Yadav, P. K., Kumar, Harendra, Singh, M. P., and Kumar, Avanish, "Heuristic Approach of Tasks Allocation in Distributing Processing System", published in the proceedings in CD of the International Conference of ORSI, held at Bangalore from Dec. 27-29, 2005.
18. Harendra Kumar, M.P.Singh, Pradeep Kumar Yadav, Avanish Kumar, "An Efficient Tasks Assignment Algorithm In Heterogeneous Distributed Processing System", *Varahmihir Journal of Computer & Information Sciences*, Vol. 2, No.2, pp.105-116, 2006.
19. Harendra Kumar, M.P.Singh, Avanish Kumar, "A Task Allocation Model for Distributed Data network", *Reflection des Era-Journal of Mathematical Sciences*, Vol. 1, No.4, pp. 379-392, 2006.

20. Harendera Kumar, Singh M.P., Yadav P.K. & Kumar Avanish, "An Efficient Tasks Assignment Algorithm in Heterogeneous Distributed Processing System" Journal of Computer & Information Science, Vol. 2(1&2), pp. 105- 116,2007
21. M.P.Singh, Harendra Kumar, P.K.Yadav, "Scheduling of Communicating Modules of Periodic Tasks in Distributed Real Time Environment", International Journal of Applied Mathematics & Engineering Sciences, Vol. 2, No. 2, pp. 193-200, July-December-2008.
22. P.K.Yadav, M.P.Singh, Harendra Kumar, "Scheduling Algorithm: Tasks Scheduling Algorithm for Multiple Processors with Dynamic Re-assignment", Journal of Computer Systems, Networks, and Communications, Vol. 2008, No.1, pp. 1-9, Article ID 578180, doi: 10.1155/2008.
23. M.P. Singh, Monika and Pradeep Yadav, "Queuing Discipline to Reduce Connection-Tracking Flows in Protocol – That uses Quantum Periodicity for Scalable Network Services", International Transaction in Mathematical Sciences and Computer, Vol. 1, No. 1, pp. 103-122, June 2008.
24. P.K. Sharma, M.P. Singh, Harikishan, "On The Diophantine Equation  $x^2 - 13 = 3^n$ ", Acta Ciencia Indica, Vol. XXXIV M, No. 3, pp. 1043-, 2008.
25. V.K. Verma, M.P. Singh, V.K. Katiyar, "Mathematical Modeling of Blood Flow Through Stenosed Tube", Journal of Mechanics in Medicine and Biology, Vol. 8, No. 1, pp. 27-32, 2008.
26. M.P.Singh, Harendra Kumar, P.K.Yadav, "Priority Based Tasks Allocation for Load Balancing in Distributed Computing Environment", Pacific Asia Journal of Mathematics, Vol.3, No.2. 2009.
27. Harendra Kumar, M.P.Singh, P.K.Yadav, "Task Allocation Model for Optimal Utilization of Processor's Capacity in Distributed system", International Journal of Mathematical Sciences and Engineering Applications (IJMSEA), Vol.3, No. IV, 2009

- 28.M.P. Singh, Monika, A.K. Pal, “Scalable Network Services with Random Phases of Service Subsets”, International Transaction in Applied Sciences”, 2009.
- 29.P.K. Yadav, M.P. Singh, Jugendra Singh, “An Efficient Method For Tasks Scheduling in a Computer Communication Network”, International Journal of Intelligent Information Processing, Vol. 3, No. 1, pp. 81-89, Jan- June 2009.
- 30.M.P. Singh, Harendra Kumar, P.K. Yadav, “A Performance Effective Tasks Scheduling Algorithm in a Heterogeneous Multiprocessor System on Directed Acyclic Graphs”, International Journal of Scientific and Industrial Research, CSIR, New Delhi, 2009.
- 31.Rashid Ali, Ramindar Kaur, V.K. Katiyar, M.P. Singh, “Mathematical Modeling of Blood Flow Through Vertebral Artery with Stenoses”, Indian Journal of Biomechanics: Special Issue (NCBM 7-8 March 2009).
- 32.M. P. Singh, Avanish Kumar & Vikram Kapoor, “Secured Email System Using Poly Alphabetic Substitution Cipher”, International Journal of Knowledge Management and e-Learning, Vol. 1, N0. 2, pp. 77 – 80, July- December 2009.
- 33.V. K. Verma, V. K. Katiyar and M. P. Singh, “Study of Periodic Breathing and Human Respiratory System”, International Journal of Medicine and Medical Sciences, Vol. 1, No. 8, pp. 330 – 333, 2009. (Academic Journal)
- 34.V. K. Verma, V. K. Katiyar and M. P. Singh, “Flow Behaviour of a non- Newtonian Fluid in Peristaltic Motion” , Accepted for publication in June 2010 issue Bulletin of Allahabad Mathematical Society (BAMS).

Books Authored : Nil

Seminar/Conferences : 16

**CONFERENCE AND COURSE ATTENDED AND PRESENTED RESEARCH PAPERS**

1. "A Fast Algorithm for Allocating Task in Distributed Processing System", XXX Annual Convention of the Computer Society of India. Held at Hyderabad. From 9-12 Nov, 1995.
2. "An Efficient Algorithm for Allocating Task to Processors in a Distributed System", Ninth National Systems Conference held at PSG College of Technology, Coimbatore from 14-16 Dec., 1995.
3. "On the Design of an Efficient Generalized Processor - Distance Based Task Allocation Model for Distributed Computing System", National Conference on Information Technology at M.A.C.T. Organised by Local Chapter of Computer Society of India., Bhopal from 25-26 June, 1995.
4. "An Efficient Algorithm for Multi-processor Scheduling with Dynamic Reassignment", Sixth National Seminar on Theoretical Computer Science, held at Vanasthali Vidyapith from 5-6 Aug., 1996.
5. "Reliability and Cost-Based Index for task Allocation in Computer Communication System", Silver Jubilee Symposium on Modelling, Optimization and Information Technologies in Managerial Decision Making (MOIT-MDM-2000) and Fourth Annual Conference of Indian Society of Information Theory and Application, Jhansi, 2000.
6. "A Dynamic Strategies for Optimal Task Allocation", Silver Jubilee Symposium on Modelling, Optimization and Information Technologies in Managerial Decision Making (MOIT-MDM-2000) and Fourth Annual Conference of Indian Society of Information Theory and Application, Jhansi, 2000.
7. "A Novel Clustering Based Load Balancing Algorithm for Allocating Tasks to Processors in Distributed Computing Systems", Fifth Conference of the International Academy of Physical Sciences CONIAPS-V held at Bundelkhand University, Jhansi, 2002 and presented a research paper entitled.
8. "An Efficient Allocation Model for Distributed Systems", Sixth International Conference of the Association of Asia-Pacific Operational Research Societies within IFORS 'APORS-2003' held at New Delhi from December 08-11, 2003.

9. "Stresses in a thin isotropic elastic infinite plate with an epitrochoidal hole", 19<sup>th</sup> annual conference of Ramanujan Mathematical Society, hosted by Institute of Basic Sciences, Agra on July 21-24, 2004.
10. "Flat ended circular cylindrical punch for initially stressed Neo-Hookean solids", International conference on Industrial and Applied Mathematics, organized by Jamia Millia Islamia, New Delhi on Dec. 04-06, 2004.
11. "Heuristic Approach of Tasks Allocation in Distributing Processing System", International Conference of ORSI, held at Bangalore from Dec. 27-29, 2005.
12. "Rectangular clamped plate: A Variational Approach", 8<sup>th</sup> conference of International Academy of Physical Sciences, organized by C.C.S. University, Meerut from Dec. 29-31, 2005.
13. "Mean Response Time of a Communication Network", First National Conference on Computer Science and Information Technology held at Krishna Institute of Engg. & Technology, Gaziabad, 11-12, Nov 2006.
14. "Performance Analysis of a Computer Communication Network Through M/M<sup>Y</sup>/1 Bulk Arrival Queueing Modal", 3<sup>rd</sup> International Conference on Quality Reliability and Infocom Technology (Trends and Future Directions) held at Indian National Science Academy, New Delhi, 2-4 Dec 2006.
15. "Computer Communication System: Minimization of the Total Time and Response Time of Task Allocation", 9<sup>th</sup> conference of International Academy of Physical Sciences held at Agra University, Agra, 3-5 Feb 2007.
16. Chaired two sessions in the 4<sup>th</sup> Uttarakhand State Science and Technology Congress, 10-12 November 2009.