

CURRICULUM VITAE

Guo-Hui Zhang

EDUCATION

- 1990 Ph.D., Mathematics, Southern Illinois University at Carbondale
1987 M.S., Mathematics, Southern Illinois University at Carbondale
1983 B.S., Mathematics, Northeast Normal University at Changchun, China

TEACHING EXPERIENCE

- 1993-present Associate Professor, Department of Mathematical Sciences,
University of Alabama in Huntsville
1990-1993 Assistant Professor, Department of Mathematics
Sonoma State University, Rohnert Park
88-90/85-86 Teaching Assistant, Department of Mathematics,
Southern Illinois University at Carbondale
1983-85 Lecturer, Mathematics Department
Northeast Normal University at Changchun, China

RESEARCH SPECIALTIES

Graph theory and Combinatorial designs

PUBLICATIONS

- 1 (with W.D. Wallis) On the clique partition number of the complement of a triangle, *Congressus Numerantium* 66(1988), 217-226.
- 2 (with W.D. Wallis) The impossibility of certain critical graphs, *Recent Studies in Graph Theory*, ed. V.R. Kulli, Visheva International Publications, 1989, 225-227.
- 3 (with W.D. Wallis) On maximal clique irreducible graphs, *Journal of Combinatorial Mathematics and Combinatorial Computing*, 8(1990), 187-193.
- 4 Smallest regular graphs with prescribed odd girth, *Journal of Graph Theory*, 15(1991), 453-467.
- 5 (with W.D. Wallis) Small clique coloring numbers, *Bulletin of the Institute of Combinatorics and its Applications*, 5(1992), 107-111.
- 6 The maximum valency of regular graphs with given order and odd girth, *Journal of Graph Theory*, 16(1992), 205-211.
- 7 Pseudo-one-factorizations of regular graphs of odd order-I: Some general questions, *Graphs, Matrices, and Designs*, ed. Rolf Rees, Marcel Dekker, 1992, 299-314.
- 8 (with W.D. Wallis) On the partition and coloring of a graph by cliques, *Discrete Mathematics*, 120(1993), 191-203.
- 9 (with W.D. Wallis and J.L. Yucas) Single-change covering designs, *Designs, Codes, and Cryptography*, 3(1992), 9-19.

- 10 Pseudo-one-factorizations of regular graphs of odd order-II: Products of graphs, *Discrete Mathematics*, 128(1994), 371-384.
- 11 Extremal regular graphs with prescribed odd girth, *Journal of Combinatorial Theory, Series B*, 60(1994), 222-238.
- 12 On the iteration of graph labelings, *Ars Combinatoria*, 37(1994), 75-85.
- 13 Some new bounds on single-change covering designs, *SIAM J. Discrete Mathematics*, 7(1994), 166-171.
- 14 (with D.R. Preece, R.L. Constable, J.L. Yucas, W.D. Wallis, J. P. McSorley and N.C.K. Phillips) Tight single-change covering designs, *Utilitas Mathematica*, 47(1995), 55-84.
- 15 (with A. Amin, L. Clark, J. McSorley, and H. Wang) A generalized coloring of graphs, *JCMCC* 24 (1997), 49-63.
- 16 Inseparable orthogonal matrices over $Z(2)$, *Journal of Combinatorial Theory, Series A*, 84(1998), 111-132.
- 17 (with P. M. Gibson) Combinatorially orthogonal matrices and related graphs, *Linear Algebra and its Applications*, 282(1998), 83-95.
- 18 (with P. M. Gibson) Column orthogonal $(0, 1, -1)$ -matrices, *Linear and Multilinear Algebra*, 45(1999), 291-316.
- 19 (with Ashok Amin and Peter Slater) Parity dimension for graphs-a linear algebraic approach, *Linear and Multilinear Algebra*, 50(2002), 327-342.
- 20 (with Brett Skinner) Chromatic index of simple hypergraphs, *Discrete Mathematics*, 343(2020).