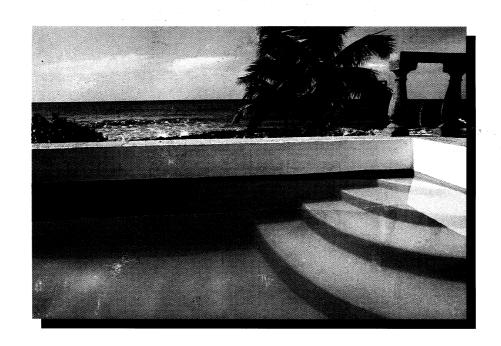


Chemical Dynamics

Within The Pool and Spa Environment



Edited by:

Que Hales Ray Denkewicz, Jr.

Symposium Series Volume II 1997

Chemical Dynamics within the Pool and Spa Environment

The Second Annual NSPI Water Chemistry Technical Symposium

Publishing Editor:

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Smithfield, RI

Symposium Series Volume 2

Proceedings of the 2nd Annual (1997) Chemistry Symposium, published by the National Spa and Pool Institute.

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Cover Design:

Caroline Calo

Preface

This volume contains the proceedings of the technical symposium entitled *Chemical Dynamics within the Pool and Spa Environment* which was held on November 11, 1997 in Chicago, Illinois. This symposium, which was sponsored by NSPI and many of its member companies, brought together nearly 200 individuals from government laboratories, universities, and industry with a diversity of backgrounds. As the symposium title suggests, the central theme of the symposium was to discuss the important area of swimming pool and spa water chemistry.

Although much valuable, technical information has been previously published in scientific journals on many of the subjects covered in this proceedings, the organizers felt a deeper commitment to creating a contemporary forum for the cross fertilization of technological ideas between the industry's leading scientific researchers and pool and spa trade professionals. This volume is a result of that effort.

A total of 11 papers were presented at the symposium. Ten of the presented papers appear here. All papers were subject to review by the Editors after which authors had an opportunity to respond to the Editors' comments. Because a primary goal of the Editors was reasonably rapid publication, the revised papers were accepted without further revision. Thus, the published papers reflect the views and standards of the authors and not necessarily those of the Editors.

J. Q. Hales R. Denkewicz, Jr.

Forward

In 1996, NSPI through its interest in providing a forum for the exchange of ideas, information and experience among those with professional interest in the science and technology of swimming pools and spas, established a Symposium Series, to be held at its Annual Exposition. This year's symposium, suggested to us and organized by Ray Denkewicz, Jr. and J. Que Hales is the second in what has become a continuing series of symposia serving to elevate the education, integrity and quality of our industry.

Arlene Stachel President, NSPI

Carvin DiGiovonni Technical Director, NSPI

Acknowledgments

The organizers would like to extend their appreciation to the following sponsors who either donated their time and talents or provided direct financial contributions to make this symposium possible.

(In alphabetical order)

Autopilot Systems, Inc. Balboa Instruments, Inc. BioLab, Inc. **Buckman Laboratories** Church & Dwight **Construction Technologies Laboratories DEL Industries DuPont Environmental Test Systems** Hasa, Inc. Journal of the Swimming Pool and Spa Industry LaPorte Water Technologies **Muskin Leisure Products** Occidental Chemical Corp. PPG Industries, Inc. Vanson **Zodiac North American Pool Care Sector**

Special thanks to Pat Smith, Programs Coordinator at NSPI, who graciously accepted the responsibility of coordinating all the details that were associated with the planning and execution of the symposium, including the printing of this book. Thanks also to Arlene Stachel, NSPI President, for making general introductory remarks on behalf of the National Spa and Pool Institute.

Order information for audio tapes of the presentations:

As part of the NSPI Educational Audio Cassette Program, all of the presentations made at the symposium were audio recorded. For information on availability and pricing of the set of three audiocassettes, please contact the National Spa and Pool Institute at:

National Spa and Pool Institute 2111 Eisenhower Avenue, Alexandria, VA 22314–4698

Phone:

703–838–0083 ext. 124

Fax:

703-549-0493

The catalog numbers for the three tapes covering the day—long symposium are 97NSPI—1A, 97NSPI—1B, and 97NSPI—1C.

Table of Contents

| Preface | პ |
|---|----|
| Forward | 4 |
| Acknowledgments | 5 |
| Information on ordering audio cassette tapes | |
| Outbreaks Caused by Pseudomonas Aeruginosa Associated with Whirlpool Spas, | |
| Hot Tubs, and Swimming Pools | 8 |
| Charles P. Gerba, Ph.D. and Peter Gerba – University of Arizona | |
| Chitosan: Chemistry and Use in Water Clarification | 19 |
| Everett Nichols, Ph.D. – Vanson, Inc. | |
| Recirculating Dynamics of Conventional Recreational Water Algaecides | 26 |
| Fernando del Corral, Ph.D., Russell E. Fues and Rosy Covarrubias – Buckman Laboratories | |
| New Plaster Start-up Chemistry Using Sodium Bicarbonate | 34 |
| Kim Skinner and J. Que Hales – Pool Chlor; Doug Latta – Aqua Clear | |
| The Ozonation of Swimming Pool Water: Process Selection and Material Requirements | 42 |
| Wolfram Hartwig, Ph.D Engineered Treatment Systems | |
| Swimming Pool Water Buffer Chemistry | 53 |
| John A. Wojtowicz – Chemcon | |
| Applying Ozone to Commercial Swimming Pools – Before or After the Filter | 60 |
| Beth Hamil – DEL Industries | |
| Improved Test Medium for the Evaluation of Algaecides and Algistats for Swimming Pools | 63 |
| Joe Grenier and Ray Denkewicz, Jr. – Zodiac North American Pool Care Sector | |
| Safety of Cement - Leachability of Trace Toxic Elements | 69 |
| Howard M. Kanare and Presbury B. West – Construction Technologies Laboratories | |
| Relationships Between Some Variables Affecting Pool Water Quality | 89 |
| Dick Vattimo – Occidental Chemical Corporation | |
| The Effect of Potassium Monopersulfate on ORP Measurement of Chlorine Sanitizer Residuals | 94 |
| Ed Lightcap - DuPont Specialty Chemicals | |