The Rochester Computer Society, Inc.

a computer/tech club open to everyone

M⬛NIT⬛R

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Our Club

RCSI is a nonprofit 501(c)(3) group open for membership to anyone interested in computers and new technology. Established in 1981, our aim is to provide an exchange of information between users of digital devices. We are not in any way affiliated with any computer manufacturer or software company, and *we do not sell your data or email address*.

Program Meetings

No admission fee for non-members. Everyone is welcome! Second Tuesday of every month, *except July and August*, from 6:30pm-8:30pm.

Help's Half Hour (Q & A) 6:30pm – 7:00pm. *Members and Guests are welcome to attend and bring their computer related questions with them to get answered.* **Yes, you may bring the problem computer with you.**

7:00 – 7:15, Club Business

7:15 – 8:30+, Main Presentation Come and join in the fun and enjoy a snack! **You are welcome to bring a guest**.

Become a Member

The club would like to have you as a member, and your subscription will help to keep us going. Go to our website, www.rcsi.org, and download a printed form for use by the Post Office mail, **or** enter your info online and pay with a credit card or PayPal, **or** attend a meeting.

March 12, 'Future of the Internet',
'Ethical Hacking', 'Science Behind Hybrid Foods'
April 9, 'AI in Healthcare',
'Computer Automation History'

In This Issue

I Lost My Two-Factor Authentication (2FA) Device. How Do I Sign In?

by Leo Notenboom, https://askleo.com/
Making Technology Work For Everyone

Signing in becomes a little more inconvenient. (But only once.)

Fear of second-factor loss prevents some people from using two-factor authentication. There's no need to fear that scenario. Nope. Not at all. If you lose your second factor, your next login just gets slightly more inconvenient…

…in a secure way.

Losing your two-factor authentication device
Someone who finds your second factor does not have access to your accounts; they still need your password.

If you're using SMS two-factor, contact your mobile provider and move your phone number to a new device.

Otherwise, access the account using recovery methods. Then remove and re-add two-factor with a new code or device.

Two factors means *two* factors
Remember, two-factor authentication needs *two* factors to sign in. Even if hackers have your password, they can't sign in without your second factor. This is the reason I so strongly recommend two-factor authentication.

But the converse is true as well: if hackers have your second factor — say they stole your phone or found your YubiKey — **they still can't sign in without your password**.

Both factors are required. If they don't have *both* your password and your second factor (whether that's a device, an app, a code, etc.), your account remains safe.

So there's no need to panic if you lose that second factor.

Accounts using SMS-based two-factor
SMS-based (text message) two-factor authentication is the easiest to deal with. SMS two-factor is based on your phone *number*, not on your specific phone.
If you lose your mobile phone, reach out to your provider, get a new phone, and **transfer your existing number to the new phone**. You're done. Your two-factor notifications will now arrive on your new device and not your old one.
If you don't get a new phone immediately, contact your provider as soon as possible and disable your lost phone. This prevents whoever has it from getting your SMS messages… or anything else.
It's conceptually simple, and covers all accounts that use SMS two-factor authentication.

Related

Why ANY Two-Factor Is Better than No Two-Factor
   Headlines are proclaiming that two-factor authentication has been hacked. That in no way means you shouldn't use it. Your account is still much safer with two-factor enabled.

For other accounts: first, regain access
Some accounts don't use SMS notifications for the second factor. For each account you have that uses a device or an app as its second factor, you need to sign in and set a new second factor.

For some accounts, you'll already be signed in and can proceed to the next step right away. For others, when you sign in, you'll be asked for your second factor.
If you use a tool like Authy on multiple devices — like Windows and your mobile phone — you can sign in using the two-factor code provided by one of the other Authy installations. (This, and the ease of moving to a new phone, is the big benefit I see using from Authy.)
If, however, your second factor is only a single device — such as *only* your mobile phone or a single, specific, USB security key — then you no longer have the second factor you need to sign in.
When you set up two-factor authentication, **you should also have also set up a recovery mechanism**. Most services almost insist that you do so.

That may be an alternate email address, an SMS-enabled phone number, a single recovery code, a collection of one-time use codes, or even an additional two-factor device. Use that mechanism to sign into your account. (And if you haven't set up a recovery mechanism, go do it now.)

Then, reboot two-factor
The goal is to invalidate existing two-factor devices and re-establish a new one.
In most cases, that's a two-step process: **turn off two-factor authentication and then turn it back on again**. It's kind of like a reboot.

Turning two-factor off accomplishes the first goal: any pre-existing second-factor devices, codes, or associations are disabled and forgotten. The codes provided by previously configured two-factor applications like Authy will no longer work. You also need to delete any entries for the account in authenticator apps you still have access to. Any recovery codes and such will also be invalidated.
Your account will, *for a brief moment*, not be protected by two-factor authentication. That's why the next step is important.

Turn two-factor back on. This establishes a new code you can use with your two-factor app, a relationship with a replacement hardware key, or whatever two-factor technique you use. Your account will once again be properly protected by two-factor authentication.

Do this
Having someone else gain access to your second factor is similar to having someone else discover your password.

What do you do when your password is compromised? You change it.

What do you do when your second factor is compromised? You reboot it.
As long as both are not compromised by the same person at the same time, your account remains secure throughout.

END OF ARTICLE # #

Looking for more security tips and safety nets? Subscribe to Confident Computing! Less frustration and more confidence, solutions, answers, and tips in your inbox every week.

From the https://askleo.com/ website.

Time to Replace Your Computer? Do this First.

By Phil Sorrentino
Secretary, and APCUG Rep

To most of us, replacing our computer is a double-edged sword. There is the joy of expecting to take advantage of newer, faster hardware and software, and then there's the challenge of the unknown, new features. This is especially true now because we have been using Windows 10 for a long time and our next computer will undoubtedly have Windows 11. Windows 11 was released in October 2021. All computers from typical manufacturers like Dell, HP, ASUS, Microsoft, Toshiba, Lenovo, etc., come with Windows 11. Windows 11 does have some new features, but most Windows 10 users should feel comfortable with Windows 11 once they find out where their favorite features are. They're all there, but the path to get to them is not always clear. Before you think about how to use the new computer, there is one last thing you should do with your old computer. And that is to ensure no personal information is on the old computer. You may be giving the computer to someone, or you may be donating the computer to a service that refurbishes computers for re-distribution, or you might take it to an e-waste facility. You don't want your private information to go to the new user. (As for donated computers, I can confidently say that all the Computer User Groups I have been associated with always wiped the hard drives before anything else was done. Hard drives are often not even useable, so they are removed and destroyed, usually with a hammer or drill.)

Just a brief technical discussion. By now, most computer users know that deleting a file does not actually remove the file from the computer, and with some basic software, the file can be read (as long as another file has not been written over it). The first byte of the file indicates whether it is deleted or not. This may have been done to make it very easy for the Operating System to delete files, so it doesn't take too much time, especially if you are trying to delete hundreds of files at a time. But this leaves the file on the drive intact, except for the fact that the first byte indicates it has been deleted. When the file is deleted, all of the data space is returned to the Operating System so it can use the space again when it needs space for a new file. Depending on what else is happening, the deleted file may be written over in the next few seconds, but it might remain intact or partially intact for a long time. Of course, if it contains personal information, that information is at risk.

In the past, it was more difficult to ensure you removed all your personal information because the functionality wasn't part of the Operating System. Instead, you had to use a separate software

Tidbits of probably useless information

The majority of the Earth's surface is covered by bodies of water (roughly 71%).

The average depth of the oceans is 12,100 ft.

Not to take anything away from the gorgeous Grand Canyon, but the Zhemchug Canyon, located in the Bering Sea, has a vertical relief of 8,520 feet-making it almost 2,500 feet deeper.

The largest ocean waves are called internal waves (below the surface), which take place between two fluids with two different densities. As these internal waves travel, they can grow to be 650 feet tall.

Too much sunlight can damage the algae that live inside coral in shallow water. To protect the algae, which are a main source of sustenance for coral reefs, the corals flouresce. This creates proteins that act as a sort of sunscreen for the algae.

Our oceans contain around 20 million tons of dissolved gold, or about one gram for every 110 million tons of ocean water. Each person would get about six pounds of gold. There are also deposits in the sea floor, as well as underneath rock as far down as 35,000 feet.

Just two large ice sheets remain from our planet's last ice age: the Greenland Ice Sheet and the Antarctic Ice Sheet. The latter of the two is staggering in size. Clocking in at 5.4 million square miles, it's roughly the size of the continental United States and Mexico combined.

program developed specifically for writing useless data into all of the space originally occupied by data files. There are many of those programs available, one of which is called DBAN. But today, Windows 10 makes the job very easy because that functionality can be found in Settings' "Update and Security" section. First, choose the "Recovery" option, then "Get Started," and finally, select "Reset this PC." At that point, you will be presented with "Keep my files" and "Remove everything." "Keep my Files" Removes apps and settings but keeps your personal files; you don't want this choice. "Remove everything" Removes all your personal files, apps, and settings, which is what you want. Choosing "Remove everything" will write zeros into all of the space used by your files. Once zeros are written into a file's data space, that file will not be able to provide any indication of the original file contents. (The only slightly possible exception may be highly specialized hardware and software probably only owned by hard drive manufacturers and executed only by some government agency.) So, for all intents and purposes, the data is gone. (Remember that only the C: drive was wiped clean of your personal data. If you have a second drive, as might be the case with a desktop with personal data, the data is still on the second drive.) As a bonus, Windows 10 will be re-installed. The computer should be operating just like it did when you originally got it, but without any of the apps you installed and, of course, without your personal information.

If, for some reason, you are not comfortable using Windows 10's "Reset this PC," there is always software like DBAN available. DBAN is short for Darik's Boot And Nuke. DBAN is Free Open-Source Data Wiping Software for Personal Use, as it says on its website, dban.org. As you can see from the website, DBAN has many features and options, probably more than the average user will need. You can also get DBAN from filehippo.com, a reasonably safe place to download software. DBAN works well, but it comes with a warning, as shown below, and a disclaimer that "the authors are not liable for any damages arising from the use of this software," which might frighten some potential users."

DBAN's Warning

Why The U.S. Government Is Fighting To Keep The AM Radio In Your Car

By Nadeem Sarwar, 2/20/24

Over the past couple of years, some of the biggest automobile brands, including BMW, Tesla, Volkswagen, Porsche, and Audi, have dropped AM radio from their cars. The trend is particularly visible in electric cars, which are on the rise owing to a mix of lowered costs, improved charging infrastructure, greater availability, and government benefits. However, the shift hasn't been well-received by stakeholders in the broadcasting industry, agri-trade associations, members in the top policy-making halls, and of course, the folks who are reliant on the radio broadcasts for getting critical information.

Over half a dozen former FEMA administrators also wrote to the U.S. Department of Transportation, arguing that if carmakers continue with their offloading, the "vital public safety system" that is AM radio, will cease to work as intended.

Lawmakers, on the other hand, are not inclined to let it happen. The bill, Am For Every Vehicle Act, if passed, would make it mandatory for all vehicles sold on U.S. soil to offer AM radio functionality.

Read the Pros and Cons at https://www.slashgear.com/1519426/am-car-radio-congress/.

"DBAN has been designed for the home user, and although it is good at what it does, the interface is a little clunky" is a quote from the filehippo.com description, so unless you are a technically inclined user or very adventurous, this may not be for you. Use the Windows 10 "Reset this PC" functionality in that case.

From the website of Sun City Center Computer Club, FL, https://www.scccomputerclub.org/ , philsorr@yahoo.com

* * * * * SOFTWARE and HARDWARE * * * * *

Taking Notes with Xournal

By Dick Maybach
Brookdale Computer User Group

We all have our preferences for taking informal notes. If you prefer handwritten text and sketching graphics, you might like an application that supports this, such as Xournal. It was developed for Linux, https://sourceforge.net/projects/xournal/, but it's also available for Windows, https://xournal.en.softonic.com/, and Android, although the last is a beta version. A manual is available at http://xournal.sourceforge.net/manual.html; it has about 24 pages, but only the first third is really useful. If you like the concept but don't care for the Xournal implementation, there are alternatives, such as MS Windows Journal, Jamal, http://www.dklevine.com/general/software/tc1000/jarnal.htm, and Gournal, https://www.adebenham.com/old-stuff/gournal/.

The best interface for sketches and handwriting is a touch screen, preferably with a stylus, although a standard screen plus a graphics pad, such as Wacom, is also usable. Trying to use a mouse with a normal display will result in little but frustration. Figure 1 shows the program's default opening screen. Although the default page style is ruled, you can change it to plain or graph.
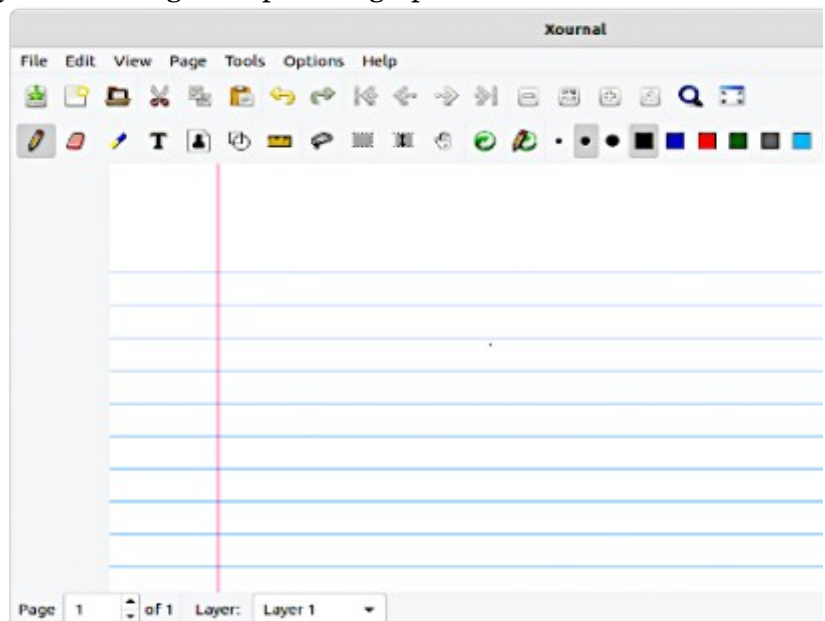
Scams

Scammers are using people to funnel stolen money out of the country. This con may look like a classic [romance scam](#), but victims are tricked into illegal activity and can be prosecuted.

You join a dating app and start messaging someone who looks amazing. They are the complete package: good-looking, successful, kind... and, most importantly, really into you, too! After chatting for a little while, your new love interest suggests that you chat by text or email rather than through the app. If you do that, you may notice that they also delete their dating profile.

Everything seems great, but soon, your new beau has some unusual – but seemingly harmless – requests. They want you to receive money for them and wire it overseas. They may claim to be helping a loved one battling an illness, doing a business deal, or representing a charitable organization.

It turns out that the money they want you to receive is stolen. After stealing it, scammers send the money through someone in the United States or Canada, making it harder for authorities to trace. Money laundering and wire fraud are illegal! Although the "money mule" is a victim, they may also face prosecution.

Many scammers steal photos from the internet to use in their dating profiles. You can do a reverse image lookup using a website like [Google Images](#) to see if the photos on a profile have been stolen from somewhere else.

https://www.bbb.org/article/scams/22677-bbb-scam-alert-this-romance-scam-tricks-victims-into-laundering-money

The menu bar (at the top) has file tools and settings. It duplicates many tools in the toolbars but with text labels instead of icons. The toolbars let you select the operation (line drawing, highlighting, erasing, inserting, and deleting objects), choose the colors, and designate areas for other functions. You have similar tools in your word processor and graphics software, making the tool easy to use.

Figure 2 shows the results of importing a logo, adding a line drawing and handwriting, importing text, and highlighting a portion of it.
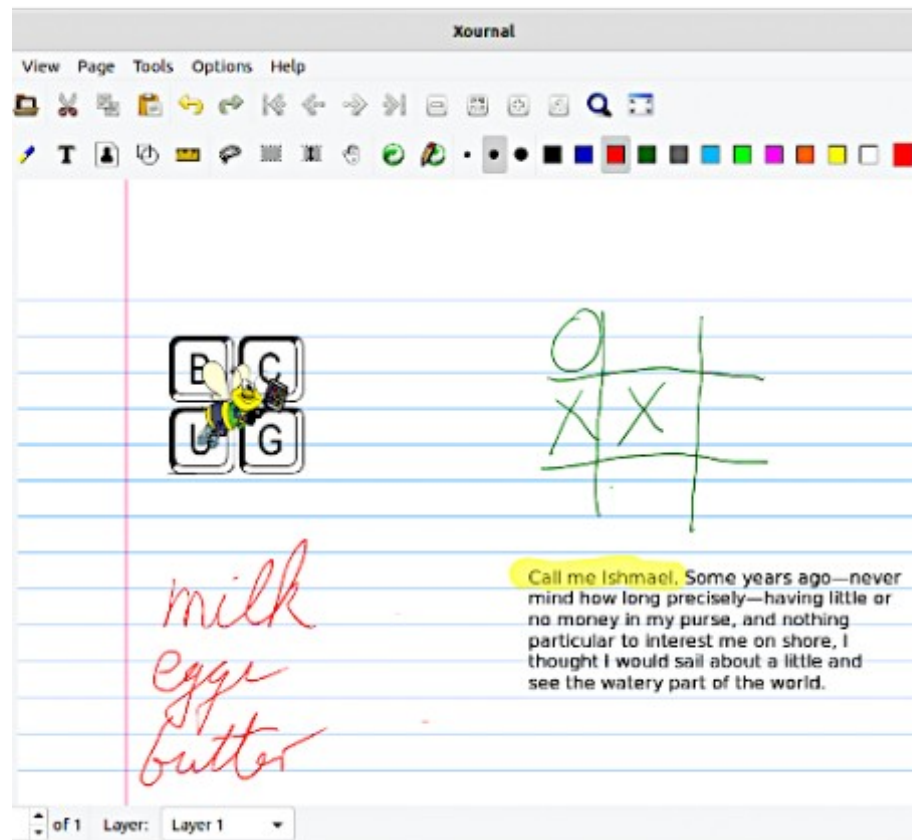
Xournal saves each note in a separate file, and keeping them organized requires effort. You should use descriptive filenames, place them in logical directories, and delete them when no longer needed. It would be easy to scatter dozens of notes throughout the hundreds of directories on most PCs. If you can't find a note, it's the same as if you'd deleted it.

I frequently use PDF files, often as articles I download or documents I receive. While these are convenient, they are difficult to modify. For example, when I download an article, I like to add the URL where I found it. Also, some PDF documents are questionnaires or require a signature. Xournal can use a PDF as a background, over which you can add text or sketches. Figure 3 shows an example.

Virtual Tours

Meet **Japan culture** and views from home.
https://www.youtube.com/watch?time_continue=24&v=OR_Y7vj66PU&feature=emb_title

The Food Network teamed up with candy maker Mars to give **M&M** fans a virtual tour of one of its factories. During the short YouTube video, viewers can pan around as a tour guide explains how unrefined chocolate is turned into the little candies we know and love.
Visit M&M Candy Factory Tour Now

Colonial Williamsburg is a living-history museum in Virginia that offers a glimpse at what life was like in the 18th century. Its virtual tour is highly interactive and includes videos, informational signs, and 3D models you can rotate.
With its various webcams, you can see the armory, courthouse, merchants square, and more. Colonial Williamsburg's website also offers a virtual scavenger hunt your kids can participate in as they tour the area.
Visit Colonial Williamsburg Now

Stellarium Web is an online planetarium created by two brothers. Offering an accurate and realistic view of the night sky, it lets you pan around and spot stars, satellites, and other celestial bodies.
Visit Stellarium Now

I've inserted (and highlighted) the document's URL at the top and circled a meeting here. The original PDF hasn't changed, but you can export the annotated result as a new PDF. This technique makes adding a signature far more convenient than my old PDF printing method, signing the paper copy, and scanning the result. You can use other graphics, and screenshots, for example, and annotate them. Do read the manual before doing this, as there are some subtleties.

Xournal can save files only as PDFs or in Xournal format. Choosing a notes tool for collaboration means considering what file formats it can use. PDF is the standard for documents, as are JPEG and PNG for images. If the tool can't import the file directly, it may have a convenient workaround. For example, Xournal can import the contents of any window, so you can open an image file with your image viewer and allow Xournal to import it as a screenshot. Then, after annotating it, you can export it as a PDF.

For me, Xournal is most useful for annotation, particularly as an aid to collaboration. Team members frequently exchange documents or graphics; annotating them is far clearer than sending back printed comments. Of course, I prefer a text notes program when developing articles like this, but if you long for the Post-It days, you might like the Xournal approach.

Taken from the newsletter of www.bcug.com, n2nd@att.net.

Interesting Internet Finds

by Steve Costello
scostello@sefcug.com

How to Fix Your Smart TV Problems Without Buying a New TV

https://www.techhive.com/article/1382183/how-to-fix-your-smart-tv-problems.html

Is your smart TV an older model? Is the smart TV operating system not getting updated or having problems? If you answered yes to these questions, check out this post before trashing it and buying a new one.

Why Do Batteries Lose Charge When You Aren't Using Them?

https://www.howtogeek.com/842269/why-do-batteries-lose-charge-when-you-arent-using-them/

Check out this post to learn why batteries lose charge even when unused.

Skip The Wireless Earbuds And Buy Something That'll Last

https://www.reviewgeek.com/152420/skip-the-wireless-earbuds-and-buy-something-thatll-last/

Wireless earbuds are convenient but earbuds, or their batteries need to be replaced too often. That is what this post is all about. I know I can't go completely wired, but try to as much as possible. Check out this post and see if it makes sense for you too.

Why You Need to Keep Your Browser Updated

By Kurt Jefferson, Editor
Central Kentucky Computer Society

When was the last time you updated your web browser? If it's been longer than a few weeks, you should check to see if an update is waiting to be installed.

Statista, the website that tracks browser usage, reports that:
• 73% of Microsoft Edge users
• 35% of Firefox users
• 23% of Safari users

in America and Western Europe are running outdated browsers.

A How-To-Geek article published in June 2021 explains why you need to use the latest version of your web browser: (https://www.howtogeek.com/725165/why-you-should-update-your-web-browser/)

Browser Updates Protect You

Browsers are continually updated for security reasons. However, outdated browsers contain opportunities for hackers to attempt to load malicious content onto your computer without your permission.

Updates patch these "openings" and block potential breaches so that the bad guys cannot install a large variety of viruses, malicious software, adware, and other crud on your machine.

If you visit an infected website, your outdated browser may not protect what's sometimes called "drive-by downloads." These are incidents where malicious software automatically installs on your Mac, Windows, or Linux machine without you knowing about it.

How-To-Geek explains how to update Chrome, Firefox, Safari, and Edge on desktop machines and how to update your mobile browsers on iOS and Android devices.

If you're unsure if your web browser is update-to-date, you can visit WhatIsMyBrowser? to find out. That website also provides plenty of other details about your web browser, including whether cookies are enabled, JavaScript is enabled, and other details such as your local IP address and Internet Service Provider.

Reprinted from the https://ckcs.org/, lextown2@gmail.com.

* * * * * BITS and PIECES in the NEWS * * * * *

> **Editor's Note**: To continue reading the following articles, you may copy the long URL at the end of the article and enter it into a web browser **or** click on the URL in the PDF or web versions of this newsletter.

Swiss Startup Believes this Forgotten Element is the Key to Safe Nuclear Energy

Transmutex has just raised $23mn to bring its concept to life, January 29, 2024

Nuclear energy is making a comeback. Across Europe, governments are pouring huge amounts of money into new power plants while startups are busily working on smaller, modular alternatives.

ROCKS:

Which magazine do rocks
subscribe to?
The Rolling Stone.

What's a geologist's favorite
restaurant?
Hard Rock Cafe.

What do lazy rocks do?
Sit around all day getting
stoned.

My wife told me she is thinking
about selling Egyptian rocks.
It sounds like a pyramid
scheme to me.

What is a rock's favorite fruit?
A pome-granite.

When were rock puns the
funniest?
During the stone age.

Why did the rock decide to hit
the gym?
Because he wanted to be bigger
and boulder.

What do you call a rock that
bunks school?
A skipping stone.

Why was the geologist boring at
the party?
Because he liked to be stone-
cold sober!

How does a geologist show their
displeasure?
They give the coal shoulder.

What did the one volcano say to
the other volcano?
Nice ash!

What did the boy volcano say to
the girl volcano?
I lava you so much.

May the quartz be with you!

Most of these plants rely on uranium, the radioactive metal that
fueled the atomic age (and contributed to a couple of catastrophic
meltdowns). However, Swiss startup Transmutex wants to reinvent
nuclear energy using a lesser-known element called thorium.

**Uranium's forgotten
cousin**
Thorium is a lead-like metal
that is mildly reactive, but
four times more abundant
than uranium and a lot safer
to handle. However, thorium
is not a fissile material,
meaning it cannot undergo
nuclear fission.

Transmutex's solution is to
use thorium instead of
uranium and combine it with
a particle accelerator, which constantly feeds neutrons into the
thorium atoms, creating a fission reaction.

This means that, unlike traditional reactors, the plant is incapable of
sustaining a chain reaction. Once the particle accelerator is switched
off, the flow of neutrons is interrupted and the reactor shuts down
immediately. This function would have prevented deadly accidents
like the Chernobyl power plant disaster in 1986.

The startup said it is currently consulting with "top tier"
governmental institutions worldwide to explore the possibility of
forming an international coalition to accelerate the development of its
first nuclear reactor.China has already constructed an experimental
thorium reactor at Wuwei, on the outskirts of the Gobi Desert. Other
countries including the US, Germany, the Netherlands and the UK
have also tested thorium as fuel in other types of nuclear reactions.
And in France, researchers at the CNRSA are carrying out studies to
develop a so-called Molten Salt Fast Reactor powered by thorium.

More details on https://thenextweb.com/news/swiss-startup-
nuclear-energy-thorium.
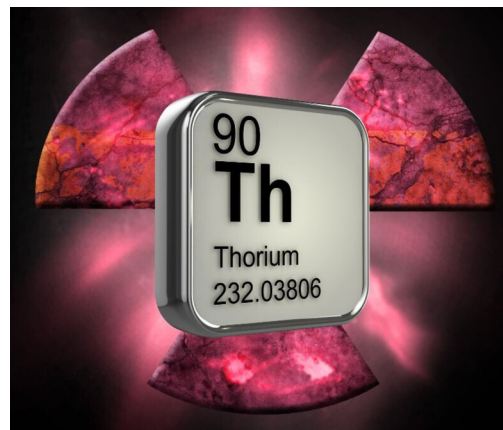
Piezoelectric "Bone Bandage" Heals Cracked Bones Faster
By Paul McClure, February 01, 2024

Researchers have successfully regenerated damaged skull bones in
mice by creating a freestanding, biomimetic scaffold that combines a
piezoelectric framework and the growth-promoting properties of a
naturally occurring mineral. The novel "bone bandage" has wide-
ranging potential applications for bone regeneration and regenerative
medicine.

Piezoelectric materials generate an electric charge in response to
applied mechanical stress. Bone is a piezoelectric material. Because it
possesses an electrical microenvironment, electrical signals play an
important role in the bone repair process, which can effectively

Odds and Ends

AI 'Girlfriends' Are Snapping Up Users' Data

By [Adrianna Nine](#)
February 14, 2024

To some, a cheeky conversation with an AI chatbot might seem pretty innocuous—once you get past the fact that there isn't a human on the other side. But even if you don't think your virtual romance will end tragically à la *Her* (2013), your text-based flirtations still pose unique risks. Researchers involved with Mozilla's "*Privacy Not Included" project shared this Valentine's Day, that apps offering AI girlfriends (or any AI "significant others") almost always harvest and sell users' personal data. It's just like the adage says: If you're not paying for it, you are the product.

Mozilla researchers [scoured](#) the privacy disclosures, terms and conditions, and marketing materials of 11 romantic AI chatbot apps. These apps ranged from Chai—to Anima, which appears to offer AI girlfriends and boyfriends complete with AI-generated art. The team found that the companies behind the chatbots refuse to take responsibility for anything the chatbots say or prompt you to do. This was the case even for the apps that billed themselves as "self-help" (Talkie Soulful AI), "wellbeing" (EVA AI), or "mental health" (Romantic AI) providers.

Read this news at https://www.extremetech.com/internet/ai-girlfriends-are-snapping-up-users-data.

promote bone regeneration. However, bone regeneration is a complex process that relies on mechanical, electrical, and biological components.

Current strategies for bone regeneration, such as grafts or scaffolds that release growth factors, have limitations, such as complications at the donor site, limited availability, and high cost. Now, researchers from the Korea Advanced Institute of Science and Technology (KAIST) have developed a pioneering approach to bone regeneration that combines piezoelectricity and a mineral (Hydroxyapatite (Hap)) that occurs naturally in bone.

Read the rest at https://newatlas.com/medical/piezoelectric-scaffold-hydroxyapatite-regenerate-damaged-bone/.

Britain's Dragonfire Laser Weapon Engages First Aerial Targets

By [David Szondy](#), January 21, 2024

Britain has fired its [Dragonfire](#) high-powered laser weapon at aerial targets for the first time. The test of the Laser Directed Energy Weapon (LDEW) on the Ministry of Defence's Hebrides Range was designed to demonstrate its power and accuracy.

Recent real world events have shown that there is a definite use for laser weapons on the modern battlefield. While modern missiles can take out aerial threats with great effectiveness, as shown in Ukraine, Israel, and the Red Sea, there is a problem with using a finite stockpile of missiles costing millions of dollars each to knock out drones and rockets costing only thousands.

Lasers have a number of advantages. Each 'shot' travels at the speed of light over very long ranges and a laser weapon can engage multiple targets simultaneously. They can also strike with extreme precision and at a remarkably low cost per round.

Dragonfire's range is classified as well, though the government does say that it has demonstrated its ability to track and counter aerial threats. The weapon has the precision to hit a £1 coin (23 mm/0.9 in diameter) at a kilometer (0.6 miles) and that the cost per shot is about £10 (US$13). Under development at a cost of £100 million (US$127 million) by a team led by the Defence Science and Technology Laboratory (Dstl) for the Ministry of Defence, it is being considered for service with the British Army and the Royal Navy.

"This type of cutting-edge weaponry has the potential to revolutionize the battle-space by reducing the reliance on expensive ammunition, while also lowering the risk of collateral damage," said Defence Secretary, Grant Shapp. "Investments with industry partners in advanced technologies like DragonFire are crucial in a highly contested world, helping us maintain the battle-winning edge and keep the nation safe."

Found on the website of https://newatlas.com/military/britain-dragonfire-laser-weapon-first-aerial-targets/.

The First and Longest-Running Computer Festival in the World!
Saturday March 16, 2024 | 9:00 am – 5:00 pm ET | https://tcf-nj.org/
This Years Theme: **Putting Generative AI to Work!**
You may attend the festival in person or virtually online. Many great topics and speakers.

CLUB and REGIONAL NEWS

The **TOTAL SOLAR ECLIPSE** is coming to Rochester on Monday, April 8, 2024. This happens when the moon passes in front of the sun, perfectly blocking its surface. Although the moon passes between the Earth and sun every day, the three celestial objects will be aligned perfectly for three minutes and 38 seconds of darkness. For more information, https://rochestereclipse2024.org/.

> **This is a once-in-a-lifetime event.** Do you know how rare it is to see a total solar eclipse? The last one experienced in Rochester occurred in 1925 (that's almost 100 years ago!) and our area won't see another one until the year 2144, approximately 120 years from now. Catch this opportunity while you can to experience three minutes and 38 seconds of totality!

The Greater Rochester Region is in the path of totality! Almost everyone in the nine-county region will get to fully experience a total solar eclipse.
Timing: 2:07 PM: Eclipse begins as Moon will begin to cover the Sun
3:20 PM: Totality Begins. Duration depends on where you're in the path of totality
4:33 PM: Eclipse ends for Rochester viewers

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For anyone who would like to do some additional reading about various topics ranging from software, or hardware and their implementations, you can check out Mark Zinzow's blog at **https://mszinzow.blogspot.com/**. He has given several presentations over the years (some by Zoom) and is a proponent of open software and security. The latter is a real battle today, with all the hackers and scammers out there trying to trick us into giving out our secret financial information. Additional places to find Mark, **https://www.zguru.us/**, **www.slideshare.net/msz**, and on **youtube** (search for Mark Zinzow).

If anyone else has a blog, let me know and it can be included in this newsletter.

Got Questions?

Send an email to either person below and they will get back to you. The questions can be related to the OS (Operating System) or hardware related issues. Please give them time for a response, as they do this service on a volunteer basis. Thank you.

Windows OS: . . . . . Arpad Kovacs, podcomputer@gmail.com

Linux & some Mac: Carl Schmidtmann,   unixgeek@faultline.com

Our Meeting Place
St John's Meadows at Johnsarbor Drive, is on the left, past Clinton Avenue, when going West on Elmwood Avenue. The opening in the white fence is Johnsarbor Drive. At the 'T', turn right. The meeting is in the SECOND building on the left – **Chestnut Court**.
Our meeting place can change. Please check our website before each meeting. **www.rcsi.org**