



## Dr G S R Murthy

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## Expertise

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### Statistics and Probability

Carried out a number of industrial projects on applications of Statistics and Operations Research; Based on my contributions published a book on case studies with Springer, and contributed five chapters in another book edited volume by Springer; Designed National Drugs Survey (2014-16); Conducted State-wide survey (Andhra Pradesh 2007) for estimation agricultural power consumption; Carried out a project for DGGI on estimation Gross Bet Value at Casinos for the purpose of assessment of GST.

## Work experience

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### 1. Indian Statistical Institute 1999 — 2000

Former Head  
Hyderabad

### 2. Indian Statistical Institute 1997 — Present

Senior Technical Officer  
India

### 3. Indian Statistical Institute 1993 — 1997

Technical Officer  
India

### 4. Indian Statistical Institute 1986 — 1993

Technical Officer Grade III  
India

## Education

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1. Ph.D - 1995

Indian Statistical Institute, Kolkata

2. M. Stat. - 1983

Indian

3. B. Stat. (Hons) - 1981

Indian Statistical Institute

4. PG Diploma - 1983

Indian Statistical Institute

5. Specialist Development Fellowship - 1986

Indian Statistical Institute

## Publication

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1. T. Parthasarathy's contributions to complementarity problems: a survey

G S R Murthy.;Sivakumar, K. C.;Sushmitha, P.

Annals of Operations Research, Volume 287, Year 2020, Pages 867-894

2. AN EFFICIENT ALGORITHM TO THE INTEGRATED SHIFT AND TASK SCHEDULING PROBLEM

Murthy, G. S. R. and Lalita, T R

Technical Report, Year 2020

3. COMPACT ILP FORMULATIONS FOR A CLASS OF SOLUTIONS TO BERTH ALLOCATION QUAY CRANE ALLOCATION SCHEDULING PROBLEMS

Murthy, G. S. R. and Lalita, T R

Technical Report, Year 2020

4. THE WIND POWER SCHEDULING PROBLEM

Murthy, G. S. R. and Lalita, T R

5. **Mathematical formulations for large scale check-in counter allocation problem**  
G S R Murthy  
Journal of Air Transport Management, Volume 85, Year 2020, Pages
6. **Clinical and angiographic profile and in-hospital outcomes of elective percutaneous interventions in patients with Diabetes mellitus in a tertiary care centre**  
Swarajyam, Veeramchaneni and Rao, CV and Murthy, GSR and Kumar, PVVNM  
Indian Heart Journal, Volume 69, Year 2017, Pages S61
7. **Applications of Operations Research and Management Science - Case Studies**  
G. S. R. Murthy  
Springer International Series on Operations Research & Management Science, Volume 229, Year 2016, Pages 270
8. **A Methodology for National Drugs Survey**  
G S R Murthy and T R Lalita  
Technical Report, Volume SQCOR - 2015 - 2, Year 2015, Pages
9. **Plant Loading and Dispatch Planning**  
Murthy, GSR  
, Year 2015, Pages 51--89
10. **A Case Study that Lead to New Designs**  
Murthy, GSR  
, Year 2015, Pages 249--266
11. **Optimization in PCB Manufacturing**  
Murthy, GSR  
, Year 2015, Pages 19--35
12. **Intelligent Modeling and Practical Solutions**  
Murthy, GSR  
, Year 2015, Pages 161--213
13. **Material Optimization in Web Manufacturing**  
Murthy, GSR  
, Year 2015, Pages 1--17
14. **Statistics for Measuring Tyre Contact Patch**  
Murthy, GSR  
, Year 2015, Pages 231--247
15. **A Scientific Tool for Workforce Management in BPO Companies**

- Murthy, GSR  
, Year 2015, Pages 137--160
16. **Deckle Optimization in Paper Industry**  
Murthy, GSR  
, Year 2015, Pages 91--135
  17. **Modelling Optimum Utilization of Irrigation Resources**  
Murthy, GSR  
, Year 2015, Pages 215--230
  18. **A Statistical Procedure for Minimizing In Vivo Tests for Quality Control of Vaccines**  
Murthy, GSR  
, Year 2015, Pages 37--49
  19. **A note on multivariate folded normal distribution**  
Sankhya: The Indian Journal of Statistics, Volume 77B, Year 2015, Pages 108-113
  20. **Assembling cells in wet cell traction batteries that power forklifts**  
International Series in Operations Research and Management Science, Volume 212, Year 2015, Pages 465-477
  21. **Cutting stock problems in the paper and sheet metal industries**  
International Series in Operations Research and Management Science, Volume 212, Year 2015, Pages 413-430
  22. **Wood inventory management in paper industry**  
International Series in Operations Research and Management Science, Volume 212, Year 2015, Pages 199-216
  23. **Optimizing the allocation of cuboidal boxes to cuboidal compartments for storage in a warehouse**  
International Series in Operations Research and Management Science, Volume 212, Year 2015, Pages 297-314
  24. **Designing earth dams optimally**  
International Series in Operations Research and Management Science, Volume 212, Year 2015, Pages 129-165
  25. **On fully semimonotone matrices**  
International Game Theory Review, Volume 15, Year 2013
  26. **Complementarity problems and positive definite matrices**  
Bhimashankaram, P and Parthasarathy, T and Murthy, ALN and Murthy, GSR  
Algorithmic Operations Research, Volume 7, Year 2012
  27. **A network flow model for irrigation water management**

Murthy, ALN and Murthy, GSR  
Algorithmic Operations Research, Volume 7, Year 2012

28. Optimization in  $2^m 3^n$  Factorial Experiments

Murthy, GSR and Manna, DK  
Algorithmic Operations Research, Volume 7, Year 2012

29. Evaluation Problem in Ultrasonic Examination of Ball Mill Shell

Rao, E Amma and Babu, D Vijaya and Murthy, GSR  
NDE 2002: Predict, Assure, Year 2002, Pages 2002

30. On the Connectedness of Solution Sets of Parametrized Equations and of Solution Sets in Linear Complementarity Problems

Gowda, M Seetharama and Murthy, GSR and Parthasarathy, T  
, Year 2001, Pages 165--177

31. Principal pivoting method for solving column sufficient complementarity problems

SIAM Journal on Matrix Analysis and Applications, Volume 22, Year 2001, Pages 527-532

32. The Linear Complementarity Problem in Static and Dynamic Games

Murthy, GSR and Parthasarathy, T and Sriparna, B  
, Year 2000, Pages 289--301

33. A Note on  $P_1$ - and Lipschitzian Matrices

Murthy, GSR and Neogy, SK and Thuijsman, Frank  
SIAM Journal on Matrix Analysis and Applications, Volume 21, Year 2000, Pages 636--641

34. On the solution sets of linear complementarity problems

Murthy, G. S.R.; Parthasarathy, T.; Sriparna, B.  
SIAM Journal on Matrix Analysis and Applications, Volume 21, Year 2000, Pages 1229-1235

35. Some recent results on the linear complementarity problem

Murthy, G. S.R.; Parthasarathy, T.; Sriparna, B.  
SIAM Journal on Matrix Analysis and Applications, Volume 19, Year 1998, Pages 898-905

36. Fully copositive matrices

Mathematical Programming, Series B, Volume 82, Year 1998, Pages 401-411

37. A Chain Condition for  $Q_0$ -Matrices

Biswas, AK and Murthy, GSR  
, Year 1997, Pages 149--152

38. Constructive characterization of lipschitzian  $Q$  matrices

Murthy, GSR and Parthasarathy, T and Sriparna, B  
, Year 1997

39. Constructive characterization of Lipschitzian  $Q_0$ -matrices

Murthy, GSR and Parthasarathy, T and Sriparna, B  
Linear algebra and its applications, Volume 252, Year 1997, Pages 323--337

40. Lipschitzian  $Q$ -matrices are  $P$ -matrices

Murthy, GSR and Parthasarathy, T and Sabatini, Marco  
Mathematical programming, Volume 74, Year 1996, Pages 55--58

41. On co-positive, semi-monotone  $Q$ -matrices

Murthy, GSR and Parthasarathy, T and Ravindran, G  
Mathematical programming, Volume 68, Year 1995, Pages 187--203

42. Some Properties of Fully Semimonotone,  $Q_{\geq 0}$ -Matrices

Murthy, GSR and Parthasarathy, T  
SIAM journal on matrix analysis and applications, Volume 16, Year 1995, Pages 1268--1286

43. A note on negative Lipschitzian matrix

Murthy, GSR and Parthasarathy, T and Sabatini, M  
OPSEARCH-NEW DELHI-, Volume 31, Year 1994, Pages 237--237

44. Some contributions to linear complementarity problem

Murthy, GSR  
, Year 1994

45. On Lipschitzian  $Q$ -matrices

Murthy, GSR and Parthasarathy, T and Sabatini, M  
, Year 1994

46. Some properties of fully-semimonotone,  $Q_{\geq 0}$ -matrices

Murthy, GSR and Parthasarathy, T  
, Year 1994

47. A note on sufficient conditions for  $Q_{\geq 0}$  and  $Q_{\geq 0} \cap P_{\geq 0}$  matrices

Murthy, GSR  
Mathematical programming, Volume 61, Year 1993, Pages 345--349

48. A copositive  $Q$ -matrix which is not  $R_{\geq 0}$

Murthy, GSR and Parthasarathy, T and Ravindran, G  
Mathematical programming, Volume 61, Year 1993, Pages 131--135

49. Ninth International Workshop on "Matrices and Statistics" in Celebration of CR Rao's 80th Birthday Hyderabad, AP, India: December 9--13, 2000

Bhatia, R and Bhimasankaram, P and Murthy, GSR and Narayana, V and SuruyaPrakesh, U and Swamy, RJR and Udayasree, P and Viswanath, K and Werner, Hans Joachim  
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