

COOLING TECHNOLOGY INSTITUTE

Bibliography of Technical Papers

Categorized for Technical Content
(May be subject to multiple interest)



COOLING TOWER INSTITUTE

Bibliography of Technical Papers

The following papers have been presented at conferences of the Cooling Tower Institute and are listed by categories. Efforts are being made to simplify our filing system. The new order number is in the first column with the old order number in parenthesis after the title. This will help in cross referencing numbers. Reproduced copies of these papers are available from the CTI office, PO Box 73383, Houston, TX 77273. Please order by the new order number. Papers are priced at \$10.00 each, plus postage/handling. Prepayment is requested on all orders \$25 or less.

ANALYSIS METHOD

ORDER #	TITLE	AUTHOR	DATE
TP81-14	A New Simplified Method for Field Analysis of Phosphonates in Water (TP-240A)	R.S. Mitchell & S.H. Nadeau, Monsanto Co.	1981

CLEANING SYSTEMS

TP64-04	Chemical Cleaning of the Water Side of Process Equipment (TP-15A)	W.E. Zimmie, W.E. Zimmie, Inc.	1964
TP96-02	Online Cooling Tower Cleaning	Mark Coyle, Gordon Barksdale, American Inland Divers, Inc.	1996
TP98-13	New Technology Improves Tower Basin Cleaning	Randy Delenikos, Bill Leizear, LAKOS Filtration System	1998
TP99-15	Online Cooling Tower Cleaning and Water Division	Cliff Roy & John Foy, Syncrude Canada LTD; Lloyd Olson, International Cooling Towers	1999

CONVERSION

TP97-02	Com Ed Co. Byron Generating Station Unit 1 Crossflow to Counterflow Conversion	James O. Smith Com Ed Co., Mark Muder, Marley Cooling Tower	1997
TP99-14	Conversion of a Crossflow Tower to a Double-Level, Multi Fan Counter Flow Tower	Vincent Wiltz, Cooling Tower Specialists	1999

COOLING TOWER WATER BLOWDOWN TREATMENT

TP60-01	Amberlite IRC-84 in Treatment of Water for Cooling Towers (TP-21B)	D.G. Downing, J. Printz & D.L. Owens, Rohm and Haas Co.	1960
TP73-13	Fluidized Moving Bed Ion Exchange for Treatment of Cooling Towers Blowdown (TP-111A)	J. Newman, Liquitech, Inc.	1973
TP75-10	Operating Experience with the Electro-Chemical Chromate Removal Unit (TP-139A)	Joseph G. Duffey & Stephen B. Gale, Andco, Inc., Stanley Bruckenstein, State Univ. of New York at Buffalo	1975
TP76-13	Electrochemical Destruction of Chromate and Zinc From Cooling Tower Water (TP-156A)	C.R. Schmitt & J.R. DeMonbrum, Union Carbide Corp.	1976
TP77-14	Hexavalent Chromium Reduction in Cooling Tower Blowdown-Evaluation of the Electrolytic Process (TP-167A)	A.J. Reitano, Jr. & R.R. Lessard Exxon Research & Eng. Co.	1977
TP77-19	The Reduction of Chromate by Amine Phosphonates at a Low pH (TP-172A)	S.B. Twitchell & R.J. Lipinski, The Mogul Corporation	1977
TP78-12	Chromate Handling Systems for Cooling Tower Blowdown (TP-192A)	Fred Roensch, Anita Feltes & A.W. Oberhofer, Nalco Chemical Co.	1978
TP84-19	An Innovation in Chromate Removal	Stephen B. Gale Ph.D. & Philip P. O'Donnelle, Niagara Environmental Associates	1984
TP01-10	Hero Process - Recovery Reuse of Cooling Tower Blowdown and as a Preconcentrator for ZLD Application	Charles H. Fritz, PE, Black & Veatch Corp; V.J. Nathan, Aquatech Int'l Corp	2001

ORDER #	TITLE	AUTHOR	DATE
TP06-02	Cooling Tower Blowdown Limitations: Case Studies of New Wastewater Permit Limits	Jennifer Cunningham, Air Liquide Large Industries US LP	2006
TP06-14	Copper Removal From Cooling Tower Blowdowns	Christopher Howell & David Christophersen, Crown Solutions, Inc.	2006
TP07-07	Zero Blowdown for Cooling Towers	Sam Owens, Chemico International, Inc.	2007

COOLING TOWER WATER CHEMISTRY

TP76-11	Amorphous Silica Scale in Cooling Waters (TP-148A)	William S. Midkiff, Ph.D. & H. Pressley Foyt, Los Alamos Scientific Laboratory	1976
TP77-15	Copper Ion Pickup in Recirculation Cooling Tower Systems (TP-177A)	Stephen F. Hager & James M. Popplewell	1977
TP77-17	Silica Species as Stabilizers of Stagnant Water Films (TP-170A)	Roy V. Comezux, Exxon Research & Engineering Co.	1977
TP79-16	Reduction of Sulfate Concentration in Circulating Water (TP-198A)	Karel Zadera RMC, Corp., Raymond E. Kerollis, Kerrollis Associates	1979
TP80-12	Bibliography on the Use of High Dissolved Solids Waters in Cooling Towers (TP-215B)	Cooling Tower Institute's Task Group on the use of High Dissolved Solids Waters in Cooling Towers	1980
TP82-12	Sewage Effluent Make-Up to Cooling Towers with Film Fill (TP-252A)	Kenneth Lindemann, Southern Public Service Company	1982
TP83-15	Log Diagram Predicts Chemical Performance on Calcium Carbonate (TP-272A)	William S. Midkiff, Ph.D P.E., Industrial Water Engineering, Inc.	1983
TP84-12	Minimizing Calcium Phosphate Fouling and Associated Pitting Rates	Paul Labine, J. Minalga, D. King & W. Norman, Petrolite Corp.	1984
TP86-06	The Importance of Crystal Structure to the Water Treatment Industry	Gary Caplan, Bird Archer, Inc.	1986
TP90-09	Hypohalous Acid and Haloamine Flashoff in Industrial Evaporative Cooling Systems	William F. McCoy, Great Lakes Chemical Corporation	1990
TP95-16	Traced Biocides: A New Technology for Industrial Water Treatment	William F. McCoy, Scott A. Borchardt, Mark R. Hermiller, Nalco Chemical Company	1995
TP96-06	Methods for Chlorine Control in Critical Cooling Towers	Stephen A. Wortendyke, Capital Controls Co., Inc.	1996
TP06-13	Experience With Monitoring and Control of Microbiological Growth Due To Hydrocarbon Ingress In Open Cooling Water Systems	Arif Jaffer, Fred Chastain, Jennifer Fichter, Baker Hughes/ Baker Petrolite	2006
TP08-13	Intermittent Feeding of Aseptrol Tablet Redefines the Role of ClO2 in Small and Mid-Sized Cooling Water Systems	Keith Hirsch, BASF Corporation	2008

COOLING TOWER WATER TREATMENT PROGRAMS

TP68-16	New, Non-Chromate Synthetic-Organic Corrosion Inhibitor for Cooling Water Systems (TP-58A)	C.M. Hwa, Dearborn Chemical Division	1968
TP72-08	New Advances in Organic Cooling Water Programs (TP-100A)	Ernest Q. Petrey, Drew Chemical Corporation	1972
TP73-11	Effective Phosphate/Phosponate Treatments Replace Chromate-Based Programs (TP-117A)	William L. Harpel & John M. Donohue, Betz Laboratories, Inc.	1973
TP81-15	A Breakdown in Cooling Tower Water Technology Dianodic II (TP-229A)	R.H. Gailey, R.C. May & G.W. Delaney, Betz Laboratories, Inc.	1981
TP84-14	A Cooling Tower Pilot Plant for Evaluating Non-Chromate Water x Treatment Programs	Carol A. Jones, Dow Chemical Corporation	1984
TP85-03	Cooling Water Treatment Transition Zinc-Chromate to All Organic	James G. Kanuth, Dupont Co. & Kent Binks, Drew Chemical Corp.	1985
TP85-12	New Approaches to Monitoring The Performance And Control of Cooling Water Programs	D.C. Helton, D.A. Johnson & G.W. Hanks, Nalco Chemical Co.	1985

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TP86-13	Diol Technology: A Unique Non-Heavy Metal Treatment Approach	Byrnes Kuehnle, Wright Chemical Company & Mike King, Ciba-Geigy Corporation	1986
TP86-19	A Chrome/Zinc-Based Cooling Water Treatment for Systems Operating Under Reducing Conditions	Michael G. Fitzpatrick & Ronny C. Jackson, ChemTreat, Inc.	1986
TP87-05	Alkaline All-Organic Cooling Water Treatment (Field & Laboratory Development)	D.A. Little, J.E. Waller & Chris Soule, Dearborn Division	1987
TP87-07	A Novel Polymeric Material For Use in Minimizing Calcium Phosphate Fouling in Industrial Cooling Water Systems	Robert W. Zuhl, Zahid Amjad & William F. Masler, III, The BF Goodrich Company	1987
TP87-10	A Molybdate Update Effective, Economical Programs	Philip R. Engelhardt, Keith M. Johnson & Barry A. Metz, Wright Chemical Corporation	1987
TP89-06	Polymer/HED Blends for Calcium Carbonate Deposit Control	Alan Yeoman & Patrick Sullivan, Ciba-Geigy Corporation	1989
TP89-10	Performance of Molybdates as an Alternative to Chromates	Charles W. Smith, Ph.D., Mitco Water Laboratories, Inc.	1989
TP91-09	Laboratory Development of Novel Multifunctional Polymers for Cooling Water Use	Ingrid Brase & Joseph Pasapane, National Starch and Chemical Co., & James H. Belcher, Alco Chemical Company	1991
TP92-12	Alkaline Phosphate - A New Direction for Phosphate Cooling Water Treatment	Christine M. Stuart & Phil Eastin, Nalco Chemical Company	1992
TP94-03	Development of High Cycle Cooling Water Treatment Program	Binu S. Khambatta, Daniel A. Meier & Michael A. Kamrath, Nalco Chemical Company	1994
TP94-04	Monitoring Biological Control in Cooling Systems	Gary G. Engstrom & Jack C. Tully, Grace Dearborn	1994
TP94-11	A Mechanistic Study of Corrosion Inhibition by Phosphonates	B.J. Hepburn & P.J. Sullivan, FMC Corporation	1994
TP95-08	Maximizing Cooling Tower Cycles of Concentration	Robert J. Cunningham, Chemisis Inc.	1995
TP98-02	Making the Best Choices in Water Treatment Additives	Roy Manley, BetzDearborn, Inc.	1998
TP99-01	Halogen Stable Alkaline Cooling Program	Dave Ritz & Gary Geiger, BetzDearborn Inc.	1999
TP99-03	Actives Based Monitoring and Control for Improved Cooling System Management and Performance	Michael G. Trulear & John Richardson, ChemTreat, Inc.	1999
TP99-07	Tweaking-The Art and Science of Successful Cooling Water Treatment	M.A. "Andy" Ward, Thomas M. Laronge, Thomas M. Laronge, Inc.	1999
TP00-03	A Non-Chemical Water Treatment Device	John Lane, Clearwater Systems; Gerald Kutner, Engelhard	2000
TP03-10	Real-Time Biological Monitoring	Ken Davenport, Biotrace, Inc.	2003
TP03-19	Experience With On-Line Monitoring of Biofilms in Plant Applications	George Licina, Structural Integrity Associates	2003
TP04-10	A Novel Polymer for Effective Cooling Water Scale Control in Stressed	Abdulmohsen D. Alamajnouni, Saudi Aramco & Arif E. Jaffer, Baker Petrolite	2004
TP05-19	Effective, Chemical-Free Microbiological Control for Industrial Cooling Water Systems	Joanne Kuchinski, Linda Rusznak & Edward Beardwood, Ashland Specialty Chemical	2005
TP06-08	Realizing the Full Potential of Your Cooling Tower Lime/Soda Ash Blowdown Softener	Robert Strandberg, Covanta Energy and Terry McCoy, ChemTreat, Inc	2006
TP06-12	Advances in Cooling System Treatment, Monitoring and Control	Daniel M. Cicero, Nalco Company	2006
TP06-16	Optimizing Industrial Cooling Water System Performance With Proper Monitoring and Control	Jean M. Gucciardi, Gucciardi Consulting, Inc. and Loraine Huchler, P.E., CMC, Martech Systems, Inc.	2006
TP06-18	Development of an Online Multicomponent Water Treatment Analyzer	John Richardson, Richard H. Tribble, Michael G. Trulear and Rich Geisler, ChemTreat, Inc.	2006

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TP07-06	Cooling Tower FRP Color Considerations	Clinton Smith, Strongwell	2007
TP08-05	The Application of Solid Water Treatment Chemistry for Cooling Towers	Fred Lattin, James Heimert, APTEch Group, Inc.	2008
TP08-07	New Solutions to Old Problems: Technical Innovation in Mature Markets	Daniel M. Cicero, Nalco Company	2008
TP08-09	Improved Calcium Phosphate Control for Stressed Systems	Gary Geiger, GE Water and Process Technologies	2008
TP08-15	Physical Water Treatment for Cooling Towers	David McLachlan, Fluid Treatment Solutions, Inc.	2008
TP08-19	Dolphin "Pulsed Power" Cooling Water Treatment	David Alley, Clearwater Systems & Paul Puckorius, Puckorius and Associates	2008
TP08-21	A Low-Cost, Safe, Effective Halogen Disinfectant for Cooling Towers	Rodney Herrington & Susan B. Rivera, Miox Corporation	2008
TP08-23	Tracking Molybdate in Cooling Water	Vadim B. Malkov & Phil Kiser, Hach Company; Blaine Nagao, Chemical, Inc. & Steve Dumler, H2Tronics	2008

CORROSION

TP61-01	Corrosion Resistant Materials for Cooling Tower Hardware (TPR-126)	Wesley W. Smith	1961
TP64-02	The Corrosion Engineer Looks at the Cooling Tower (TP-13A)	David W. McDowell, Jr., Southwest Research Institute	1964
TP68-01	A Report on Cathodic Protection of Underground Piping Systems at the Paducah Gaseous Diffusion Plant (TP-57A)	L.C. Burkhalter, M.F. Shelton & E.H. Tomlinson, Union Carbide Corporation Nuclear Division	1968
TP69-01	Protection of Iron and Steel Through Hot Dip Galvanizing (TP-69A)	K.S. Frazier, American Hot Dip Galvanizers Association	1969
TP72-01	Fundamentals of Corrosion in Cooling Water Systems (TP-102A)	William R. Hollingshad, Calgon Corporation	1972
TP77-01	The Evaluation of Nonchromium Low Zinc Cooling Water Corrosion Control Additive (TP-171A)	Richard E. Badger, Shell Oil Company	1977
TP77-02	Proper Start Up of Cooling Towers Systems - Prevent Initial Corrosion and Fouling (TP-162A)	Paul R. Puckorius, Puckorius and Associates, Inc.	1977
TP78-01	On Stream Evaluation of General and Pitting Corrosion Rates in Cooling Using Potentiodynamic Techniques (TP-190A)	A.E. Woodson, Petrolite Corp., Tretolite Division	1978
TP79-01	Numerical Evaluation of Corrosion Inhibitor Effectiveness and Supplier's Technical Services (TP-211A)	William W. Wheeler, Rohm and Haas Texas, Inc.	1979
TP83-01	Development of Procedures for Pretreating Mild Steel Cooling Water Exchangers (TP-270A)	Raymond M. Pasteris, Mobil Research & Development Corp.	1983
TP83-02	Cooling Tower Hardware Corrosion Studies (TP-263A)	Steven C. Blue, Union Carbide Corporation	1983
TP86-04	Experience With Galvanized Cooling on Alkaline Treatment Programs	John C. Smedley, Olin Water Services	1986
TP86-16	A Petroleum Based System for Control of External Corrosion In, On and Around Cooling Towers	Michael A. Berry & Carroll N. Steely, Denso, Inc., & James F. Axsom, P.E., Consultant	1986
TP87-14	Corrosive Water - A Brazilian Reality	Jose Otavio Silva, Messias Candido Amaral & Flavio Bianchi, Aquatec Quimica, S.A.	1987
TP89-01	Reducing Copper Corrosion and Discharge Via a Novel Inhibitor and Applications Program	Orin Hollander & Charles Shelton, Betz Industrial, & Ronald Griffin, City of Tallahassee Electric Dept.	1989
TP89-11	Investigation of Alternative Inhibitor Programs for Highly Corrosive Alkaline Waters	Greg Simpson & Richard Murtagh, Burmah Technical Services, Inc.	1989
TP90-08	An Alternative Oxidizer, Bromine Offers a Northeast Chemical Plant Improved Corrosion and Fouling Control	Mark J. Giusto, Drew Industrial Division	1990

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TP91-13	Cooling Water Corrosion Problems in the Utility Industry: MIC Case Histories	Paul R. Puckorius & Robert T. Hess, Puckorius and Associates, Inc.	1991
TP91-14	Update on White Rust Corrosion and Control	Keith M. Johnson & Joseph B. Mihelic, Drew Industrial Division	1991
TP94-10	Pitting Corrosion of Cooling Water Systems	Mark A. Lysin, P.E. & Thomas M. Laronge, Thomas M. Laronge, Inc.	1994
TP94-13	The Control of Ferrous Metal Corrosion in Cooling Water by a Novel Phosphonate Corrosion Inhibitor	David A. Little, Wayne A. Mitchell & E.S. Lawson, Grace Dearborn	1994
TP96-10	Cathodic Protection of the Palo Verde Cooling Towers	William R. Schutt, Matcor, Inc.	1996
TP96-12	Analyzing Corrosion Rates of Copper for Open Recirculating Systems	Gary Caplan, Diversey Water Technologies Ltd.	1996
TP96-14	Corrosion Inhibition of Ferrous Metal in Soft Water Under Cooling Water Conditions	Colin Hogan, FMC Process Additives Division	1996
TP97-14	Elucidation of Components of Aromatic Triazole Demand in Cooling Water Systems and Development of More Environmentally Friendly Yellow Metal Corrosion Inhibitor	Narasimha M. Rao, Donald A. Johnson, Frank F. Lu, Nalco Chemical Company; N.P. Nghiem, Oakridge Nat'l Laboratory	1997
TP02-15	Corrosion and Biofouling Control in a Refinery Cooling Water System Using Sewage Water as a Make Up	Abdulmohsen Almajnouni, Saudi Arabian Oil Company; Arif Jaffer Baker Petrolite	2002
TP06-06	Improving Localized Corrosion in a Complex Cooling Water System	Michael H. Dorsey and Arthur F. Brunn, DuPont; Kevin Daigle, ChemTreat, Inc.	2006
TP07-03	Cooling Water - Optimal Control of Admiralty Corrosion Utilizing Multiple Halogen Sources	Gene Dombrowski, Chemtreat, Inc and John Zimowski, Dupont	2007
TP07-08	Corrosion-Induced Concrete Deterioration and Rehabilitation of Natural Draft Hyperbolic Cooling Towers	Leandro Etcheverry, Structural Preservation System	2007
TP07-21	New Liquid Biocide Products for Specific Industrial Water Treatment Requirements	Christopher J. Nalepa, Farah Azarnia and Tina Craft, Albemarle Corporation	2007
TP07-23	A New Closed System Treatment Program for Industrial Applications	William Beer and Rosa Crovetto, GE Water and Process Technologies	2007

DEPOSIT CONTROL

TP76-10	Evaluation of Novel Polyacrylate Type Anti-Scalant Using a Dynamic Scale Test Apparatus (TP-149A)	R.M. Goodman & A.M. Schiller, American Cyanamid	1976
TP87-07	A Novel Polymeric Material For Use in Minimizing Calcium Phosphate Fouling in Industrial Cooling Water Systems	Robert W. Zuhl, Zahid Amjad & William F. Masler, III, The BF Goodrich Company	1987
TP88-08	Polymer Blending for Dispersion and Deposit Control	G.D. Hansen, Consultant	1988

DRIFT

TP69-02	A Review of CTI Work on the Measurement of Cooling Tower Drift Loss (TP-68A)	John C. Campbell	1969
TP70-01	Control of Cooling Tower Mist (TP-87A)	R.H. Maurer, Celanese Chemical Company	1970
TP73-01	Cooling Tower Drift Its Measurement, Control and Environmental Effects (TP-107A)	G.K. Wistrom & J.C. Ovard, Ecodyne Cooling Products Co.	1973
TP73-02	Atmospheric Effects of Water Cooling Facilities (TP-107B)	Eric Aynsley, Particle Data Laboratories, Ltd. & James E. Carson, Argonne National Laboratory	1973
TP73-03	Analytical Determination of Cooling Tower Drift Eliminators Efficiencies (TP-108A)	R.E. Grumble, Westinghouse Research & Development Labs, & A. Roffman, Westinghouse Environmental Systems Dept.	1973

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TP73-04	Predictions of Drift Deposition From Salt Water Cooling Towers (TP-109A)	A. Roffman, Westinghouse Environmental Systems Dept., R.E. Grimble, Westinghouse Research & Development Labs	1973
TP73-05	Cooling Tower Plumes - Defined and Traced by Means of Computer Simulation Models (TP-115A)	W.G. England, L.H. Teuscher & J.R. Taft, Systems, Science & Software	1973
TP74-01	The Generation of Visible Plumes by Wet/Dry Cooling Towers (TP-123A)	Robert J. Biese, Ms.M.D.,P.E., Gilbert Associates, Inc.	1974
TP74-02	On the Question of Airborne Transmission of Pathogenic Organisms in Cooling Tower Drift (TP-124A)	B.G. Lewis, Argonne National Laboratory	1974
TP77-03	Drift - Modeling and Monitoring Comparisons (TP-175A)	Norbert C.J. Chen, Oak Ridge National Lab., Steven R. Hanna, Air Resources Laboratory	1977
TP79-02	Cooling Tower Drift Studies at the Paducah, Kentucky Gaseous Diffusion Plant (TP-213A)	Fred G. Taylor & Patricia D. Parr, Oak Ridge National Lab., Steven R. Hanna, AirResources Lab	1979
TP81-01	Cooling Tower Drift Study - Drift Measurement and Analysis of the Measuring Technique (TP-232A)	Shin H. Park, Union Carbide	1981
TP85-06	Comparison of Methods For Measurement of Cooling Tower Drift	M.W. Golay, W.J. Glantschnig & F.T. Best, Dept. of Nuclear Engr., Massachusetts Institute of Technology	1985
TP86-01	Comprehensive Drift Measurements on a Circular Mechanical Draft Cooling Tower	Karl Wilber, Environmental Systems Corp., & Ken Vercauteren, Arizona Public Serv.	1986
TP87-08	An Economical Solution to Cooling Tower Drift	George C. Pedersen, P.E., Kimre, Inc., V. Keith Lamkin, P.E., Engineered Processes, Inc., & Mike Seich, Dow Chemical Co.	1987
TP90-12	Comparison of Two Isokinetic Drift Measurement Methods	Paul Lindahl & O.L. Kinney, The Marley Cooling Tower Co.	1990
TP92-10	Reduction of Cooling Tower PM ₁₀ Emissions Due to Drift Eliminator Modifications at a Chemical Refining Plant	Thomas E. Weast, P.E. & Nicholas M. Stich, Midwest Research Institute, & Gordon Israelson, P.E., Westinghouse Electric Corporation	1992
TP93-01	Plume Abatement and Water Conservation With The Wet/Dry Cooling Tower	Paul A. Lindahl, & Randall W. Jameson, The Marley Cooling Tower Company	1993
TP93-07	Simultaneous Comparison of the CTI HBIK and the EPA Method 13A Isokinetic Drift Test Procedures	Michael R. Whittemore, Brentwood Industries, Inc., & Thomas E. Weast, Midwest Research Institute	1993
TP94-01	Drift Testing - Scale Up From Test Cell To Field Acceptance Test	David Brill, Black & Veatch	1994
TP94-16	Drift Eliminators and Fan System Performance	Joe H. Lander, Florida Power Corp. Dr. Bryan R. Becker, P.E., Assoc. Professor of Mechanical Engr., Univ. of Missouri, Larry F. Burdick, P.E. Project Engineer, The Marley Cooling Tower Co.	1994
TP96-05	Prediction of the Plume From a Cooling Tower	Kazutaka Takata, Kiyoshi Nasu, Hiroyuki Yoshikawa, Shinko Pantec Co., Ltd.	1996
TP98-08	Cooling Tower Plume Abatement at Chicago's O'Hare Airport	J.D. (Doug) Randall, P.E., Marley Cooling Tower, Michael C. Long, P.E., Black & Veatch, Romesh K. Kansal, P.E., Dept of Aviation, City of Chicago	1998

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TP98-16	The Relationship Between SP and HGBIK Drift Measurement Results - New Data Creates a Need for a Second Look	Jack R. Missimer, Ph.D., P.E. David E. Wheeler, P.E., Kenneth W. Hennon, Power Generation Technologies	1998
TP99-13	A Non-Metallic Air Cooled Heat Exchanger for Cooling Tower Plume Reduction	David M. Suptic, The Marley Cooling Tower Company	1999
TP03-08	Cooling Tower Emissions Quantification Using The Cooling Technology Institute Test code ATC-140	Ken Hennon & David Wheeler, Power Generation Technologies	2003
TP05-12	An Economical Solution to Cooling Tower Drift	G.C. Pederson, Frank Power & Arthur Braren, KIMRE, Inc	2005
TP06-11	A Review of Drift Eliminator Performance	William C. Miller, Timothy E. Krell, Brentwood Industries, Inc	2006

DRIVESHAFTS

TP72-02	Flexible Coupling Driveshaft Systems For Cooling Towers (TP-98A)	Fred K. Landon, Koppers Company, Inc.	1972
TP85-20	Thermal Expansion Problems With Long Single Piece Fan Drive Shafts	C.W. Hendrickson, Rexnord Mechanical Power Division, D.A. Fairbanks & G.R. Kleman, Southwestern Public Service	1985
TP88-06	Composite Driveshafts in Cooling Towers	Dr. K.R. Berg, ASEA Composites, Inc.	1988
TP89-08	Design and Application of Composite Cooling Tower Couplings	Brian S. Spencer, Addax, Inc.	1989
TP91-11	Composite Couplings for Cooling Towers	Dennis Van Laarhoven, Consultant	1991
TP97-10	Mechanical Damage Caused by EMF Generated From Fast Bus Reclosure	James T. Heard, Addax, Inc.	1997
TP05-04	Natural Frequency Characteristics of Drive Shafts	Robert Poling, Amarillo Gear Co.	2005

DRY COOLING

TP69-13	The Supplemental Use of Dry Surface in a Cooling Tower System (TP-65A)	J.R. Buss & P.L. Tremont, Monsanto Company	1969
TP83-14	Integrated Wet/Dry Cooling and Plume Abatement With The Binary Cooling Tower (TP-21A)	William G. Sanderson & Richard G. Lancaster, Tower Systems, Inc.	1983
TP98-15	The New Wet/Dry Cooling Tower Without Finned Tube Dry Section (NWD)	Toshio Miura, Osamu Gotoh, Ishikawajima Plant Engr & Const Co., Ltd.	1998
TP03-01	Why Every Air Cooled Steam Condenser Needs A Cooling Tower	Luc DeBacker, PhD & William M. Wurtz, Hamon Dry Cooling	2003
TP04-13	Performance Improvement to Existing Air-Cooled Heat Exchangers	Robert Giammaruti, Hudson Products Corporation	2004
TP05-06	Pressure Recovery Effects in Air-Cooled Installations	Henk Van Der Spek, Howden Cooling Fans	2005
TP06-07	Evaporative Pre-Coolers for Air Cooled Heat Exchangers	Matt Smith, L.S. Enterprises; Rich Aull, Brentwood Industries; Robert Giammaruti, Hudson Products Corporation	2006
TP06-09	Enhancement of Air Cooled Condenser Operation in Power Plants	Ram Chandran, Holtec International	2006
TP07-04	Effects of Wind on Air-Cooled Condenser Performance	John S. Maulbetsch, Maulbetsch Consulting and Micael N. Difilippo, Consultant	2007

ENERGY EVALUATION

TP81-02	The Manufacturer and Energy-Efficient Cooling Towers (TP-228A)	Kathleen M. Hunt-Atwater B.A.C. Pritchard, Inc.	1981
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TP81-03	How To Minimize Energy Consumption With Variable-Speed Fan Control (TP-236A)	Robert W. Corey, Emerson Electric Co., and John C. Campbell, Lilie Hoffmann Cooling Towers, Inc.	1981
TP85-04	Cold Water, Pumping Head and Energy Conservation	Robert Burger, Burger Associates, Inc.	1985
TP85-18	A System Efficient Approach to Cooling Tower Energy Modifications	Greg M. Kelly, The Marley Cooling Tower Company	1985
TP87-04	Counterflow Cooling Tower Design With High Energy Evaluations	Paul Lindahl, Jr. & Thomas Bugler, III, The Marley Cooling Tower Company	1987
TP91-10	Strategies For Improved Cooling Tower Economy	Steve Adams, Ecodyne Cooling Tower Services, and John Stevens, Film Cooling Towers	1991
TP 96-03	Variable Speed Fan Drives for Cooling Towers	William F. Immell, The Marley Cooling Tower Company	1996
TP00-12	Developing the Worth of Colder Water in a Steam Turbine Generating Station	Thomas H. Hamilton, P.E. Consulting Engineer	2000
TP01-07	Cooling Towers and VFD's	Rick Foree, Danfoss Drives	2001
TP07-22	Variable Frequency Drives: Operation and Application with Evaporative	Benjamin Cohen, Baltimore Aircoil Company	2007
TP08-02	Evaluating Your Cooling Tower	Richard DesJardins, DesJardins Consulting	2008

ENVIRONMENTAL IMPACT

TP67-01	The Relationship of Cooling Tower Operation to Pollution Control (TP-26A)	M.C. Forbes, Aquatrol, Inc.	1967
TP68-02	Review of Thermal Pollution Problems, Standards and Controls at the State Government Level (TP-41A)	William S. Crumlish, P.E., Spkr-Texas Water Quality Board	1968
TP68-03	The Subcommittee on Air and Water Pollution of the Senate Committee on Public Works (TP-42A)	Tor Kolflat, Sargent and Lundy	1968
TP68-04	Monitoring and Control of Industrial Air and Water (TP-43A)	K.D. Ripley, Dow Chemical Co.	1968
TP68-05	An Economic and Engineering Analysis of Municipal Wastewater Renovation (TP-50A)	J.W. Porter, A.N. Hopkins & W.L. Fisher, Bechtel Corporation	1968
TP69-03	Thermal Pollution: A Survey of Cause and Effect (TP-61A)	Michael C. Noland, Midwest Research Institute	1969
TP69-04	Concept of Environmental Planning and Design (TP-71A)	Ashley Martin, Babbitt-Martin & Associates, Inc.	1969
TP70-02	Environmental Aspects of Cooling Tower Plumes (TP-78A)	Eric Aynsley, IIT Research Institute	1970
TP70-03	Trends in Thermal Pollution Control Requirements (TP-81A)	J.I. Bregman, Water Pollution Research and Applications, Inc.	1970
TP70-04	Cooling Towers, The Environment and the Future (TP-88A)	Eric Aynsley, IIT Research Institute	1970
TP70-05	Thermal Criteria - A Measure to Control Thermal Pollution (TP-77A)	Satyendra P. Mathur & Donald B. Stevens, NY Dept. of Health	1970
TP71-02	Thermal Discharges: Their Role in the Environment (TP-105A)	Carl E. Knapp Lewicke, Environmental Science & Tech. An American Chemical Society Publications	1971
TP72-03	Water Pollution Abatement Brings New Ideas to the Cleaning Water Industry (TP-101A)	Allan L. Farber, Tenneco Chemicals, Inc.	1972
TP73-06	The Preparation of a Master List of Chemicals Used in Cooling Towers for Use in Preparation of Environmental Impact Statement (TP-114A)	Robert H. Rainey, Oak Ridge National Laboratory	1973
TP75-01	Programmatic Descriptive Description for Environmental Monitoring and Pollution Abatement at the Y-12 Plant (TP-135A)	Merwyn Sanders, Union Carbide Corporation	1975
TP75-02	Environmental Considerations in Cooling Tower Treatment (TP-136A)	Art F. Brunn, E.I. DuPont de Nemours & Company	1975

ORDER #	TITLE	AUTHOR	DATE
TP75-03	Case Study of the Environmental Effects of the Chalk Point Natural Draft Cooling Tower (TP-143A)	Thomas B. Carlson & Frederick M. Shofner, Environmental Systems Corp. and Jerry Pell, State of Maryland	1975
TP75-04	Industry - Living with EPA Regulations Promulgated to Meet the FWPCA Amendments of 1972 (TP-134A)	Jay G. Weidman, Betz Laboratories	1975
TP76-02	Environmental Impact of Chemicals Washed From Preservative-Treated Wood (TP-147A)	J.R. DeMonbrun, Oak Ridge Y-12 Plant, Union Carbide Corporation	1976
TP76-03	Interception and Retention of Cooling Tower Drift on Vegetation (TP-151A)	F.G. Taylor, Jr., D.D. Gray & P.D. Parr, Oak Ridge National Laboratory	1976
TP79-03	A Pilot Study to Detect Vegetation Stress Around a Cooling Tower (TP-210A)	Suresh B. Pahwa & Brent L. Shipley, Intera Environmental Consultants, Inc.	1979
TP79-04	A Summary of Federal and State Requirements for Commercial Applicators of Pesticides (TP-214B)	D.L. Wilbur, The Mogul Corp.	1979
TP79-05	Toxicology of Cooling Water Treatment Chemicals (TP-207A)	Florence K. Kinoshita, Hercules Inc.	1979
TP88-10	Cooling Tower Asbestos Abatement or Close Encounters with EPA, OSHA, ET AL	Robert Burger, Burger and Associates, Inc.	1988
TP91-12	Comparison of Cooling Tower Mineral Mass Emissions by Isokinetic EPA Method 13A and Heated Cascade Impactor Tests	Gordon Israelson, P.E., Westinghouse Electric Corp. and Nicholas M. Stich & Thomas E. Weast, P.E., Midwest Research Institute	1991
TP92-02	The Latest Worldwide Technology in Environmentally Designed Cooling Towers	Gary R. Mirsky, Jean-Pierre Libert, & Kathy Bryant, Hamon Cooling Towers and Franz Bouton, Hamon Sobelco, S.A.	1992
TP94-06	Molybdate Use in Cooling Towers: Impact of the New EPA Sludge Rule and Alternative Approaches	Brian Lee & Brian Vaska, Drew Industrial Division	1994
TP05-05	Atmospheric Emissions from Evaporative Cooling Towers	Wayne Micheletti, Wayne C. Micheletti, Inc.	2005

ENVIRONMENTAL IMPORTANCE

TP64-05	Use of a Cooling Tower as a Trickling Filter in Pollution Control (TP-9A)	R.M. Smith, The Dow Chemical Company	1964
TP69-14	Effect of Trace Metals on Stream Ecology (TP-60A)	Charles Lanford, Petro-Tex Chemical Corporation	1969
TP78-11	Bacterial Aerosols Generated by Cooling Towers of Electrical Generating Plants (TP-191A)	A. Paul Adams, Dept. of the Army Barbara G. Lewis, Argonne National Labs	1978
TP07-20	Sea Water Cooling System Design	Naresh Shah, Ph.D., Worley Parsons	2007

FANS

TP62-06	Field Tests of Fan Performance on Induced Draft Cooling Towers (TPR-122)	D.D. Herrman	1962
TP68-06	Axial Flow Fans and Their Application to Cooling Towers (TP-36A)	E.M. Davidson, Hudson Products Corporation	1968
TP69-05	Fan Noise Levels in Cooling Towers (TP-62A)	W.E. Robb, Chittom Equipment Company	1969
TP74-03	Cooling Tower Fans - Today and Tomorrow (TP-120A)	Robert C. Monroe, Hudson Products Corporation	1974
TP77-08	Fan Performance Consideration in Cooling Towers (TP-158A)	David Stackhouse & Kenton Whitehead, Ecodyne Cooling Products Division	1977
TP79-06	Single-Cell Cooling Tower Performance Studies (TP-202A)	W.R. Brock & J.S. Woodard, Union Carbide, Oak Ridge Gaseous Diffusion Plant	1979

ORDER #	TITLE	AUTHOR	DATE
TP80-01	The Effect of Fan Tip Clearance on Cooling Towers Performance (TP-212A)	Joe M. Schwinn, Ecodyne Cooling Products Division	1979
TP87-12	Anomalies in Fan Efficiency Calculations	Weyert E. De Boer, Ventilatoren Stork Hengelo	1987
TP88-13	Auto Pitched Fans in Cooling Towers	Charles Chittom, Chittom Int'l	1988
TP88-14	Hydraulic Cooling Tower Driver the Innovation	John A. Dickerson, Hem, Inc.	1988
TP93-03	Reduction of Noise Generation by Cooling Fans	Ir. Henk F. van der Spek, Ventilatoren Sirocco Howden B.V	1993
TP97-06	The Influence of Materials of Construction on Leading Edge Erosion of Fiberglass Fan Blades Used on Cooling Towers	Larry F. Burdick, Marley Cooling Tower Company	1997
TP97-12	Maximizing Fan Performance	Robert C. Monroe, Hudson Products Corporation	1997
TP98-01	Noise Testing of Cooling Tower Fan Drives	Craig Burriss, Amarillo Gear Co.	1998
TP99-06	Structural Design Evolution of a Large Fiberglass Fan Blade	Larry Burdick, The Marley Cooling Tower Company	1999
TP99-11	Advanced Airfoils for Cooling Tower Fan Blades	James Tangler & Cris Bosetti, National Renewable Energy Lab; Dan Somers, Airfoils Inc.	1999
TP00-05	Evaluation of the Unsteady Loads on a Fan Blade	Giorgio Cipelletti, Cofimco S.P.A.	2000
TP01-05	Cooling Tower #4, Fan Failure	Dennis P. Shea & Shelby Sustala Solutia, Inc.	2001
TP02-12	A Flexible Blade-To-Hub Connecting System Opposed To A Rigid Element In An Axial Fan	Riccardo Provasi, Cofimco, S.p.A.	2002
TP03-05	Vibration Control: New Fan Blade Tip Reduces Pulsation	Henk van der Spek, Howden Cooling Fans	2003
TP03-11	Motor Efficiency - A Guide for Reduced Consumption	John Malinowski, Baldor Electric Company	2003
TP04-04	New Fan Blade Tip Design Reduces Structural Vibrations - Verification in Practice	Sander C. Venema, Howden Cooling Fans; Chris B. Lazenby, Southern Company Services	2004
TP05-06	Pressure Recovery Effects in Air-Cooled Installations	Henk Van Der Spek, Howden Fans	2005
TP05-07	Fan Air Flow Testing on Cooling Towers and ACHES	Robert Giammaruti, Hudson Products Corporation	2005
TP08-06	Investigation on Fan Noise Generation and Its Reduction	Claudio Cataldo, Cofimco Srl	2008
TP08-14	Fan Stall Problems; Cause or Effect	Charles Foster, Diagnostic Cooling Solutions, Inc.	2008
TP08-16	The Cost of Noise	Robert Giammaruti, Hudson Products & Jess Seawell, Composite Cooling Solutions, LP	2008

FILLS

TP67-02	Cellular Cooling Tower Fill (TP-32A)	George Meek, The Munters Corporation	1967
TP72-04	Condition of Preservative Treated Cooling Tower Slats After 10-Year Service (TP-96A)	Lee R. Gjovik, B. Alan Bendtsen & H.G. Roth, Forest Products Laboratory	1972
TP83-03	Seismic Evaluation of Spaced Tile Fill (TP-275A)	Richard White, P.E., Ceramic Cooling Tower Company	1983
TP84-03	Evolution of Cooling Tower Fill	Gary R. Mirsky, Custodis-Hamon Constructors, Inc. and J. Bauthier, Hamon-Sobelco, S.A.	1984
TP84-17	Plastic for Splash Fill and Drift Eliminators	Keith A. Sharf, Doron Plastics Co.	1984
TP88-05	Comparative Ealuation of Counterflow Cooling Tower Fills	Robert D. Fulkerson, Cooling Tower Technology	1988
TP88-09	The Usage of Fiber Cement as a Film Type Fill Media in Evaporative Cooling Towers	John W. Cooper, Jr., Heinz Treuberg & Dr. Heiko Klaus, Toschi USA, Inc.	1988

ORDER #	TITLE	AUTHOR	DATE
TP90-07	Determination of the Turbulent Lewis Number From Experimental Data for Wet Cooling Tower Fill	Dudley J. Benton, Tennessee Valley Authority	1990
TP90-11	Film Fill Recent Research and Application Data	Gary R. Mirsky, Hamon Cooling Towers and Michel Monjoie, Hamon-Sobelco, S.A.	1990
TP91-03	Evaluation of Plastic Fill For High Temperature Service	Steven C. Blue, Paducah Gaseous Diffusion Plant, Martin Marietta Energy Systems, Inc.	1991
TP92-06	Cooling Tower Film Fill Water Quality/Operations Guidelines For Successful Utilization	James G. Kanuth & Paul R. Puckorius, Puckorius & Associates, Inc.	1992
TP92-09	Cleaning and Maintenance of Film Fill at Florida Power Corporation	David Pearson & Jim Witherow Florida Power Corporation and Barbara McClung, Calgon Corporation	1992
TP93-06	Research of Fouling Film Fill	Michel Monjoie, Hamon-Sobelco, S.A., Russell Noble, Southern Company Services, Gary R. Mirsky, Hamon Cooling Tower	1993
TP93-08	Influence of Fill Type and Flow Orientation on the Lewis Number	Dudley J. Benton, TVA Engineering Laboratory	1993
TP95-07	Innovative Application of Film Fill in Large Industrial Crossflow Cooling Towers	David Suptic, The Marley Cooling Tower Company	1995
TP95-13	NPF Cooling Tower Fill - Its Development and Demonstration	E. Hobson, & T.H. Massey, National Power Plc, Paul Lindahl, The Marley Cooling Tower Co.	1995
TP98-04	Fill Fouling Control in Cooling Towers	F. Philip Yu, Anthony W. Dallmier William F. McCoy, Nalco Chemical Company	1998
TP99-05	A Comparison of Crossflow Cooling Tower Splash-Type Fills	Robert D. Fulkerson, Fulkerson Enterprises, Inc.	1999
TP00-01	Design Features and Their Affect on High Performance Fill	Rich Aull & Tim Krell, Brentwood Industries, Inc.	2000
TP01-02	Low Clog Film Fill - New Approaches	Kenneth P. Mortensen, Marley Cooling Tower Co. & Stephen N. Conley, Marley Cooling Tower Co., Development Ctr.	2001
TP01-03	Recycling Contaminated and Fouled PVC Fill	Michel Monjoie & Serge Bigier, Hamon Thermal Europe	2001
TP06-19	Guidelines for Selecting The Proper Film Fill	Donald Zelek, Brentwood Industries, Inc.	2006
TP06-20	High Performance Ceramic Fill	Peter Fay, Consultant; Ann Engh, Sandkuhl Clay Works, Inc.	2006
TP06-21	A Performance Comparison of Counterflow Reduced Fouling Fills	Toby L. Daley, P.E., T Daley & Associates, Inc.	2006
TP07-02	Design and Operation of a Counterflow Fill and Nozzle Test Cell: Challenges and Solutions	Jean-Pierre Libert, EvapTech, Inc.	2007

FIRE PROTECTION

TP62-07	Fire Protection of Water Cooling Towers (TP-2A)	H.C. Cranick, Factory Insurance Association	1962
TP71-03	Fire Protection and Cooling Towers (TP-95A)	Bruce A. Miller, Factory Mutual Engineering Association	1971

FOULING

TP63-02	Waterside Fouling and Scaling of Heat Exchange Equipment (TP-8A)	B.J. Kelly & Paul R. Puckorius Nalco Chemical Company	1963
TP69-06	Cooling Water Anti-Foulants, Theory and Application (TP-59A)	Ronald D. Lees & J. Larry Twifold, Hercules, Inc.	1969

ORDER #	TITLE	AUTHOR	DATE
TP71-06	Organic/Inorganic Polymers - A New Treatment For Cooling Water System (TP-91A)	Paul R. Puckorius, W.E. Zimmie Inc.	1971
TP81-04	Use of a New Fouling Monitor in Development and Application of Cooling Water Treatments (TP-238A)	Bruce L. Libutti, Drew Chemical Corp., & Rex V. Rhoades, Rohrback Corporation	1981
TP81-05	Discriminating Between Biofouling and Scaling in a Deposition Monitor (TP-239A)	Nicholas Zelter, W.R. Characklis & Frank L. Roe, Montana State University	1981
TP81-06	Determination of Seasonal Variations in Fouling Factors and Apparent Slime Thickness (TP-237A)	R.J. Ferguson, Apollo Technologies, Inc.	1981
TP82-01	Biofouling Control in Recycled Cooling Water With Bromo Chloro Dimethylhydantoin (TP-250A)	J.V. Matson, Univ. of Houston & W.G. Characklis, Montana State University	1982
TP82-02	Use of a Fouling/Corrosion Monitor to Optimize an Organic Cooling Water Treatment Program (TP-246A)	P. Thomas, G. Hays & R. Yawn, Drew Chemical Corporation	1982
TP84-16	Tube Material, Fluid Velocity, Surface Temperature and Fouling a Field Study	N. Zelter, J.A. Robinson & F.L. Roe, CCE, Inc., W.G. Characklis, Montana State Univ., & Z. Dacic, K. Chapple & A. Ribaud, Power Auth. of the State of New York	1984
TP85-02	Guidelines for Selection and Use of On-line Fouling Monitors	William E. Moore & George F. Hays, CTI Water Treatment Committee	1985
TP85-14	The Effects of Oil Contamination and Suspended Solids on Fouling and Corrosion Rates in Open Recirculating Cooling Water Systems	Joseph S. Roti & Amato Spagnoletti, Drew Industrial Div.	1985
TP86-14	Biological Organic Fouling and Its Effect on Corrosion of AISI 304 Stainless Steel	Amadew J.N. Silva, Renato A. Silva, Jose O. Silva & James N. Tanis, Aquatec Quimica, S.A.	1986
TP87-01	Control of Microbiological Fouling with Glutaraldehyde	Robert G. Eagar, Jr., Ph.D. & Alan B. Theis, Ph.D., Union Carbide Corporation	1987
TP87-07	A Novel Polymeric Material For Use in Minimizing Calcium Phosphate Fouling in Industrial Cooling Water Systems	Robert W. Zuhl, Zahid Amjad & William F. Masler, III, The BF Goodrich Company	1987
TP88-15	New Application Technology For Controlling Algal Fouling in Recirculating Cooling Water Systems	A.L. Smith, R.A. Muia & M.O. Clancy, Calgon Corporation	1988
TP94-05	Film Fill Fouling in Counterflow Cooling Towers: Mechanism and Design	Kenneth P. Mortensen & Stephen N. Conley, The Marley Cooling Tower Company	1994
TP94-14	Fouling of Film Forming Cooling Tower Fills - A Mechanistic Approach	J.S. Gill, M.A. Yorke, R.M. Donlan & D.L. Gibbon, Calgon Corp.	1994
TP96-09	Optical Monitor for Improved Fouling Control in Cooling Systems	R.L. Wetegrove, R.H. Banks, M.R. Hermiller, Nalco Chemical Company	1996
TP98-14	Film Fill Fouling in Counterflow Cooling Towers: Experimental & Field	Kenneth P. Mortensen, P.E., Stephen N. Conley, Marley Cooling Tower Company	1998
TP01-08	An Innovative Biodetergent for Fouling Control	F. Philip Yu, Nalco Chemical Co. & Yu-May Lu, Taiwan Nalco Chemical Co., Ltd.	2001
TP01-15	High Efficiency 0.5 Micron Sand Filtration	Bryan Hayward, Chemworks Filtration Inc.	2001
TP02-04	Anatomy of Enhanced Heat Exchanger Tubing	Thomas M. Laronge, Thomas M. Laronge, Inc; Mark A. Lisin, Lisin Metallurgical Services	2002
TP02-06	Designed To Fail (Heat Exchanger Designs That Lead To Failure)	T.J. Tvedt, Puckorius & Assoc.	2002
TP07-17	Anionic Compatible Quat?	Philip Sweeney, Doug Murray, Lonza, Inc.	2007

ORDER #	TITLE	AUTHOR	DATE
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TP71-04	The Cooling Tower Institute Origin - Evolution - Future (TP-35A)	C.D. Carlson, The Dow Chemical Company	1971
TP91-01	Evolution of the Water Cooling Tower	James L. Willa, Willa, Inc.	1991
HVAC APPLICATIONS			
TP05-01	Optimization of Water Cooled Chiller-Cooling Tower Combinations	James W. Furlong, Frank T. Morrison, Baltimore Aircoil Co.	2005
IRON ROT ATTACK			
TP95-14	Iron Rot - The "New" Nemesis	James L. Willa, Willa, Inc.	1995
LEGIONNAIRES' DISEASE			
TP82-03	Concentration, Serotypic, Profiles and Infectivity of Legionnaires' Disease Bacteria Populations in Cooling Towers (TP-249A)	R.L. Tyndall, Zoology Dept., University of Tennessee	1982
TP87-18	Microbicidal Efficacy of BNPD Against Legionella Pneumophila	Michael Coghlin & Gary Caplan Bird Archer, Inc.	1987
TP02-13	The Control of Bacteria On Surfaces: Effectiveness of Bromine-Based Biocides Towards Microbial Biofilms and Biofilm-Associated Legionella Pneumophila	C.J. Nalepa, J.N. Howarth & E.W. Liimatta, Albemarle Corporation; H. Ceri & C.A. Stremick, The Biofilm Research Grp, University of Calgary; J.E. Stout & Y. E. Lin, VA Medical Center, Pittsburgh, PA	2002
TP03-09	One Company's Legionella Standard	J.W. Smith, Shell Global Solutions Jerry Ransdell & Jim McLean, Shell Chemical Co.	2003
TP08-11	A New Method to Measure Viable Legionella and Total Heterotrophic Aerobic Bacteria	William F. McCoy, Phigenics LLC	2008
LIGHTNING PROTECTION			
TP05-09	Lightning Protection for Cooling Towers	James F. Blake, Jr., American Lightning Protection Systems, Inc. Bill Howard, American Cooling Tower, Inc.	2005
MATERIALS			
TP62-08	Plastic Trends in Cooling Tower Design (TP-5A)	A.L. Fuller, Fluor Products Co.	1962
TP66-01	Fire Retardant Fiberglass Reinforced Polyester as a Material of Construction for Cooling Towers (TP-19A)	Paul R. Carey & Walter A. Szymanski, Durez Plastics Division Hooker Chemical Corp.	1966
TP67-03	Fiberglass Reinforced Plastics and Cooling Towers (TP-34A)	Richard W. Billings, Reinforced Plastics Division	1967
TP69-07	Application of AC Motors to Cooling Towers (TP-63A)	J.A. Ciesar, Westinghouse Electric Corporation	1969
TP69-08	A Look at Wood Plastic Composites With Implication For Cooling Tower Applications (TP-64A)	Duane L. Kenaga, Dow Chemical Company	1969
TP72-05	Plastic Piping Systems in Cooling Tower Design (TP-104A)	David A. Chasis, Plastics Piping Systems, Inc.	1972
TP76-04	Use and Availability of Redwood Lumber in Cooling Towers (TP-154A)	Peter Johnson, Jr., California Redwood Association	1976
TP78-02	Low Cost New Material For Construction of Water Cooling Towers (TP-180A)	R.W. Billings, Reichhold Chemicals, Dennis P. Miller, Dow Chemical	1978
TP80-13	Electric Brake For Cooling Tower Motors (TP-217A)	Elmer E. Rabek, Reliance Electric Company	1980

ORDER #	TITLE	AUTHOR	DATE
TP82-04	Structural Evaluation of Profiled Fiberglass Reinforced Polyester Panels For Cooling Towers (TP-255A)	Joseph F. Panikulam, H.H. Robertson Company	1982
TP82-05	Controlling The Deterioration of Asbestos Cement Cooling Tower Fill (TP-258A)	Winston Chow, Electric Power Research Inst., Richard W. Stone Brown and Caldwell Consulting Engr.	1982
TP83-04	A New Type of Closed Circuit Cooling Tower With Plastic Heat Exchangers (TP-261A)	G. Hery, Hamon (France), J. Bauthier, Hamon-Sobelco (Belgium), William M. Wurtz, Hmon-Sobelco International	1983
TP85-17	Pultruded Fiberglass Reinforced Polyester: The Material of Choice For Cooling Towers	Roger A. Anderson, Enduro Fiberglass Systems	1985
TP86-05	The Selection and Testing of Plastics Tower Fill	Steven C. Blue, Martin Marietta Energy Systems, Inc.	1986
TP87-03	Design Consideration For the Installation of RTRP Piping for Cooling Tower Hot Water Distribution Systems	Michael F. Luckenbill, Fibercast Company	1987
TP94-02	Development of FRP Structural Frame For Industrial Cooling Tower	Kanji Kato & Kesaaki Mochizuki Ishikawajima Plant Eng. & Const. Co., LTD., Akira Hamamoto, Ishikawajima-Harima Heavy Ind. Co., LTD., Hideto Yabumoto, Nippon Shokubai Co., LTD.	1994
TP96-11	Strength-Degradation Based Life Expectancy of Wood Cooling Towers	Jozsef Bodig, Arun K. Pandey, Engineering Data Mgmt., Inc. Jeff Hofacre, American Electric Power Serv. Corp., Mark Holmberg Northern States Power Co., Robert Martirosian, Potomac Electric Power Company	1996
TP98-07	Implementing Regulations Under The Fastener Quality Act (FQA)	Rodrick Williams, All-Pro Fastener, Inc.	1998
TP99-02	Diagonal Bracing Connections in Fiberglass Cooling Towers	Jamie Bland, Ceramic Cooling Tower Company	1999
TP01-14	Safe Erection Procedure for Fiberglass Cooling Towers	Jacob Moneta & Brian O'Leary, Hamon Cooling Towers	2001
TP03-18	Internal Pipe Seals for Repair of Cooling Water Piping	John A. Charest, Universal Utility Services	2003
TP05-03	The Impact of Veil Thickness and Coating Tower FRP Composites	Clint Smith, Strongwell	2005

MECHANICAL DRAFT TOWERS

TP95-02	Partial Collapse and Rebuild of the Conesville Unit 4 Mechanical Draft Cooling Tower	Frank L. Michell & Walt Demjanenko, American Electric Power Service Corp.	1995
TP03-17	Feasibility of Seawater Cooling Towers for Large-Scale Petrochemical Development	Dr. Shahriar Eftekhazadeh & Dr. Muin M. Baasiri, Bechtel Corp and Paul A. Lindahl, Marley Cooling Technologies	2003

MICROBIOLOGICAL ACTIVITY IN COOLING SYSTEMS

TP73-07	Microbiological Control in Cooling Water Systems (TP-119A)	William H. Yost, Zimmite Corp.	1973
TP79-17	Microbiological Control of Cooling Waters (TP-197A)	D. Anthony Carter & Patricia A. McGraw, Dearborn Chemical, Chemed Corporation	1979
TP88-16	Filamentous Iron Bacteria Diagnosis and Treatment in Water Systems	Bruce E. Chamberlain, Drew Industrial Division Ashland Chemical Company	1988
TP91-05	Relationship of Biofilm Formation on Stainless Steel in Untreated Once Through Cooling Water to Seasonal Water Quality Trends	Rodney M. Donlan, Raymon A. Muia & Alan L. Smith, Calgon Corporation	1991

ORDER #	TITLE	AUTHOR	DATE
TP94-12	The Effect of Process Leak Contaminants on Biocidal Efficacy	Lawrence A. Grab, John A. Diemer & M.G. Freid, Union Carbide Chemicals and Plastics Co., Inc.	1994

MISCELLANEOUS

TP62-03	A Comparison Between European and U.S. Cooling Towers (TRP-123)	John W. Hubenthal, Ceramic Cooling Tower Company	1962
TP65-03	Cooling Tower Steam Sterilization From Year's Experience (TP-18D)	T.A. McConomy, Hall Laboratories Division	1965
TP67-04	Sea Water as an Industrial Coolant (TP-31A)	W.B. Brooks, The Dow Chemical Company	1967
TP67-05	On The Design of a Cooling Tower For Educational Purposes (TP-33A)	Juan J. DeLeon, & David P. Malatesta, Undergraduate Students, Ozer A. Arnas, Assoc. Prof., Louisiana State Univ.	1967
TP77-18	Cooling Tower Salinity Optimization via Sidestream Desalination (TP-168A)	Gerald T. Westbrook, Dow Chemical U.S.A.	1977
TP78-03	Examination of the Sensitivity of Spray Cooling to Wind Speed and Direction (TP-185A)	Karl R. Wilber, Environmental Systems Corporation	1978
TP79-07	The Successful History of Spray Canal Cooling (TP-206A)	Richard L. Brown & Dwight Furr, Ceramic Cooling Tower Co.	1979
TP83-05	A New Answer to the Water Treating "Gadget" Problem (TP-265A)	J.C. Dromgoole, Maintenance Engineering Corp., M.C. Forbes, Alkem, Inc.	1983
TP83-06	"Tower Units" Calculation for Concentrated Sea Water (TP-273A)	M. Schaal & G. Meron, Israel Electric Corporation	1983
TP87-02	A Case History of a Coal Gasification Wastewater Cooling Tower at the Great Plains Coal Gasification Project	Benjamin R. Crocker, Environmental Systems Corp., Mary C. Bromel & Michael W. Pontbriand, ANG Coal Gasification Company	1987
TP87-11	Reuse of Pretreated Coal Gasification Condensate in a Pilot Scale Cooling Tower	Michael D. Johnson, Univ. of ND Energy Research Ctr & Gerald W. Schweitzer, Calgon Corporation	1987
TP89-15	Design, Operation and Water Treatment of a Wet Finned Tube Exchanger Cooling Tower	Christopher H. Norton & Ken W. Rowland, Southern California Gas Company	1989
TP90-05	Estimating Operational Service Time of Heat Exchangers	J. Fred Wilkes, Consultant Flavio Bianchi & Mauro C. Ramirez, Aquatec Quimica, S.A.	1990
TP96-16	Helper Cooling Towers at the Bang Pakong Power Station	David J. Brill, David Copeland, Thomas E. Kalin, Black & Veatch, Worawit Khamkanist, Electricity Generating Authority of Thailand	1996
TP00-02	Experiment Investigation of an Evaporative Cooling Tower	Kuo-Hsiang Chien, Energy & Resources Laboratories Industrial Technology Research Institute	2000

NATURAL DRAFT TOWERS

TP68-07	Natural Draft Cooling Towers (TP-38A)	W.J. Jones, Hamon-Cottrell, Inc.	1968
TP70-12	Thermal Performance Evaluation of The Natural Draft Cooling Tower (TP-83A)	John C. Campbell, Ceramic Cooling Tower Company	1970
TP96-08	Oriented Spray-Assisted Cooling Tower	Charles F. Bowman, Chuck Bowman Assoc., Inc. Dudley J. Benton, Ph.D., Environmental Consulting Engineers, Inc.	1996

ORDER #	TITLE	AUTHOR	DATE
TP98-03	Upgrading and Repacking Two 460 MW Natural Draft Cooling Towers	Peter Bosman, Knight Piesold Energy LLC, Dave Stables, Knight Piesold (Pty) Ltd	1998
TP98-10	On-Line Performance Monitoring of the Natural Draft Cooling Tower at Cardinal Plant	Frank L. Michell, Mathew J. Miller, American Electric Power	1998

NON OXIDIZING BIOCIDES

TP74-12	Evolution of Non-Polluting Microbiocides (TP-131A)	Ronald A. Schultz, Wright Chemical Corp.	1974
TP83-16	Temperature and pH Hydrolysis of 2,2 Dibromo-3-Nitrilopropionamine (TP-262A)	Amanda K. Meitz & Lawrence B. Magnusson, The Mogul Corp.	1983
TP86-17	Evaluation of Industrial Biocides in Laboratory Model Cooling Towers	W.F. McCoy & E.S. Lashen, Rohm & Haas Company	1986
TP90-06	Tris (Hydroxymethyl) Nitromethane: An Evaluation of a Versatile Cooling Water Treatment Microbiocide	Kenneth Soeder, Jamestown Chemical Co., Dr. Frederick J. Passman, Angus Chemical Co.	1990
TP90-14	A New Bromine Oxidizing/Nonoxidizing Antimicrobial Combination Product for Industrial Water Treatment	C.R. Ascolese, Betz Industrial	1990
TP92-13	Biocide Efficacy vs. Acid Producing and Iron Oxidizing Bacteria	Lawrence A. Grab, Union Carbide Chemical and Plastics, Leonard A. Rossmore, Biosan Laboratories, Inc.	1992
TP95-03	The Devil You Know Versus The Devil You Don't - An Evaluation of Chlorine Versus a Non-Oxidizing Biocide for Zebra Mussel Control	Patrick H. Gill & Alan L. Smith Calgon Corporation	1995

OXIDIZING BIOCIDES

TP76-14	Chlorine Dioxide a New Development in Effective Microbio Control (TP-153A)	William J. Ward, Olin Water Services	1976
TP78-13	A Simplified Application of Chlorine For Biological Control (TP-187A)	William W. Wheeler, Rohm & Haas, Inc.	1978
TP80-04	Safe Feed of Liquid Biocide a New Option for Microbiological Control In Cooling Water Systems (TP-243A)	Frances C. Pocius, Nalco Chemical Company	1980
TP84-06	Chlorine Dioxide Solves Biofouling Problems in a Refinery Cooling Tower Used for Phenol Destruction	Lex McGuire, Sun Refining & Marketing Co., Tom Dishinger, Drew Chemical Corporation	1984
TP88-07	Replacement of Chlorine Gas at a Major Gulf Coast Refinery With a New Oxidizing Biocide	Samuel E. Shull & Douglas T. Murray, Lonza, Inc., Rudy Thorgeson, Trident Chemical Co. Paul R. Puckorius, Puckorius and Associates, Inc.	1988
TP89-05	Organic Halogen Stabilizers	Zhihe Zhange & Jack V. Matson University of Houston	1989
TP89-14	The Use of Chlorine Dioxide to Control Microbiological Growth in an Ethylene Glycol Contaminated Cooling Tower...A Case History	Raj Dhillon & Charles Edward, Hoechst Celanese	1989
TP00-09	First Field Trials of Single-Feed, Liquid Bromine Biocide for Cooling Towers	Jon Howarth & Chris Nalepa, Albemarle Corporation	2000

OZONE

TP87-17	Ozone - An Alternate Method of Treating Cooling Tower Water	H. Banks Edwards, P.E., Consultant	1987
TP89-07	Ozone Treatment of Cooling Water Results of a Full-Scale Performance Evaluation	G. Darell Coppenger, Martin Marietta Energy Systems, Benjamin R. Crocker & David E. Wheeler, Environmental Systems Corporation	1989
TP92-04	Update of Cooling Tower Ozonation at an Organic Chemical Manufacturing Facility	James A. Merritt, Emery-Trailgaz Ozone Company	1992

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TP92-07	Biocidal Aspects of Ozone for Cooling Water Treatment - Probable Impacts of Bromide Ion	Rip G. Rice, Ph.D., Rice Int'l Consulting Enterprises, J. Fred Wilkes, Consultant	1992
TP94-07	Design Consideration for Ozone Water Treatment Systems in Cooling Towers	Carl Nebel, PCI Ozone & Control Systems, Inc.	1994
TP95-12	Guidelines and Examples of Ozone in Cooling Tower Applications	Lee C. Ditzler, TriOx	1995
TP05-20	Reducing Cooling Tower Costs With Ozone Technology	Andrew Conner, Cleanwater Ozone Systems, Inc	2005

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TP81-13	Psychrometrics and the Psychrometer (TP-231A)	Ivan F. Kuharic, The Marley Cooling Tower Company	1981
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REPAIR AND CONSTRUCTION

TP65-01	Cooling Tower Maintenance (TP-17B)	J.R. DeMonbrun, Union Carbide Corporation	1965
TP71-07	Design of Concrete Basins for Cooling Towers (TP-92A)	A.G. Stepp, Monsanto Company	1971
TP74-04	Cooling Tower Rebuilding (TP-125A)	Robert Burger, Robert Burger Associates, Inc.	1974
TP77-07	How to Repair a Cooling Tower (TP-173A)	James L. Willa & David Hoffman Lilie-Hoffmann Cooling Towers, Inc.	1977
TP78-04	Basic Cooling Tower Technology and Rebuilding for Profits (TP-184A)	Robert Burger, Robert Burger Associates, Inc.	1978
TP79-08	Custom Reconstruction of Southwestern Public Service Company Jones Station Unit - 1 Cooling Tower (TP-205A)	Peter G. Botsonis, Southwestern Public Service Company	1979
TP80-05	Considerations for the Structural Analysis and Design of Wood-Framed Cooling Towers (TP-220A)	Robert I. Speight, P.E., Bac-Pritchard, Inc.	1980
TP81-07	Cooling Tower - Money Making Machines (TP-242A)	Robert Burger, Burger Assoc., Inc.	1981
TP83-07	Preplanning for Cooling Tower Upgrading (TP-259A)	C.J. McCann, Tower Performance Inc.	1983
TP83-08	An Evaluation of Steel as a Cooling Tower Structural Material (TP-268A)	David Hutton, P.E., Bac-Pritchard Inc.	1983
TP85-11	Restoration and Repair of 30-Year Old Cooling Towers at the Paducah Gaseous Diffusion Plant, Phase I	M.F. Shelton, Martin Marietta Energy Systems	1985
TP85-21	Utility Crossflow Cooling Tower Thermal Repair & Upgrading	Dennis R. Moran, CM Towers, Inc.	1985
TP86-08	Replacement of Asbestos Cement Fills in Natural Draft Cooling Towers	George A. Gay & David W. Stackhouse, Custodis-Ecodyne, Inc.	1986
TP87-16	Restoration, Testing and Repair of 30-Year Cooling Tower at the Paducah Gaseous Diffusion Plant Phase II	M.F. Shelton, Martin Marietta Energy Systems, Inc.	1987
TP89-03	Crossflow to Counterflow Cooling Tower Conversion	Allen E. Feltzin, Airco Industrial Gases	1989
TP89-09	Modification of the Induce Draft Cooling Tower at Cross Generating Station - Cross, South Carolina	R.W. Lemay & Vino Verma, Santee Cooper	1989
TP90-04	Removal of Asbestos Paper Fill From Large Industrial Cooling Towers	E.D. Mittendorf, Cascade Dept. Operations Division	1990
TP91-06	On-Line Rebuild of Cooling Tower Serving a 500 MW Power Station	Roger R. Burger, Grand River Dam Authority, H. Peter Fay, GEA Power Cooling Systems, Inc.	1991
TP91-15	Refurbishing America's First Hyperbolic Cooling Tower	Brian W. Deuvall, The Marley Cooling Tower Co., and Frank L. Michel & Dan H. Drew, American Electric Power Service Corp.	1991
TP92-05	Design Methodology and Recommended Maintenance for FRP Composite Structured Cooling Towers	JessSeawell & Toby Daley, Ceramic Cooling Tower Co.	1992

ORDER #	TITLE	AUTHOR	DATE
TP96-13	Cross to Counter Flow Repack on Induced Draft Operating Cooling Tower	Michel Monjoie, Hamon Thermal Engineers & Contractors, Gary Mirsky, Hamon Cooling Towers	1996
TP97-01	Design Considerations for a Fiberglass, Field Erected, Closed-Circuit Cooling Tower	Christopher W. Carlson, P.E., Baltimore Aircoil Company	1997
TP97-13	PGDP Enhances Plant RCW Reliability	Michael Talley, Teresa Gross, John Elrod, Lockheed Martin Utility Services	1997
TP98-11	Advances in Oil Mist Lubrication for Cooling Towers	Fred Paben, Lubrication Systems Company	1998
TP99-04	Evaluation of Design Loads for FRP Composite Columns	Dr. Robert L. Yuan, University of Texas	1999
TP99-08	Improved Ower Plant Performance With Evaporative Steam Condensing	Dave Hutton, Baltimore Aircoil Company	1999
TP99-10	The Retrofit of a Big Cooling Tower at an Oil Refinery in Vienna in Combination with a Significant Noise Reduction	Henk van der Spek, Ventilatoren Sirocco Howden	1999
TP00-15	Collapse of the Conesville 4B Seven Cell Mechanical Draft Cooling Tower	Frank L. Michell, Walt Demjanenko & Joe Tseng, American Electric Power	2000
TP00-16	Safe Construction of Field Erected Cooling Towers	Mike Bickerstaff, Ceramic Cooling Tower Corporation	2000
TP02-05	Concrete Basics, Materials, Selection in Design and Repair	Thomas G. Toth, Psychrometric Systems, Inc.	2002
TP02-08	Suitability of Preservative-Treated Radiata Pine for Cooling Tower Construction	R.N. Wakeling, D.R. Page, M.J. Collins & Ronnie Heasman, Cooling Tower Fabrications	2002
TP02-10	Avoiding Cooling Tower Catastrophe	James L. Willa, Willa, Inc.	2002
TP02-11	Collapse of Tuttle #2 Cooling Tower and Resulting Replacement Repair Program	Stephen Tips, City Public Service	2002
TP03-07	Crossflow to Counterflow Natural Draft Tower Conversion	Dr. John Arntson, Jamie Bland & Mike Bickerstaff, Ceramic Cooling Tower Corp., Merwin Jones, Mirant Mid-Atlantic LLC	2003
TP03-13	Correcting Sedimentation Problems at American Electric Power's Conesville Plant River Intake	Frank Michell, Pedro Amaya, & C. Dannemiller, AEP; Dr. Robert Ettema & M. Muste Univ of Iowa	2003
TP04-08	Update on the Impact of Water Immersion for Pultruded FRP	Clinton B. Smith, Strongwell	2004
TP05-11	Complete Structural Rebuild of Two Six Cell Crossflow Cooling Towers Using All FRP Members	Deano Sarantakos, Kentucky Utilities	2005
TP06-03	Large Scale Mechanical Equipment Simple Steps for Success	David M. Suptic, David M. Suptic, P.E. LLC	2006
TP06-17	Westar Energy Cooling Tower Rebuilds	David Spacek, Westar Energy, Inc.	2006
TP06-22	Wind Load Rated Packaged Cooling Towers	Daniel S. Kelly, Evapco	2006
TP07-16	Etiwanda Cooling Towers, Repair or Replace	Robert Fulkerson, Fulkerson & Associates, Inc.	2007
TP07-18	Rehabilitation of Hyperbolic Cooling Towers at Electric Generating Station	Kevin A. Michols, CTLGroup	2007
TP07-24	Living in a Material World	Frank Morrison, Baltimore Aircoil Company	2007
TP08-22	Construction Productivity Guidelines for Field Erected Cooling Towers	James Baker, Composite Cooling Solutions, LP	2008

SIDESTREAM SOFTENING

TP67-06	Current Practice in Sidestream Filtration for Cooling Towers (TP-25A)	J.W. Hayes, Jr., Humble Oil & Refining Company	1967
TP68-08	Sidestream Filtration with Diatomite (TP-45A)	Raymond W. McIndoe, Johns Manville	1968
TP73-12	Softening of Cooling Tower Blowdown Water For Reuse (TP-112A)	C.C. Fowlkes, Union Carbide Corporation	1973

ORDER #	TITLE	AUTHOR	DATE
TP74-05	Sidestream Filtration for Cooling Towers (TP-130A)	Ellis G. Udwin, Baker Filtration Company	1974
TP77-06	Sidestream Softening of Cooling Tower Blowdown (TP-166A)	Jay Hennings & Charlie Misenheimer, Georgia-Pacific Corp., Harold Templet, Betz Laboratories, Inc.	1977
TP77-13	Sidestream Softening as a Means to Achieving Zero Blowdown From Evaporative Cooling Systems (TP-165A)	D.T. Reed, E.F. Klen & D.A. Johnson, Nalco Chemical Co.	1977
TP80-06	Status of Sidestream Softening (TP-216A)	Jack V. Matson, University of Houston, Paul R. Puckorius, Puckorius & Associates, Inc.	1980
TP81-08	Chemistry of Sidestream Softening and Silica Reduction (TP-234A)	James T. Knight, Graver Water Division Ecodyne Corp.	1981
TP85-05	Demonstration of a Maximum Recycle Sidestream Softening System at a Petrochemical Plant	Jack V. Matson, Wendy G. Mouche & Eric Rosenblum, Environmental Engineering Program University of Houston	1985
TP04-02	Cooling Tower Side Stream Filtration 101	Clarence Melancon, Water Filtration Technologies, Inc.	2004
TP05-14	It's Time to Rethink Cooling Tower Filtration	Dr. Marcus N. Allhands, Amid Filtration Systems	2005
TP06-04	Filtration For Multi-Story Office Buildings HVAC	Dr. Marcus N. Allhands, Amid Filtration Systems; Victoria Allies TNT Technology Company	2006

SOUND

TP72-07	What is Noise (TP-99A)	Don O'Dell, Chief Engineer Chittom Equipment Company	1972
TP76-05	Noise Prediction Techniques for Siting Large Natural Draft and Mechanical Draft Cooling Towers (TP-159A)	Gregory A. Capano & Wayne E. E. Bradley, Stone & Webster Engineering	1976
TP77-09	The Sound of Low-Speed Fans (TP-160A)	Bruce E. Murray & Eric W. Wood, Bolt Beranek and Newman, Inc.	1977
TP77-10	Induce Draft Cooling Tower Noise and Its Control (TP-161A)	John S. Wang, Exxon Research and Engineering Company	1977
TP82-06	The New CTI Sound Code - Interpretation and Application (TP-245A)	Tom Rose, Joiner-Pelton-Rose, Inc.	1982
TP93-03	Reduction of Noise Generation by Cooling Fans	Ir. Henk F. van der Spek, Ventilatoren Sirocco Howden B.V	1993
TP95-01	Cooling Tower Noise	Gary R. Mirsky, Hamon Cooling Towers	1995
TP05-08	Application of Low Noise Technology for Evaporative Equipment	Trevor Hegg, Evapco, Inc Paul Nelissen, Howden Cooling Fans	2005
TP07-12	Sound Measurement from Field Erected Cooling Towers	Kenneth Hennon, David Wheeler CleanAir Engineering, Inc.	2007

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TP74-13	Cooling Tower Bid Evaluation (TP-126A)	James L. Willa & Paul David Hoffmann, Lillie Hoffmann Cooling Towers, Inc.	1974
TP85-01	CTI Certification: Its Benefits to the Cooling Tower Industry	David Hutton, P.E., BAC-Pritchard, Inc.	1985
TP88-04	How To Make CTI Standards Work For You	James L. Willa, Willa, Inc.	1988

SPECIFICATIONS OF COOLING TOWER WATER TREATMENTS

TP68-13	Cooling Water Treatment Specifications (TP-40A)	A.R. Cubisino, The M.W. Kellogg Company	1968
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TESTING

TP00-07	Demonstrating the Effectiveness of Field Testing Evaporative Vapor Condensers	Glenn D. Comisac, Baltimore Aircoil Company	2000
TP04-14	Selected Diagnostics to complement a Cooling Tower Performance Test or Status Test	Charles W.H. Foster, Diagnostic Cooling Solutions Inc.	2004
TP08-20	Seismic Qualification of Cooling Towers by Shake-Table Testing	Panos G. Papavizas, Baltimore Aircoil Company	2008

THERMAL PERFORMANCE

TP61-01	The Evaluation of Cooling Tower Performance From Field Test Data (TPR-121)	John C. Campbell	1961
TP62-04	Effect of Altitude on Cooling Tower Rating and Performance (TPR-125)	Thomas H. Hamilton	1962
TP62-05	Sizing Cooling Towers to Optimize Plant Performance (TP218A)	S.D. Clark, Union Carbide Corp.	1962
TP67-07	A Report on In-Place Spray Treatment of Cooling Towers at the Paducah Gaseous Diffusion Plant (TP-20A)	L.C. Burkhalter, Union Carbide Corporation	1967
TP67-08	Control of Fog From Cooling Towers (TP-30A)	J.R. Buss, Monsanto Company	1967
TP67-09	The Application of Computer Techniques to the Selection and Evaluation of Water Cooling Tower (TP-29A)	Neil W. Kelly, Pritchard Products Corporation	1967
TP68-09	Novel Cooling Tower Control System (TP-48A)	H. Feitler & C.R. Townsend, Magna Corporation	1968
TP69-09	Off-Peak Cooling With Thermocycle (TP-70A)	Robert Reynolds, York Division Borg-Warner Corporation	1969
TP69-10	Missapplication and Incorrect Location of Cooling Towers (TP-73A)	Robert S. Jones, Francis Assoc.	1969
TP72-07A	Estimating Cooling Tower Costs Performance - A Tool for Determining the Impact on the Hydro-Thermal Program (TP-97A)	Emoy H. Hall, Bonneville Power Administration	1972
TP74-06	The Cooling Tower - Waste Heat Superstar (TP-121A)	Peter M. Phelps, Phelps Engineering, Inc.	1974
TP75-05	Proper Cooling Tower Operation Makes Money (TP-141A)	James L. Willa, Lillie-Hoffmann Cooling Towers, inc.	1975
TP76-07	Emergency Shutdown Cooling Towers Considerations in the Evolution of an Optimum Tower Design (TP-152A)	Stuart M. Klein, United Engineers & Constructors, Inc.	1976
TP76-15	A Blueprint for the Preparation of Crossflow Cooling Tower Characteristic Curves (TP-146A)	Neil W. Kelly, Neil W. Kelly and Associates	1976
TP78-05	Improving Condenser Cleanliness by Using a Dispersant to Supplement Chlorination at a Nuclear Plant (TP-189A)	J.R. Sipp, Vermont Yankee Nuclear Power Station, Jeff R. Townsend, Drew Chemical Corp.	1978
TP78-06	Review of Cooling Tower Calculation (TP-194A)	Walter Gloyer, Consultant	1978
TP79-09	An Evaluation of Schemes for the Prediction of Recirculation on Crossflow Rectangular Mechanical Draft Cooling Towers (TP-195A)	R.D. Moore, D.E. Wheeler, K.R. Wilber & A.E. Johnson, Environmental Systems Corp.	1979
TP79-10	Handling Upsets in Cooling Water Systems (TP-196A)	J.R. Townsend, Drew Chemical Corporation	1979
TP79-11	Biofilm Development and Destruction in Turbulent Flow (TP-204A)	W.G. Characklis, Rice University	1979
TP79-12	Evaporative Hat Removal in Wet Cooling Towers (TP-209A)	Thomas E. Eaton, P.E., University of Kentucky	1979
TP79-13	Next Year's Profits...From Your Cooling Tower (TP-199A)	C.J. McCann & Dennis Moran, Tower Performance, Inc.	1979
TP80-07	A Review of Present and Recently Proposed Methods for Thermal Evaluation of Atmospheric Water Cooling Equipment (TP224A)	Glenn F. Hallett, Fluor Engineers and Constructors, Inc.	1980
TP80-08	Common Misconceptions Concerning Cooling Tower Performance (TP-225A)	James L. Willa & John C. Campbell, Lillie-Hoffmann Cooling Towers, Inc.	1980

ORDER #	TITLE	AUTHOR	DATE
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TP82-07	Evaporative Cooling Performance Evaluation (TP-253A)	Larry D. Howlett, Heat Transfer & Mechanical Design	1982
TP82-13	Effect of Altitude on Cooling Tower Design and Testing (TP-251A)	George E. McKee, Cooling Technology Corporation	1982
TP83-09	The Use of the CTI Blue Book at Altitude (TP269A)	Robert Fulkerson, Cooling Technology Corporation	1983
TP84-01	EPRI Research on Cooling Tower Performance	John A. Bartz & Wayne C. Micheletti, Electric Power Research Institute	1984
TP84-07	Integration of the Cooling Tower in the Chemical Processing Plant	W. v.L. Campagne & Lane J. McDonough, Stone & Webster Engineering Corporation	1984
TP84-13	Recirculation and Interference Characteristics of Circular Mechanical Draft Cooling Towers	John W. Cooper, Jr., Zurn Industries, Inc.	1984
TP84-18	Eliminating the Merkel Theory Approximations -- Can it Replace the Empirical "Temperature Correction Factor"?	Marcel R. LeFevre, MRL Corporation	1984
TP85-08	Influence of air and Water Temperature on Fill Characteristics Curve	Marcel R. LeFevre, MRL Corporation	1985
TP85-09	Application of Upspray Type Water Distribution Systems in Cooling Towers	H. Peter Fay & Gerhard Hesse, GEA Power Cooling Systems, Inc.	1985
TP86-02	An Operations History of W.A. Parish Units #7 & #8 Main Cooling Towers and Associated Systems	Mary Brakhage Fuglaar, Houston Lighting & Power Company	1986
TP86-03	Status Report: Cooling Tower Performance Project	John A. Bartz & Wayne C. Micheletti, EPRI and Margaret C. McPhail, Houston Lighting & Power	1986
TP86-12	Activation of a New Tower Facility	W.D. Lansford, P.E., Arnold Engineering Development Ctr.	1986
TP86-15	Application of Uncertainty Analysis to Cooling Tower Thermal Performance Tests	John G. Yost & David E. Wheeler Environmental Systmes Corp.	1986
TP88-01	Exhaust Steam Condensing With an Evaporative Condenser	Lindsay L. Haman, P.E., Baltimore Aircoil Company, David Hutton, P.E., BAC-Pritchard Inc.	1988
TP88-17	Artificial Intelligence for Operation of a Crossflow Mechanical Draft Cooling Tower	Benjamin R. Crocker & David E. Wheeler, Environmental Systems Corporation, Gerald L. Mroczkowski & Richard E. Steiner, Wisconsin Public Service Corp.	1988
TP89-17	Cooling Water Operational Experiences at an Ammonia Plant	Guy A. Crucil & Lawrence Aytes Nalco Chemical Company, and Paul A. Lamar, Farmland Industries, Inc.	1989
TP91-02	A More Nearly Exact Representation of Cooling Tower Theory	Allen E. Feltzin, Airco Industrial Gases/The BOC Group, Dudley Benton, Tennessee Valley Authority	1991
TP91-07	Development of Cooling Tower Performance Impacts on Utility and Process Plants	Ken Quigley, Ecodyne Cooling Tower Services and Karl Wilber Research Cottrell Companies	1991
TP92-01	Using The EPRI Test Data to Verify a More Accurate Method of Predicting Cooling Tower Performance	Richard J. DesJardins, DesJardins and Associates	1992
TP95-10	Tower Demolition safety Techniques For The 90's	Michael F. Talley & John Elrod Martin Marietta Utility Services, Inc.	1995
TP95-17	Computerized Simulation of Closed Circuit Cooling Tower With Parallel and Counterflow Spray Water-Air Flow Design	Branislav Korenic, Ph.D., Baltimore Aircoil Company	1995
TP96-15	Enhancing Tower Performance Using Non-Uniform Water Distribution	Adriaan J. de Villiers, Peter B. Bosman, Knight Piesold Energy	1996

ORDER #	TITLE	AUTHOR	DATE
TP97-09	On-Line Performance Monitoring of the 1300 MW Natural Draft Cooling Towers on American Electric Power's General James M. Gavin Plant	Frank L. Michell, Dan H. Drew American Electric Power	1997
TP01-04	Cooling Towers, Evaporative Condensers, and ASHRAE Guideline 12-2000	David F. Geary, Baltimore Aircoil Company	2001
TP02-03	Wireless Condition Monitoring of Industrial Cooling Towers	Lloyd D. Lee, MAARS, Inc	2002
TP02-09	A Temporary Cooling Tower CAN Work For You	Billy Childers, Aggreko, Inc	2002
TP02-14	Vibration Control For Cooling Towers	Robert Simmons, Amber/Booth Co.	2002
TP02-19	Network Analysis Helps Increase Cooling System Capacity	Sushil Aggarwal, Fluor Daniel Inc	2002
TP03-06	Innate Recirculation of Cooling Towers	Hector L. Cruz, Bechtel Power Corporation	2003
TP04-03	Supplemental Cooling	Billy Childers, Aggreko Cooling Tower Services	2004
TP04-11	Thorough Inspections Reduce Cooling Tower Mechanical and Performance Risk	Terry McCoy, ChemTreat, Inc & Robert Strandberg, Covanta, Inc.	2004
TP05-02	Online Refurbishment of Four Large Natural Draft Cooling Towers	Alex Dreyer, GEA Aircooled Systems	2005
TP05-10	Dynamic Load Considerations in Cooling Tower Water Distribution Piping	David M. Suptic, David M. Suptic P.E. LLC	2005
TP05-23	Hybrid Closed-Circuit Cooling Tower Solves a Water Availability Problem	David Hutton, Baltimore Aircoil Company	2005
TP06-01	Cooling Towers Work as a System	Richard DesJardins, DesJardins Consulting	2006
TP06-05	Responding to a Cooling Tower Emergency	Billy Childers, Aggreko LLC	2006
TP06-15	Guidelines for Successful cooling Tower Installations for Campus District Energy Systems	Frank T. Morrison, Baltimore Aircoil Company	2006
TP07-10	Seismic Rated Factory Assembled Evaporative Cooling Equipment	Scott Nevins, Evapco, Inc.	2007
TP08-04	Crossflow Cooling Tower Performance Calculations	Robert Fulkerson, Fulkerson & Associates	2008
TP08-12	Architectural Enclosure Influences on the Performance of Field Erected Cooling Towers	Toby Daley, Composite Cooling Solutions, L.P.	2008

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TP61-02	Psychrometry (TP-1A)	James L. Willa, Cooling Tower Institute	1961
TP63-04	Water Flow Measurement in Field Tests of Cooling Towers (TP-3A)	Kent J. Bordelon, Cooling Tower Institute	1963
TP68-10	Cooling Tower Test Accuracy (TP-49A)	W.J.Hoffmann, Jr. & James L. Willa, Lilie Hoffmann Cooling Towers, Inc.	1968
TP77-11	Field Examination of Cooling Tower Testing Methodology (TP-163A)	Karl R. Wilber, Environmental Systems Corporation, John S. Maulbetsch, Electric Power Research Institute	1977
TP77-12	CTI Water Cooling Tower Thermal Performance - Testing Procedures and Instrumentations (TP-174A)	C.K. Doll, Midwest Research Institute	1977
TP78-07	Water Flow Measurement in Large Pipes and Conduits (TP-182A)	John P. Fath, Fischer & Porter Company	1978
TP79-14	The Application of Acoustic Flowmeters to Pipeline Flowrate Measurement (T-208A)	Francis C. Lowell, Jr., O.R.E., Inc.	1979
TP81-10	Fluid Flow Measurement and Energy Savings (TP-227A)	Norman L. Alston, Dieterich Standard Corporation	1981
TP81-11	Evaluation of Cooling Tower Test Accuracy (TP-235A)	Marcel R. LeFevre, MRL Corp.	1981
TP81-12	ATC-105 Test Accuracy at Off-Design Conditions (TP-241A)	Robert D. Fulkerson, Cooling Technology Corporation	1981
TP83-10	Design and Operation of Remote Reading Wet Bulb Instruments With Thermistor Temperature Sensors (TP-266A)	Thomas E. Weast, Midwest Research Institute	1983

ORDER #	TITLE	AUTHOR	DATE
TP84-08	Field Measurements of Chiller Heat Transfer Coefficients	Levin G. Armwood, P.E., Mogul Division/The Dexter Corporation	1984
TP84-11	Determination of Fan Flow and Water Rate Adjustment for Off-Design Cooling Tower Tests	John M. Vance, Union Carbide Corporation	1984
TP84-15	Examination of Cooling Tower Air Flow Measurement Techniques and Their Utility in Cooling Tower Performance Determinations	Dave Wheeler, Karl Wilber & Greg Starnes, Environmental Systems Corporation	1984
TP89-04	Ultimate Heat Sink Thermal Performance Test at the River Bend Station	T.P. Anthony, Gulf States Utilities J.R. Salmon, Stone & Webster Engineering, John G. Yost, P.E. Environmental Systems Corp.	1989
TP92-11	Dye Dilution Flow Rate Measurements for Cooling Towers	Jack R. Missimer, Ph.D., P.E. Environmental Systems Corp.	1992
TP92-15	Calibration Characteristics of a Simplex Pitot-Static Probe and Five Alternative Velocity Probes	R.N. Partghasarathy, Robert Ettema & V.C. Patel, Iowa Institute of Hydraulic Research	1992
TP94-15	Testing Procedures for Wet/Dry Plume Abatement Cooling Towers	Michel Monjoie & Jean-Pierre Libert, Hamon Sobelco	1994
TP97-04	Characterization of Drift Rates and Drift Droplet Distribution for Mechanical Draft Cooling Towers	Jack R. Missimer, David Wheeler Power Generation Technologies	1997
TP97-05	Accuracy and Linearity of Diamond Shaped Averaging Pitot Tubes	Susan Mahoney, Dieterich Standard	1997
TP00-06	A New Look at Recirculation Analysis Including Measure of a 50 Cell Cooling Tower	Michel Monjoie & Franz Bouton Hamon Thermal Europe	2000
TP01-13	Circulating Water Flow Measurements - A Study	Eugene D. Culver, Ceramic Cooling Tower Corp.	2001
TP02-01	Analysis of Thermal Performance Test Data of Large Cooling Towers Using CTI ToolKit Software	Frank Michell, American Electric Power; Rich Aull, Brentwood Industries, Inc.	2002
TP03-02	Flow Measurement and All That Jazz	Mark S. Huber & Robert Miller Baltimore Aircoil Company	2003
TP08-10	A Simplified Method to Evaluate Cooling Tower and Condenser Performance Using the CTI Toolkit	Luc DeBacker & Natasha Peterson Bechtel	2008

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TP65-02	An Overall Concept of Cooling Water Treating Economics (TP-18C)	George M. Kieth, Aquatrol, Inc.	1965
TP66-02	For Greater Plant Efficiency - De-Oil Your Water - and Save (TP-20B)	Dr. L. Bakker & B.S. Hazel, National Castings Division, Midland-Ross Corporation	1966
TP70-06	Maintaining Clean Water Systems With Chemical Additives (TP-76A)	S.D. Curtis & R.M. Silverstein, Drew Chemical Corporation	1970
TP70-07	Proper and Efficient Operation of a Cooling Tower Water System (TP-79A)	Clyde A. Farris, Jr., Water Services, Inc.	1970
TP73-07	Microbiological Control in Cooling Water Systems (TP-119A)	William H. Yost, Zimmite Corp.	1973
TP74-07	Coordinated Cooling Water Treatment Programs (TP-132A)	James L. Twiford, Hercules, Inc.	1974
TP74-08	New Developments in Cooling Water Treatment Technology (TP-133A)	E.J. Levi, Ph.D., Drew Chemical Corporation	1974
TP75-06	The Use of Ion Exchange Resins in Cooling Tower Technology (TP-137A)	Dr. Robert Kunin, Rohm & Haas Company	1975
TP75-07	Recovery of Chromate from Cooling Tower Blowdown by Ion Exchange Resins (TP-138A)	Daisuke Yamamoto, Koichi Yabe & Osamu Abe, Kurita Water Industries Ltd.	1975
TP75-08	Instrumentation in Cooling Water Systems (TP-142A)	Charles G. Arnold, Dow Chemical U.S.A.	1975
TP75-09	Automatic Chlorination of Cooling Water Using ORP Sensing (TP-144A)	Roy V. Comeaux & J.N. Chatfield, Exxon Company, U.S.A.	1975
TP82-09	A "Modified" Technique of In-Place Fungicide Treatment of Cooling Towers as Used at the Paducah Gaseous Diffusion Plant (TP-254A)	M.F. Shelton & B.G. Warriner, Union Carbide Corporation	1982

ORDER #	TITLE	AUTHOR	DATE
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TP84-04	Chemical Feeding Devices for Cooling Tower Waters	Water Treatment Subcommittee Cooling Tower Institute, Maxey Brooke, Chairman	1984
TP85-07	Low T.D.S. Makeup Water -- A Problem?	William P. Grobmyer, Sr. & John W. Brown, Jr., P.E., Burns & McDonnell Engineering Co., Gerald Butcher, Western Farmers Electric Coop	1985
TP85-13	Advances in Alkaline Cooling Water Treatment Technology: An Update	Albert E. Shaffer, Jr., & Stuart D. Klatskin, Betz Laboratories, Inc.	1985
TP85-15	Study of Cooling Water at High Cycles	Jasbir S. Gill & Richard G. Varsanik, Calgon Corporation	1985
TP86-18	Advances in Deposit Control For Cooling Water Systems	Nancy S. Sherwood & Alan L. Smith, Calgon Corporation	1986
TP88-11	An Alternative Cooling Water Treatment Program for the Replacement of Chromate	Guy A. Crucil & Ronald H. Schild, Nalco Chemical Co.	1988
TP89-02	A Chromate Replacement Program for Industrial Cooling Waters That E. Eastman, Calgon Corporation	Nancy S. Sherwood, Gordon E.	1989
TP89-12	Cooling Water Treatment for High Conductivity Waters	R. Gailey, P. Labine & S. Jost, Petrolite Corporation	1989
TP89-18	Cutting Costs - Fast Detection and Response Corrects Cooling Water Treatment Upsets	Juan Carlos Staibano, Fred Wilkes, Hernando Barba & Antonio A. Rodriguez, Aquatec Quimica, S.A.	1989
TP90-01	Practical Applications of Tracers - Beyond Product Monitoring	John E. Hoots, Nalco Chemical Company	1990
TP90-10	Problems and Pitfalls in Water Treatment Specifications	Arthur J. Freedman & Thomas M. Laronge, Thomas M. Laronge, Inc.	1990
TP90-13	Effects of Molybdate in Cooling Water Treatment Programs	Kenneth P. Fivizzani & Sang-Hea Shim, Nalco Chemical Company	1990
TP91-04	Fail-Safe Cooling Water Operations	Arthur J. Freedman & Thomas M. Laronge, Thomas M. Laronge, Inc.	1991
TP91-08	Precise Prediction of Cooling Water pH	Craig W. Ballard & Jack V. Matson, Ph.D., P.E., University of Houston	1991
TP92-03	Practical Considerations in High Cycle Cooling Water Operations	Arthur J. Freedman & Thomas M. Laronge, Thomas M. Laronge, Inc., Chester M. Malewski & Craig W. Williams, Sierra Pacific Power Company	1992
TP92-08	Automated Oxidant Control	Phil Kiser, Stranco, Inc.	1992
TP92-14	Evaluation of Alternatives to Gaseous Chlorine for Cooling Water Microbiological Control	Marcus Vaska & Winston Go, Drew Industrial Division	1992
TP93-02	Control of Microbiological Contaminants in Small Cooling Systems	Daniel H. Pope, Ph.D., Bioindustrial Technologies, Inc. William T. Osborne, Baltimore Aircoil Company	1993
TP93-04	Fingerprints of Errors - Failures in Cooling Water Systems	Arthur J. Freedman, Ph.D., Mark A. Lisin, P.E. & Thomas M. Laronge, Thomas M. Laronge, Inc.	1993
TP93-10	A New On-Line Monitoring and Control Capability for Cooling Water Programs	J. Richardson, K.D. Heinz & M.A. Reinsalu, Grace Dearborn, W.R. Grace	1993

ORDER #	TITLE	AUTHOR	DATE
TP93-11	Silica Stabilization in Industrial Cooling Towers: Recent Experiences and Advances	Paul R. Young, Christine M. Stuart & Phillip M. Eastin, Nalco Chemical Company, Marshall McCormick, Chevron	1993
TP95-04	Fractures in Cooling Water System Components	Thomas M. Laronge & Mark A. Lisin, Thomas M. Laronge, Inc.	1995
TP95-09	Highly Effective New Polymer For Calcium Phosphate Control in Cooling Water Systems	Anne B. Austin & Michael L. Standish, Alco Chemical	1995
TP97-08	Twenty Minutes with Molybdate	M.H.L. Garnaud, Climax Molybdenum UK, Ltd; Thomas J. Risdon, Climax Molybdenum Marketing Corporation	1997
TP97-11	A New Treatment for Calcium Carbonate Control in Alkaline Conditions	Jasbir S. Gill, Jennifer R. Parson Robert C. Gordon, Calgon Corp.	1997
TP97-15	The Advancing Evolution of Centrifugation	William R. Leizear, Randall D. Delenikos, LAKOS Filtration Systems	1997
TP00-04	Bugs and Bugaboos of Cooling System Components	Thomas M. Laronge, Thomas M. Laronge, Inc.	2000
TP00-14	Recent Advances in High Alkaline Cooling Water Treatment	John Richardson & Michael G. Trulear, ChemTreat, Inc.	2000
TP01-06	Mixed-Oxidant Use in Cooling Tower Maintenance	Wesley L. Bradford, Los Alamos Technical Assoc., Inc.; Paul Petersen, Trident Technologies, Inc.	2001
TP01-09	Extend the Life of Wetted Surfaces	Mark A. Lisin, Lisin Metallurgical Services; Thomas M. Laronge, Thomas M. Laronge, Inc.	2001
TP01-11	Removal of Copper During Start-Up of Cooling Tower	Karen F. Pedraza & Dennis P. Shea, Solutia, Inc.	2001
TP01-12	Water Treatment Can be Bid Successfully	Thomas M. Laronge & Roland A. Leathrum, Thomas M. Laronge, Inc.	2001
TP02-02	Field Experience With A New, Novel Series of High Performance, Environmentally Friendly CWT Programs	S.J. Colby, D.E. Emerich & M. C. Wangerin, Ashland Specialty Chemical Company	2002
TP02-07	New All Organic Chemistry For Treatment of Closed Cooling Systems	John Richardson & Michael G. Trulear, ChemTreat, Inc	2002
TP04-15	Development of an On-Site Hypobromite Generation	Timothy Keister & Pat Gill ProChemTech International	2004
TP05-15	Finally, An Alternative to Azoles	Eric Ward, Alco Chemical	2005
TP07-05	Material Balance Chemical Control and Information Systems for Cooling	Charles Kuhfeldt, Ashland Water Technologies	2007

TREATMENT EVALUATION

TP66-03	A Survey of Desalination Technology (TP-19B)	W.F. McIlhenny, The Dow Chemical Company	1966
TP66-04	Cooling Water Treatment Dollars and Sense (TP-20A)	Maxey Brooke, Phillips Petroleum Company	1966
TP68-11	Water Treatment for Cooling Towers (TP-46A)	J.L. Thornley, Bird-Archer Co.	1968
TP68-12	Agricultural Waste Water Treatment Methods (TP-53A)	Don Swain, U.S. Bureau of Reclamation	1968
TP70-08	Cooling Tower Design Criteria and Water Treatment (TP-85A)	F.W. Motley & T.C. Hoppe Black & Veatch Consulting Engineers	1970
TP73-08	New Concepts in Alkaline Cooling Water Treatments (TP-122A)	Dr. Arthur J. Freedman & Roger Nass, Nalco Chemical Company	1973
TP75-09	Fundamentals of Cooling Tower Water Technology (TP-140A)	Sidney Sussman, Ph.D., Olin Water Services	1975
TP77-13	Copper Alloys in Fresh and Salt Water Cooling Towers Located at Power Plant Sites (TP-178A)	James J. Seibert, Ampco-Pittsburgh Corporation	1977

ORDER #	TITLE	AUTHOR	DATE
TP83-12	Test Method For Biocide Evaluations in Cooling Towers (TP-267A)	Helen E. Crandall, Hercules, Inc.	1983
TP86-07	Microbiological Test Methods in Association With Cooling Towers	Helen E. Crandall, Hercules, Inc.	1986
TP87-06	Methods For Evaluating the Efficacy of Biocides Against Sessile Bacteria	Carol A. Jones, Jane H. Leidlein & Jeff G. Grierson, Dow Chemical Company	1987
TP88-03	A Comprehensive Evaluation of Molybdate-Based Cooling Water Treatment Technology	Joseph S. Roti & Kenneth F. Soeder, Drew Industrial Division	1988
TP88-12	Pilot Cooling System Evaluation of Treatment Program Effectiveness in a Refinery Environment	Beatrise A. Bross & Robert J. Ferguson, Chemlink, Inc.	1988
TP96-07	A Laboratory Method for Evaluating Biocidal Efficacy on Biofilms	Michael Ludyanskiy, Steven J. Colby, Lonza, Inc.	1996
TP03-15	Practical Approach to Solving Cooling Water Treatment Problems Using Customized Chemical Formulation	Daniel P. Curnock & Edward W. Cocetti, ChemCentric	2003
TP03-16	Multipurpose Water Treatment In Cooling Towers	Sukjun Kang & Jasper Lee, EEKO Bio Corporation, Jeyong Yoon & Min Cho, Seoul Nat'l University	2003
TP03-21	Condenser Water Treatment Using Pulsed-Power	John Lane, Clearwater Systems and David Peck, Eichleay Engineers & Constructors	2003
TP07-09	Twenty-Years of Cooling Water Treatment Experience in Manhattan	Marcus N. Allhands and Carmine Puglisi, Orival, Inc.	2007
TP07-15	An Alternative Method for Delivering Cooling Water Treatment Chemicals Using Controlled Release Technology	Dennis Kelly and Dan Dobrez, Dober Group	2007

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TP63-06	Combating Biological Attack on the Gulf Coast (TP-4A)	C.D. Carlson, Dow Chemical Company, U.S.A.	1963
TP64-06	Fungus Control in Cooling Towers (TP-6B)	C.W. Brown, Betz Laboratories, Inc.	1964
TP87-15	The Growth and Control of Nitrifying Bacteria in a Urea Plant Cooling	S.P. Holmes, Petrolite Corporation	1987
TP98-06	A New Biocide for Control of Algal Biofouling in Cooling Towers	K. Mark Wiencek, Terry M. Williams, Robert F. Semet, Rohm & Haas Company	1998
TP98-09	A Comparison of Bromine-Based Biocides in a Medium-Size Cooling Tower	Christopher J. Nalepa, Robert M. Moore, Albemarle Corporation	1998
TP99-16	Unique Biodispersant Removes Biofilms and Increases Biocides Efficacy	Melvin H. Czechowski & Kurt W. Whitekettle, BetzDearborn Inc.	1999

UTILITY INDUSTRY

TP68-15	Advanced Methods of Electric Power Generation (TP-56A)	L.G. Hauser, Westinghouse Electric Corporation	1968
TP69-11	A New Look at Cooling Towers for the Power Generation Industry (TP-66A)	John C. Campbell, Ceramic Cooling Tower Company	1969
TP70-09	The Power Industry's Requirements for Cooling Towers (TP-81A)	Hugh C. Crutchfield, Utah Power and Light Company	1970
TP70-10	Proving Power Plant Towers (TP-82A)	James L. Willa, Lillie-Hoffmann Cooling Towers, Inc.	1970
TP74-09	Cooling Tower Consumed Power and Its Relationship to Power Plant Output (TP-127A)	Thomas H. Hamilton, Bechtel Power Corporation	1974
TP74-10	Cooling Requirements for the Nuclear Industry (TP-128A)	T. Shapiro, Union Carbide Corp.	1974
TP79-15	Comparison of Different Type Cooling Towers for Gas Turbine Inlet Air Service (TP-86A)	A.R. Cox, West Texas Utilities Company	1979
TP90-03	Operating Feedback of French Cooling Towers Civil Work and Equipment	P. Coic, Electricite De France	1990
TP00-10	With "New-Age Brands" Into a "Brand-New Age"	Leo Vonk, Bis Both Industrial Services BV	2000

ORDER #	TITLE	AUTHOR	DATE
TP00-11	Circular Hybrid Cooling Towers	Andreas Streng, Ph.D., Balcke-Duerr Energietechnik GmbH	2000
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TP63-05	Vibrations of Cooling Tower Fans (TP-7A)	Michael P. Blake, Monsanto Chemical Company	1963
TP86-11	Cooling Tower Fan Vibration Monitoring	D.L. Pete Bernhard, IRD Mechanalysis, Inc.	1986
TP87-09	Types of Cooling Tower Fan Vibration Monitoring	Robert Alan Hund & Ivo Dabelic, Vibranalysis Engineering Corp.	1987
TP03-05	Vibration Control: New Fan Blade Tip Reduces Pulsation	Henk van der Spek, Howden Cooling Fans	2003
TP03-12	Cost Effective Cooling Tower Fan Vibration Monitoring	Talmadge D. Ward Jr., & Mickey Talley, USEC Paducah Kentucky	2003
TP04-04	New Fan Blade Tip Design Reduces Structural Vibrations - Verification in Practice	Sander C. Venema, Howden Cooling Fans; Chris B. Lazenby, Southern Company Services	2004
TP06-23	Roulette and Mechanical Vibration Switches: What Are Your Odds?	Gene Ort	2006
TP07-14	Smart Vibration Switches	George Zusman, Ph.D., PCB Piezotronics	2007
TP08-08	Wireless Vibration Monitoring for Condition Based Maintenance Cooling Towers	Gerry Nadley, MachineTalker, Inc	2008
WATER MANAGEMENT			
TP64-03	The Use of Municipal Sewage Effluent in Cooling Towers (TP-14A)	Richard O. Cummings, El Paso Natural Gas Products Company	1964
TP66-05	Sound Water Management, Ket to Future Supply (TP-22A)	Dr. L. Bakker, Midland-Ross Corporation	1966
TP68-14	Water Conservation From the Standpoint of Private Industry (TP-54A)	F.P. Stanton, Kaiser Steel Corp.	1968
TP72-06	Industrial Waste Water Reclamation (TP106A)	T.M. Fosberg, Resources Conservation Company	1972
TP73-09	Sewage Plant Effluent as Cooling Tower Makeup -- A Case History (TP-116A)	Harry J. Gray & C.V. McGuigan, Olin Corporation, Harold W. Rowland, City of Burbank, CA	1973
TP74-11	Cooling Water Use by Manufacturers - Present and Future (TP-129A)	Robert Brewer & Patrick H. McAuley, Bureau of Domestic Commerce	1974
TP76-08	Complete Reuse of Cooling Tower Blowdown (TP-145A)	M.I. Perry & J.V. Matson, S & B Engineers	1976
TP78-08	The National Assessment of Water Resources: Implications for the Cooling Tower Industry (TP-179A)	Robert Brewer & Patrick H. McAuley, Industry & Trade Administration	1978
TP78-09	Chlorine Dixide Use in Cooling Systems Using Sewage Effluent as Make-up (TP-183A)	Harry J. Gray, Olin Water Services, A.W. Speirs, City of Burbank, CA	1978
TP82-10	Optimum Recycle and Reuse Cooling Systems Designs Using the BCT™ Process (TP-244A)	Richard L. Lancaster & William G.Snaderson, Tower Systems, Inc.	1982
TP82-11	San Juan Water Conservation Reality (TP-247A)	Richard D. Landon, The Marley Cooling Tower Company	1982
TP84-02	The Importance of Water Management in Plant Design	Bruce M. Webber & Albert D. Owens, Calgon Corporation	1984
TP86-09	Enhanced Water Management Using Bromine Chemistry	Rodney H. Sergent, Great Lakes Chemical Corporation	1986
TP90-02	Designing a Cooling Water Program With the Aid of a Three-Dimensional Cost Optimization Computer Method	Mei H. Hwang, Charles J. McCloskey & John A. Hvizdos, Calgon Corporation	1990

ORDER #	TITLE	AUTHOR	DATE
TP97-03	An Effective Method for Non-Chemical Control of Microbial Activity in	John Dresty, Environmental Research Institute; James Fitzpatrick, Warner Lambert Corp.	1997
TP99-09	Get the Limits of Cooling Tower Design: Low Approach-Large Range-Cold	Michel Monjoie, Hamon Thermal Rob Schwalm, Barrick Goldstrike	1999
TP99-12	Cooling Tower Water Conservation Using Solubility Chemistry	Stephen E. Mitchell, S & S Consulting Services	1999
TP03-04	Automating the Cooling Water Triangle	D.L. Stonecipher, S.R. Hatch, D.A. Meier, B.E. Moriarty & M. Chatteraj, ONDEO Nalco Co.	2003
TP03-14	San Antonio Water System's Cooling Tower Audit Program Results in Significant Water Savings	Eddie Wilcut, San Antonio Water System, John J. Sims & Tory Tvedt, Puckorius & Associates	2003
TP03-20	Power Plant Restores Cooling System Performance With Bio-Detergent Cleanup	Charles W.H. Foster & Trevor Gent, ONDEO Nalco Canada Co.	2003
TP05-18	Low Cost Cooling Tower Biocide Alternative	David Evans, Nidhal Dossary Saudi Aramco	2005
TP07-13	Sewage Effluent for Cooling: A Forty-Year Experience in the Texas Panhandle	Bernie Wieck, Universal Utility Services	2007
TP08-17	The Conversion From Gas to Tablet Chlorination: A Case Study	Austin Lopper, PPG Industries & Billy Smith, ChemTreat, Inc.	2008

WATER REUSE

TP93-09	Water Reuse Within a Refinery	K.S. Eble & J. Feathers, Betz Industrial	1993
TP94-08	Reuse of Industrial Waste Stream as Cooling Tower Makeup	Everett C. Phillips & Richard J Strittmatter, Nalco Chemical Co., Mikel E. Goldblatt, Betz Ind'l	1994
TP94-09	Innovative Thinking in Water Conservation	Nicholas J. Alfano, Calgon Corp., Dennis J. Sherren, Enron Power Corp.	1994
TP95-05	Water Conservation via New Cooling Water Technology	Narasimha M. Rao, Nalco Chemical Company	1995
TP95-11	Re-Use of Reclaimed Municipal Waste Water as Cooling Water Make-Up - Challenges and Solutions	Paul R. Puckorius, Puckorius & Associates, Inc., Kris Helm, West Basin Municipal Water Dist., Chris Spurrell, Chevron U.S.A.	1995
TP95-15	Reclaimed Water as Cooling Tower Makeup for Refinery/Petrochemical Plants - Southern California's Activities and Time Table	Paul R. Puckorius, Gary A. Loretitsch & Torry Tvedt, Puckorius & Associates, Inc.	2001
TP01-04	Water Reuse in Refineries, Chemical Plants, and Utilities: Experiences Throughout the USA - Guidelines and Case Histories	Paul R. Puckorius & John M. Tiangco, Puckorius & Associates	2002
TP02-17	Cooling Tower Systems Components and the Impact of Re-Use Water	Paul R. Puckorius, Puckorius & Associates, Ken Diehl, San Antonio Water System	2003
TP03-03	Water Reuse Experiences With Cooling Tower Systems in San Antonio, Texas	Paul R. Puckorius, & David A. Puckorius, Puckorius & Associates, Inc., Jim Reed, Denver Water Board	2004
TP04-01	Denver's Cooling Tower Water Conservation Program	Dr. A. Harriram, D.G. Nieuwenhuis Sasol Technology	2005
TP05-13	Evaluation in to the Use of Mine Drainage to Supplement Cooling Water	Dr. Chris L. Wiatr, Buckman Laboratories, Inc	2005
TP05-16	Bacterial Resistance to Biocides in Recirculating Cooling Water Systems	Phil Kiser, Hach Company	2005
TP05-17	Monitoring Cooling Water for Potential Reuse	Ben Gould, Ashbrook Simon-Hartley and Clarence Melancon, Water Filtration Technologies, Inc.	2007
TP07-19	Efficient One Step Phosphorous & Suspended Solids Removal from Municipal Wastewater		

ORDER #	TITLE	AUTHOR	DATE
TP08-01	Water Reuse in Cooling Towers - Current Experiences and Guidelines for Success in Refineries, Power Plants, and HVAC Systems	Paul Puckorius, Puckorius and Associates	2008
TP08-03	Recycled Water for Cooling 4000°F Melted Sand	Dr. Marcus N. Allhands & Tom Broderick, Orival, Inc.	2008

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TP69-12	Paper on Winterizing Cooling Towers (TP-75A)	Milton Epstein, Industrial Engr. & Equipment Company	1969
TP80-09	Criteria For Ice Prevention in Counterflow Natural Draft Cooling Towers (TP-214A)	John W. Cooper, Jr., Zurn Industries, Inc.	1980
TP84-09	Cold Weather Operation of Mechanical Draft Cooling Towers	N.E. Dolan, Ecodyne Cooling Products	1984
TP88-18	Antifreezing System on Natural Draft Crossflow Cooling Towers - Cattenom Nuclear Plant	Jean Barbaud, Electricite de France	1988
TP96-04	Cold Weather Operating Guidelines and Experience for Natural Draft Cooling Towers on the American Electric Power System	Frank L. Michell, Dan H. Drew American Electric Power	1996

WOOD ATTACK

TP62-02	Field Tests and Evaluation of Polychlorophenates in Cooling Tower (TRP-120)	C.D. Carlson, Dow Chemical Company	1962
TP64-01	Experience in Retarding Wood Rot by the Use of Plenum Chamber Sprays (TP-11A)	Saul Kaye, Wright Chemical Corporation	1964
TP70-11	Fire Retardant Treated Wood For Cooling Tower Construction (TP-80A)	Ralph H. Bescher, Koppers Company, Inc.	1970
TP76-09	Environmental Impact of Chemicals Washed From Preservative-Treated Wood (TP-147A)	J.R. DeMonbrun, Union Carbide Corporation	1976
TP78-10	Preservative Treatment of Cooling Tower Lumber a State-of-the-Art Report (TP-181A)	David Hutton, P.E., BAC-Pritchard, Inc.	1978
TP83-13	The Effects of Hot Water Exposure on the Strength and Stiffness of Douglas-Fir and Redwood (TP-264A)	John A. Nelson & Robert W. Petterson, The Marley Cooling Company	1983
TP84-10	Cooling Tower Wood Decay Identification, Current Incidence, and Control Methods	Paul R. Puckorius, Puckorius and Associates, Inc.	1984
TP85-10	Cooling Tower Wood Sampling and Analyses: A Case Study	J.L. Haymore, Martin Marietta Energy Systems, Inc.	1985
TP85-19	Cooling Tower Wood Decay Preliminary Survey Results and Conclusions	Paul R. Puckorius, Puckorius and Associates, Inc.	1985
TP86-10	Identification of Cooling Tower Wood Attack and Methods of Control	P. Song & Michael G. Trulear Nalco Chemical Company	1986
TP96-01	Wood Preservation and How It Pertains to the Cooling Tower Industry	Darrell R. Smith, Conrad Wood Preserving Co., Jeffrey J. Morrell, Oregon State University	1996
TP98-12	Cresote Revisited	James L. Willa, Willa, Inc.	1998
TP02-18	Evaluation of a Simplified Procedure to Determine the Condition of Wood Cooling Tower Components	Matthew E. Anderson, Wood Advisory Services, Inc.; Yelena S Golod, DuPont Engineering	2002

ZERO DISCHARGE

TP73-10	The Role of Cooling Water Systems and Water Treatment in Achieving Zero Discharge (TP-118A)	Ernest Q. Petrey, Jr., Petrolite Corporation	1973
TP80-10	Pilot Demonstration of the Binary cooling Tower Zero Discharge at the Sunrise Station (TP-215A)	Rickie M. Slate, Nevada Power Co., Craig Zeien, CH2M Hill, William G. Sanderson, Tower Systems, Inc.	1980
TP 80-11	Use of Brackish Water in a Zero Discharge Cooling System (TP-223A)	H. Bydalek, K.F. Hass, C.R. Mann & L.R. LePage, Stone & Webster Engineering Corporation	1980

ORDER #	TITLE	AUTHOR	DATE
TP88-02	Staged Cooling at Signal/Shasta a High Recycle Evaporative Cooling Technique for Cost Effective Zero Discharge	Richard L. Lancaster & W.G. Sanderson, Zurn/Nepco	1988
TP89-13	Recent Developments in the Operation of Industrial Cooling Tower Systems with Zero Blowdown	Jack P. Wetherell & Norman D. Fahrer, ChemTreat, Inc.	1989
TP93-05	Chemical Approaches to Zero Blowdown Operation	G.E. Geiger & M.R.Hatch, Betz Industrial, J. Ogg, Stanford Linear Accelerator	1993



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