



Point of View

The Student Newspaper of ICS

APRIL 2025

A New Method For Reducing Carbon Dioxide

by HANNAH YI

Yale University scientists James Mayer and Nilay Hazari have developed a method to convert carbon dioxide (CO₂) into formate. Their research, published in the journal Chem on March 7th, shows a pathway for converting CO₂ into valuable products. This discovery could enhance climate efforts by turning harmful emissions into beneficial chemicals and fostering environmentally friendly solutions.

Currently, fuels and chemical products are derived primarily from fossil fuels, which emit carbon dioxide to the ozone, therefore inducing global warming and whose extraction has very severe environmental impacts. As a result, there is an increasing demand for new chemical feedstocks that are sustainable and less toxic to the environment. Hazari, an associate member of Yale's Center for Natural Carbon Capture, and Mayer, a member of Yale's faculty in the Department of Chemistry, point to the need to come up with alternative ways of curtailing fossil fuel usage and developing green alternatives.

The conversion of CO₂ into valuable products on an industrial scale is challenging, primarily due to the fact that new catalysts that will function under milder conditions, for example, lower temperature and pressure, but with high productivity and stability, must be developed. The researchers deal with a relatively underdeveloped catalytic system known as an "immobilized molecular catalyst." The system involves immobilizing a molecular catalyst on a solid support material, improving the efficiency and stability of the catalyst.

The researchers synthesized molecular manganese catalysts and attached them to thermally oxidized porous silicon for use in experiments. Under illumination, the silicon catalyst absorbs energy and transfers it to the manganese catalyst, reducing CO₂ to formate. The system is optimized, and using porous silicon as a support is a key innovation in the topic. The researchers found that a thin oxide layer on silicon improves the selectivity and stability of the catalyst and is, hence, a material worthy of consideration for future chemical operations.

Formate, the product formed in this reaction, is particularly intriguing because it is a precursor for materials used in massive industrial processes. The scientists believe that this discovery opens the door to more widespread usage for CO₂ conversion and other catalytic processes involving different chemical forms.

COF 999

by IDAM SUH

COF stands for Covalent Organic Frameworks, which have unique properties with high surface areas and modifiable pore sizes. COF is similar to MOF, Metal-Organic Frameworks, in many characteristics, but they are different in case of composition, synthesis, and stability. COFs consists of light nonmetal atoms such as hydrogen, Nitrogen, Oxygen, etc with covalent bonds, which has recently risen because of its potential of becoming a breakthrough of Carbon Capture and Storage(CCS) technology as new type of COF, which is called COF 999, is introduced. COF-999 is able to harness carbon dioxide. If there is a place to store the carbon dioxide that is absorbed, it is reusable. It was invented by Omar Yaghi et al. from University of California, Berkeley, and was introduced last October. However, it still needs more research because it has limits on how much carbon it can hold.

Even though many people think it will be a breakthrough in the carbon capture and storage industry and indeed it is significant progress, it also has some points to be redefined or to be resolved, and it seems like there should be further research for real-world applications and better performance. Still, it is known that its performance didn't decline after reusing it 100 cycles. It is efficient and affordable, which emphasizes the effectiveness of COF 999. Considering these characteristics such as affordability and efficiency, COF 999 has potential to be a key technology for the CSS industry. As a result it seems that COF 999 will promote sustainable development, which has a massive impact on human life and other creatures on earth.

The Right Time to Get Coffee

by ANNA PARK

Do you enjoy drinking coffee? If so, when do you usually drink it? Recent research shows that it is important to know 'when' to consume coffee. Taking caffeine, specifically drinking coffee, has been discussed with health for a long time. However, it turns out that the real importance is when you drink it, not what. This journal article was published in the European Heart Journal in January 2025.

In the research, both caffeinated and decaffeinated were included and were categorized into three groups: morning,

afternoon, and evening. (Morning; from 4 a.m. to 11:59 a.m., afternoon: from 12 p.m. to 4:59 p.m., evening; from 5 p.m. to 3:59 a.m.). In contrast to individuals who did not consume coffee, drinking it solely in the morning correlated with a 16% reduced chance of premature death from any cause and a 31% decreased likelihood of dying from cardiovascular disease. Individuals who typically consumed coffee throughout the day did not experience a decrease in risk. These results persisted even after the authors considered confounding factors like sleep duration, age, race, etc. For those who drink coffee in the morning, whether they consumed caffeinated or decaffeinated coffee, whether it was fewer than one cup or over three cups a day, didn't make a difference. Doing it in the morning was still more favorable than other patterns regarding mortality risk.

However, this study has several flaws. First, it was not conducted as a long-term study, which could cause biases. Second, there could have been other factors that the conductors could not control since they were focused more on consuming coffee. Third, the genetic information was unavailable, decreasing its conclusion's credibility. Still, if you plan to drink coffee today, try having it in the morning.

What Are Brain-Computer Interfaces?

by JIHOON CHOI

There are many people with physical disabilities in the world. Though all disabilities are detrimental, some can be much more serious than others, and such is the case of locked-in syndrome(LIS) patients. LIS is the condition of having no muscle control except the eyes. Obviously, they face many barriers to living a normal life, as their only method of communication is through blinking. However, even this form of communication faces difficulties as the awakens of the LIS patients can not be identified. But Brain-Computer Interfaces (BCI), a revolutionary tool, is being developed to allow direct communication between the user's thoughts and an external device. With this technology, not only will patients with difficulties be able to communicate better, but its applicability in everyday life can make our lives easier, too.

There are two types of BCI; Invasive, and non-invasive. Invasive BCI requires surgery to implement a chip inside the brain, but it comes with risks of infecting the brain. Non-invasive BCI are much safer as they merely interpret brain signals from above the scalp. There is a tradeoff between these methods, as invasive BCI are riskier but more accurate, and vice versa for non-invasive. There have been clinical trials of invasive BCI, and many have been successful. Neuralink, a company developing invasive BCI, demonstrated its usability with a quadriplegic patient who played online chess, just by using thoughts.

The mechanism behind BCI lies in how neurons work in the brain. Our neurons send signals via "action potentials" that

cause a minute change in the voltage, which tools such as EEG interpret. BCI analyzes these signals and tries to figure out what the user is thinking. For example, a person can be trained to think of moving a leg if replying with a yes, and imagine an elephant to reply with a no. This produces certain brain waves that EEG can intercept, and can allow a binary form of communication that could potentially allow LIS patients to communicate. Currently, BCI is limited to simple recognition and motor activities as it intercepts signals from the cortex, which is the outer covering of the brain. This means BCI does not cover complex functions such as emotion and memory.

With the increasing technology in AI, we can expect a more accurate and efficient BCI system. It will be applied to various fields, including helping paralysis patients to communicate, identifying mental diseases, and making our work faster and easier. Though there are tremendous benefits of BCI, there is growing dissent. Developing BCI, particularly the invasive ones, require animal testing before human trials can be done. Neuralink has sacrificed over 1500 animal lives through this procedure, and there has been criticisms on the impact of BCI. Furthermore, some may question its ethicality to "read" a person's mind. These are just a few of the problems that BCI can have. With any new technology, there are harmful effects. Because BCI is state-of-the-art technology, there will be more hurdles to overcome, and we should work on minimizing its negative effects.

Screen Time Increases Risk of Nearsightedness

by YEJI LIM

Most people might know that spending a lot of time looking at screens is harmful for our eyesight. Recently, a new study found out that every hour we spend on looking at digital screens, the risk of myopia (nearsightedness) will increase to 21

Researchers from Seoul National University College of Medicine gathered data from 45 different studies. These studies showed the effects between looking at screens from electric devices like smartphones, tablets, computers, etc, and our eyes. According to those studies, the biggest risk of myopia occurs when people spend about one to four hours of screentime a day. If screentime is less than one hour a day, the risk of myopia rises slowly. However, if you see digital screens between one and four hours, the risk of myopia will increase rapidly. Furthermore, if screentime is over four hours, the rate of increase slows down again, forming a S shaped graph. This suggests that keeping a daily screen time below one hour can help protect our eyesight.

Researchers say that the number of people with myopia will rise quickly if people are not cautious about this problem. They predict by 2050, almost half of the world's population will be nearsighted. This is a serious problem since myopia can lead to more dangerous eye problems such as retinal detachment, and glaucoma, which can cause vision loss.

Researchers say in order to prevent myopia, people should take regular breaks from screens, and spend more time on outdoor activities, especially for young children. They hope this study and its results will encourage people to have a better health routine for their eyes, and warn of the dangers of excessive screentime. Since digital devices like smartphones are a part of our daily life, it is important to find the right way of using them to protect our eye health.

Parents Continue to Support Against Measles Vaccine After Daughter Passed

by SEJIN TENNANT



Image Source: UConn Today

A Texan family of seven recently lost their 6-year-old due to them contracting measles yet not being vaccinated. Their response to this controversy has shocked the world. As measles cases grow, especially in areas with low vaccination rates, misinformation about the vaccination encourages the spread of the measles outbreak. Surprisingly, the parents who lost their 6-year-old were one of the main campaigners in the anti-vaccine advocacy group “Children’s Health Defense”.

In interviews, the parents stated how the other four children also contracted measles, yet were able to make a recovery without the vaccine, leading the parents to say how “the measles wasn’t that bad”, and how their other children got over it quickly, through a translator as they were speaking in a German dialect. Other news articles state how 1/5 of unvaccinated children get hospitalized due to measles, which - even though they could recover - they could retain health complications later on as adults. Originally, the child showed common symptoms of measles, such as difficulty breathing, rashes, and fever. When the conditions worsened, the parents took her to the hospital where she would tragically pass away.

When the story became public, many went online to slander and criticize the parents’ choice, with some saying that the death could have easily been prevented, or that the parents were cruel

for speaking of their daughter’s passing in such an “objective manner”. Through more strained interviews, people realized that the couple’s actions were due to a mixture of religious beliefs, false information regarding the immune system, and social pressure.

President Yoon’s Release

by WOJOO KIM



Image Source: 한겨레

South Korea’s political situation is currently facing chaos. President Yoon Suk Yul, after being released from Seoul Detention Center, Yoon raised his fist in a victory gesture in front of his supporters, like a hero returning from the battle after a victory. Yoon’s action made people who wanted Yoon Suk Yul’s resignation of the presidency feel very desperate. Critics argue that his actions are inappropriate because the Constitutional Court is still in the process of reviewing his impeachment. This trial is still ongoing and many say that doing these bold actions is too early. Despite this, People Power Party (국민의 힘) very approved the court’s decision to release him. However, some people are concerned that Yoon’s action could influence the Constitutional Court’s final judgment. At the same time, Cho Kuk, the former leader of the Rebuilding Korea Party (조국혁신당), strongly disapproved Yoon’s release. He went on to call it a “legal jailbreak,” accusing Prosecutor General Sim Woo-jung of making a decision from political motivation. Cho Kuk argued that the entire situation shows the problem of how both the judiciary and the prosecution are failing to remain neutral. Meanwhile, presidential candidates from the People Power Party (국민의 힘) have been carefully expressing their position of Yoon’s release. Former party leader Han Dong-hoon and Seoul Mayor Oh Se-hoon both expressed that they respect the court’s decision, but their statements seem to be influenced by caution of public sentiment with strong supporters of the party. Currently, these candidates face low approval ratings, showing there is a wide gap between the party sentiment and broad public opinion.

Experts are stating opinions on how Yoon Suk Yul’s impeachment trial and early presidential election will have an impact on the future. Some say there is a possibility that Yoon

Suk Yul will return and participate in early presidential elections.

I personally think that Yoon Suk Yul should never return in the presidential elections. It is against the law to become president again in South Korea but also the martial law situation was too insane. I thought there was gonna be another Coup d'état of December Twelfth and restart the very painful history. Yoon Suk Yul should not get out of this and be punished for what he was trying to do.

Sancheong Wildfire Continues for Tenth Day

by SALLY HUH

Despite intensive firefighting efforts, the wildfire in Sancheong, South Gyeongsang Province, has continued for ten days.

The Sancheong Wildfire Integrated Command Center reported on the ninth day of the fire that 49 helicopters, 223 firefighting vehicles, and 1,686 workforces were positioned to combat the flames. 5:00 AM on the 29th, the fire control rate stood at 96%, rising to 99% by 6:00 PM. The fire's length was reduced from 2.8 kilometers to 400 meters. However, the remaining flames were concentrated in areas near valleys, which are difficult for firefighters to access. Smoke continued to rise from previously extinguished areas because strong winds blew up the flames again. Around 30 residents from Sinchon Village were forced to leave the nearby area. The wildfire's prolonged duration is attributed to recurring flare-ups, where embers reignite due to the wind and spread rapidly, creating new fires.

Dr. Kwon Chun-geun of the National Institute of Forest Science explained, "Jirisan National Park has a thick layer of fallen leaves, ranging from 40 to 100 centimeters deep. Even when water is spread, it only wets the shallow surface. Also, with steep slopes, water runs off before it can seep into the leaves and turn the flames off. A large number of personnel is required to remove hidden embers under the leaves, but the uneven terrain makes it difficult for firefighters to access these areas. The lack of access roads hinders the deployment of firefighting equipment."

The wildfire, which began on the 21st in Sancheong, has led to multiple simultaneous fires across the Yeongnam region, including areas in Uiseong, North Gyeongsang Province, and Ulsan, causing severe damage.

Thanks to the dedicated efforts of firefighters, most of the fires are now under control. However, the impact of the deadly fire is devastating. 30 people have lost their lives, 43 have been injured, and the affected area is estimated at 48,000 hectares. North Gyeongsang Province reported that 3,285 homes had been destroyed.

As firefighting operations continue, authorities are focusing on supporting affected communities and their recovery.

Blake Lively sued film director Justin Bladoni

by ISABELLE JANG

In August 2024, the film <It Ends with US> was released, and the film was a box office success, grossing \$351 million worldwide. But during the film's promotional period, rumors began to spread that Baldoni and Lively were avoiding each other and that there was a feud. News reported that the conflict between the two was due to Baldoni's inappropriate comments and sexual harassment towards Lively, and there were also rumors that Lively's husband Ryan Reynolds's excessive involvement in the film caused the feud. Also, at this time, Lively was criticized for not properly considering the topic of domestic violence and for being overly light-hearted while promoting the movie.

On December 21, Lively sued Baldoni for sexual harassment, claiming that Baldoni's behavior caused her severe mental distress. Baldoni's attorney responded by saying that Lively's claims were false and absurd. Lively also claimed that Lively had a negative impact on the film, including threatening not to promote it.

On January 1, 2025, Baldoni filed a \$250 million lawsuit against the New York Times, claiming that the article was intentionally misleading and only represented Lively's position. She also claimed that her husband, Ryan Reynolds, aggressively criticized her after she asked about her weight before a photo shoot where he had to lift Lively, who suffers from back problems. On January 8, 2025, Baldoni's attorney, Brian Friedman, denied claims that Baldoni's PR team had intentionally slandered Lively, saying Lively's team was actually trying to bury Baldoni socially. And their conflict is still ongoing, with both of them complaining about different grievances.

The reason why the fight between these two became a big issue is because after actress Blake Lively, who actually had strong power in hollywood, made public the unfair treatment she received from the movie director Justin Bladoni, many new actors who received the same unfair treatment gained strength from Blake Lively's confidence and wrote many articles saying that they too received the same unfair treatment. The current public opinion is that some people think Blake Lively is cool for standing up, but some of them say they are just listening to Blake Lively's strong position and ignoring Justin Baldoni without any solid evidence.

Japanese Idol Group M!LK Accused of Plagiarizing Aespa's "Whiplash"

by YUJU HONG

Recently, Japanese boy group M!LK has come under fire for allegedly plagiarizing Aespa's song "Whiplash." The controversy began after the group released their new song, "Iijan (아이ijan)", on March 5, 2025. Fans and music analysts quickly noticed striking similarities between the two songs, particularly in their melody, structure, and overall composition.

Several online communities and social media platforms have since been flooded with side-by-side comparisons of both tracks, with many netizens arguing that "Iijan" bears an uncanny resemblance to "Whiplash." Some have pointed out that not only does the melody sound similar, but the arrangement and instrumental choices also seem to mimic Aespa's song. This has led to widespread accusations that M!LK's song is a blatant case of plagiarism.

SM Entertainment, Aespa's agency, has yet to release an official statement on the matter. Meanwhile, M!LK's management has remained silent, neither acknowledging nor addressing the accusations. However, the controversy continues to spread, with K-pop and J-pop fans debating whether the similarities are coincidental or intentional. This is not the first time a K-pop song has allegedly been copied by artists from other industries, but the debate over plagiarism in the music industry remains a contentious topic. Many fans are now waiting to see whether M!LK or their agency will respond to the growing criticism and whether legal action might be taken.

As of now, the controversy remains unresolved, but it has once again highlighted the ongoing discussions about originality and inspiration in the global music scene. Despite the overwhelming evidence of plagiarism, the situation has taken an unexpected turn. Instead of outright condemning the alleged copying, many people—including fans, influencers, and even idols from other agencies—have started participating in a dance challenge using M!LK's song. The choreography, which some find amusing due to its exaggerated or awkward movements, has gone viral on social media, turning the controversy into a source of entertainment rather than a serious discussion about artistic integrity.

This reaction has raised concerns among those who believe that plagiarism in the music industry should not be treated lightly. While some argue that the challenge is simply harmless fun, others worry that it normalizes copyright infringement, sending the message that stealing creative work can be overlooked if the result is entertaining enough. What makes the situation even more troubling is that the viral trend benefits M!LK, drawing more attention to their song and potentially boosting their popularity. Instead of facing backlash, they are gaining exposure—exposure that arguably should have belonged to Aespa, the rightful creators of the original track's concept and sound.

In the entertainment industry, plagiarism is not just an ethi-

cal issue; it is a legal matter. Yet, when such cases become viral trends, the focus often shifts from accountability to amusement. If the public continues to treat intellectual property theft as nothing more than a meme, it could set a dangerous precedent where originality is undervalued, and artists who work hard to create something unique are not given the credit they deserve.

As the challenge spreads, it remains to be seen whether M!LK or their agency will address the accusations directly. More importantly, the incident raises the question: will the industry take stronger action against plagiarism, or will such controversies continue to be dismissed as just another internet trend?

BOOK REVIEW: *The Eden Paradox* by Barry Kirwan

by GEON GO

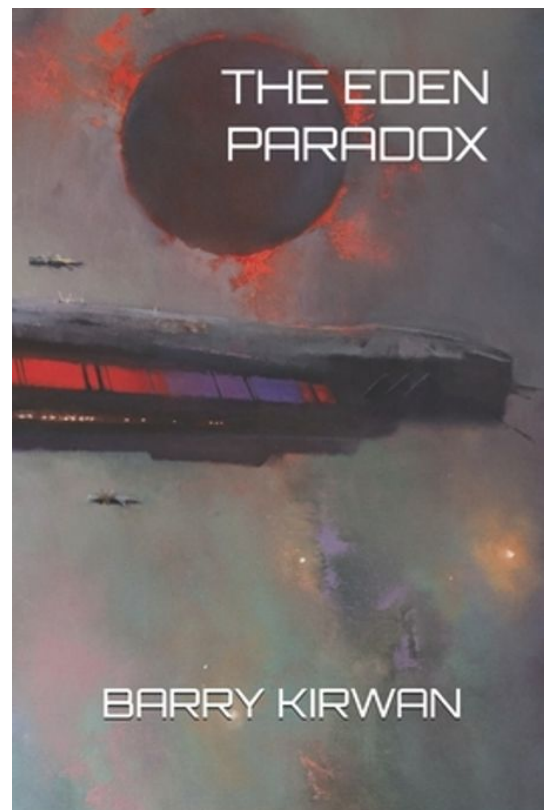


Image Source: 교보문고

In 2063, Human civilization and Earth is in danger of remaining radiation by nuclear war. Increasing temperature and radiation caused infectious disease and brought chaos to humans. Humans considered leaving their homeland and invented a new technology. This technology allowed humans to travel around the galaxy and finally found a new planet that has perfect conditions for them, and they named it 'Eden.' Humans had already sent two spaceships to Eden but all of them failed. This

book is about the third attempt to Eden, with four crews including pilot Zachariah Katain, science officer Pierre Bertrand, communication Katrina Beornwulf, and finally captain Blake. On Earth, Eden Mission Control led by mission director Keiji supports and monitors them. However, life does not go the way you want. The crews aboard the ship experienced terrifying things. They noticed that the data stream was tempered and something started to get wrong. Meanwhile, it wasn't only them who noticed the dangerousness of the mission. A telemetry analyst Micah Sanderson learns that there is someone who interrupts the Eden project. Micah noticed that the data streams were changed by someone and realized that this might be related to the previous failure of the Eden project.
