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Tribute to Professor Aloke Dey – A Noble and Pious Soul

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A Hebrew Proverb (Translation by Rabindranath Tagore)

A death is not the extinguishing of a light,
but the putting out of the lamp
because the dawn has come.

Life is given to us,
we earn it by giving it.
Let the dead have the immortality of fame,
but the living the immortality of love.

Life's errors cry for the merciful beauty
that can modulate their isolation into a
harmony with the whole.

Life, like a child, laughs,
shaking its rattle of death as it runs.

1. An Eulogy

We are all united not only in our desire to pay our homage to Aloke Dey but rather in our need to do so. For such was his extraordinary appeal in the community of statisticians across the globe that all of us feel that we have lost a soul mate of ours.

Aloke Dey was the very essence of wisdom, of dedication, of duty, of style, of sincerity, of academic honesty, of humbleness, of compassion, of friendship, of care. His associates had always been charmed by not only his knowledge but also his rectitude and integrity. And talking of his dedication, even with problems in his eyes, he used to spend hours and hours of his time working on computers and writing manuscripts.

Aloke Dey has left for his heavenly abode, and in the entire academic world, there is a feeling of having been left desolate and forlorn. All of us sense that feeling, and we do not know when we shall be able to overcome it. And, at the same time, there is a proud thankfulness to God for allowing

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us of this generation to be associated with this towering personality who not only made monumental contributions towards the advancement of statistical sciences, but also remained, at the same time, so down to earth and so compassionate. While his jovial nature endeared him to everyone, he carried an aura reflecting the deepest respect that he earned from people around him for his unbounded talent, his perfect intuition and his sharp memory. Indeed, even an apparently simple problem posed by him often had deep underpinnings, leading to the excitement of discovery. He was truly a friend, philosopher and guide whose very presence filled the minds of his associates with joy of learning, confidence and happiness.

Today is our chance to say thank you, Aloke Dey, for the way you brightened science and our lives, even though God granted you but a short life and took you away so early. Only now that you are gone do we truly appreciate what we are now without and we want you to know that life without you is very, very difficult. It is only through the strength of the message that you gave us over the years that we are slowly gaining the strength to move forward. The days that we spent together and what we had learned from you will remain in our hearts as our most cherished treasure.

2. A Birds Eye View of the Accolades

Professor Dey's attainments are so towering and encompass such a multitude of directions that we find it really hard to present them here in adequate detail. Yet, we make a valiant effort to highlight just a few of these.

Professor Aloke Dey…

[A brilliant scholar]

- Master's degree (1964) in mathematics, then master's degree (1966) from the Indian Agricultural Statistics Research Institute (IASRI) with a first rank, followed by a Ph.D. degree (1969), from IASRI.

[Official positions]

- Joined IASRI in 1970 as a faculty; became a senior professor in 1977 at the early age of 32 years.
- Joined the Indian Statistical Institute (ISI) in 1989 as a professor and continued there till his formal retirement in 2007.
- Senior Scientist of the Indian National Science Academy (2007-12) and the National Academy of Sciences, India (2012-17), both hosted by ISI.
- Held senior academic positions at many institutions abroad, including those in USA, Canada and Taiwan.

[A researcher par excellence]

- A world leader in statistics for fundamental research in diverse areas, for excellent dissemination of ideas through elegantly written books, and for influential editorial work.
- Research, spread over five decades, encompassing multiple areas pertaining to not only statistics but also mathematics, and reflecting an amazing depth and versatility.
- Extensive publications, with numerous citations, in the very best journals – no wonder though, given the profound depth of his findings.
- Areas particularly enriched through his work include design of experiments, survey sampling, combinatorial theory, linear algebra and cryptology.

- [*Research in design of experiments*]
  Here alone, path-breaking contributions to such diverse areas as factorial designs, varietal block and row-column designs, weighing designs, response surface designs, crossover designs, designs for biological assays and diallel crosses, and so on.
  Specifically:
  (A) Research on orthogonal fractional factorial plans and related orthogonal arrays, with emphasis on the practically important but mathematically difficult asymmetric case, blending theoretical elegance with immediate applicability, notably in industrial experimentation and quality control. This includes, in particular:
    (i) Work on the hard problem of obtaining fractional factorial plans when certain interactions are important, coming up with an ingenious solution *via* the use of tools from finite projective geometry.
    (ii) Deep results on optimal main effect plans under nonorthogonal blocking, opening up a whole new area.
  (B) High impact results, in both statistics and combinatorics, on other topics of experimental design, such as
    (i) a new class of incomplete block designs with nested structure,
    (ii) universal optimality and nonoptimality of certain row-column designs (well-known for counterintuitive findings),
    (iii) optimal designs for biological assays and diallel crosses, as well as optimal weighing designs (now classics in the respective fields),
    (iv) crossover designs (including a recent authoritative review).
- [*Research in other areas*]
  Very remarkable contributions to many other areas such as
    (i) unequal probability sampling plans,
    (ii) characterization problems *via* conditional expectations,
    (iii) tactical configurations,
    (iv) diagonally range dominant matrices,
    (v) efficient key pre-distribution schemes for distributed sensor networks,
    and so on.
  These include elegant statistical proofs of several results in matrix algebra.
- [*Books*]
  All real gems that received many accolades from the statistical community; all from major international publishers.

[Honours and awards]

- Fellow of the Indian National Science Academy (INSA) and the National Academy of Sciences, India (NASI).
- Honoured with the prestigious *Professor P.V. Sukhatme National Award in Statistics* (2010), by the Ministry of Statistics and Programme Implementation, Government of India, for lifetime contributions to the field of statistics.
- Elected Member of the International Statistical Institute.

[An editor of eminence]

- Editor, Sankhya, the Indian Journal of Statistics (2002-05); under his eminent leadership and through his painstaking efforts, the journal attained new heights.
- Chair Editor, Statistics and Applications (2009-2020); under his research administrative capability, the journal witnessed a boost in its stature and started becoming visible globally.

[A great teacher]

- While being a researcher par excellence, always mindful of his responsibilities as a teacher; successive generations of students benefited themselves under the tutelage of the great teacher in him.
- Co-author of an INSA sponsored book *Understanding Mathematics* that aimed at the promotion of mathematics among senior school students and first year college students.

[A great mentor]

- Supervised more than 15 Ph.D. students and inspired them to reach their full potential.
- Over the years, also acted generously as a mentor to many other statisticians apart from his direct PhD students; they all benefited academically from his counsel at various stages of their careers.

[A great friend]

- While being a celebrated teacher and an inspiring mentor, was also an extremely caring human being and a wonderful friend.
- A scintillating conversationalist who took an active interest in many areas beyond academics; many statisticians can vouch for the fact that, besides being interested in their academic affairs, he was also concerned about their overall well-being.
- Often, the professional association developed into a much closer bond where he became like a family member whom it was a joy to spend time with.

3. Research Publications

The arrangement is chronological so as to reflect the research interests of Professor Dey over the years. Within each year, the arrangement is alphabetical according to the authors' surnames.

3.1. Books Published

1. A. Dey (1985). *Orthogonal Fractional Factorial Designs*. John Wiley.
2. A. Dey (1986). *Theory of Block Designs*. John Wiley/ Halsted Press.
3. A. Dey and R. Mukerjee (1999). *Fractional Factorial Plans*. John Wiley.
4. M. Bose and A. Dey (2009). *Optimal Crossover Designs*. World Scientific.
5. A. Dey (2010). *Incomplete Block Designs*. Hindustan Book Agency/ World Scientific.

3.2. Research Papers Published

1. M. N. Das and A. Dey (1967). Group divisible rotatable designs. *Annals of the Institute of Statistical Mathematics* 1**9**, 337–347; corrections *ibid* (1968), **20**, 337.
2. A. Dey (1968). On response surface designs with equispaced doses. *Calcutta Statistical Association Bulletin*, **19**, 135–143.
3. A. Dey and A. K. Nigam (1968). Group divisible rotatable designs. Some further considerations. *Annals of the Institute of Statistical Mathematics*, **20**, 477–481.
4. A. Dey (1970). On construction of balanced *n*-ary block designs. *Annals of the Institute of Statistical Mathematics*, **22**, 389–393.
5. A. Dey and M. N. Das (1970). On blocking second order rotatable designs. *Calcutta Statistical Association Bulletin*, **17**, 75–85.

6. A. Dey and G. M. Saha (1970). Main effect plans for n^k factorials with blocks. *Annals of the Institute of Statistical Mathematics*, **22**, 381–388.
7. A. C. Kulshreshtha and A. Dey (1970). A new weighing design. *Australian Journal of Statistics*, **12**, 166–168.
8. A. K. Nigam and A. Dey (1970). Four and six level second order rotatable designs. *Calcutta Statistical Association Bulletin*, **19**,155–167.
9. A. C. Kulshreshtha, G. M. Saha and A. Dey (1971). On circular designs. *Annals of the Institute of Statistical Mathematics*, **23**, 491–497.
10. A. Dey, A. C. Kulshreshtha and G. M. Saha (1972). Three symbol partially balanced arrays. *Annals of the Institute of Statistical Mathematics*, **24**, 525–528.
11. A. C. Kulshreshtha, A. Dey and G.M. Saha (1972) Balanced designs with unequal replications and unequal block sizes. *Annals of Mathematical Statistics*, **43**, 1342–1345.
12. G. M. Saha and A. Dey (1973a). On construction and uses of balanced *n*-ary designs. *Annals of the Institute of Statistical Mathematics*, **25**, 439–445.
13. G. M. Saha, A. C. Kulshreshtha and A. Dey (1973b). On a new type of *m*-class cyclic association scheme and designs based on the scheme. *Annals of Statistics*, **1**, 985–990.
14. A. Dey and C. K. Midha (1974). On a class of PBIB designs. *Sankhyā*, **B36**, 320–322.
15. A. Dey and G. M. Saha (1974). An inequality for tactical configurations. *Annals of the Institute of Statistical Mathematics*, **26**, 171–173
16. A. K. Banerjee, A. Dey and G. M. Saha (1975). Some main effect plans for 3^n factorials. *Annals of the Institute of Statistical Mathematics*, **27**, 159–165.
17. A. Dey (1975). A note on balanced designs. *Sankhyā*, **B37**, 461–462.
18. T. K. Gupta and A. Dey (1975). On some new second order rotatable designs. *Annals of the Institute of Statistical Mathematics*, **27**, 167–175.
19. R. Chakravarty and A. Dey (1976). On the construction of balanced and orthogonal arrays. *Canadian Journal of Statistics*, **4**, 109–117.
20. A. Dey and C. K. Midha (1976). Generalised balanced matrices and their applications. *Utilitas Mathematica*, **10**, 139–149.
21. R. Gopalan and A. Dey (1976). On robust experimental designs. *Sankhya*, **B38**, 297–299.
22. A. Dey (1977). Construction of regular group divisible designs. *Biometrika*, **64**, 647–649.
23. A. Dey and S. C. Gupta (1977). Singular weighing designs and estimation of total weight. *Communications in Statistics: Theory and Methods*, **A6**, 289–295.
24. A. Dey and G. V. S. Ramakrishna (1977). A note on orthogonal main-effect plans. *Technometrics*, **19**, 511–512.
25. A. Chacko and A. Dey (1978). On the estimation of total weight in chemical balance weighing designs. *Australian Journal of Statistics*, **20**, 83–86.
26. M. Singh and A. Dey (1978). Two-way elimination of heterogeneity. *Journal of the Royal Statistical Society*, **B40**, 58–63.
27. A. Chacko and A. Dey (1979). Weighing designs optimum for the estimation of total weight. *Sankhyā*, **B41**, 270–276.
28. M. Singh and A. Dey (1979a). On analysis of some augmented block designs. *Biometrical Journal*, **21**, 87–92.
29. M. Singh and A. Dey (1979b). Block designs with nested rows and columns. *Biometrika*, **66**, 321–326.
30. M. Singh, A. Dey and A. K. Nigam (1978). Two-way elimination of heterogeneity. II. *Sankhyā*, **B40**, 227–235.
31. A. Dey and M. Singh (1980). Some series of efficiency balanced designs. *Australian Journal of Statistics*, **22**, 364–367.

32. K. Win and A. Dey (1980). Incomplete block designs for parallel-line assays. *Biometrics*, **36**, 487–492.
33. A. Dey, M. Singh and G. M. Saha (1981). Efficiency balanced block designs. *Communications in Statistics: Theory and Methods*, **A10**, 237–247.
34. S. K. Agarwal, P. Kumar and A. Dey (1982). On unequal probability sampling of two units without replacement. *Journal of the Royal Statistical Society*, **B44**, 43–46.
35. V. Agrawal and A. Dey (1982). A note on orthogonal main effect plans for asymmetrical factorials. *Sankhyā*, **B44**, 278–282.
36. V. K. Gupta, A. K. Nigam and A. Dey (1982). Orthogonal main effect plans for asymmetrical factorials. *Technometrics*, **24**, 135–137.
37. K. Sinha and A. Dey (1982). On resolvable PBIB designs. *Journal of the Statistical Planning and Inference*, **6**, 179–181.
38. A. Dey, V. K. Gupta and M. Singh (1983). Optimal change over designs. *Sankhya*, **B45**, 223–239.
39. K. Sinha and A. Dey (1983). A series of truly self-dual PBIB designs. *Mathematische Operationsforschung und Statistik Series Statistics*, **14**, 53–54.
40. A. Dey and V. Agrawal (1985). Orthogonal fractional plans for asymmetrical factorials derivable from orthogonal arrays. *Sankhyā*, **B47**, 56–66.
41. A. Dey and A.K. Nigam (1985). Construction of group divisible designs. *Journal of the Indian Society of Agricultural Statistics*, **37**, 163–166.
42. A. Dey, U. S. Das and A. K. Banerjee (1986). Construction of nested balanced incomplete block designs. *Calcutta Statistical Association Bulletin*, **35**, 161–167.
43. A. Dey and V. K. Gupta (1986). Another look at the efficiency and partially efficiency balanced designs. *Sankhya*, **B48**, 437–438.
44. M. Singh and A. Dey (1987). A note on incomplete block designs for symmetrical parallel line assays. *Communications in Statistics: Theory and Methods*, **16**, 3555–3564.
45. A. Dey (1988). Some new partially balanced designs with two associate classes. *Sankhyā*, **B50**, 90–94.
46. A. Dey and S. P. Dhall (1988). Robustness of augmented BIB designs. *Sankhya,* **B50**, 376–381.
47. A. Das and A. Dey (1989a). A generalisation of distinct representatives and its applications. *Calcutta Statistical Association Bulletin*, **38**, 57–63.
48. A. Das and A. Dey (1989b). A note on balanced block designs. *Journal of Statistical Planning and Inference*, **22**, 265–268.
49. A. Dey and A. Das (1989). On some E-optimal block designs. *Metrika*, **36**, 269–278.
50. N. K. Nguyen and A. Dey (1989). Computer aided-construction of D-optimal 2^m fractional factorial designs of resolution V. *Australian Journal of Statistics*, **31**, 111–117.
51. A. Das and A. Dey (1990a). Optimality of row-column designs. *Calcutta Statistical Association Bulletin*, **39**, 63–72.
52. A. Das and A. Dey (1990b). A note on construction of Graeco-Latin square of order $2n+1$. *Journal of the Indian Society of Agricultural Statistics*, **42**, 247–249.
53. N. K. Nguyen and A. Dey (1990). Computer-aided construction of small (M,S)-optimal incomplete block designs. *Australian Journal of Statistics*, **32**, 399–410.
54. R. Srivastava, V. K. Gupta and A. Dey (1990). Robustness of some designs against missing observations. *Communication in Statistics: Theory and Methods*, **19**, 121–126.
55. R. B. Bapat and A. Dey (1991). A-optimal block designs with minimal number of observations. *Statistics and Probability Letters*, **11**, 399–402.

56. A. Das and A. Dey (1991). Optimal variance- and efficiency-balanced designs for one- and two-way elimination of heterogeneity. *Metrika*, **38**, 227–238.
57. A. Dey, and K. Balasubramanian (1991). Construction of some families of group divisible designs. *Utilitas Mathematica*, **40**, 283–290.
58. A. Dey, R. Srivastava and V. K. Gupta (1991). Robust designs - A review and bibliography**.** *Cahiers du* CERO, **33**, 51**–**62.
59. V. K. Gupta, A. Das and A. Dey (1991). Universal optimality of block designs with unequal block sizes. *Statistics and Probability* Letters, **11***,* 177**–**180.
60. R. Srivastava, V. K. Gupta and A. Dey (1991). Robustness of some designs against missing data. *Journal of Applied Statistics*, **18**, 303**–**308.
61. K. Balasubramanian, A. Dey and P. Bhimasankaram (1992). Diagonally range dominant matrices. *Linear Algebra and Its Applications*, **176**, 45–60.
62. A. Das and A. Dey (1992). Universal optimality and nonoptimality of some row-column designs. *Journal of Statistical Planning and Inference*, **31**, 263–271.
63. A. Dey (1993a) Some orthogonal arrays with variable symbols. *Journal of Combinatorics and Information and System Sciences*, **18**, 209–215.
64. A. Dey (1993b). Robustness of block designs against missing data. *Statistica Sinica*, **3**, 219–231.
65. A. Dey, S. Hande and M. L. Tiku (1994). Statistical proofs of some matrix results. *Linear and Multilinear Algebra*, **38**, 109–116.
66. A. Dey, G. C. Chawla, and G. Balachandran (1995). Cyclic change-over designs. *Journal of the Indian Statistical Association*, **33**, 71–76.
67. A. Dey, K. R. Shah and A. Das (1995). Optimal block designs with minimal and nearly minimal number of units. *Statistica Sinica*, **5**, 547**–**558.
68. C. K. Midha and A. Dey (1995). Cyclic group divisible designs. *Calcutta Statistical Association Bulletin*, **45**, 253–257.
69. K. Balasubramanian and A. Dey (1996). D-optimal designs with minimal and nearly minimal number of units. *Journal of the Statistical Planning and Inference*, **52**, 255–262.
70. A. Dey and C. K. Midha (1996a). Construction of some asymmetrical orthogonal arrays. *Statistics and Probability Letters*, **28**, 211–217.
71. A. Dey and C. K. Midha (1996b). Optimal block designs for diallel crosses. *Biometrika*, **83**, 484–489.
72. A. Dey, C. K. Midha, and D. C. Buchthal (1996). Efficiency of the residual design under the loss of observations in a block. *Journal of the Indian Society of Agricultural Statistics*, **49**, 237–248.
73. C. K. Midha and A. Dey (1996). A note on resolvable incomplete block designs. *Journal of the Indian Statistical Association*, **34**, 81–84.
74. K. Balasubramanian and A. Dey (1997). Distributions characterized through conditional expectations. *Metrika*, **45**, 189–196.
75. G. C. Chawla and A. Dey (1998). A series of balanced ternary change over designs. *Journal of the Indian Society of Agricultural Statistics*, **51**, 42–50.
76. A. Das, A. Dey and A. M. Dean (1998). Optimal designs for diallel cross experiments. *Statistics and Probability Letters*, **36**, 427–436.
77. A. Dey and C. K. Midha (1998). Addition or deletion? *Statistics and Probability Letters*, **37**, 409–414.
78. A. Dey and R. Mukerjee (1998). Techniques for constructing asymmetric orthogonal arrays. *Journal of Combinatorics, Information and System Sciences* (Professor J.N. Srivastava Dedication Volume), **23**, 351–366.

79. A. Dey and K. R. Shah (1998). Optimal asymmetric fractional factorial plans for estimating main effects and selected two-factor interactions. *Statistical Theory and Applications. International Journal of Mathematical and Statistical Sciences*, **7**, 27–38.
80. G. M. Saha, A. Dey and C. K. Midha (1998). Construction of nested incomplete block designs. *Calcutta Statistical Association Bulletin*, **48**, 195–205.
81. A. Dey, K. Balasubramanian and S. Gupta (1999). Incomplete block designs for slope ratio assays. First NIU Statistical Sciences Symposium (De Kalb, IL, 1996). *Journal of Statistical Planning and Inference*, **78**, 369–383.
82. A. Dey and R. Mukerjee (1999). Inter-effect orthogonality and optimality in hierarchical models. *Sankhya*, **B61**, 460-468.
83. A. Das, A. Dey and S. Gupta (2000). A-efficient block designs for slope ratio assays. *Calcutta Statistical Association Bulletin*, **50**, 255–263.
84. F. S. Chai, A. Das and A. Dey (2001). A-optimal block designs for parallel line assays. *Journal of Statistical Planning and Inference*, **96**, 403–414.
85. A. Dey and C. Y. Suen (2001). Further asymmetric orthogonal arrays. *Statistics and Applications*, **3**, 61–64.
86. C. Y. Suen, A. Das and A. Dey (2001). On the construction of asymmetrical orthogonal arrays. *Statistica Sinica*, **11**, 241–260.
87. K. Chatterjee, A. Das and A. Dey (2002). Quasi-orthogonal arrays and optimal fractional factorial plans. *Statistica Sinica*, **12**, 905–916.
88. A. Dey (2002). Optimal designs for diallel crosses. *Journal of the Indian Society of Agricultural Statistics*, **55**, 1–16.
89. A. Dey and C. Y. Suen (2002). Optimal fractional factorial plans for main effects and specified two-factor interactions: a projective geometric approach. *Annals of Statistics*, **30**, 1512–1523.
90. R. Mukerjee, A. Dey and K. Chatterjee (2002). Optimal main effect plans with nonorthogonal blocking. *Biometrika*, **89**, 225–229.
91. M. Bose and A. Dey (2003). Some small and efficient cross-over designs under a nonadditive model. *Utilitas Mathematica*, **63**, 173–182.
92. F. S. Chai, A. Das and A. Dey (2003). Block designs for symmetric parallel line assays with block size odd. *Sankhyā*, **65**, 689–703.
93. A. Das, A. Dey and C. K. Midha (2003). On a property of orthogonal arrays and optimal blocking of fractional factorial plans. *Metrika*, **57**, 127–135.
94. A. Dey and R. Mukerjee (2003). *Symmetrical Factorial Experiments: A Mathematical Theory* (a tribute to R.C. Bose). In R. Bhatia Ed. Connected at Infinity, Hindustan Book Agency, New Delhi, 3–17.
95. C. Y. Suen and A. Dey (2003). Construction of asymmetric orthogonal arrays through finite geometries. *Journal of Statistical Planning and Inference*, **115**, 623–635.
96. A. Das and A. Dey (2004a). Optimal main effect plans with non-orthogonal blocks. *Sankhyā*, **66**, 378–384.
97. A. Das and A. Dey (2004b) Designs for diallel cross experiments with specific combining abilities. *Journal of the Indian Society of Agricultural Statistics*, Special Volume **57**, 247–256.
98. A. Dey (2004). Obituary: Sujit Kumar Mitra. *Sankhyā*, **66**, 211–212.
99. A. Das, A. Dey, S. Kageyama and K. Sinha (2005). A-efficient balanced treatment incomplete block designs. *Australasian Journal of Combinatorics*, **32**, 243–252.
100. A. Das, A. Dey and P. Saha (2005). Small asymmetric fractional factorial plans for main effects and specified two-factor interactions. *Metrika*, **62**, 33–52.
101. A. Dey (2005a). Orthogonal arrays. *Mathematics Student*, **74**, 145–152.

102. A. Dey (2005b). Projection properties of some orthogonal arrays. *Statistics and Probability Letters*, **75**, 298–306.
103. A. Dey and C. Y. Suen and A. Das (2005). Asymmetric fractional factorial plans optimal for main effects and specified two-factor interactions. *Statistica Sinica*, **15**, 751–765.
104. A. Das, A. Dey and C. K. Midha (2006). Allocating factors to the columns of an orthogonal array when certain interactions are important. *Statistics and Probability Letters*, **76**, 1570–1577.
105. M. Bose and A. Dey (2006). Combined intra-inter unit analysis of crossover designs and related optimality results. *Journal of the Indian Society of Agricultural Statistics*, **60**, 144–150.
106. A. Dey and R. Mukerjee (2006). D-optimal designs for covariate models. *Statistics*, **40**, 297–305.
107. A. Das, A. Dey, L. Y. Chan and K. Chatterjee. (2008). On $E(s^2)$-optimal supersaturated designs. *Journal of Statistical Planning and Inference*, **138**, 3749–3757.
108. A. Dey (2008). Canonical efficiency factors and related issues revisited. *Journal of the Indian Society of Agricultural Statistics*, **62**, 169–173.
109. A. Dey (2009). Orthogonally blocked three-level second order designs. *Journal of Statistical Planning and Inference*, **139**, 3698–3705.
110. K. Chatterjee and A. Dey (2010). A class of saturated row-column designs. *Indian Journal of Pure and Applied Mathematics*, **41**, 293–302.
111. A. Dey (2010). Construction of nested orthogonal arrays. *Discrete Mathematics*, **310**, 2831–2834.
112. A. Dey (2011). On the construction of two-level fractional factorial designs when some combinations are debarred. *Journal of the Indian Society of Agricultural Statistics*, **65**, 221–224.
113. A. Dey (2012a). On the construction of nested orthogonal arrays. *Australasian Journal of Combinatorics*, **54**, 37–48.
114. A. Dey (2012b). Recent developments in fractional factorial designs. *Journal of the Indian Society of Agricultural Statistics*, **66**, 251–258.
115. A. Dey and R. Mukerjee (2012a). Development of research in experimental design in India. *International Statistical Review*, **80**, 231–252.
116. A. Dey and R. Mukerjee (2012b). Efficiency factors for natural contrasts in partially confounded factorial designs. *Statistics and Probability Letters*, **82,** 2180–2188.
117. M. Bose, A. Dey and R. Mukerjee (2013). Key predistribution schemes for distributed sensor networks via block designs. *Designs, Codes and Cryptography*, **67**, 111–136.
118. A. Dey (2013). *Orthogonal Latin squares and the Falsity of Euler's Conjecture*. In R. Bhatia *et al*. Eds. Connected at Infinity II, Texts and Readings in Mathematics, 67, Hindustan Book Agency, New Delhi, 1–17.
119. A. Dey and B. Kole (2013). Small three-level second-order designs with orthogonal blocks. *Journal of Statistical Theory and Practice*, **7**, 745–752.
120. M. Bose and A. Dey (2015). *Crossover Designs*. In Angela M. Dean, Max Morris, John F. Stufken and Derek Bingham Eds. Handbook of Design and Analysis of Experiments. Boca Raton: Chapman & Hall/CRC Handbooks of Modern Statistical Methods Series, 159–195.
121. N. K. Nguyen and A. Dey (2015). A catalog of orthogonally blocked three-level second-order designs with run sizes ≤ 100. *Journal of Statistical Theory and Practice*, **9**, 537–543.
122. A. Dey (2016). Efficiency factors for natural contrasts. *Statistics and Applications* (New Series), **14**, 1–8.

123. A. Dey and D. Sarkar (2016). A note on the construction of orthogonal Latin hypercube designs. *Journal of Combinatorial Designs*, **24**, 105–111.
124. T. F. Zhang, Y. Y. Zong and A. Dey (2016). On the construction of asymmetric orthogonal arrays. *Journal of Statistical Planning and Inference*, **170**, 77–82.
125. A. Dey and D. Sarkar (2017). A new family of orthogonal Latin hypercube designs. *Australasian Journal of Combinatorics*, **69**, 58–62.
126. A. Dey, R. Singh and A. Das (2017). Efficient paired choice designs with fewer choice pairs. *Metrika*, **80**, 309–317.
127. T. F. Zhang, Q. Deng and A. Dey (2017). Construction of asymmetric orthogonal arrays of strength three via a replacement method. *Journal of Combinatorial Designs*, **25,** 339–348.
128. A. Dey and D. Sarkar (2019). D-efficient composite-type second order designs via computer search. *Statistics and Applications* **17** (New Series) "Special Volume to Felicitate Professor Arun Kumar Nigam on his 75th Birthday", 33–40.
129. T. F. Zhang, G. Wu and A. Dey (2019). Construction of some new families of nested orthogonal arrays. *Communications in Statistics: Theory and Methods*, **48**, 774–779.