

JONATHAN M. DIETZ, Ph.D.

Senior Project Manager - Raleigh, NC

Academic Credentials:

B.S. Biology and Earth Science, 1983
Clarion University, Clarion, PA
M.S., Environmental Pollution Control, 1989
Pennsylvania State University, State College, PA
Ph.D. Environmental Engineering, 2003
Pennsylvania State University, State College, PA

Employment Record:

2021 - Present - Smith Gardner, Inc.
2001 - 2018 - DG Consulting, LLC.
2000 - 2001 - Pennsylvania State University
1993 - 2000 - Gannett Fleming, Inc.
1990 - 1993 - The EADS Group
1988 - 1990 - Versar, Inc.

Areas of Expertise:

Treatment Process Design
AMD Active & Passive Treatment
Aqueous Chemistry

Selected Publications & Presentations:

Dietz, J.M. & B.A. Dempsey. Pending. A Deterministic Abiotic Heterogeneous Ferrous Iron Oxidation Model. Paper in preparation to be submitted to Environmental Science & Technology.

Dietz, J.M. & B.A. Dempsey. Heterogeneous oxidation of Fe(II) in Acid Mine Drainage. Applied Geochemistry, Vol. 18, pp.90-97. 2017

Dietz, J.M. & T.S. Gourley. Cost Saving And Performance Enhancing Modifications At a Lime-Based Treatment System: Rushton Treatment Plant Case Study. Paper presented at the 2015 National Meeting of the American Society of Mining and Reclamation, Lexington, KY Reclamation Opportunities for a Sustainable Future June 6 -11, 2015. R.I. Barnhisel (Ed). Published by ASMR; 1305 Weathervane Dr., Champaign, IL 61821. 2015

Dietz, J.M. and M. Morosetti. An Innovative Package Treatment System For The Orcutt-Smail Discharges; A Moderate Flow High Strength Acid Mine Drainage. Paper presented at the 2015 National Meeting of the American Society of Mining and Reclamation, Lexington, KY Reclamation Opportunities for a Sustainable Future June 6 -11, 2015. R.I. Barnhisel (Ed). Published by ASMR; 1305 Weathervane Dr., Champaign, IL 61821. 2015



Dr. Dietz has over 33 years of multi-disciplined consulting experience, including the past 18 years as an Environmental Engineer. He has experience in active and passive mine drainage treatment (R&D of new innovative anaerobic vertical flow wetlands); Clean Water Act National Pollution Discharge Elimination System (NPDES) studies; Clean Water Act Chapter 404 wetland protection and mitigation; and environmental and ecological assessments.

Dr. Dietz has over 33 years' experience in the innovative design of passive treatment systems for acid mine drainage treatment and restoration of waters impaired by acid rain with over 30 constructed passive systems. More recently his focus is on improved process design and operation in active treatment including mine drainage, potable water, and cooling water.

Combining his in-depth understanding of aqueous chemistry and mass transport processes with reactor design, Dr. Dietz has improved operation and performance at existing treatment facilities and has developed innovations in new full-scale treatment systems. Recently he has undertaken control and treatment projects related to Disinfection Byproducts (DBPs), which will become greater concern as state's increase required chlorine residual in response to waterborne diseases. In addition to his treatment operation & design experience he has extensive background in NPDES permitting and NEPA documentation bringing full service experience and capabilities to wastewater and water treatment.

He has developed conceptual and preliminary designs for leachate collection systems and leachate and cooling water treatment facilities that included identification, testing, and use of innovative treatment technologies. He has also conducted several leachate treatability studies related to NPDES effluent limit compliance. Treatability studies include evaluation of chemical/physical processes including chemical neutralization, oxidation/precipitation, coagulation/flocculation, sedimentation, and filtration.