**Grounds**

**Alternative Infills for Synthetic Turf Fields**

Since the installation of the first synthetic turf field in the 1970s, there have been concerns about the safety, health, and environmental impacts of installing and playing on artificial surfaces. Infill was introduced to turf fields in the 1990s and consisted of crumb rubber (SBR-styrene butadiene rubber) and sand. The sand and crumb rubber are added on top of the carpet and raked in between the fibers to provide footing; shock attenuation; and to hold the fibers upright, giving it a realistic grass-like appearance. This basic system has been used since for most types and brands of synthetic athletic fields, except for some field hockey fields, which still use knitted nylon carpet. Although the link is still unsubstantiated, many owners and players have questioned the health and safety of using recycled rubber crumb in synthetic turf and have requested alternative materials. Because of these concerns and sometimes the potential for community opposition to turf field projects, many field owners no longer want to consider using the standard crumb rubber and sand infill and look for alternatives. This presentation will discuss the available alternative details and detail their pros and cons.

**Peter Spanos, P.E., CFM, LEED® AP**

Peter Spanos, P.E., CFM, LEED® AP is a Project Engineer for Gale Associates, Inc. Mr. Spanos provides engineering and design services related to land development, use and permitting. He specializes in synthetic turf, athletic track, field, and event layout, site drainage analysis, utility relocation, road layout, water and wastewater systems, parking lot layout, and flood mitigation.

**USF Grounds Management**

* Turf Maintenance – Maintained using industry best practices as promoted by modern turf science
* Irrigation Management – Scheduling and application of irrigation water is controlled by Rainbird IQ software program
* Tree Maintenance – Certified Arbor on staff. On schedule to complete requirement to be certified as a “Tree Campus USA” by the National Arbor Day Foundation.
* **Lawrence “Ray” Miller Sr.** retired from the United States Air Force in 2013 after completing a 25-year military career. Immediately after retiring from the Air Force, Ray spent much of his time mentoring and inspiring high school students and sharing his leadership skills and life experiences. He earned his MBA at The University of Maryland, in College Park Maryland. In 2018, with over 20 years of leadership experience, he accepted a position at the University of South Florida where he currently works as an Assistant Director for Campus Service. In his present role, he is responsible for five unique departments, to include the Vehicle Repair Shop, The Grounds Department, The Campus Post Office, The Waste/Recycle Shop, and the Emergency Fuel Program.
* **Parum Maraj** was born in Trinidad West Indies. He moved to Cranston Rhode Island on his birthday in 1975. He attended the University of Rhode Island with accounting as his major, before leaving to attend Rhode Island Trade Shop School (RITSS). Worked in the automotive field until gaining a position as Body Shop Manager at Herb Chambers Cadillac in Providence Rhode Island. In 1998 he accepted a position in Florida at Bill Currie Ford then Reeves Imports as a Service Advisor. Worked at Marks Auto Body before getting a position in 2005 at University of South Florida as a mechanic in the vehicle shop. While working in the vehicle shop, he proved himself by refurbishing and replacing signage campus wide, repairing roadways, pressure washing, landscape maintenance, whatever was asked of him. Parum worked his way up to the position that he’s in right now as Assistant Manager for the grounds department.
* **Kimberly Tomkinson** comes from a background of golf course management positions that she had worked for 30 plus years in that time she obtains her irrigation certification, pesticide license and green industry management practices. Kimberly brings to University of South Florida a broad range of experience, leadership and service and has held the position of Assistant Manager of the Grounds Services for 19 years. In her role of Assistant Manager, she controls the pesticides certification, irrigation scheduling of 200 plus acres, 10 decorative fountains and maintains the annuals campus wide. Previously Kimberly manages 17 employees schedule and maintains the campus aesthetics. The University has over 1900 acres and supports Athletic, Campus recreation and Grounds services and is the fourth-largest public University in the state of Florida with an enrollment of 50,755. Kimberly in her role as Assistant Manager supports the University’s commitment of excellent service for the students, facility, staff and visitors.
* **Ray Miller, MBA**
* Assistant Director, Campus Services
* **Parum Maraj**
* Ground Assistant Manager, Campus Services
* **Kimberly Ann Tomkinson**
* Ground Assistant Manager, Campus Services
* Facilities Management
* University of South Florida

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 UCF AIM in the Field (Landscape and Natural Resources)

**Leadership**

**A Case Study in Using Facilities Condition Assessment Data**

Proper management of an asset portfolio means knowing:

* What you have
* What condition it’s in
* How much expected useful life is left
* How much it will cost to repair or replace
* The deferred renewal backlog

The California State University System facilities portfolio includes 23 campuses with a combined 78 million gross square feet. Over the last several years, the system has conducted Facilities Condition Assessments (FCAs) at all campuses. The project includes E&G and non-state facilities, infrastructure, exterior hardscapes, and ADA. This presentation will demonstrate how the largest higher education system in the world partnered with ISES Corporation to collect objective FCA data to better manage deferred renewal backlog and create an improved 10-year capital renewal plan. Once the data was collected and analyzed, an update program was developed to keep the third-party data accurate and current.

**Tony Simpson** joined ISES Corporation in 2014, after 20 years of experience in higher education facilities management at California State University, San Bernardino (CSUSB), part of the California State University System (CSU). He earned a well-deserved reputation for exceptional leadership locally within the CSU system and nationally for Facilities Management and Energy Reduction strategies. Tony served in a variety of senior management positions, culminating in his appointment as Senior Director of Facilities Services, with responsibility for all aspects of the facilities operations and maintenance departments.

Prior to beginning his university facilities management career, Tony spent more than 17 years working for one of the largest construction firms in the UK, managing complex construction projects there as well as in the US. These projects included civic centers, theaters, airports, shopping centers and university facilities.

**Facilities Management Emergency Response – Lessons Learned in Command and Control**

USF Facilities Management departments have handled their fair share of both “routine” facilities issues and larger campus-wide disasters. Each issue has provided an opportunity to evaluate processes and procedures and implement solution sets to better preparedness and response. Most notable has been the integration of the Emergency Management Department into the Facilities Management Division; this organization structure has allowed USF an opportunity to increase efficiency, effectiveness, and communication when responding to emergency events. This presentation will discuss lessons learned and how integrating components of the National Incident Management System into facilities response operations has improved these processes.

Jen Fleischman is the Director of Emergency Management for the University of South Florida System where she leads the USF System Emergency Management Program, Facilities Management Building Information Services, and the Facilities Management Service Center. She has 12 years of experience working in public safety, much of which has been served in higher education.

She received her master’s degree in Public Administration from the University of Central Florida (Orlando, Florida) and a Bachelor of Arts in Criminal Justice from Florida Atlantic University (Boca Raton, Florida).  She is a Florida Professional Emergency Manager, member of the Florida Emergency Preparedness Association, and the International Association of Emergency Managers.



Jen Fleischman, MPA, FPEM

Director, Department of Emergency Management

USF System Emergency Manager

Facilities Management

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**UCF Leadership for Reliability**

**Duane Siemen/University of Central Florida**

**Environmental Controls**

 **Making FSU's campus cool*.  Combining procurement, design and construction best practices to make $9M of HVAC upgrades***

FSU’s cooling infrastructure is in far better shape than most other academic institutions thanks to 13,000 tons of new chillers that are under factory warranty for the next 10 years that also reduces campus energy usage.  FSU was able to accomplish the $9M of upgrades by competitively selecting Trane to upgrade three central plants using a combination of two procurement methods: Energy Savings Performance Contracting and Cooperative Purchasing.  This presentation will share the best practices implemented in these campus projects.

**Ken Revell is a Utilities Manager** at Florida State University located in Tallahassee, Florida. He started his employment with F.S.U. back in 2013 and held the title of Facilities Specialist in the Maintenance Department until being promoted to Utilities Manager in December 2017. During his time at F.S.U. he has gained a better understanding of how the Facilities Departments operate and collaborate to contribute to making FSU a Top 18 Public University in the Country.

**Cameron Griffith is a Solutions Advisor** with Trane and an expert at working with Universities to upgrade facilities while directly impacting their educational mission.  Cameron has worked in the facilities, energy and sustainability industry for 18 years.  He earned a mechanical engineering degree from Clemson University and a master’s degree in business from RPI.  He is a LEED AP and holds CEM and CDSM professional certifications.  He is Trane’s main point of contact for Florida higher education customers looking to impact their mission by maximizing the benefit of their facilities.

**Cooling Tower Systems: Understanding the Risks Associated with *Legionella* and Practices to Reduce the Risk**

**Nalco Water an Ecolab Company**

Legionella Risk Minimization in Cooling Tower Systems

This presentation will review the Legionella risk factors and how they apply to an operating cooling tower system. We will then review the recent events in the marketplace that are driving a closer look at how to reduce risks associated with legionella. The final part of the presentation will outline a step by step approach on how to reduce risks in a cooling tower system.

**Greg Galbreath, Industry Technical Consultant:** Gregg is a subject matter expert in the field of water safety. Gregg has North American responsibilities for the development and implementation of risk reduction strategies specifically for the control and risk management of waterborne pathogens in cooling tower systems. Gregg is a member of the ASHRAE 514 (Minimizing Risk of Injury and Disease Associated with Building Water Systems) standard committee.

Gregg has over 33 years of industry experience with 21 of those years with Nalco Water. Gregg has a Bachelor of Science degree in Chemical Engineering from Grove City College in Grove City, PA.

**Space Scheduling and Building Automation Systems: Opportunities and Challenges**

Use of schedule management tools to achieve improvements in building energy efficiency, carbon-footprint reduction, and security have proven highly effective. However, managing large numbers of ever-changing schedules in a large campus environment remains a challenge throughout the industry. This presentation discusses challenges encountered and solutions implemented while integrating campus space scheduling software (25Live), with various building automation systems (HVAC, Access Control) at USF Tampa Campus. This solution uses a decentralized approach to enable building occupants to manage schedules. Primary challenges will be covered, including: software integration, adapting solution to different mechanical system designs of varying degree of age, meeting unique end user needs, and gaining end user confidence.

**Hari Patel** Joined the Facilities Management team at USF in June of 2015.  Originally from India, he has called the Tampa Bay area home since 2002. Hari is a proud Bull, with a bachelor’s degree in Mechanical Engineering.

Currently as Assistant Director of Facilities Management Operations, Hari leads Energy Management & Controls Shop, Fire Safety Shop and Key Shop.  Before joining USF, Hari worked as an Application Engineer in HVAC Controls industry for over 10 years.  He has experience in designing, implementing & optimizing controls systems for single buildings and large education and commercial campuses.

**Richard Meana** has been employed at USF since December of 2013. Originally from the Tampa bay area, Richard graduated from USF with a master’s degree in Computer Engineering as well as bachelor’s degrees in Computer Science and Computer Engineering.

Currently serving as Assistant Director for the IT Operational Technology department, Ricard leads teams that support campus Access Control, Security, Supervisory Control and Data Acquisition (SCADA) Systems.

**Building Services**

**USF Recycling Program**

We will discuss the benefits from our unique public-private sector partnership. Discussions will include the recycling center at Sycamore, the fluorescent bulb and fixture ballasts program, and electronic equipment program

Every year, the recycling program processes approximately 1,500 tons of waste, yard waste, and debris, as well as 623.8 tons of recycling material combined. This material consists in; mixed paper, commingle, metal, oil, batteries, tires, and fluorescent bulbs. The Recycling Program is managed and operated with one manager, two employees, and with the collaboration and effort of the university community.

**Ray Curbelo** is a graduate of The Lincoln Technical Institute in Union, NJ. He worked as a Diesel technician for The Howland Hook Seaport terminal. In 2001 he accepted a position in Mercedes Benz of Tampa as a technician. Ray manages the Vehicle Shop, Waste Recycling department, and the Emergency Fuel Management program at the University of South Florida with a budget of more than three-quarter million dollars since 2005.He regularly mentors and guides the university community about the recycling program. He implemented efficient recycling processes that reduce environmental impact. He documented the recycle products from the vehicle shop and university by establishing a battery, tire, oil, and oil filters recycling program. He is currently assisting students with the bio-digester program.

**Raymond Curbelo**

Manager of Vehicle Maintenance/Recycle/ Waste Services

Facilities Management

University of South Florida

**Why do floors fail?**

Florida State University

Key factors cleaning professionals need to know to prevent flooring failures.

Floor covering is one of the most expensive capital investments in a facility. Flooring failures reduce the product’s lifespan, decreases the appearance, and often voids the manufacturer’s warranties. These problems create additional cost increasing the funding needed to rectify the problem. Therefore, it is imperative for cleaning professionals to a have comprehensive understanding of the installation process, materials and products applied, and the manufacturer’s requirements for maintenance. These measures preserve the flooring’s warranties and prevent flooring failure. The key factors responsible for flooring failures: improper installation, adhesive break down, sealant and/ or finish penetration issues from abrasive cleaning chemicals and floorcare equipment. We as cleaning professionals need to advocate and protect our building’s property and frontline staff. We can accomplish this by staying aware and educated to prevent flooring failures through identifying and reporting improper flooring installations and utilizing cleaning methods that properly protect the floors.

Presenters:

**Ivory Lucas III**

Assistant Director

Florida State University Building Services Department

FCITS Certified Commercial Flooring Inspector, FCITS Certified Carpet Inspector, and IICRC Carpet Cleaning Water Restoration Certification.

**Laurie Whetstone**

Quality Control Inspector/ Coordinator

Florida State University Building Services Department

FCITS Certified Commercial Flooring Inspector, FCITS Certified Carpet Inspector, FCITS Certified Tile & Stone Inspector, and IICRC Carpet Cleaning Water Restoration Certification.

**Steam Coil Cleaning for Energy Efficiency and Building Health**HVAC systems are one of the most important components of modern buildings. HVAC is not only important for indoor environments and human health but significant from an energy conservation point of view. Growing energy demands, cost, and associated environmental concerns directly impact the building HVAC system. Optimization of the system is important not only for environmental comfort but also in reducing energy consumption in buildings.

Studies have been performed to analyze steam as a mechanism of cleaning HVAC coils to enhance performance by removing latent debris and microbial growth from on or within evaporator coils that restricts air flow and causes poor IAQ. The outcomes of various studies demonstrate both optimized IAQ and energy efficiency. This presentation is based on White Paper jointly published with the Continental Automated Buildings Association (CABA).

**TOPICS:**
Poor IAQ Related to HVAC Systems
How Fouled Coils Affect Energy Costs

Efficacy of Conventional/Surficial Coil Cleaning Methods

Efficacy of Steam Coil Cleaning and How It Works
Summary of Steam Coil Cleaning Case Studies
**Frank Santini** is an accomplished attorney and Pure Air Control Services VP Strategic Alliances & Education.  As an attorney he graduated in the top 1% of his law school class and has been recognized as a Super Lawyer and AV Preeminent by Martindale-Hubbell, the highest possible rating for attorneys.  He has spoken about indoor air quality and the legal implications of indoor air quality and HVAC hygiene before the Architect of the Capitol, George Washington University, Auburn University, Georgia Tech, University of Georgia, University of Florida, among others.  Mr. Santini’s speaking engagements are colored by his acting and professional wrestling background, which included a stint as the NWA Florida Heavyweight wrestling Champion.
Frank Santini, JD, MBA, VP Strategic Alliances & Education

**Maintenance**

**USF Biodigester Program**

This pilot project turns campus waste into campus energy. In partnership with USF PhD students we are researching the potential for decentralized food waste recovery. The byproducts of the biodigesters are methane gas which can be used to power campus golf carts and organic fertilizer which will be used to reduce our annual fertilizer expense.

Whitney Fung is currently a fourth-year doctoral student at the University of South Florida (USF) in the College of Public Health and the Data Insights Manager at Feeding Tampa Bay. She graduated from the University of Florida (UF) with a Bachelor’s in Nutritional Sciences and Master’s in Family, Youth, and Community Sciences, with a concentration in Nonprofit Organizational Leadership. She is a community advocate and looks to promote community collaboration through community-based participatory research, civic engagement, and interdisciplinary, cross-sector initiatives to promote sustainable food systems. Her research interests are in nutrition, health disparities, food insecurity, and chronic disease prevention.



Whitney Fung

PHD Student

College of Public Health

University of South Florida

**Four things you need to know about the ASME Elevator Safety Code Update**

(and one Common Industry Practice that Causes Elevators to Fail Inspection.)

This session will break down the newly released A17.1/B44 Safety Code for Elevators and Escalators, and specifically one-way video and two-way text communication requirements including under what circumstances the new code applies to your elevators. Discussion will surround the risks, liabilities and implications property owners and managers face with elevators on property.  Attendees will come away with a greater understanding of the 2019 code requirements in commercial elevators as well as the proper way to test for compliance.  In addition, they will learn how these new requirements work into their building safety program.

**Don Holloway**, Elevator Mechanic, Qualified Elevator Inspector and Kings III Field Services Manager

Don has been with Kings III Emergency Communications for eight years but in the elevator trade for over 20.  During that time, he has worked as a mechanic, service manager, inspector, and consultant.  He carries a QEI with NAESA and CET/CETS with NAEC in addition to 20 other state licenses across the country.  Don also sits on the Electrical Code Committee with ASME (American Society of Mechanical Engineers).  And since codes vary in their use and their adoption, he works closely with local jurisdictions to ensure compliance.

**Dave Mann**, VP of Technology

 Dave has built a career that has spanned more than 30 years in the emergency call center field. He is currently responsible for all technology departments at Kings III including IT, Software Development, and Product Development. Throughout his career, Dave has designed, implemented, upgraded, redesigned as well as retired and replaced innumerable systems, processes, business models, workflows and building designs. Active in industry associations, he has been a frequent consultant, trainer and guest speaker.

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**Tremco: Roof Restoration - Stretching your budget while saving the environment**

Kristophor C. Linster, P.E., RRO, LEED AP is a building envelope engineer with The Tremco Group and the Founder of the Building Enclosure Council of Jacksonville. Mr. Linster practices in the areas of specifying, bidding, project administration of various building enclosure and waterproofing projects including project submittal review, documenting and trouble-shooting field conditions, WUFI hygrothermal software modeling, and product research.  Additional responsibilities include construction monitoring and commissioning observation and reporting, as well as overseeing water penetration and air infiltration testing projects.

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**Reliability for Maintenance**

**University of Central Florida**