Background Summary

Dr. Marrin is an applied scientist in the fields of biogeochemistry, pollutant dynamics, water resources, and aquatic ecology. He developed analytical and interpretive techniques to assess the biodegradation and partitioning of contaminants in aquifers and surface waters, as well as to evaluate wastewater impacts on coastal marine ecosystems. His recent lectures focus on global water quality issues, water footprints, the water-energy-food nexus, and perceptual challenges related to water, nature, and the environment. He also maintains a multifaceted consultancy for a clientele that has included environmental services firms, corporate R&D divisions, educational institutions, public health agencies, and non-profit organizations.

EDUCATION
Ph.D., Water Resources (hydrochemistry); The University of Arizona.
M.S., Environmental Science (lacustrine fisheries); University of California, Berkeley.
B.S., Biological Sciences (marine ecology); University of California, Irvine.
Cert., Wastewater Treatment (CSUS); Nutrition/Wellness (AFPA).

RECENT POSITIONS
Consulting Scientist (California and Hawaii based) 1999-present.
Providing expertise on water chemistry, microbiology and research/development.

Scientific Associate, Water Innovation Advisors/EverBlue Ventures (Hawaii) 2020-2025.
Technically reviewed early-stage firms in the water sector to assist or invest in them.

Principal Scientist, Fundación Somos Agua (México DF) 2008-2015.
Collaborated with designers, artists and civic leaders to elucidate local water issues.

Research Scientist & Writer (Hawaii) 1999-2008.
Developed water quality metrics for coastal zones and authored several books.

Adjunct Professor, San Diego State University (California) 1988-1999.
Taught graduate courses and served as a thesis advisor for hydrology students.

President, InterPhase Environmental (California) 1988-1996.
Established a firm specialized in water pollutant detection and biodegradation.

REPRESENTATIVE PROJECTS
- Projecting greenhouse gas emissions from biodegrading pollutants in water.
- Monitoring seawater intrusion and groundwater discharge into coastal zones.
- Assessing the effects of limnological and management constraints on fishes.
- Evaluating the treatment and prevention of biofilms in water delivery systems.
- Using footprint analyses to quantify the food and energy demands on water.
- Estimating the water requirements and impacts of geoengineering schemes.
- Evaluating potable waters generated by desalination and air condensation.
- Verifying the chemistry, microbiology and productivity of mountain springs.
- Applying systems and information science to describe watershed dynamics.
- Utilizing pattern recognition techniques to identify changes in water quality.
- Exploring intuitive and cognitive processes that influence human perception.