ANNOUNCEMENT

THE DR. ROBERT W. OKEY 2016 SCHOLARSHIP
SPONSORED BY THE WATER ENVIRONMENT ASSOCIATION OF UTAH

The Dr. Robert W. Okey Scholarship

INTRODUCTION:

The Dr. Robert W. Okey Scholarship was established in honor of a man who dedicated over 50 years of service to the wastewater industry, the Water Environment Federation and the Water Environment Association of Utah (WEAU). Dr. Okey worked in the wastewater industry for many years before obtaining his PhD degree and becoming a professor at the University of Utah. Many people now working in the industry in Utah remember taking classes from him. He authored numerous papers and books and held patents covering various aspects of wastewater treatment. He is fondly remembered for his many unique papers and presentations at the annual conferences and for his participation in furthering the goals and objectives of WEAU.

CONDITIONS OF ELIGIBILITY:

The Water Environment Association of Utah will provide a $2000 grant to a undergraduate student enrolled in an environmental program, either in engineering or an applicable area of science or technology, at a Utah college or University. A qualified candidate may apply as often as desired for each year the scholarship is offered; however, a candidate can only receive one grant.

Each candidate must complete all of the essay questions assigned. A committee appointed by the WEAU Board will judge the essays. The essays must be received by Wednesday, October 26, 2016. The winner will receive their scholarship funds at the WEAU Mid-year Conference November 14, 2016.

Completed essays shall be submitted to the WEAU/Scholarship Committee by the due date and may be sent either to the following address or electronically submitted to the email below.

WEAU/Scholarship Committee
Thomas A. Holstrom, P.E.
c/o Central Valley Water Reclamation Facility
800 West Central Valley Road
Salt Lake City, Utah 84119

Or email Thomas Holstrom at holstromt@cvwrf.org
The Dr. Robert W. Okey
WEAU SCHOLARSHIP

The scholarship is provided to students enrolled in environmental programs either in engineering or an applicable area of science or technology. The grant will be for $2000.

The grant will be as follows:

One grant will be awarded for undergraduate students that have not reached their last semester of study. The criteria for entering are as follows:

Undergraduate Student:

1. Be a member of the WEAU student chapter. (It’s free, Go to www.wef.org to sign up. Contact your Student Liaison with any questions.)
2. Respond to essay questions.
3. Be enrolled for at least 7 credit hours.
4. Provide a statement of career goals and interests.

There are a number of questions to be addressed in the 2016 scholarship competition, as shown on the following page.

The following items must be addressed for your scholarship submittal to be considered:

1. Each question listed must be answered.
2. Include a clear statement of the problem and the proposed solutions that address each question.
3. Care must be given to provide the source of special or unusual aspects of your solution.
4. A full list of sources must be included in a reference section.
Undergraduate Student Scholarship Essay Question

RESOURCE RECOVERY AT WASTEWATER TREATMENT FACILITIES

The Water Environment Federation (WEF) and other national and international organizations are embracing the concept of Water Resource Recovery Facilities in place of the traditional wastewater treatment facility. This paradigm shift views wastewater as a source of potential recoverable resources instead of an endless stream of waste products for disposal.

Consider a 20 MGD Water Resource Recovery Facility that accepts primarily domestic waste water with some light industrial discharges from food processing. The facility includes headworks screening and grit removal, primary sedimentation, a biological nutrient removal activated sludge secondary treatment process, secondary sedimentation and ultraviolet disinfection. Primary and waste secondary biosolids are anaerobically digested prior to dewatering.

1. List the recoverable resources which may be available from the plant described above. Provide your assumptions in developing this list.
2. Describe what you believe to be the most cost effective strategy for realizing the recovery of each resource listed in item 1. above.
3. Provide a general process schematic for the treatment facility including the proposed resource recovery components.
4. Include an approximate mass balance of materials and energy inputs and outputs to support your process schematic.
5. Estimate the value of recovered resources from this Water Resource Recovery Facility.