



R&DE, Students Pilot Sustainable Cleaning Solution from Tersano



R&DE Student Housing receives a best practice award for its Green Cleaning Program

Last spring, Mirrielees resident Arjun Kumar '20 banished his bleach and ditched his disinfecting wipes. Instead, he scoured his apartment from countertops to toilet with a chemical-free cleaner from the tap in the laundry room. A machine called the Tersano LotusPro attached to the tap uses electricity to create Stabilized Aqueous Ozonated Water (SAO), also known as "TERSANO SAO." The solution is as effective as traditional chemicals with no environmental consequences.

"SAO cleans and disinfects any surface, with no toxic smell, and can even be used as a laundry detergent—and it's free," said Kumar, who trained students weekly to use the system. Kumar and other Mirrielees residents were participating in a student-dispensing pilot with Residential & Dining Enterprises' (R&DE) new Student Housing Green Cleaning program. SAO can be used as a disinfectant for 24 hours and remains a multipurpose cleaner for up to seven days before it reverts back to plain tap water.

The Green Cleaning program is the first of its kind at a West Coast university. The program was recently recognized with a best practice award by the California Higher Education Sustainability Conference. "Adopting engineered water as our green cleaning standard made sense. It saves money and protects the environment all while keeping our residences just as clean and safe for students," said Imogen Hinds, Executive Director of Student Housing Operations.

The program began in 2015 as a student-suggested collaboration between R&DE Student Housing, Students for Sustainable Stanford, and sorority house Delta Delta Delta. Students helped collect data on bacteria levels, and surveyed custodians and students on whether they felt their spaces were just as clean.

R&DE Sustainability and Utilities Manager Kristin Parineh hopes students will take engineered water out into the world after they leave Stanford. “Our students are going to have their own places someday. We are planting a seed and hopefully making them more responsible for what they have to do for the planet. We’ve tested it, we know it works, so rely on us to feel confident to use it,” explained Parineh.

In 2017, the cleaning system was used in 20 percent of R&DE’s residences (32 buildings), replacing more than 350 gallons of chemicals. The effort is a plus for the planet as chemical cleaners can harm the environment.

TERSANO SAO is the “New Normal” at Stamford

One glance at Ng House custodian Everardo Camacho’s cart is all it takes to see the new normal. Among his tools of the trade: microfiber cloths and pink dusters, rolls of toilet tissue, and an upended broom. Conspicuously absent are the 30 bottles of chemical products he used for over a decade. Now, Camacho brings a sparkle to common spaces and restrooms with just two spray bottles—Tersano SAO and Tersano’s PROscrub, an environmentally friendly degreaser. To refill his bottles, he simply ducks into a custodial closet where a Tersano LotusPro dispenser produces the SAO on demand at the touch of a button from plain water.

While R&DE saves over \$40,000 a year in chemical purchases and storage, the system also saves students money. Mirrielees residents, who were surveyed on spending habits before the pilot, could potentially save up to \$10,000 a year by using SAO. This year students can dispense SAO from their laundry rooms in both Mirrielees and Wilbur Hall. R&DE’s goal is to implement the system in all R&DE campus residences by 2024.

“We have a responsibility to be diligent stewards of the university’s resources and the planet’s,” said Shirley Everett, Senior Associate Vice Provost for R&DE. “I am pleased that this Green Cleaning Program allows us to fulfill those duties, while engaging students in a project they’re passionate about.”



Ng House custodian Everardo Camacho, right, and four year Student Housing sustainability intern Teo Camacho '18 M.A. fill a spray bottle with Tersano’s SAO.



Tersano LotusPro installed in a janitor's closet

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