### TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Title</th>
<th>Author(s)</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formulas $a + a^2p + a^3y + \cdots + a^n$</td>
<td>G.F.C. de Bruyn</td>
<td>98</td>
</tr>
<tr>
<td>Book Announcement: Generalized Pascal Triangles and Pyramids: Their Fractals, Graphs, and Applications</td>
<td>by Dr. Boris Bondarenko</td>
<td>103</td>
</tr>
<tr>
<td>Generating Fibonacci Words</td>
<td>Wai-fong Chuan</td>
<td>104</td>
</tr>
<tr>
<td>Author and Title Index for Sale</td>
<td></td>
<td>112</td>
</tr>
<tr>
<td>Extraction Property of the Golden Sequence</td>
<td>Wai-fong Chuan</td>
<td>113</td>
</tr>
<tr>
<td>On Even Pseudoprimes</td>
<td></td>
<td>123</td>
</tr>
<tr>
<td>Generalizations of Some Simple Congruences</td>
<td>R.S. Melham and A.G. Shannon</td>
<td>126</td>
</tr>
<tr>
<td>Nonzero Zeros of the Hermite Polynomials Are Irrational</td>
<td>P.R. Subramanian</td>
<td>131</td>
</tr>
<tr>
<td>A Generalization of a Result of D'Ocagne</td>
<td>R.S. Melham and A.G. Shannon</td>
<td>135</td>
</tr>
<tr>
<td>Geometric Distributions and Forbidden Subwords</td>
<td>Helmut Prodinger</td>
<td>139</td>
</tr>
<tr>
<td>On the General Linear Recurrence Relation</td>
<td>Ray Melham and Derek Jennings</td>
<td>142</td>
</tr>
<tr>
<td>Seventh International Research Conference</td>
<td></td>
<td>146</td>
</tr>
<tr>
<td>On a Probabilistic Property of the Fibonacci Sequence</td>
<td>N.G. Gamkrelidze</td>
<td>147</td>
</tr>
<tr>
<td>Fifth International Conference Proceedings</td>
<td></td>
<td>152</td>
</tr>
<tr>
<td>Pierce Expansions of Ratios and Fibonacci and Lucas Numbers and Polynomials</td>
<td>Arnold Knopfmacher and M.E. Mays</td>
<td>153</td>
</tr>
<tr>
<td>New Editorial Policies</td>
<td></td>
<td>163</td>
</tr>
<tr>
<td>Exponential Growth of Random Fibonacci Sequences</td>
<td>Peter Hope</td>
<td>164</td>
</tr>
<tr>
<td>A Difference-Operational Approach to the M&quot;obius Inversion Formulas</td>
<td>L.C. Hsu</td>
<td>169</td>
</tr>
<tr>
<td>On the $k^{th}$ Derivative Sequences of Fibonacci and Lucas Polynomials</td>
<td>Jun Wang</td>
<td>174</td>
</tr>
<tr>
<td>A Note on Choudhry's Results</td>
<td>Krystyna Bialek</td>
<td>179</td>
</tr>
<tr>
<td>Elementary Problems and Solutions</td>
<td>Edited by Stanley Rabinowitz</td>
<td>181</td>
</tr>
<tr>
<td>Advanced Problems and Solutions</td>
<td>Edited by Raymond E. Whitney</td>
<td>187</td>
</tr>
</tbody>
</table>

---

**VOLUME 33**  
**MAY 1995**  
**NUMBER 2**
PURPOSE

The primary function of THE FIBONACCI QUARTERLY is to serve as a focal point for widespread interest in the Fibonacci and related numbers, especially with respect to new results, research proposals, challenging problems, and innovative proofs of old ideas.

EDITORIAL POLICY

THE FIBONACCI QUARTERLY seeks articles that are intelligible yet stimulating to its readers, most of whom are university teachers and students. These articles should be lively and well motivated, with new ideas that develop enthusiasm for number sequences or the exploration of number facts. Illustrations and tables should be wisely used to clarify the ideas of the manuscript. Unanswered questions are encouraged, and a complete list of references is absolutely necessary.

SUBMITTING AN ARTICLE

Articles should be submitted in the format of the current issues of THE FIBONACCI QUARTERLY. They should be typewritten or reproduced typewritten copies, that are clearly readable, double spaced with wide margins and on only one side of the paper. The full name and address of the author must appear at the beginning of the paper directly under the title. Illustrations should be carefully drawn in India ink on separate sheets of bond paper or vellum, approximately twice the size they are to appear in print. Since the Fibonacci Association has adopted \( F_1 = F_2 = 1, F_{n+1} = F_n + F_{n-1}, n \geq 2 \) and \( L_1 = 1, L_2 = 3, L_{n+1} = L_n + L_{n-1}, n \geq 2 \) as the standard definitions for The Fibonacci and Lucas sequences, these definitions should not be a part of future papers. However, the notations must be used. One to three complete A.M.S. classification numbers must be given directly after references or on the bottom of the last page. Papers without classification numbers will be returned.

Two copies of the manuscript should be submitted to: GERALD E. BERGUM, EDITOR, THE FIBONACCI QUARTERLY, DEPARTMENT OF COMPUTER SCIENCE, SOUTH DAKOTA STATE UNIVERSITY, BOX 2201, BROOKINGS, SD 57007-1596.

Authors are encouraged to keep a copy of their manuscripts for their own files as protection against loss. The editor will give immediate acknowledgment of all manuscripts received.

SUBSCRIPTIONS, ADDRESS CHANGE, AND REPRINT INFORMATION

Address all subscription correspondence, including notification of address change, to: RICHARD VINE, SUBSCRIPTION MANAGER, THE FIBONACCI ASSOCIATION, SANTA CLARA UNIVERSITY, SANTA CLARA, CA 95053.

Requests for reprint permission should be directed to the editor. However, general permission is granted to members of The Fibonacci Association for noncommercial reproduction of a limited quantity of individual articles (in whole or in part) provided complete reference is made to the source.

Annual domestic Fibonacci Association membership dues, which include a subscription to THE FIBONACCI QUARTERLY, are $37 for Regular Membership, $42 for Library, $47 for Sustaining Membership, and $74 for Institutional Membership; foreign rates, which are based on international mailing rates, are somewhat higher than domestic rates; please write for details. THE FIBONACCI QUARTERLY is published each February, May, August and November.

All back issues of THE FIBONACCI QUARTERLY are available in microfilm or hard copy format from UNIVERSITY MICROFILMS INTERNATIONAL, 300 NORTH ZEEB ROAD, DEPT. P.R., ANN ARBOR, MI 48106. Reprints can also be purchased from UMI CLEARING HOUSE at the same address.

©1995 by

The Fibonacci Association

All rights reserved, including rights to this journal issue as a whole and, except where otherwise noted, rights to each individual contribution.
The Fibonacci Quarterly

Founded in 1963 by Verner E. Hoggatt, Jr. (1921-1980) and Br. Alfred Brousseau (1907-1988)

THE OFFICIAL JOURNAL OF THE FIBONACCI ASSOCIATION
DEVOTED TO THE STUDY
OF INTEGERS WITH SPECIAL PROPERTIES

EDITOR
GERALD E. BERGUM, South Dakota State University, Brookings, SD 57007-1596
e-mail: Bergumg@mg.sdstate.edu

EDITORIAL BOARD
DAVID M. BRESSOUD, Macalester College, St. Paul, MN 55105-1899
JOHN BURKE, Gonzaga University, Spokane, WA 99258
HENRY W. GOULD, West Virginia University, Morgantown, WV 26506
A.F. HORADAM, University of New England, Armidale, N.S.W. 2351, Australia
CLARK KIMBERLING, University of Evansville, Evansville, IN 47722
RICHARD MOLLIN, University of Calgary, Calgary T2N 1N4, Alberta, Canada
GARY L. MULLEN, The Pennsylvania State University, University Park, PA 16802
SAMIH OBAID, San Jose State University, San Jose, CA 95192
NEVILLE ROBBINS, San Francisco State University, San Francisco, CA 94132
DONALD W. ROBINSON, Brigham Young University, Provo, UT 84602
LAWRENCE SOMER, Catholic University of America, Washington, D.C. 20064
M.N.S. SWAMY, Concordia University, Montreal H3G 1M8, Quebec, Canada
ROBERT F. TICHY, Technical University, Graz, Austria
WILLIAM WEBB, Washington State University, Pullman, WA 99164-2930
ANNE LUDINGTON YOUNG, Loyola College in Maryland, Baltimore, MD 21210-2699

BOARD OF DIRECTORS
THE FIBONACCI ASSOCIATION

CALVIN LONG (President)
Northern Arizona University, Flagstaff, AZ 86011

G.L. ALEXANDERSON
Santa Clara University, Santa Clara, CA 95053

ANDREW GRANVILLE
University of Georgia, Athens, GA 30601-3024

PETER HAGIS, JR.
Temple University, Philadelphia, PA 19122

FRED T. HOWARD
Wake Forest University, Winston-Salem, NC 27109

MARJORIE JOHNSON (Secretary-Treasurer)
665 Fairlane Avenue, Santa Clara, CA 95051

LESTER LANGE
San Jose State University, San Jose, CA 95192

JEFF LAGARIAS
Bell Laboratories, Murray Hill, NJ 07974

THERESA VAUGHAN
University of North Carolina, Greensboro, NC 27412