References

- Addelman, S. (1962), "Orthogonal Main-Effects Plans for Asymmetrical Factorial Experiments," *Technometrics*, 4, 21–46.
- Bose, R.C. (1947), "Mathematical Theory of the Symmetrical Factorial Design," *Sankhya*, 8, 107–166.
- Box, G.E.P. and Bisgaard, S. (1987), "The Scientific Context of Quality Improvement," *Quality Progress*, 20(6), 54–61.
- Box, G.E.P., Hunter, W.G., and Hunter, J.S. (1978), *Statistics for Experimenters*, New York: John Wiley & Sons, Inc.
- Byrne, D.M. and Taguchi, S. (1986), "The Taguchi Approach to Parameter Design," *Quality Congress Transactions*, American Society for Quality Control, 177, 168–177.
- Chakravarti, I.M. (1956), "Fractional Replication in Asymmetrical Factorial Designs and Partially Balanced Arrays," *Sankhya*, 17,143–164.
- Cochran, W.G. and Cox, G.M. (1957), *Experimental Designs, Second Edition*, New York: John Wiley & Sons, Inc.
- Dehnad, K. (1989), *Quality Control, Robust Design, and the Taguchi Methods*, Pacific Grove, California: Wadsworth and Brooks.
- Fries, A. and Hunter, W.G. (1980), "Minimum Aberration 2^{k-p} Designs," *Technometrics*, 22 (4), 601–608.
- Hogg, R.V. and Ledolter J. (1992), *Applied Statistics for Engineers and Physical Scientists, Second Edition*, New York: Macmillan Publishing Company, Inc.
- Hunter, J.S. (1985), "Statistical Design Applied to Product Design," *Journal of Quality Technology*, 17, 210–221.
- John, P.W.M. (1972), *Statistical Design and Analysis of Experiments*, New York: Macmillan Publishing Company, Inc.
- Kackar, R. (1985), "Off-line Quality Control, Parameter Design, and the Taguchi Method," *Journal of Quality Technology*, 17, 176–209.
- Kempthorne, O. (1975), *The Design and Analysis of Experiments*, Huntington, NY: Robert E. Krieger Publishing Co.
- Margolin, B.H. (1967), "Systematic Methods of Analyzing $2^n \times 3^m$ Factorial Experiments with Applications," *Technometrics*, 11, 431–444.
- Mason, R.L., Gunst, R.F., and Hess J.L. (1989), *Statistical Design and Analysis of Experiments*, New York: John Wiley and Sons, Inc.

- Montgomery, D.C. (1991), *Design and Analysis of Experiments, Third Edition*, New York: John Wiley & Sons, Inc.
- Phadke, M. (1989), *Quality Engineering Using Robust Design*, Englewood Cliffs, New Jersey: Prentice Hall.
- SAS Institute Inc. (1999), SAS/STAT User's Guide, Version 8, Cary, NC: SAS Institute Inc.
- SAS Institute Inc. (1999), SAS Language Reference: Dictionary, Version 8, Cary, NC: SAS Institute Inc.
- SAS Institute Inc. (1999), *Getting Started with the ADX Interface for Design of Experiments*, Cary, NC: SAS Institute Inc.
- Searle, S.R. (1971), Linear Models, New York: John Wiley & Sons, Inc.
- Taguchi, G. and Wu, Y. (1980), *Introduction to Off-line Quality Control*, Nagoya, Japan: Central Japan Quality Control Association.
- Williams, E.J. (1949), "Experimental Designs Balanced for the Estimation of Residual Effects of Treatments," *Australian Journal of Scientific Research*, Series A, 2, 149–168.
- Yates, F. (1936), "Incomplete Randomized Blocks," Annals of Eugenics, 7, 121–140.
- Yin, G.Z. and Jillie, D.W. (1987), "Orthogonal Design for Process Optimization and its Application in Plasma Etching," *Solid State Technology*, May, 127–132.

The correct bibliographic citation for this manual is as follows: SAS Institute Inc., SAS/QC^{*} User's Guide, Version 8, Cary, NC: SAS Institute Inc., 1999. 1994 pp.

SAS/QC® User's Guide, Version 8

Copyright © 1999 SAS Institute Inc., Cary, NC, USA.

ISBN 1-58025-493-4

All rights reserved. Printed in the United States of America. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, by any form or by any means, electronic, mechanical, photocopying, or otherwise, without the prior written permission of the publisher, SAS Institute Inc.

U.S. Government Restricted Rights Notice. Use, duplication, or disclosure of the software by the government is subject to restrictions as set forth in FAR 52.227–19 Commercial Computer Software-Restricted Rights (June 1987).

SAS Institute Inc., SAS Campus Drive, Cary, North Carolina 27513.

1st printing, October 1999

 SAS^{\circledast} and all other SAS Institute Inc. product or service names are registered trademarks or trademarks of SAS Institute in the USA and other countries. $^{\circledast}$ indicates USA registration.

IBM®, ACF/VTAM®, AIX®, APPN®, MVS/ESA®, OS/2®, OS/390®, VM/ESA®, and VTAM® are registered trademarks or trademarks of International Business Machines Corporation. ® indicates USA registration.

Other brand and product names are registered trademarks or trademarks of their respective companies.

The Institute is a private company devoted to the support and further development of its software and related services.