

# S&YP NEWS



FWEA Students and Young Professionals Committee Newsletter

SUMMER 2016

## Message from the Chair

Danielle Bertini, Carollo

Welcome to the first issue of the semi-annual FWEA Students and Young Professionals Committee (SYPC) Newsletter! As outgoing Chair of the SYPC, I have been so proud of what this committee has accomplished in the past and their plans for the future. As a past participant of the FWEA and WEFTEC Student Design Competitions (SDCs), I have personally experienced how amazing and important the opportunities provided by this organization are for developing engineers. The goal of this newsletter is to recognize our sponsors (without whom we would not exist) and to showcase all of the hard work put on by the outstanding students and volunteers throughout the year. Additionally, I hope it serves as a networking tool for students and professionals.

The mission of the SYPC is to support students and young professionals in the environmental engineering field. We accomplish this by providing scholarships, hosting the SDC and Poster competitions, and offering a variety of networking opportunities. Recently added was a resume review and workshop for the students attending the SDC at the Florida Water Resources Conference. Students received feedback from multiple industry professionals and had the opportunity to speak with volunteers and judges about their careers.

If you're attending WEFTEC this year, please be sure to stop by and support our Florida students at the national Student Design Competition!

### 2016 / 2017 Goals:

- Maintain and improve relationships with universities and FWEA student chapters
- Connect university students with local utilities and mentors
- Collaborate more with other FWEA Chapters and Committees
- Reach out and be more involved with K-12 students

We are also hoping to add a Student Paper Competition next year, which will allow research-focused projects to participate at

FWRC for the opportunity to win a free trip to WEFTEC to compete in the national paper competition. More details will be available in the Fall edition of the SYPC newsletter.

### Looking to get involved?

Are you new to the industry or to Florida? The SYPC is a great way to get involved and get connected with others in your field. I can honestly say I wouldn't have the job I have now if I wasn't involved in FWEA! If you're looking to get involved or become a sponsor, please reach out to:

**Tyler Smith**, Chair SYPC  
Carollo Engineers  
[tsmith@carollo.com](mailto:tsmith@carollo.com)

**David Hernandez**, Vice Chair SYPC  
Hazen & Sawyer  
[dhernandez@hazenandsawyer.com](mailto:dhernandez@hazenandsawyer.com)

**Samantha Hanzel**, Poster Competition Chair  
Jacobs  
[Samantha.Hanzel@jacobs.com](mailto:Samantha.Hanzel@jacobs.com)

## In This Issue

Message from the Chair

SYPC Committee

2016 YP Summit

2016 FWRC Highlights

SDC

Poster Competition

Resume Workshop

Participants

Feedback from FIU

YP of the Year Award

Networking Tips

Upcoming Events

## Thank you to our Sponsors!



## Meet the S&YP Committee

Tyler Smith	(Carollo Engineers)
David Hernandez	(Hazen & Sawyer)
Danielle Bertini	(Carollo Engineers)
Sam Hanzel	(Jacobs)
Kristen Waksman	(Carollo Engineers)
Lauren Davis	(Arcadis)
Yanni Polematidis	(CDM Smith)
George Dick	(Gresham Smith & Partners)
Weizhi Cheng	(CDM Smith)
Suzanne Mechler	(CDM Smith)

## 2016 YP Summit

by Lindsay Marten (Stantec)

Receiving FWEA's 2015 Young Professional (YP) of the Year Award at the Florida Water Resources Conference was exciting on a number of levels. It was humbling to be nominated for the award, and it also felt good to know that the efforts of FWEA's volunteers do not go unnoticed... Because we're all volunteers after all! One of the benefits of winning the award is that the Students and Young Professionals Committee provides travel assistance for the YP of the



The full day YP Summit program started bright and early the following day at the Hilton Bayfront, where the Utility Management Conference was also taking place. The first half of the workshop involved technical sessions by the Orange County Sanitation District, Orange County Water District, and the City of San Diego Utilities Department. I appreciated this portion of the workshop because it was fascinating to learn all of the struggles California has faced with the ongoing drought and the innovative solutions they've implemented to provide the public with the precious resource of water. All technical speakers kept the presentations interactive to keep us engaged, critically thinking amongst ourselves, and to keep the energy moving. The afternoon portion of the workshop focused on developing young professionals from workplace communication and creating stellar presentations to career advancement and leadership skills.



## 2016 YP Summit Quick Bits

- The Summit kicked off on February 23, 2016 with a networking icebreaker at the Half Door Brewing Company in San Diego.
- The morning session included technical presentations by local sanitation, water and utilities departments.
- The afternoon session focused on improving communication, presentations, career advancement and leadership skills for YPs.



## 2016 YP Summit (cont'd)

The program ended with a YP perspective panel on lessons learned, career advancement, and networking, which I happened to find most beneficial. Following the program, there was a YP Summit reception held for us on the terrace of the hotel. Aside from the absolutely beautiful San Diego weather and scenic sunset views of the bay, this was the perfect way to end the day. During this time I was able to meet several of the presenters and participants, but my conversations with WEF president, Paul Bowen, Director of Education and Training for CWEA, Julie Taylor, and YP Summit Planning Committee Co-Chair, Rocky Craley were most memorable.

The following day I decided to make the most of my time since I traveled so far, and attend technical sessions at the Utility Management Conference. I was able to see some familiar faces from the Summit the previous day of fellow YP's and also some of the presenters. Like most conferences, I was able to float around to the various sessions throughout the day, and take in as much information as possible relating to success stories in regional collaboration, mitigating infrastructure risks, conservation and water quality, just the name a few.

I am so grateful that I was given the opportunity to attend the YP Summit this year, and would love to attend next year's event. Luckily for us Florida YPs, the 2017 Summit will be held in beautiful Tampa, Florida so we won't have to travel very far at all!

### 2017 YP Summit Details

When: February 6 & 7,  
2017

Where: Tampa Marriott  
Waterside Hotel &  
Marina  
Tampa, FL

More Info:

[http://www.awwa.org/  
membership/get-involved/  
young-professionals.aspx](http://www.awwa.org/membership/get-involved/young-professionals.aspx)

OR

[http://www.wef.org/  
YPSummit/](http://www.wef.org/YPSummit/)



# 2016 FWRC Highlights

This year, the S&YP Committee held a number of events at the Florida Water Resources Conference including a student design competition, poster competition, resume workshop and networking happy hour.

## Student Design Competition

**By Tyler Smith & Danielle Bertini (Carollo Engineers)**

The FWEA SYPC hosted the 20th Annual Student Design Competition (SDC) on April 24th, 2016 at the Florida Water Resources Conference held in Orlando, Florida. The competition is intended to promote real-world design experience for students interested in pursuing a career in water/wastewater engineering and sciences.

This year, 10 teams from six different universities and colleges across the state participated and competed in one of two categories: Wastewater or Environmental. The two winning teams received a \$4000 travel allowance to go on to represent Florida at the national WEFTEC SDC competition to be held on Sept. 25th in New Orleans. Additionally, each first place team received a \$1000 Norm Casey Scholarship. All other teams received a \$500 participation bonus.



We're proud to announce and congratulate this year's winner for the each category:

### ***First Place Wastewater Competition (pictured left):***

University of South Florida, for their design, "Developing Solutions for the City of Plant City Water Reclamation Facility to Handle Increased Septage Loads Due to the Ban from FL SB 550," with team members Monica Resto, Dillon Forsyth, Wainella Isaacs, Madeline Kender, Jonathan Knudsen, Vittoria Zucchelli.

### ***First Place Environmental Competition (Pictured above):***

University of South Florida, for their design, "Supplementary Sludge Management Process for City of Plant City Water Reclamation Facility," with team members Rebecca Braz, Krystin Kadonsky, Christin Gentz, Maria Reed, Poe Poe Min Hlaing.

## 2016 FWRC Quick Bits

- Held April 24-27th at the Gaylord Palms Resort and Convention Center in Orlando, FL
- Record breaking attendance with 3,193 participants
- Out of six participating universities, USF won both the environmental and wastewater student design competitions

## 2017 FWRC Details

When: April 23-26, 2017

Where: Palm Beach  
County Convention  
Center  
West Palm Beach,  
FL

More Info:

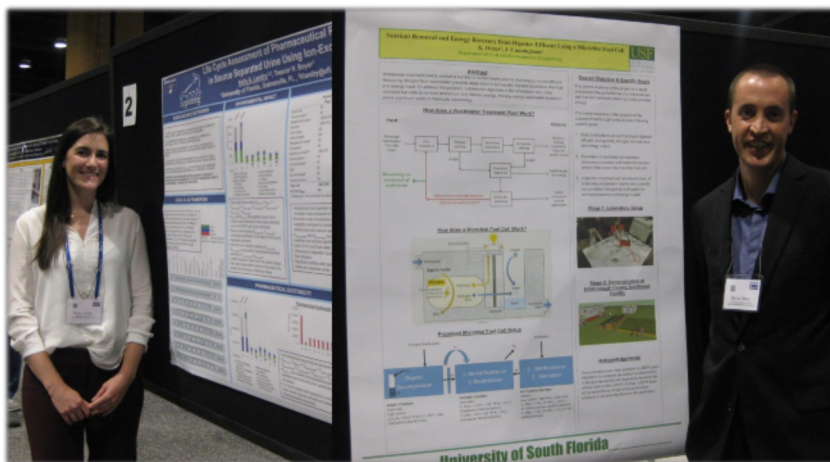
## 2016 FWRC Highlights (Cont'd)

### Student & Young Professional Poster Competition

In addition to the SDC, a poster competition was held in which 13 participants competed for 1st and 2nd prizes of \$300 and \$200, respectively. Congratulations to 1st Place Winner Kelly Landry, from the University of Florida for her poster on "Environmental and Economic Assessment of Urine Source Separation and Pharmaceutical Removal by Ion-Exchange" and 2nd Place Winner Kevin Orner, from the University of South Florida for his poster on "Nutrient Removal and Energy Recovery from Digester Effluent Using a Microbial Fuel Cell" (*Pictured below*).

The SYPC would like to recognize the students, faculty advisors, professional mentors, and the SDC planning committee and volunteers (Tim Ware, George Dick, Samantha Hanzel, Weizhi Cheng, Kristen Andre, Lauren Davis, Kristiana Dragash, David Hernandez, Yanni Polematidis, and Holly Hansen) for all of their hard work and dedication. And a special thank you goes out to all of the judges, who read and reviewed design reports and judged the presentations.

We would also like to thank our Utility, Silver and Gold sponsors including: City of Tallahassee, St. Johns County, City of Tavares, Stantec, Arcadis, Moss Kelly, JEA, Jacobs, GHD, and the Florida Water Resources Conference.



## Resume Workshop

By David Hernandez (Hazen & Sawyer)

Following the FWRC student design competition, a resume workshop was held for all competing students. Students submitted their resumes prior to the conference and received mark-ups and suggestions back from SDC judges and industry engineers at the workshop. Tyler Smith and Lauren Davis kicked off the workshop by giving a presentation to a packed room. During the presentation, Tyler and Lauren stressed the five key ingredients to a successful resume:

- Know yourself
- Know your audience
- Know your resources
- Know your resume
- Know your tomorrow

Following the presentation, a Q&A took place where students were able to have an open dialogue with a panel of engineers ranging from young professionals to engineers with over 20 years of experience. Students asked a variety of questions on how to improve their resume, how to make good initial impressions to potential employers, and how to improve their in-person interviews. The SYPC thanks our panel of engineers, dedicated volunteers, and students for making this workshop such a success!

# 2016 FWRC Highlights (Cont'd)

The SDC and Poster Competition would not be possible without the participation from universities all over Florida. The S&YP Committee would like to thank the students and professors for submitting a number of great topics in the environmental and wastewater fields.

## Student Design Competition Topics & Participants

### Wastewater Projects:

*Ultra-Low Phosphorus Removal Retrofit for Aquifer Recharge*

**Florida Atlantic University**, Team: Bishow Shaha, Alyssa Dalloo, Sylvain Estinvil, Mateja Vidovic, Andrea Garcia, Shirin Ghahghael, Justin Dacey, Christopher Diggs

*Phosphorous Removal with Electrocoagulation*

**Florida Gulf Coast University**, Team: Daniel Franco, Jabari Lee, Sebastian Arbelaez

*Design and Operational Modifications for Preventing Struvite Formation at Miami-Dade South District Wastewater Treatment Plant*

**Florida International University**, Team: Arlene LaRocque, Yareliz Negron, Andrew Speroterra, Stacie Schotanus

*Improvement of TPS Water Reclamation Facility by Modified UCT Process*

**Florida State University**, Team: Khaleel Muhammed, Melissa Pennington, Boya Wang, Yi Xiong, Zhiming Zhang

*Centralized Regeneration of Chemically-Enriched Municipal Waste Particulate Matter*

**University of Florida**, Team: Anjali Modi, Eduardo Gomez, Michael Kutyna, William Davis, Shaddi Kamel, Thuy-Minh Tran, Jun Kim

*Developing Solutions for the City of Plant City's Water Reclamation Facility to Handle Increased Septage Loads Due to the Ban from FL SB 550*

**University of South Florida**, Team: Monica Resto, Dillon Forsyth, Wainella Isaacs, Madeline Kender, Jonathan Knudsen, Vittoria Zucchelli

### Environmental Projects:

*Atmospheric Moisture Collector*

**Florida Gulf Coast University**, Team: Adam Pitts, Andrew Newman, Dennis Barrero

*Pennsuco Complex Well Assessment and Rehabilitation Project*

**Florida International University**, Team: Andrea Ramirez, Patrick Hernandez, Ahmad Alkandari

*Feasibility of Particulate Matter Recovery for Nitrogen and Phosphorus Load Reduction*

**University of Florida**, Team: Phaedra Brady, Sara Fox, Yue Liu, Alex Lochard, Taylor Murphy, Charles Reynolds, Melissa Suarez, Ben Swaringen

*Supplementary Sludge Management Process for City of Plant City Water Reclamation Facility*

**University of South Florida**, Team: Rebecca Braz, Krystin Kadonsky, Christin Gentz, Maria Reed, Poe Poe Min Hlaing



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# Poster Competition Topics & Participants



*Studying the Formation of Suspected Disinfection By-Product Carcinogens Using Fluorescence Spectroscopy, UV254 Absorbance, and Apparent Molecular Weight Distribution*

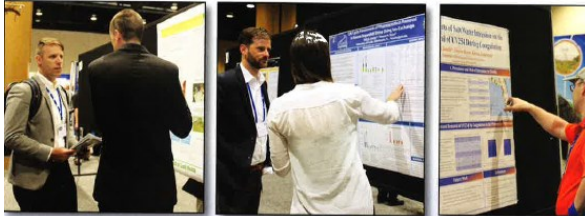
**University of Central Florida**

Paul Biscardi

*Design of a Supervisory Control System for the Valrico Advanced Wastewater Treatment Plant*

**University of South Florida**

Aaron Driscoll



*Caulkins Water Farm Pilot Project - A Part of the Solution to Pollution*

**The MilCor Group**

Felicia Gatling

*Evaluation of Hypochlorite Wastewater Disinfection*

**University of South Florida**

Helene Kassouf



*Environmental and Economic Assessment of Urine Source Separation and Pharmaceutical Removal by Ion-Exchange*

**University of Florida**

Kelly Landry

*The impact of endocrine disrupting compounds found in wastewater effluent on the embryonic development of Oryzias latipes (Medaka fish)*

**University of Central Florida**

Zachary Loeb

*Use of Pre-corroded Linear Polarization Probes and Coupons for Conducting Corrosion Control Studies*

**University of Central Florida**

Samantha Myers

*Nutrient Removal and Energy Recovery from Digester Effluent Using a Microbial Fuel Cell*

**University of South Florida**

Kevin Orner

*Experimental and Modeling Studies of Simultaneous Nitrification Denitrification Dynamics in an Oxidation Ditch*

**University of South Florida**

Ann Sager

*The Effects of Salt Water Intrusion on Drinking Water Treatment Processes*

**University of Florida**

Naomi Senehi

*Modeling Diffusion-Controlled Solute Mass Transport for a Nanofiltration Membrane Process*

**University of Central Florida**

David Yonge



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# FIU's Wastewater Team FWRC 2016 Experience

By Yareliz Negron (Florida International University)

Our team's project was on the issue of struvite formation/recovery at wastewater treatment plants. The topic was inspired by a pilot study being done at a local wastewater treatment plant in Cutler Bay, FL. Our team was able to take advantage of this and was able to visit the WWTP to see their current methods for managing struvite formation and to discuss the largest areas of concern and how the problem would be handled.

Attending the FWEA Competition was a first time experience for three out of four of us, so needless to say, we were very nervous before the conference began and even more during the other teams' presentations. However, once it was our turn to present, we put our fears away and gave the presentation our very best shot. Immediately after our presentation, the judges gave us suggestions on how to take our project to the next level. Even though we didn't win, our team had a great time and we were glad to have the opportunity to meet with several engineers that gave us invaluable advice on our projects as well as future career advice. Overall, this learning experience was great-- this competition really does help future engineers to get out of their shells and expand their professional network, and most importantly, to better themselves.

The resume workshop consisted of a personal evaluation of each individual's resume: an overall description of information that should be included, and general formatting tips for creating a successful resume. A career panel consisting of various professional engineers involved in the hiring process also provided information on what they look for in a resume; they also described what they look for in a potential candidate during the interview process, something most of the engineering students present were either facing at the moment or will be in the near future. A few interesting interview questions were described in the hopes that we would realize that most interviewers are looking for engineers who can think outside of the box.

The career panel answered all of our questions and encouraged us to ask them personal questions at the end of the workshop in an effort to improve our resume. Overall, the resume workshop was very helpful and made us all realize the importance of an effective resume in our future careers.

The entire experience, from researching our topic to presenting it at the FWEA competition was a growing experience for all of us. We are thankful to have had such a great opportunity with real employers in order to help us prepare for what is waiting for us after college--the real world.



## 2016 YP of the Year Award goes to...

**Laurel Rowse of AECOM!**

Laurel was nominated by her peers for the 2015-2016 FWEA "YP of the Year" Award and was selected by the S&YP Committee due to her involvement and high level of service to FWEA. She is currently the Vice Chair of the Wastewater Process Committee and Process Seminar Subcommittee, but previously served on a number of FWEA committees including the Strategic Planning Committee. She has volunteered and dedicated time to USF students by helping organize mock interviews, design competition and science fairs. She also served as a U.S. Peace Corps water/sanitation engineering volunteer in the Dominican Republic during her time at USF obtaining a MS degree. Laurel is an outstanding young professional that has shown leadership and commitment to service.

Laurel will receive an all expenses paid trip the 2016 YP Summit held in Tampa, Florida this year. Congratulations, Laurel!

For more information on the YP of the Year Award and how to nominate a YP for 2016-2017 year, email Tyler Smith at [tsmith@carollo.com](mailto:tsmith@carollo.com).



## Networking Tips & Tricks for S&YP's

1. Wear your name tag on your right side.
2. Keep your right hand free and ready to shake someone's hand.
3. Have plenty of business cards, and instead of handing them out, ask first—"May I give you my card? This is also a great opportunity to ask for cards—"May I give you my card, and may I have yours?"
4. Establish your personal brand. Perfect your "elevator speech" as a way of introducing yourself, your company, or a project you are working.
5. Be interested rather than interesting (Note: I got this from an online article, but I liked it.)
6. Use being a Student and Young Professional to your advantage, and don't be afraid to approach others and ask questions. Most people are very receptive to helping and mentoring YPs who are just starting out.
7. Follow up with a hand written note or phone call.
8. Keep up with the daily news, especially on topics that relate to your field of study and your clients.
9. Be confident, but not cocky.
10. Audit and amend your social media to build an image that reflects trustworthiness, confidence, professionalism, balance, growth, etc.



After the SDC a Judges Panel Q&A was held where students and YPs were able to ask experienced professionals for advice on resumes, interviewing and networking.



# Upcoming Events

## West Coast Chapter:

August 21st, 2016 - Day with the Rays

August 25th, 2016 - Summer Quarterly Luncheon

September, 2016- Evening Networking Social

November 17, 2016- Fall Quarterly Luncheon



## Manasota Chapter:

Summer 2016- Summer Social

August 31st, 2016- Joint Luncheon with AWWA Region X

November 10th, 2016- Joint Luncheon with AWWA Region X

## Southwest Chapter:

August 2016- Southwest Chapter YP Social

September 2016- Southwest Chapter Quarterly Dinner

October 2016- Southwest Chapter Golf Tournament

## First Coast Chapter:

July 26th, 2016—Pumping Seminar at JEA Service Center (4 PDHs), 8 AM – 1 PM

August 29th, 2016—Golf Tournament at St. Johns Golf and Country Club

October 4th, 2016—Fall Luncheon

October 22nd, 2016—FSAWWA Model Water Tower Competition

December 8th, 2016—Holiday Social

## Southeast Chapter:

October, 2016—Quarterly Meeting, YP Event, TBD

## Contact Us

Visit our website or contact the S&YP Committee Chair for more information on FWRC, volunteering, or sponsorship opportunities.

**Tyler Smith**

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[http://www.fwea.org/students\\_young\\_professionals.php](http://www.fwea.org/students_young_professionals.php)