

Cathay November 2018

www.cathayradio.org

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Mission: The Cathay Amateur Radio Club is basically an active social club of Ham Radio Operators and their spouses. We support local community requests for HAM emergency communications. Several of us are trained in CPR/ First Aid and are involved with community disaster preparedness.

Monday Night Net Time: 9 PM Local Time/PST,
Repeater: WB6TCS - RX 147.210, TX 147.810, Offset +0.6 MHz, CTCSS/Tone PL100 Hz

Please note: Repeater: N6MNV UHF 442.700 Mhz, Offset +5MHz, CTCSS/Tone PL 173.8 Hz in South San Francisco is cross linked every Monday Night Net at 9 p.m. to WB6TCS 2 meter repeater.

The CARC Monday night net is the best way to find out the latest club news. All check-ins are welcome.

Message from the President: George Chong, W6BUR

Hello CARC Members and Friends;

Many thanks to Mr. Denis L. Moore – WB6TCS for the use of his repeater for our CARC Monday Night Net.

I know at this point in the year, we are all wondering where the time go! My reply to that is we cannot stop the passage of time, so we should embrace it and make the most of it coming together with friends and family during this holiday season. .

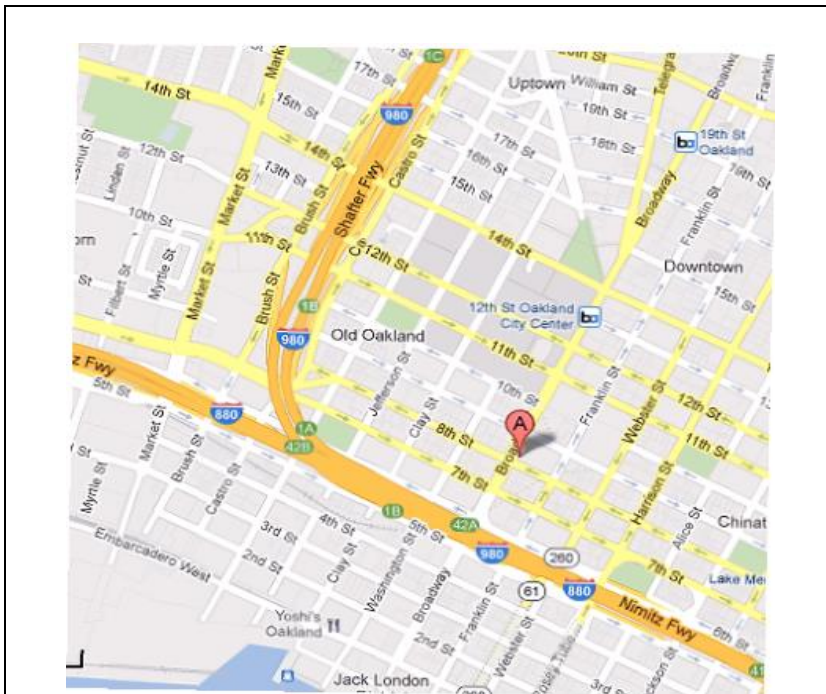
Veteran's Day Luncheon

Please mark your event calendars and join us for the CARC annual luncheon celebration of Veteran's Day, 11am – 1pm on Sunday November 11, 2018 at the restaurant below:

Buffet Fortuna
800 Broadway Street
Oakland, CA 94607
(510) 839-1688 web address - <http://www.buffetfortuna.com/>

The restaurant is an all you can eat American, Japanese and Chinese seafood buffet style food. The cost is \$11.99 per person and for seniors (62+) it is \$10.99. All soft drinks, coffee and tea are included with the price plus tipping is optional. The dining time is limited to 2 hours, however have never seen it enforced for the luncheon period. Of course it does help a lot that CARC member Gilbert Gin, (KJ6HKD) is planning on attending and he has considerable influence with the restaurant owners. I am usually stuffed to the gills within the first hour of eating the delicious food. It is truly a bargain value luncheon.

Map of the restaurant location is shown below:



Tech Article Introduction

This is a story of let's take something we all know about and experience every evening when water condenses on the surface our cars. Then apply new nanotechnologies toward creating a compact, portable and efficient device to extract water up to 10 gallons of drinking water per hour from the air.

A team of researchers at the University of Akron under the leadership of Professor Josh Wong is working toward developing a water harvester using electrospun nanoscale polymers fibers to condense the water from the air. Successful development of such a device the size of a backpack would be a worldwide game changer.

Now that I have peaked your interest, please the Tech Article.

Additional Thoughts

Wishing you all a upcoming Happy Thanksgiving!

I wish to thank our CARC members that set aside their valuable time to participate in our Monday night's nets.

Chat sub s'em to all you CARC members! - George W6BUR.

Public Service Announcements

HAM CRAM / HAM Licensing

For upcoming HAM Licensing locations please refer to:

<http://www.arrl.org/find-an-amateur-radio-license-exam-session>

Auxiliary Communications Service (ACS)

The Auxiliary Communications Service (ACS) was organized by the San Francisco Office of Emergency Services (OES) following the 1989 Loma Prieta Earthquake to support the communications needs of the City and County of San Francisco when responding to emergencies and special events.

The Auxiliary Communications Service holds General Meetings on the third Tuesday of each month at the San Francisco Emergency Operations Center, 1011 Turk Street (between Gough Street and Laguna Street), from 1900 hours to 2100 hours local time. All interested persons are welcome to attend.

The ACS Net begins at 1930 hours (7:30 p.m.) local time each Thursday evening, on the WA6GG repeater at 442.050 MHz, positive offset, tone 127.3 Hz. The purpose of this net is to practice Net Control skills, practice checking in with deployment status in a formal net, and to share information regarding upcoming ACS events. Guests are welcome to check in. ACS Members should perform Net Control duty on a regular basis. On the second Thursday of each month, the net will be conducted on the output frequency of the WA6GG repeater, 442.050 MHz no offset, tone 127.3 Hz, simplex.

For more information, please attend an ACS meeting or check in on a net, or call 415-558-2717.

Upcoming meetings: Tuesday 7pm, November 20, 2018

Gilbert Gin (KJ6HKD)

Free Disaster Preparedness Classes In Oakland:

<http://www.oaklandnet.com/fire/core/index2.html>

CORE is a free training program for individuals, neighborhood groups and community-based organizations in Oakland. The underlying premise is that a major disaster will overwhelm first responders, leaving many citizens on their own for the first 72 hours or longer after the emergency.

If you have questions about the recertification process, you may contact the CORE Coordinator at 510-238-6351 or core@oaklandnet.com.

Free Disaster Preparedness Classes In San Francisco – NERT Taught by San Francisco Fire Department (SFFD).

<http://sf-fire.org/calendar-special-events>

Upcoming events

November

7 NERT Quarterly Meeting – All NERTs Welcome

10 2MCM Ham Radio Practice
Spreckels Lake in Golden Gate Park – no RSVP Needed

17 NERT Training Day – Third Saturday

December

8 2MCM Ham Radio practice Spreckels Lake in Golden Gate Park

no RSVP needed

15 NERT Training Day - Third Saturday

RSVP to sffdnext@sfgov.org or call 415-970-2024 to register.

***SFFD DOT** is the Fire Department Division of Training. All participants walking, biking or driving **enter through the driveway gate on 19th St.** between Folsom and Shotwell. Parking is allowed along the back cinderblock wall.

Visit www.sfgov.org/sffdnext to learn more about the training, other locations, and register on line. Upcoming Special NERT Events.

San Francisco Police Department: Auxiliary Law Enforcement Response Team (ALERT)

The Auxiliary Law Enforcement Response Team (ALERT) is a citizen disaster preparedness program designed. The ALERT program is for volunteers 16 years of age or older, who live, work, or attend high school in San Francisco.

Graduates of the San Francisco Police Activities League (P.A.L) Law Enforcement Cadet Academy are also eligible to join.

ALERT volunteers will first complete the Fire Department's Neighborhood Emergency Response Team (NERT) (www.sfgov.org/sfnert) training and then graduate into an 8 hour Police Department course specifically designed for ALERT team members.

ALERT members will work closely with full-time and/or Reserve Police Officers in the event they are deployed after a disaster. The Basic ALERT volunteer will have no law enforcement powers other than those available to all citizens.

SFPD ALERT Training

The next SFPD ALERT training class has been scheduled for January 26, 2019. The class will be held at the San Francisco Police Academy, in the parking lot bungalow, from 8am-5pm (one hour lunch break) on Saturday.

** Class dates indicated in red are only for new members who have not completed either SFFD NERT training or the SFPD Community Police Academy.

IMPORTANT- All participants must complete the background interview process in order to be eligible to attend the ALERT training class.

Eligible ALERT participants may register for a training class by contacting the ALERT Program Coordinator, Mark Hernandez, at sfpdalert@sfgov.org, or by telephone at 415-401-4615.

SFPD ALERT Practice/Training Drill

All active/trained ALERT members are asked to join us for our next training drill, scheduled for an evening on Saturday November 3, 2018. Details will be emailed to active ALERT members, prior to the date of the exercise. Participation is not required, but strongly encouraged.

For more information on the San Francisco Police Department ALERT Program, email us at sfpdalert@sfgov.org, or call Sergeant Mark Hernandez (SFPD, Ret.), SFPD ALERT Program Coordinator, at (415) 401-4615.

For additional information on the web please refer to:

<http://sf-police.org/index.aspx?page=4019>

Tech Article



The University of Akron
College of Engineering

Engineering professor to present freshwater research at ACS national meeting

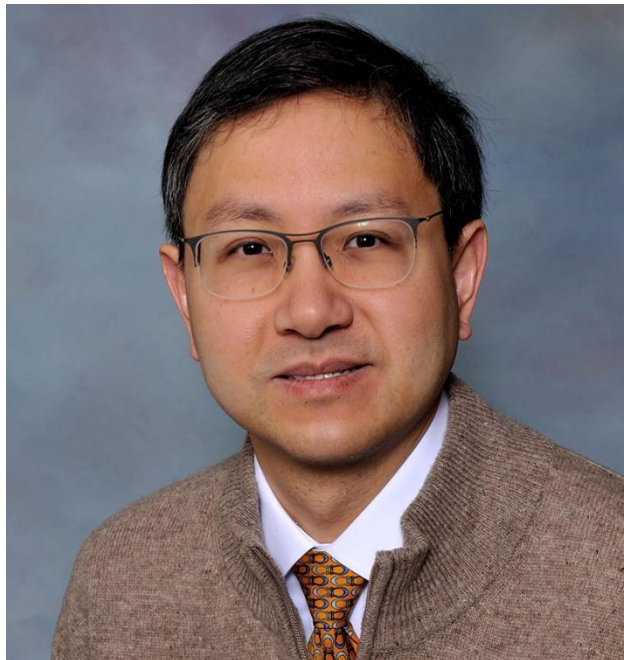
Date: 08/21/2018

<https://www.uakron.edu/engineering/me/me-news-detail.dot?newsId=c1f0c8d5-a992-468b-bb91-7ba9e3ea4597&pageTitle=Recent%20Headlines&crumbTitle=Engineering%20professor%20to%20present%20freshwater%20research%20at%20ACS%20national%20meeting>

One of the simplest, yet vital resources on our planet is at the center of **Dr. Shing-Chung “Josh” Wong’s** latest research, which aims at helping populations in dry, arid parts of California, Africa and China.

Dr. Josh Wong

The professor of mechanical engineering is leading a research team to develop a lightweight, battery-powered freshwater harvester that could take as much as 10 gallons per hour from the air, even in arid locations. The nanofiber-based method could help address modern water shortages due to climate change, industrial pollution, droughts and groundwater depletion. This will also aid residents in South America who live atop mountain ranges higher than rain clouds.

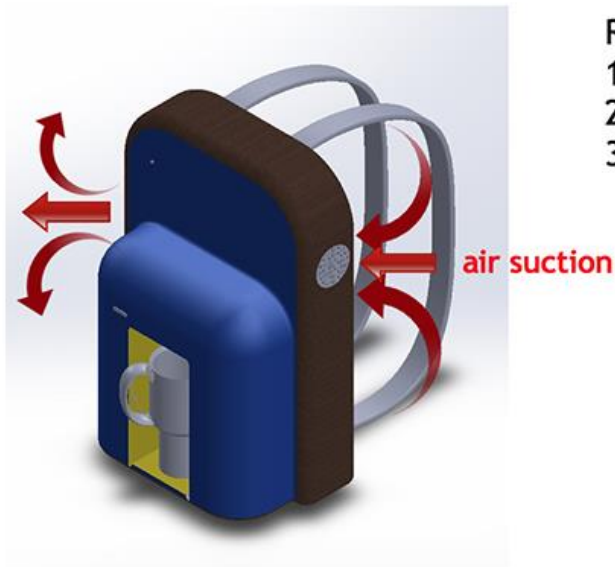


Wong and the team members are presenting their results today, Aug. 21, at the National Meeting & Exposition of the American Chemical Society (ACS) in Boston.

“I was visiting China, which has a freshwater scarcity problem,” said Wong. “There’s investment in wastewater treatment, but I thought that effort alone was inadequate.”



A Preliminary Concept of a Harvester



Requirements:

1. Temperature differential
2. Pressure differential
3. Lithium-Ion Battery Powered

Advanced Materials Laboratory – Mechanical Engineering, University of Akron

A mobile freshwater harvester as envisioned by Dr. Josh Wong.

He thought it might be more prudent to develop a water harvester that could take advantage of the abundant water particles in the atmosphere.

To miniaturize water generation and improve the efficiency, Wong and his UA students turned to electrospun polymers. Electrospinning uses electrical forces to produce polymer fibers ranging from tens of nanometers up to 1 micrometer — an ideal size to condense and squeeze water droplets out of the air. These nanoscale fiber polymers offer a much larger surface-area-to-volume ratio than that provided by the typical structures and membranes used in water distillers.

Nanofiber technology is key

By experimenting with different combinations of polymers that were hydrophilic — which attracts water — and hydrophobic — which discharges water, the team concluded that a water harvesting system could indeed be fabricated using nanofiber technology.

Unlike existing methods, Wong's harvester could work in arid desert environments because of the membrane's high surface-area-to-volume ratio. It also would have a minimal energy requirement.

The appearance of the portable water harvester depends on the end-use applications. An envisioned design for it looks much like a backpack.

“We could confidently say that, with recent advances in lithium-ion batteries, we could eventually develop a smaller, backpack-sized device,” Wong said.

Fast access to drinkable water

What’s more, Wong’s nanofiber design simultaneously grabs water and filters it, thus the water would be free of pollutants and immediately drinkable.

Next, Wong hopes to obtain additional funding to build a prototype of the freshwater harvester. He anticipates that, once his team is able to produce the prototype, it should be inexpensive to manufacture.

Wong, who has two issued patents to his credit, with more pending, co-founded Akron Ascent Innovations in 2012 and led in its platform technology of electrospun dry adhesives. His professional honors include a National Science Foundation Faculty Early CAREER Award, received in 2008. Apart from water-harvesting research, Wong is a well-recognized expert in mechanical behavior, fracture mechanics and failure analyses of light-weight polymer composites and soft materials.

Media contact: **Alex Knisely**, 330-972-7429 or aknisely@uakron.edu.