**Digital Media Fab Lab - Raindrop.io Bookmarks**

**FSU**

[FSU CFA News/Updates/Announcements](https://forms.cfa.fsu.edu)

Submit a post for CFA news

[The League of Graduate Artists - Contact Information](https://fsu.campuslabs.com/engage/organization/LGA)

LGA at FSU

[Florida State University](http://report.fsu.edu)

Report possible violations of Florida State University's Sex Discrimination and Sexual Misconduct Policy, Student Conduct Code, or concerning behavior involving a student.

<https://coolclimate.org>

smart climate action planning tools, transformational programs and policy solutions to the climate crisis

[The City of Tallahassee](https://talgov.com/you/you-learn-solid-recycle.aspx)

The official website of the City of Tallahassee, Florida, a city which remembers its past while focusing on the future – a vibrant capital city: fostering a strong sense of community, cherishing our beautiful, natural environment, and ensuring economic opportunities for all our citizens.

[Electronics Donation and Recycling](https://epa.gov/recycle/electronics-donation-and-recycling)

Page describe how to recycle and where to donate electronic materials

[Green Chemistry](https://epa.gov/greenchemistry)

EPA's Green Chemistry Program; including definition of green chemistry and description of the program's mission and activities

[Green Chemistry](https://stolaf.edu/apps/chemistry/gca)

[Workers' Compensation | Office of Human Resources](https://hr.fsu.edu/sections/attendance-leave/workers-compensation)

The purpose of the Workers' Compensation program is to coordinate and manage claims relating to work-related injuries sustained by University employees. Some aspects of the claims process include: reporting an injury, obtaining medical treatment, and returning the employee to work. The University policies and procedures can also provide guidance, especially in areas, such as time & leave and payroll issues. It is our ultimate goal to return employees to work as quickly and efficiently as possible.

[Florida State University Libraries](https://www.lib.fsu.edu/materials-purchase-suggestion)

Materials Purchase Suggestion

[Asbestos](https://epa.gov/asbestos)

The EPA asbestos web site contains general information on asbestos sources, exposure and health effects, what to do if you suspect asbestos, training, and laws and regulations.

[Asbestos - Overview | Occupational Safety and Health Administration](https://osha.gov/asbestos)

[Asbestos and Your Health | Asbestos | ATSDR](https://www.atsdr.cdc.gov/asbestos)

Learn more about asbestos, its effect on public health and the efforts of ATSDR to respond to this hazard.

[Learn About Asbestosis](https://lung.org/lung-health-diseases/lung-disease-lookup/asbestosis/learn-about-asbestosis)

Inhalation of large amount of asbestos fibers or its dust over a long period of time can produce scarring of lung tissues. This scarring is called asbestosis.

[Air Resource Management | Florida Department of Environmental Protection](https://floridadep.gov/air)

Thanks to a statewide effort, emissions in Florida continue to decrease and are now the lowest they have been on record. The state of Florida has one of the best outdoor air quality monitoring networks in the country, enabling the Florida Department of Environmental Protection to provide accurate and timely data to the states residents and visitors. In-House Graphics-Air

[Quit Smoking NOW | College of Medicine](https://med.fsu.edu/ahec/quit-smoking-now)

[Asbestos%20 awareness%20and%20 management%20 program](https://www.safety.fsu.edu/safety_manual/Asbestos%20Awareness%20and%20Management%20Program.pdf)

[Asbestos Exposure and Cancer Risk Fact Sheet](https://cancer.gov/about-cancer/causes-prevention/risk/substances/asbestos/asbestos-fact-sheet)

A fact sheet about asbestos, asbestos-related diseases, and who to contact for more information.

[4-OP-C-7-I Equal Opportunity and Compliance (EOC) | Policies and Procedures](https://policies.vpfa.fsu.edu/policies-and-procedures/faculty-staff/equal-opportunity-and-compliance-eoc#I1)

Responsible Executive:​ Finance and Administration Approving Official: Vice President for Finance & Administration Effective Date: January 1, 2014 Last Revision Date: Unrevised at this time. 4-OP-C-7-I1 AMERICANS WITH DISABILITIES ACT OVERVIEW The Florida State University (University) is committed to a policy ensuring that individuals with disabilities are not discriminated

[Home](https://fsu.force.com/s/)

[Education | Information Technology Services](https://its.fsu.edu/ispo/training/education)

Information security education focuses on addressing the weakest link in the quest for a secure environment-people. In today's helter-skelter world of online interactions, transactions and distractions, the risk of information security threats is more widespread than ever, and all it takes is one wrong click or one unattended computer to put yourself and the university at risk. Our education empowers users to learn how to use the Internet safely and securely at work, school and home. Use the resources below to learn how to start protecting yourself and Florida State.

[FSU Research Repository | fsu.digital.flvc.org](http://diginole.lib.fsu.edu/repository)

[Florida State University - ROARMAP](http://roarmap.eprints.org/468/)

[Browse by Country - ROARMAP](http://roarmap.eprints.org/view/country/840.html)

[Welcome to ROARMAP - ROARMAP](http://roarmap.eprints.org/)

[Policy FAQ | Open Access @ FSU](http://openaccess.fsu.edu/faq)

[Americans with Disabilities Act: Title II Regulations](https://www.ada.gov/regs2010/titleII_2010/titleII_2010_regulations.pdf)

[Campus access](https://www.lib.fsu.edu/service/campus-access)

[What’s in a name? NameCoach knows | University Announcements](https://announcements.fsu.edu/article/whats-name-namecoach-knows?utm_campaign=2020-10-01&utm_source=employee+announcements&utm_medium=email&utm_content=read+more&utm_term=namecoach)

NameCoach is here to make sure no one mispronounces your name while at FSU. Funded by the Student Technology Fee, NameCoach promotes campus diversity and inclusion by storing easy-to-learn audio name pronunciations in the tools frequently used by students, faculty, and staff.

[YouTube](https://wordpress.com/support/videos/youtube/)

To quickly embed a YouTube video, simply copy the video’s URL from your web browser’s address bar while viewing the video, paste it on a line by itself in your post/page editor and we take care of …

[Motivating diverse learners using culturally relevant responsive education](https://diversity.fsu.edu/sites/g/files/upcbnu2546/files/2020-06/motivating-diverse-learners-using-culturally-relevant-responsive-education.pdf)

[Council on Research and Creativity (CRC) | FSU Office of Research](https://www.research.fsu.edu/research-offices/ord/crc/)

[External Apps Supported in FSU's Canvas - FSU Canvas Support Center](https://support.canvas.fsu.edu/kb/article/772-external-apps-supported-in-fsus-canvas/)

[FSU Web Style Guidelines and Resources](https://webstyle.unicomm.fsu.edu/3.3/)

[Office of Human Resources](https://hr.fsu.edu/?page=training/certificates/certificates_diversity)

[FSU Dropbox](https://dropbox.fsu.edu/)

[Securing Zoom Meetings](https://its.fsu.edu/sites/g/files/upcbnu1011/files/ITS%20News%20Images/Zoom_Infographic.pdf)

[Virtual Private Network (VPN) | Information Technology Services](https://its.fsu.edu/service-catalog/infrastructure/network-services/virtual-private-network-vpn)

UPDATE: The Aruba VIA VPN will be decommissioned in Fall 2020. Find Out More

[DIRECTO Symposium](https://directo.fsu.edu/sites/g/files/upcbnu2771/files/FINAL-DIRECTO%20Symposium%20Program%20fall2020.pdf)

[FLASH - #HurricaneStrong - Home](https://www.flash.org/hurricanestrong/)

[Hurricane](https://www.redcross.org/content/dam/redcross/atg/PDF_s/Preparedness___Disaster_Recovery/Disaster_Preparedness/Hurricane/Hurricane.pdf)

[Hurricane Connection | Public Safety](https://www.talgov.com/publicsafety/emergency-hurricane.aspx)

The official website of the City of Tallahassee, Florida, a city which remembers its past while focusing on the future – a vibrant capital city: fostering a strong sense of community, cherishing our beautiful, natural environment, and ensuring economic opportunities for all our citizens.

[Tallahassee | The Salvation Army Florida](https://salvationarmyflorida.org/tallahassee/)

Tallahassee | Welcome to The Salvation Army of Tallahassee Florida. Here you will find information on our Programs and services.

[Tallahassee Democrat | News, sports, entertainment, classifieds.](https://www.tallahassee.com/)

Breaking news, sports, business, entertainment, State Capitol and Florida State University coverage from the Tallahassee (Florida) Democrat newspaper.

[Emergency Information](https://www.211bigbend.org/emergency)

You can call 2-1-1 for human service information and assistance. We are available 24 hours a day to listen and provide emotional support, crisis counseling, suicide prevention and information. Our human service referral database is comprehensive and up-to-date. You do not have to be in crisis to call, there is no eligibility criteria and our services are free. Skilled hotline counselors treat your call confidentially and you remain anonymous. They help you navigate through the maze of community services in a nonjudgmental manner. As a first point of contact,we serve as the gateway to other ...

[App | Florida Storms](https://floridastorms.org/app/)

Everything you need, nothing you don't. Florida Storms is not just another weather app with a radar. It's a clean and fast interactive map that alerts you to every storm, while at the same time delivers credible real-­time audio and text alerts from the Florida Public Radio Emergency Network. Using…

[Florida Mobile App | FL511](https://fl511.com/App)

[Find The Nearest Gas Stations & Cheapest Prices | Save On Gas](https://www.gasbuddy.com/go/app)

GasBuddy lets you search for Gas Prices by city, state, zip code, with listings for all cities in the USA and Canada. Updated in real-time, with national average price for gasoline, current trends, and mapping tools.

[FEMA Mobile App | FEMA.gov](https://www.fema.gov/about/news-multimedia/app)

[FSU Canvas Emergency Module Resources | Office of Distance Learning](https://odl.fsu.edu/emergency-resources#NationalEmergency)

Use these links to jump to specific resources: FSU Emergency ResourcesLocal Emergency ResourcesState and National Emergency bullhorn icon

[Welcome to Byte to Bites](https://bytetobites.com/)

Linking People With Food

[Leon County Disaster Survival Guide](http://www2.leoncountyfl.gov/haveahurricaneplan/index.html)

[Emergency Management | Public Safety](https://www.talgov.com/publicsafety/emergency.aspx)

The official website of the City of Tallahassee, Florida, a city which remembers its past while focusing on the future – a vibrant capital city: fostering a strong sense of community, cherishing our beautiful, natural environment, and ensuring economic opportunities for all our citizens.

[Leon County Emergency Information Portal](http://www2.leoncountyfl.gov/ei/index.asp)

Welcome to Leon County's Emergency Information Portal. Here you will find useful tips on protecting you and your family in the event natural or man-made disasters occur in Leon County. On the left-hand navigation panel you will find links to resources for preparation, response and recovery information.

[FSU Canvas Emergency Module Resources | Office of Distance Learning](https://odl.fsu.edu/emergency-resources#FSUEmergency)

Use these links to jump to specific resources: FSU Emergency ResourcesLocal Emergency ResourcesState and National Emergency bullhorn icon

[FSU ALERT Emergency Notification & Warning System | Emergency Management](https://emergency.fsu.edu/services/fsu-alert-emergency-notification-warning-system)

[FSU ALERT - SMS Text Messages | Emergency Management](https://emergency.fsu.edu/services/fsu-alert-emergency-notification-warning-system/fsu-alert-sms-text-messages)

As part of Florida State University’s FSU ALERT Emergency Notification System, the University has the ability to send SMS text messages to mobile phones.

[Tornadoes | Ready.gov](https://www.ready.gov/tornadoes)

Tornadoes can destroy buildings, flip cars, and create deadly flying debris. Tornadoes are violently rotating columns of air that extend from a thunderstorm to the ground. Tornadoes can: Happen anytime and anywhere; Bring intense winds, over 200 MPH; and Look like funnels. IF YOU ARE UNDER A TORNADO WARNING, FIND SAFE SHELTER RIGHT AWAY

[Tornado Safety](https://www.weather.gov/safety/tornado)

[Tornadoes](https://www.floridadisaster.org/hazards/tornadoes/)

[Tornado Safety Tips](https://www.redcross.org/get-help/how-to-prepare-for-emergencies/types-of-emergencies/tornado.html#About)

Learn how to prepare, respond and recover from tornadoes. Learn about using tornado shelters and other tornado safety tips.

[Prepareathon playbook tornado final 090414 508](https://www.fema.gov/media-library-data/1409936139924-14f8f593c82cf0ee0384701252b30995/prepareathon_playbook_tornado_final_090414_508.pdf)

[Tornadoes 508](https://www.fema.gov/media-library-data/1522342356541-54bd8d92d0d0d07bca4c1250ebde2b21/Tornadoes_508.pdf)

[Watches, Warnings or Advisories for Leon (FLC073) Florida](https://alerts.weather.gov/cap/wwaatmget.php?x=FLC073&y=1A)

[National Weather Service - Tallahassee, Florida](https://forecast.weather.gov/MapClick.php?lat=30.45649000000003&lon=-84.27647999999994#.X0lDuXlKjic)

NOAA National Weather Service National Weather Service

[EAS Plan](https://fab.org/eas-plan/)

[FSU Canvas Emergency Module Resources | Office of Distance Learning](https://odl.fsu.edu/emergency-resources)

Use these links to jump to specific resources: FSU Emergency ResourcesLocal Emergency ResourcesState and National Emergency bullhorn icon

[Hazards | Response Guides | Emergency Management](https://emergency.fsu.edu/resources/hazards)

Here are some of the most common hazards we face at Florida State University. Click on each topic for more information.

[Current Weather | Emergency Management](https://emergency.fsu.edu/resources/current-weather)

Current Watches, Warnings and Advisories for FSU and the surrounding Leon County Current Radar Local Radar

[Emergency Management](https://emergency.fsu.edu/)

[Service Status | Information Technology Services](https://status.its.fsu.edu/)

[New Ticket - FSU Canvas Support Center](https://support.canvas.fsu.edu/new)

[Stay healthy fsu 2020 order form](https://obs.fsu.edu/sites/default/files/media/doc/StayHealthyFSU-2020-OrderForm.pdf)

[Fall 2020 Plan](https://stayhealthy.fsu.edu/resources)

To help you promote healthy practices in your campus spaces, the university has created a robust assortment of signs available FREE for order or download. This includes important public health messages such as wearing masks, social distancing, and handwashing. Email UC-Creative-Print@fsu.edu to request any Stay Healthy FSU materials not included below.

[COVID-19 Workplace Guidance | COVID-19 Resources](https://coronavirus.hr.fsu.edu/covid-19-workplace-guidance)

It is anticipated that all departments and offices will have an on-campus presence beginning August 17. Departments should ensure on-campus staffing levels meet the needs of the campus community. Departments should coordinate with their faculty and staff to identify who must be physically present on campus to perform their duties and determine work schedules. Although we are moving away from percentages at this time, the goal continues to be a lower density of employees on campus balanced with the need to engage and support our students and perform critical business functions.

[COVID-19: Considerations for Wearing Masks | CDC](https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cloth-face-cover-guidance.html)

Coronavirus disease 2019 (COVID-19) is a virus (more specifically, a coronavirus) identified as the cause of an outbreak of respiratory illness first detected in Wuhan, China.

[Coronavirus Disease 2019 (COVID-19)](https://www.cdc.gov/coronavirus/2019-ncov/index.html)

Coronavirus disease 2019 (COVID-19) is a virus (more specifically, a coronavirus) identified as the cause of an outbreak of respiratory illness first detected in Wuhan, China.

[Coronavirus Disease (COVID-19) - events as they happen](https://www.who.int/emergencies/diseases/novel-coronavirus-2019/events-as-they-happen)

Latest updates on COVID-19

[Safety and Health Topics | COVID-19 | Occupational Safety and Health Administration](https://www.osha.gov/SLTC/covid-19/index.html)

Safety and Health Topics | COVID-19

[FSU Returning to Work Checklist](https://coronavirus.hr.fsu.edu/sites/g/files/upcbnu2786/files/FSU%20HR%20RTC%20Checklist.pdf)

[COVID-19 Resources](https://coronavirus.hr.fsu.edu/)

[Employee Assistance Program](https://eap.fsu.edu/)

[Conflict Resolution Strategies during COVID-19 - Florida State University News](https://news.fsu.edu/announcements/covid-19/2020/04/21/conflict-resolution-strategies-during-covid-19/)

This message to all faculty and staff has been approved by Renisha Gibbs, Associate Vice President for Human Resources and Finance & Administration Chief of Staff. This unprecedented period of social distancing and stay-at-home orders gives couples and families wonderful opportunities to reconnect. While time together is a gift, it can also be a catalyst […]

[Mental Health and Coping During COVID-19 | CDC](https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/managing-stress-anxiety.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fprepare%2Fmanaging-stress-anxiety.html)

Coronavirus disease 2019 (COVID-19) is a virus (more specifically, a coronavirus) identified as the cause of an outbreak of respiratory illness first detected in Wuhan, China.

[Clinical Questions about COVID-19: Questions and Answers | CDC](https://www.cdc.gov/coronavirus/2019-ncov/hcp/faq.html)

Coronavirus disease 2019 (COVID-19) is a virus (more specifically, a coronavirus) identified as the cause of an outbreak of respiratory illness first detected in Wuhan, China.

[Faculty%20and%20 staff%20 campus%20 repopulation%20 guidance](https://coronavirus.hr.fsu.edu/sites/g/files/upcbnu2786/files/Faculty%20and%20Staff%20Campus%20Repopulation%20Guidance.pdf)

[List N: Disinfectants for Use Against SARS-CoV-2 (COVID-19) | US EPA](https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2-covid-19)

Search EPA’s list of registered disinfectants for use against SARS-CoV-2, the virus that causes the novel coronavirus (COVID-19).

[Covid resource quick reference guide](https://www.research.fsu.edu/media/5881/covid-resource-quick-reference-guide.pdf)

[Software and Equipment Search | Florida State University Libraries](https://www.lib.fsu.edu/software-and-equipment-search)

[Facility for Arts Research (FAR) | Home](https://artsresearch.fsu.edu/)

Facility for Arts Research at FSU

[Safety at FSU](https://www.safety.fsu.edu/)

[Hazardous Waste Pick-up](https://www.safety.fsu.edu/form/hazwastepickup.php)

[Shopping Guide | Procurement Services](https://procurement.fsu.edu/how-buy/shopping-guide)

Supplier Attribute Indicators Diversity Supplier: Small Business / Minority or Women Owned Business Florida Based Supplier: Principal Business is in State of Florida SpearMart Supplier: Participating supplier in FSU's eProcurement System Sustainability Supplier: Offers Green, Recycling, Energy Efficient, or Sustainable Products/Services Advertising Services Artistic Services

[FileMaker](https://filemaker.cfa.fsu.edu/fmi/webd)

[Grainger Industrial Supply - MRO Products, Equipment & Tools](https://www.grainger.com/?gclid=EAIaIQobChMInPmc_oLd5AIVmJOzCh2fmg2cEAAYASAAEgKiNvD_BwE&s_kwcid=AL!2966!3!192095876383!e!!g!!grainger&ef_id=EAIaIQobChMInPmc_oLd5AIVmJOzCh2fmg2cEAAYASAAEgKiNvD_BwE:G:s&s_kwcid=AL!2966!3!192095876383!e!!g!!grainger&cm_mmc=PPC:+Google+PPC)

Grainger is your premier industrial supplies and equipment provider with over 1.6 million products to keep you up and running. Use Grainger.com for fast and easy ordering with next-day delivery available. Rely on our product experts for 24/7 support.

[FSU College of Fine Arts :: Support Ticket System](https://support.cfa.fsu.edu/)

customer support platform

**Art Galleries**

[En](https://mucciaccia.com/en)

**FSU Digital Media**

[Interactive Art I: Creative Coding](https://fsudigitalmedia.github.io)

Projects created by FSU students in the Spring 2021 section of ART 4652C

[FSU Digital Media](https://github.com/FSUdigitalmedia)

FSU Digital Media has 83 repositories available. Follow their code on GitHub.

**FSU Open Scholars**

[Home | re3data.org](https://re3data.org)

[FAIR Principles](https://go-fair.org/fair-principles)

In 2016, the ‘FAIR Guiding Principles for scientific data management and stewardship’ were published in Scientific Data. The authors intended to provide guidelines to improve the Findability, Accessibility, Interoperability, and Reuse of digital assets. The principles emphasise machine-actionability (i.e., the capacity of… Continue reading →

[OSF](https://osf.io)

[Standards](https://rd-alliance.github.io/metadata-directory/standards)

RDA | Metadata Directory

**Conferences & Events**

[Digital Built Week Europe 2021 - DBEI](https://www.dbei.org/event/dbw-europe-2021/)

ABOUT DIGITAL BUILT WEEK EUROPE Digital Built Week Europe is a series of events brought to you annually by the Digital Built Environment Institute. It is the flagship event designed to cater to the needs of those who design, build, operate and maintain our built environment. The week includes the sub-events of BILT Academy, Hackathon, […]

[Financing the circular economy](https://www.ellenmacarthurfoundation.org/our-work/activities/finance?utm_campaign=He_092020&utm_medium=email&utm_source=newsletter_mailchimp&utm_content=finance-paper&utm_source=Higher+Education+Academic+List&utm_campaign=a0155dabf6-from_linear_to_circular_he_feb_2020_COPY_01&utm_medium=email&utm_term=0_b248201008-a0155dabf6-87913919&mc_cid=a0155dabf6&mc_eid=9338a09804)

Our report, Financing the circular economy - Capturing the opportunity, brings new analysis that highlights the rapid growth in circular economy financing and investment across asset classes and sectors.

[Summit 2020](https://www.youtube.com/playlist?list=PLXT_ozykGValJYqnmWCK3eg92NZAxc_L-&utm_source=Higher+Education+Academic+List&utm_campaign=a0155dabf6-from_linear_to_circular_he_feb_2020_COPY_01&utm_medium=email&utm_term=0_b248201008-a0155dabf6-87913919&mc_cid=a0155dabf6&mc_eid=9338a09804)

[PRSE 2020 - Home Page](https://www.prseventeurope.com/prse2020/en/page/home)

[Global Landingpage | re:publica](https://re-publica.com/en)

[DSGN+Skills](https://www.dsgnskills.com/)

[The 2020 Humans to Mars Summit](https://www.eventbrite.com/e/the-2020-humans-to-mars-summit-registration-74093093437)

The Humans To Mars Summit embodies the core mission of Explore Mars, Inc. to advance humanity to the Martian surface by the 2030s.

[3D Bioprinting | 3dheals | United States](https://www.3dheals2020.com/)

3DHEALS2020 will be one of the largest conferences featuring thought leaders, cutting-edge innovations, and fundraising platforms for startups in the space of healthcare 3D printing, bioprinting, other related technologies.

[3DEXPERIENCE World 2020 - Dassault Systèmes®](https://3dexperienceworld.com/)

Join us at 3DEXPERIENCE World 2020 in Nashville, TN, the must-attend event that brings together the entire 3DEXPERIENCE community for three full days.

[SIGGRAPH 2019: Home](https://s2019.siggraph.org/)

SIGGRAPH 2019 will be held 28 July-1 August, 2019, at the Los Angeles Convention Center. Experience a five-day immersion into the latest innovations in computer graphics, animation, VR, Gaming, and Emerging Technologies.

[Home](https://westeconline.com/)

WESTEC, a Manufacturing Technology Series event, is the West Coast's top manufacturing tradeshow. Buy and sell manufacturing machinery and services here.

[TCT 3Sixty | The Event For 3D Printing & Additive Intelligence](https://www.tct3sixty.com/event/en/page/home)

The new approach is one focused on developing an understanding across the industry of the potential of additive manufacturing and 3D printing technology.

[DigiFab Con](https://digifabcon.org/)

[Conferences](https://fablearn.org/conferences/)

[FABx Event](https://fabevent.org/)

[SEMA SHOW 2020 | semashow.com](https://www.semashow.com/)

[Home](https://www.fabtechexpo.com/)

Join 48,000 metal forming, fabricating, welding & finishing professionals and 1,700 exhibiting companies Nov. 18-20, 2020 at the Las Vegas Convention Center

[Formnext – International exhibition and conference on the next generation of manufacturing technologies](https://formnext.mesago.com/frankfurt/en.html)

Formnext is the leading exhibition and conference dedicated to additive manufacturing and all of its upstream and downstream processes.

**Clean Paints**

[BioShield, Healthy Living Paints](http://www.bioshieldpaint.com/index.php?main_page=tip&cPath=16&tID=43)

BioShield : - Color Pigments for Tinting Floor & Furniture Finishes Gentle Sheen & Floor Care Wall Finishes & Trim Enamel Interior/Exterior Wood Stains Catalog & Color Charts Natural Oils & Citrus Thinner Solvent-Free Wall Paint Organic Household Cleaners ApisColor Beehive Paint BioShield Clay Paints About Clay Paint ecopaint, healthy living

[Paints](https://www.unearthedpaints.com/collections/paints)

All Unearthed Paints are natural, eco-friendly, and 100% VOC-free. We currently offer three types of natural, environmentally friendly paints: Clay Paint, Textured Clay Paint, and Vega Paint. Our paints are made with the finest ingredients, including reclaimed Italian marble, white porcelain clay, and earth and minera

**Clean Papers**

[Eco-Friendly Wallpapers That Make a Décor Splash](https://recyclenation.com/2011/05/eco-friendly-wallpapers-recycle-decor-splash/)

Toxins and chemicals are out and all-natural materials are in — make way for wallpaper's eco-makeover.

**Clean Fabrics**

[drip by drip](https://www.dripbydrip.org/)

[Waterplaybook](https://waterplaybook.net/)

What does your fashion consumption got to do with global water crises? How much water is hanging in your own wardrobe? Find out now.

[TEXBOOST](https://www.tintextextiles.com/pf/texboost/)

Less Commodities more Specialities is the motto behind the mobilising TEXBOOST project, a cornerstone of the Textile Cluster: Technology and Fashion. The pillar where Tintex develops work within the project, focuses on the development of a textile that will be an alternative to the use of animal leather. This product focuses on the use of vegetal waste and by products, combined with the use of biopolymers aiming to minimize its environmental impact.

**Bio Materials**

[Circular Economy | Alysia Garmulewicz Ph.D.](https://garmulewicz.com)

Circular economy Alysia Garmulewicz research

[The CHEMARTS Cookbook](https://chemarts.aalto.fi/index.php/the_chemarts_cookbook)

[Suppliers' Database - CHINAPLAS Suppliers' Database](https://www.chinaplasonline.com/SuppliersDB20/allexhibitors/eng/all_suppliers?Keyword=Bioplastics&SearchType=all)

Welcome to CHINAPLAS Exhibitor List! The unique database consists of detailed information of over 3,900 exhibitors. You can also search the information by keywords, product categories and applications; or visit the theme zone pages of Machinery & Equipment, Chemicals & Raw Materials and Chinese Export to explore the potential supplier directly.

[Bioplastics successfully meet all EU safety standards](https://www.european-bioplastics.org/bioplastics-successfully-meet-all-eu-safety-standards/)

Berlin, 29 October 2020 - Products made from bio-based plastics must undergo the same testing procedures as conventional plastic products to access the market of the European Union (EU). Thereby a health risk for consumers is excluded. Plastics intended to be certified as biodegradable or compostable must undergo additional tests. "Products made of

[TRUCIRCLE™ - SABIC - datasheet](https://omnexus.specialchem.com/product/t-sabic-trucircle?src=omnews&utm_source=news&utm_medium=industry&utm_campaign=news201028)

TRUCIRCLE™ by SABIC is a 100% recyclable linear low density polyethylene (LLDPE). It is an initiative for encompassing circular materials and technologies to de

[Grow your clothing? Grass dress, algae shoes, kombucha fabric](https://m.youtube.com/watch?v=VPUX7nRlYAU)

Clothes rely on supply chains & commoditized garments. Designers at Barcelona's Fabricademy use biomaterials to "grow" & "print" the wardrobe of the future, ...

[Fungus May Be Fall’s Hottest Fashion Trend](https://www.nytimes.com/2020/10/02/fashion/mylo-mushroom-leather-adidas-stella-mccartney.html)

A surprising group of fashion rivals including Stella McCartney and Lululemon are joining forces to back Mylo, a new mushroom leather.

[New Algae Oil-based Degradable PU Foam for Completely Recyclable Flip-flops](https://omnexus.specialchem.com/news/industry-news/new-algae-pu-foam-flipflops-000222467?lr=iom20081964&li=200310283&utm_source=NL&utm_medium=EML&utm_campaign=iom20081964&m_i=%2B9RXlyrOs3u%2B7pxjVYCysuWvigsSirY8ID%2BBhE32nksj5CcNosUSMn58LjrGmT_p3IVhcw7ain%2Bhya3gGGnKegIvbywE%2BH&status=valid)

Scientists at the University of California San Diego have formulated polyurethane foams, made from algae oil, to meet commercial specifications for midsole shoes and the foot-bed of flip-flops.

[Mycelium | fungus filament](https://www.britannica.com/science/mycelium)

Mycelium, the mass of branched, tubular filaments (hyphae) of fungi. The mycelium makes up the thallus, or undifferentiated body, of a typical fungus. It may be microscopic in size or developed into visible structures, such as brackets, mushrooms, puffballs, rhizomorphs (long strands of hyphae

[3D Printed Mycelium — C. DOLS](https://www.ckdols.com/3d-printed-mycelium)

[3D Printing With Fungus - Artist Creates Chairs and Other Objects Out of Mushrooms - 3DPrint.com | The Voice of 3D Printing / Additive Manufacturing](https://3dprint.com/7279/3d-print-fungus-mycelium/)

As we have mentioned before, one of the few downsides to 3D printing is the plastic waste created by all the prints. We have seen many bioplastics come to market,...

[3D-manufacturing with biomaterials](https://biofabforum.org/t/3d-manufacturing-with-biomaterials/297)

Hi all, I came across this 3D-manufacturing technique, which uses a gel as a suspension material (see video below).It offers a few advantages over regular 3D-printing techniques. Inspired, I started to wonder if this can be applied into the biofabrication domain. So, due to my limited knowledge of biology, my question is: Are there any biomaterials that can cure/harden in the absence of air/oxygen? By melting, microbial processes, growth processes, symbiosis… Example: molten (bees)wax coul...

[Robotic fabrication (KUKA Robot) of mycelium composites](https://biofabforum.org/t/robotic-fabrication-kuka-robot-of-mycelium-composites/312)

Hey! I am an architecture student, currently doing research at VUB on the robotic fabrication (using a KUKA Robot) of functionally graded biomaterials. Remarks or hints are always welcome, since I don’t have an extensive knowledge of Biology. PROTOCOL PREPARATION OF THE FIBRE A desired amount of gelling agent is mixed with 100 ml distilled water. The mass of the gel to fill a jar is measured. The mass of the fibre to fill a jar is measured. A humidity of 80% (more or less) is needed for the ...

[Regenerative Biomaterials & Therapeutics Group](https://regenerativebiomaterials.com/)

[Microbial Home Probe](http://materiability.com/portfolio/microbial-home/)

[Write](http://materiability.com/write/)

[Projects](http://materiability.com/projects/)

[Bioplastic Robotic Materialisation](http://materiability.com/portfolio/bioplastic-robotic-materialisation/)

[Mycokarst](http://materiability.com/portfolio/mycokarst/)

[SEAmpathy](http://materiability.com/portfolio/seampathy/)

[The Green Charcoal](http://materiability.com/portfolio/the-green-charcoal/)

[Green-Plastics.net](https://green-plastics.net/)

[Resource Library](https://aplasticplanet.com/resource-library/)

[Packaging Innovations 2019: interview with Myriam Moeyersons](http://biomebioplastics.com/packaging-innovations-2019-interview-myriam-moeyersons/)

Biome Bioplastics was selected to showcase the possibilities of biomaterials at Packaging Innovations' PlasticFreeLandTM.

[Company - Biome Bioplastics](http://biomebioplastics.com/company/)

Intelligent plastics, naturally

[Bioplastics Guide](http://www.bioplastics.guide/ref/bioplastics/biodegradable-bioplastics/)

The Bioplastics Guide provides, through its site, blog and other resources strategic, market-focused guidance for prospective investors in bioplastics. Our consulting division extends this strategic guidance further by providing strategic and market analyses of the bioplastics industry, customised for their aspirations and context.

[From Compost to Composites: An Eco-Friendly Way to Improve Rubber - Research & Development World](https://www.rdworldonline.com/from-compost-to-composites-an-eco-friendly-way-to-improve-rubber/)

[Materiom : Search](http://www.materiom.org/search)

[Materiom : Agar bioplastic (heated) Ag02](https://materiom.org/recipe/41)

[Materiom : Sodium Bicarbonate | Cornstarch SB01](https://materiom.org/recipe/47)

[REDI170581](https://www.centi.pt/en/projects/other/redi170581-)

Perceived value of recycled raw materials, applied to a new generation of materials - project for the economy and social acceptance

[Plastic-like packaging material made from completely renewable raw materials by VTT](https://www.vttresearch.com/en/news-and-ideas/plastic-packaging-material-made-completely-renewable-raw-materials-vtt)

Consumers and companies alike are interested in environmentally friendly and recyclable packaging made from renewable materials, such as wood. Using cellulose and fatty acids, two completely renewable substances, VTT has developed a material that can be used in food packaging similarly to plastic due to its thermoformable properties. The development work is currently underway at VTT in cooperation with Arla Foods, Paulig and Wipak.

[Our Recyclable Polymer Materials](https://www.ubqmaterials.com/materials/)

UBQ™ waste to plastic material is thermoplastic and climate-positive. It is compatible as a raw material and is safe for people and the environment. Enter for more info

**Bio Adhesives**

[How to Make Glue {11 Homemade Recipes}](https://snappyliving.com/11-recipes-to-make-your-own-glue/)

Lean how to make glue, and you can make all sorts of homemade glue – even specialty crafting glues – from these recipes. It’s fun, interesting and educational.

[Onyx Green 3 Pk Glue Sicks](https://www.google.com/shopping/product/114315875503476928?q=Biodegradable+Adhesives&client=safari&rls=en&biw=1801&bih=825&prds=epd:8811419781885393425,paur:ClkAsKraX1iFp_2lCUxv3NlKCj7e9xVsvn0RxydJz60Dpycp52PRZjX-X8KjFW-oY29aZ02NwE1rsDt8WgL31AjS-i4VtUU1zlppWza9NE05VcZyYPivrNhvNhIZAFPVH70fuZN9M7r-jB7RnOsw3kkbQinBaQ,prmr:1&sa=X&ved=0ahUKEwjc5MbU9_bmAhUkm-AKHb1-BJIQ8wIIxwI)

[Bioadhesives](https://link.springer.com/referenceworkentry/10.1007/978-3-319-42087-5_53-2)

Bioadhesion is a versatile tool used by many organisms for a variety of purposes. It has roles to play in construction, predation, defense, and attachment and covers different concepts based on...

[Ecological Assortment](https://www.tesa.com/en/consumer/ecological-assortment)

With our environmentally friendly adhesives, we prove that powerful adhesive performance and sustainable production are not mutually exclusive. For our ecoLogo® products, we use recycled materials, …

[Bio tak s100 fda](http://biotak.com/wp/wp-content/uploads/2014/10/BioTAK-S100_FDA.pdf)

[AFM SafeCoat, Almighty Adhesive - Non-Toxic, Multi-Purpose, Solvent-Free Construction Adhesive](https://www.greenbuildingsupply.com/All-Products/Paints-Coatings-Caulks-Sealants-Adhesives/AFM-Safecoat-Almighty-Adhesive-10-1-oz?gclid=EAIaIQobChMI_bTL1Pf25gIVieDICh1MNAXJEAkYASABEgLBNPD_BwE)

AFM SafeCoat, Almighty Adhesive, non-toxic, VOC-compliant construction adhesive, eco-alternative to Liquid Nails.

[compostable adhesive - BioTAK® - biodegradable adhesive](http://biotak.com)

BioTAK®. The completely biodegradable adhesive. BioTAK® specialises in self-adhesive solutions. For all challenges we are faced to, we only look for sustainable solutions. Our focus is on using renewable, replenishable biodegradable materials. At BioTAK® we create highly innovative products for standard and customised formulations. Our range of biodegradable and compostable adhesives has been developed to compliment compostable packaging and products. BioTAK® is a worldwide registered trademark of Sustainable Adhesive Products Ltd.

[5 Types of Sustainable Adhesives You Should Know About](https://www.bostik-industrial.com/5-types-of-sustainable-adhesives-to-know-about/)

As environmentally friendly solutions are predicted to show greater growth in upcoming years, learn about five sustainable adhesives gaining popularity among manufacturers.

**Bio Inks**

[EcoBioInks4SmartTextiles](https://www.centi.pt/en/projects/academic-scientific/ecobioinks4smarttextiles)

The project aims to develop eco-sustainable and photo-changeable fluorescent bio-inks based on reversibly switchable fluorescent proteins.

**Biodegradable Electronics**

[Scientists Develop Biodegradable Computer Chips Made From Wood](https://www.sciencealert.com/scientists-develop-biodegradable-computer-chips-made-from-wood)

Imagine a future filled with biodegradable electronics.

[Scientists Have Made Soft, Light Batteries From Wood Pulp](https://www.sciencealert.com/scientists-have-made-soft-light-batteries-from-wood-pulp)

They could be used to line the bodies of electric cars.

[Water-soluble silicon leads to dissolvable electronics](https://phys.org/news/2015-01-water-soluble-silicon-dissolvable-electronics.html)

(Phys.org)—Researchers working in a materials science lab are literally watching their work disappear before their eyes—but intentionally so. They're developing water-soluble integrated circuits that dissolve in water or biofluids in months, weeks, or even a few days. This technology, called transient electronics, could have applications for biomedical implants, zero-waste sensors, and many other semiconductor devices.

[A Biodegradable Computer Chip That Performs Surprisingly Well](https://www.technologyreview.com/s/539206/a-biodegradable-computer-chip-that-performs-surprisingly-well/)

Researchers show that devices based on a material derived from wood work as well as the communications chip in your smartphone.

[These New Computer Chips Are Made From Wood](https://www.smithsonianmag.com/innovation/these-new-computer-chips-are-made-from-wood-180955471/?no-ist)

A new technique replaces the bulk of smartphone-friendly microchips with a transparent, flexible material made from wood pulp

**Waste to Reuse**

[Study Unveils New Technology to Turn Waste PET into Battery Components](https://omnexus.specialchem.com/news/industry-news/technology-waste-pet-battery-000221523?lr=som2020aug&li=200310283&utm_source=NL&utm_medium=EML&utm_campaign=som2020aug&m_i=xugHr_RMfP4_RnARCYB0YD4NdFa7VLXdEMw9qeR7HUqp__LOiBPOo06E4kzaBraE62YBzouNQgRNl%2BgyODS10fPgvGX6xj&status=valid)

**Materials for Laser Processes**

[TroCraft Eco wood sheets for laser engraving and cutting](https://www.engraving-supplies.com/engravable-wood/trocraft-eco.html)

Default Description

[Sustainability](http://www.applasticsinc.com/sustainability.html)

Environmental Protection & Sustainability Policy - 100% Recycled, Reprocessed or Upcycled Plastics

[Materials](https://glowforge.com/materials)

Meet Glowforge, the 3D laser printer that makes magical things at the push of a button.

[Laser cutting materials, laser engraving materials | Cut Laser Cut](http://www.cutlasercut.com/laser-cutting-materials-laser-engraving-materials)

[We Engrave Anything Tallahassee Laser Engraving Pros](https://lazerengravingpros.com/tallahassee-laser-engraver/)

[Wood Laser Cutting Service. Custom Cut Wood & Next Day Delivery](https://www.ponoko.com/laser-cutting/wood)

Laser cutting & engraving wood products for makers & businesses ✅ Your designs custom made by our designers & robots, fast. Make your first product FREE

[Home](https://www.engraving-supplies.com/)

Default Description

[Plastic Sheets, Rod, Tube & Fabrication Services Since 1914 | ePlastics®](https://www.eplastics.com/)

ePlastics is a distributor of plastic sheets, rod, tubing and fabrication trusted for over 100 years. We carry a large stock of plexiglass, acrylic, polycarbonate, fiberglass, hdpe and other speciality plastics. Based in San Diego we ship worldwide.

[Plastic Sheets & Rolls : TAP Plastics](https://www.tapplastics.com/product/plastics/plastic_sheets_rolls)

Find inspiration for all the DIY projects to come by exploring our selection of plastic sheet roll and polycarbonate film in various colors and sizes. Shop today!

[Plexiglas® acrylic sheet and acrylic resin products - Plexiglas.com](https://www.plexiglas.com/)

Altuglas International is a global leader in (PMMA) polymethylmethacrylate technology.

[Recycled pla filament](https://www.re-filament.com/shop/recycled-pla-filament.html)

[Same Stuff Professional Plastic Welder Refill, 2 fl. oz.](https://www.micromark.com/Same-Stuff-Professional-Plastic-Welder-Refill-2-fl-oz-_2)

SAME STUFF...Liquid Plastic Welder Formulated for the Plastic Modeler Exactly the same as ProWeld and Tenax-7R, except for the name! Solvent-type cement uses capillary action to weld styrene, acrylic,

[POM (Polyoxymethylene) Material for Laser Cutting](https://www.sculpteo.com/en/lasercutting/laser-cutting-materials/pom-material/)

All the information about our POM for laser cutting. Laser cut or 3D print in 3 clicks, receive your part in a few days!

[USCutter](https://www.uscutter.com/)

Wholesale Vinyl Cutters and Supplies. Buying Guide, Online Sales and Support. Largest variety of Vinyl Material, Laminators, Banners, Vehicle Wrap, Heat Transfer and more.

[Home - Custom Plastics, Inc.](https://www.customplasticsinc.com/)

Your one-stop shop for plastic injection molding, complex plastic extrusion, engineering and design, and in-line manufacturing services.

[Inventables](https://www.inventables.com/)

Inventables: the hardware store for designers. We help designers buy the products they need.

[Midland Plastics Customized Plastic Solutions | Midland Plastics](https://www.midlandplastics.com/)

Midland Plastics offers plastic materials in sheet, rod, tube form, and custom machining, manufacturing, thermoforming, custom extrusion solutions.

[Acrylic Products Online Shop & Knowledge Base | by ACRYLITE®](https://www.acrylite.co/)

ACRYLITE® is a Premium Acrylic Products Brand. Learn More Now & Shop online ✓ No Minimum Order Volume ✓ Cut-To-Size For Your Projects ✓ Technical Support.

[Arlon Graphics - Cast and Calendered Vinyl Films](https://www.arlon.com/na_en/)

Arlon creates innovative materials for visual expression- pressure sensitive cast and calendered vinyl for a variety of applications.

**Materials for 3D Printing**

[Home](https://polymaker.com)

[Polylactic Acid or Polylactide, PLA Plastic, Lactic Acid Polymer Guide](https://omnexus.specialchem.com/selection-guide/polylactide-pla-bioplastic?src=omarticle)

[Laser Inversion Enables Multi-Materials 3D Printing](https://www.engineering.columbia.edu/press-releases/lipson-whitehead-3d-printing)

Researchers invent new technique that could transform additive manufacturing processes, potentially enabling the printing of circuit boards, electromechanical components, and perhaps even robots.

[Pioneer in development and manufacturing high performance materials and additives for 3D printing - Evonik Industries AG](https://3d-printing.evonik.com/product/additive-manufacturing/en/)

Evonik is a world leader in development and manufacturing customized polymer materials and additives for various 3D printing technologies. For more than 20 years, we've been setting quality standards for innovative materials in additive manufacturing.

[DWS Systems | Materials](https://www.dwssystems.com/materiali-en)

A wide range of resins patented by DWS. Materials for lost wax microfusion, nanoceramic materials developed for the creation of rubber molds and many more.

[E3D-v6 Assembly - E3D-Online](https://wiki.e3d-online.com/E3D-v6_Assembly)

[3D Printing Materials | MakerBot](https://www.makerbot.com/stories/design/3d-printing-materials/)

So, what is 3D printing material? We've got the answer to this question and more in our latest blog post. Read now!

[Proto-pasta Brand 3D Printer Filament - Made in USA by Protoplant Inc](https://www.proto-pasta.com/)

We aim to deliver the highest quality, most creative material & application solutions with a close-to-custom & close-to-customer approach. Our passion for machines, design & making drives experimentation at the intersection of craft & technology wherein we seek to cultivate positive social & environmental interaction.

**Plotting/Vinyl Cutting**

[d.i.d. - Scalable Pen Plotter by ufficioprogettiperduti](https://www.thingiverse.com/thing%3A3789969)

d.i.d. - deep ink diver Our Github - updated files and firmware d.i.d. is a 3d printed, open-source, scalable, pen plotter. The aim of the project is to make a cheap, easy to build, printer made specifically for vector-based graphics. From a precise pen made for technical drawing, to big markers used for graffiti; the way printing is perceived on paper is not bound anymore to the restrictions of a cartridge. The material on which it is printed now also has a role by himself: the roughness of the paper is not hidden by the inkjet but emphasized by the pen that physically touches the paper an...

[Oracal 631 Matte Vinyl Rolls 6 Ft. to 150 Ft.](https://www.swingdesign.com/collections/oracal-631-matte-vinyl-rolls)

With our collection of Oracal 631 matte vinyl rolls, find the right color at a great value. These options are long lasting and easy to work with on all cutters.

[Oracal 631 Vinyl for Interior Decoration, Adhesive Removable](https://www.uscutter.com/Oracal-631?gclid=EAIaIQobChMIk6bnm5LD6QIVY-W1Ch0c_gQ5EAMYAyAAEgKPTfD_BwE)

[Avery 500 Promo Calendered Opaque (4 year) for Vinyl Cutters and Signmaking from Beacon Graphic Systems](https://beacongraphics.com/supplies/avery/a4-series-opaque.html)

Vinyl Graphic Films for Vinyl Cutters from Beacon Graphic Systems

**Material Safety Standards**

[Section: 8 Plastics - Ordering Options](https://www.astm.org/BOOKSTORE/BOS/section8.htm)

[Bio pbs brochure](https://www.m-chemical.co.jp/en/products/departments/mcc/sustainable/product/__icsFiles/afieldfile/2016/05/20/BioPBS_brochure.pdf)

[A Roadmap to 2025 - The UK Plastics Pact | WRAP UK](https://www.wrap.org.uk/content/the-uk-plastics-pact-roadmap-2025)

[Proposition 65](https://www.p65warnings.ca.gov/)

[Hazard Communication Standard: Safety Data Sheets - OSHA 3514 | Occupational Safety and Health Administration](https://www.osha.gov/Publications/OSHA3514.html)

Hazard Communication Standard: Safety Data Sheets - OSHA 3514

**3D Scanning**

[Ten24](https://ten24.info)

3D scanning / Photogrammetry / Characters

[Sølve Sundsbø — Archive](http://solvesundsbo.com/work)

The archive of Sølve Sundsbø

[Form Capture - 3D Scanning, Digitisation & Fabrication for the Arts](https://formcapture.com)

Form Capture applies innovative 3D scanning, digital and fabrication techniques to organic materials to beautifully render the moment where nature meets technology.

[Rigsters](https://rigsters.com/about-us)

3D Scanning - We are a small group of passionate designers and developers who started this company in 2015 here in Copenhagen Denmark, with a great passion towards technology and innovation

[NOYO Blue Whale Skeleton - 3D model by Idaho Virtualization Laboratory (@ivlpaleontology) [2eccbcc]](https://skfb.ly/6VYWA)

**Open Source**

[Home](https://myminifactory.com/scantheworld)

STL files for 3D designers and makers, share free and paid guaranteed 3D printable models. Download high-quality 3D print files for tabletop gaming, toys, gadgets and more for your 3D printers.

[Matalog / Global Material Library](https://matalog.org)

Matalog has the ambition of crowdsourcing a global repository of material information to create an open access material library that houses the profiles of materials used by architects, builders, designers, makers, artists and artisans around the world. Developing a common material database, we hope to standardise the way materials are profiled, bringing together disparate and fragmented information into one location. We believe this will help anyone working with materials to make informed decisions easier and to create collections to share, organise and communicate with others.

[GitHub](https://github.com/topics/3d-printing)

GitHub is where people build software. More than 65 million people use GitHub to discover, fork, and contribute to over 200 million projects.

[n8n.cloud | Powerful workflow automation tool](https://n8n.cloud)

Deploy smart workflows that power your products, services, and business processes. Get peace of mind with a managed solution.

[BSD Zero Clause License](https://choosealicense.com/licenses/0bsd)

The BSD Zero Clause license goes further than the BSD 2-Clause license to allow you unlimited freedom with the software without requirements to include the copyright notice, license text, or disclaimer in either source or binary forms.

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[M10](https://www.copyright.gov/circs/m10.pdf)

[Creative Commons — Attribution-ShareAlike 4.0 International — CC BY-SA 4.0](https://creativecommons.org/licenses/by-sa/4.0/)

[Creative Commons — Attribution-ShareAlike 4.0 International — CC BY-SA 4.0](https://creativecommons.org/licenses/by-sa/4.0/legalcode)

[Educational Community License, Version 2.0 (ECL-2.0) | Open Source Initiative](https://opensource.org/licenses/ECL-2.0)

[Various Licenses and Comments about Them - GNU Project - Free Software Foundation](http://www.gnu.org/licenses/license-list.en.html)

[Why you shouldn't use the Lesser GPL for your next library - GNU Project - Free Software Foundation](https://www.gnu.org/licenses/why-not-lgpl.html)

[Comparison of free and open-source software licences - Wikipedia](https://en.wikipedia.org/wiki/Comparison_of_free_and_open-source_software_licences)

[Choose an open source license | Choose a License](https://choosealicense.com/)

Non-judgmental guidance on choosing a license for your open source project

[OSS Watch Licence Differentiator](http://oss-watch.ac.uk/apps/licdiff/)

[Marking your work with a CC license - Creative Commons](https://wiki.creativecommons.org/wiki/Marking_your_work_with_a_CC_license)

[HTML5](https://developer.mozilla.org/en-US/docs/Web/Guide/HTML/HTML5)

HTML5 is the latest evolution of the standard that defines HTML. The term represents two different concepts. It is a new version of the language HTML, with new elements, attributes, and behaviors, and a larger set of technologies that allows the building of more diverse and powerful Web sites and applications. This set is sometimes called HTML5 & friends and often shortened to just HTML5.

[WebAssembly](https://webassembly.org/)

[WebGL Specification](https://www.khronos.org/registry/webgl/specs/1.0/)

[WebGL](https://get.webgl.org/)

[PeerTube](https://alternativeto.net/software/peertube/about/)

PeerTube is a free, decentralized and federated video platform developed as an alternative to other platforms that centralize our data and attention, such as...

[Open-Island Maker Blog](https://asapisland.wordpress.com)

The demand for floating islands rises with the sea-levels.

[Precious Plastic Community Platform](https://community.preciousplastic.com/how-to)

A series of tools for the Precious Plastic community to collaborate around the world. Connect, share and meet each other to tackle plastic waste.

[A Big Bang for Plastic Recycling](https://preciousplastic.com/index.html)

The alternative plastic recycling system run by people.

[FSFE - Free Software Foundation Europe](https://fsfe.org/index.en.html)

Non profit organisation working to create general understanding and support for software freedom. Includes news, events, and campaigns.

[Public Money, Public Code](https://publiccode.eu/)

Public Money, Public Code - A campaign for releasing publicly financed software as Free Software

[Dowse | Better be aware](https://www.dowse.eu)

Basic good manners for your IoT

[DECODE](https://decodeproject.eu)

DECODE provides tools that put individuals in control of whether they keep their personal data private or share it for the public good

[Dyne.org digital community and free software foundry](https://www.dyne.org)

A non-profit foundation and free software foundry with more than 10 years of expertise in developing tools and narratives for community empowerment.

[Zenroom](https://zenroom.org)

Multiplatform cryptography for DB and blockchain, zk-SNARKS, blockchain interop, smart contracts in human language, fully isolated virtual machine

[Standardisation of practices in Open Source Hardware](https://arxiv.org/abs/2004.07143)

Standardisation is an important component in the maturation of any field of technology. It contributes to the formation of a recognisable identity and enables interactions with a wider community....

[Open Repair Alliance](https://openrepair.org/)

The Open Repair Alliance is an international group of community repair organizations committed to longer-lasting electrical and electronic products.

[Open Next](https://opennext.eu/)

[Open Repair Data Standard v0.1](https://docs.google.com/document/d/1zR7GO2Jot_1g7QFPNo5R9wgEFXYo9CiyByM264BAsB4/edit#heading=h.qzb4vl19muoh)

Open Repair Data Standard (ORDS) Version 0.1 Section 1: About Open Repair Alliance 2 Goals and ORDS Use Cases 2 Section 2: Governance and Membership 3 Founding Members 3 Additional Membership 3 Decision Making 3 Section 3: The Standard 4 Guiding Principles 4 Collected Data 4 Modules 5 Primary ...

[DIN SPEC 3105-2 - 2020-07 - Beuth.de](https://www.beuth.de/de/technische-regel/din-spec-3105-2/324805750)

DIN SPEC 3105-2 - 2020-07 Open Source Hardware - Teil 2: Community-basierte Bewertung; Text Englisch. Jetzt informieren!

[DIN SPEC 3105-1 - 2020-07 - Beuth.de](https://www.beuth.de/de/technische-regel/din-spec-3105-1/324805763)

DIN SPEC 3105-1 - 2020-07 Open Source Hardware - Teil 1: Anforderungen an die technische Dokumentation; Text Englisch. Jetzt informieren!

[OSEGermany / Open Hardware Standards](https://gitlab.com/OSEGermany/OHS)

Open-Source-Hardware – Anforderungen an die Technische Dokumentation; Englischer Text

[.net gadgeteer opensource toolkit](https://www.designboom.com/technology/net-gadgeteer-opensource-toolkit/)

an alternative to arduino, the opensource toolkit relies on modular hardware and microsoft's .net framework for rapid prototyping and creation of electronic devices.

[FabMo™](http://gofabmo.org/)

FabMo™ : At last... An Innovative Platform for Today's and Tomorrow's Smart Tools

[GitHub](https://github.com/collections/choosing-projects)

GitHub is where people build software. More than 50 million people use GitHub to discover, fork, and contribute to over 100 million projects.

[3D printing, open-source technology and their applications in research](https://digitalcommons.mtu.edu/cgi/viewcontent.cgi?article=1063&context=etdr)

[Definition (English)](https://www.oshwa.org/definition/)

Translations: العَرَبِيةُ, 中文, Français, Deutsch, Ελληνικά, עִבְרִית, Italiano, 日本語, 한글, Latina, Português, Español, Svenska The open-source hardware statement of principles and definition were …

[Zotero | Your personal research assistant](https://www.zotero.org/)

Zotero is a free, easy-to-use tool to help you collect, organize, cite, and share research.

[Zotero](https://umb.libguides.com/ld.php?content_id=34028287)

[11 Things Every Newspaper Should Know About PDFs - Metadata in PDFs](https://www.linkedin.com/learning/11-things-every-newspaper-should-know-about-pdfs/metadata-in-pdfs?u=42572828)

Metadata in PDFs - How to Manage with Adobe Bridge

[Open Sources: Voices from the Open Source Revolution](https://www.oreilly.com/openbook/opensources/book/)

[Forge Your Future with Open Source](https://books.google.com/books?id=Tm15DwAAQBAJ&pg=PT66&source=gbs_selected_pages&cad=2#v=onepage&q&f=false)

Free and open source is the foundation of software development, and it's built by people just like you. Discover the fundamental tenets that drive the movement. Take control of your career by selecting the right project to meet your professional goals. Master the language and avoid the pitfalls that typically ensnare new contributors. Join a community of like-minded people and change the world. Programmers, writers, designers, and everyone interested in software will make their mark through free and open source software contributions. Free and open source software is the default choice for ...

[TODO guides // TODO: Talk openly, develop openly](https://todogroup.org/guides/)

TODO: talk openly, develop openly. We believe we can better improve our open source programs - and our contributions to the open source movement as a whole - by working together.

[Preparing For Release – opensource.google](https://opensource.google/docs/releasing/preparing/)

[Docs – opensource.google](https://opensource.google/docs/)

Google Open Source

[The Open Source Definition (Annotated) | Open Source Initiative](https://opensource.org/osd-annotated)

Open Source Definition

[Your Code of Conduct](https://opensource.guide/code-of-conduct/)

Facilitate healthy and constructive community behavior by adopting and enforcing a code of conduct.

[01566244075411](https://assets.pubpub.org/z1qlpyk6/01566244075411.pdf)

[Building a Soil Sifter / Rotary Trommel](https://www.instructables.com/id/Building-a-Soil-Sifter-Rotary-Trommel/)

Building a Soil Sifter / Rotary Trommel: Spoiler alert! If you can't wait for the final scene in this instructable, check out this video for the completed trommel. This instructable is a companion to my previous Bike Spoke Forged Knife. In that instructable I used the bicycle spokes,...

[Headphone Amp in an NES Controller!](https://www.instructables.com/id/Headphone-Amp-in-an-NES-Controller/)

Headphone Amp in an NES Controller!: I’ve done a few builds now with NES controllers (check them out below). This time round I managed to add a headphone amp inside one – no mean feat when you consider how much space is insideThe trick was to use a li-op battery (from an old phone) ...

[Pallet Wood Pencils (1,000 of Them!)](https://www.instructables.com/id/Pallet-Wood-Pencils-1000-of-Them/)

Pallet Wood Pencils (1,000 of Them!): Pencils, so many pencils... Do people even use pencils anymore? I don't think so, but that's never stopped me! Now the question is, how do I make the stupidly repetitive process of handcrafting 1,000 pencils interesting? I still don't know the ans...

[Recycle Cardboard Into Anything With 3D Printing!](https://www.instructables.com/id/Recycle-Cardboard-Into-Anything-With-3D-Printing/)

Recycle Cardboard Into Anything With 3D Printing!: Paper is a ubiquitous and powerful material that we use every day. From newspaper to cardboard boxes to egg cartons, our world runs on paper, and a lot of it! However, all paper products tend to share a common characteristic: they're flat. Paper i...

[Hexagon Insect Hotel](https://www.instructables.com/id/Hexagon-Insect-Hotel/)

Hexagon Insect Hotel: I got the idea when a couple of small wild bees settled on my balcony. Unfortunately, they chose something that sooner or later I had to put away for space reasons. So I had to find a new home for the little bees and beetles.The results after a sh...

[3D Printing Health: Custom DIY Orthotics](https://www.instructables.com/id/3D-Printing-Health-Custom-DIY-Orthotics/)

3D Printing Health: Custom DIY Orthotics: \*Update:\* We are thrilled to announce that our project and story has recently been featured by several DIY websites across the web. Thanks for your support and helping share our project! 3DPrint.com: "With self-sustainability available at the 3D p...

[About the Ada Initiative](https://adainitiative.org/about-us/)

The Ada Initiative was a United States 501(c)3 charitable organization. Between 2011 and 2015 the Ada Initiative supported women in open technology and culture through activities such as producing …

[The Legal Side of Open Source](https://opensource.guide/legal/)

Everything you’ve ever wondered about the legal side of open source, and a few things you didn’t.

[Home](http://www.corestandards.org/)

[Read the Standards | Next Generation Science Standards](https://www.nextgenscience.org/search-standards)

[How to Write an Instructable](https://www.instructables.com/class/How-to-Write-an-Instructable-Class/)

[Open Source Guides](https://opensource.guide/)

Learn how to launch and grow your project.

[Unplugged Collection final](https://www.scopesdf.org/unplugged-collection/)

**Artists**

[Clement Valla](http://clementvalla.com)

Clement Valla is an Brooklyn-based artist who makes work in a wide range of media including photography, sculpture,software, and the internet. His work stems from the simple realization that in all likelihood, more images are being produced and parsed by computers today than are being made and seen by humans. He is interested in these picture-producing apparatuses, and how they transform representation and our ways of seeing.

[WE ARE – SUPERFLEX](https://superflex.net)

SUPERFLEX is an expanding collective of humans and non humans working with an expanding idea of art.

[Rosalie Yu](https://rosalieyu.com)

Cargo

[Rosalie Yu](https://vimeo.com/rosalieyu)

Rosalie can be reached at yurosalie\_at\_gmail\_dot\_com.

**Fabricademy**

[Textile Academy](https://vimeo.com/fabricademy)

Fabricademy is a transdisciplinary course that focuses on the development of new technologies applied in the textile industry, in its broad range of applications,…

[fabtextiles](https://vimeo.com/user48760582)

FabTextiles is an applied research on digital fabrication technologies, wearable electronics and personal production oriented in Fashion.

[Fabricademy Projects](https://vimeo.com/channels/1502134)

Final projects of students after an intensive training in Fashion Technology, Digital Fabrication, Biomaterials and Sustainability with a mission to innovate and…

[Fabricademy 2019-2020](http://class.textile-academy.org/)

Course Website

**Fab City**

[17784 abb robotics advances construction industry automation to enable safer and sustainable building](https://constructionweekonline.in/business/17784-abb-robotics-advances-construction-industry-automation-to-enable-safer-and-sustainable-building)

[International Organization for Standardization](https://www.iso.org/home.html)

We're ISO, the International Organization for Standardization. We develop and publish International Standards.

[DIY 3D Scanner](https://en.openscan.eu/)

Günstige 3D-Scanner-Bausätze und ausführliche Anleitungen zum Thema Photogrammetrie und 3D Scan allgemein von OpenScan.

[FCN Fissa 2 Botenloods](http://www.bureauzwirt.nl/fcn-fissa-2-botenloods.html)

Fissa #2 Boat House IJmuiden Every now and then we organise a special dinner in IJmuiden aan Zee to show the local potentials and best kept secret places. By inviting artists, designers, researchers,...

[FABCITYNATURE](http://www.bureauzwirt.nl/fabcitynature.html)

IJmuiden aan Zee is an unique place in the Netherlands, on a crucial crossing point. A number of different, powerful, raw identities and qualities collide. Harbor, sea, industry, beach, dunes and...

[Fab City Global Initiative](https://fab.city/)

Locally

**Rapid Prototyping Service Bureaus**

[Fictiv | On-Demand Manufacturing, CNC Machining & 3D Printing](https://www.fictiv.com/)

Fictiv’s digital manufacturing ecosystem gets you high quality parts at unprecedented speeds. Get instant quotes for a wide range of capabilities, including CNC machining, surface finishing, 3D printing and urethane casting.

[Plastic 3D Printers | 3D Systems](https://www.3dsystems.com/3d-printers/plastic)

[3D Printing Service | Prototypes & Production Parts | SLS, FDM](https://www.xometry.com/3d-printing-service)

Rapid, Affordable, Professional Metal and Plastic 3D Printing in Over 60 Materials. Upload your CAD files to our site for an instant quote and get parts shipped

[High Volume 3D Printing Service](https://www.slant3d.com/)

Slant 3D is a high volume production 3D printing service that works as an alternative to injection molding.

[About Sculpteo : Online 3D Printing Company](https://www.sculpteo.com/en/about/)

About Sculpteo : 3D printing services, geographic location, team, social-friendly company...

[FATHOM Advanced Manufacturing: Instant Quotes, 3D Printing](https://studiofathom.com/)

FATHOM is an industry leader in dynamic advanced manufacturing services—enhance and accelerate your product development and production timelines today!

[100kGarages - Where projects are made by digital fabricators (fabbers) working with 2-D or 3-D digital fabrication tools](https://100kgarages.com/)

100kGarages.com is a place for people who have designs or ideas for things they want to make. Our digital fabricators (fabbers) work with 2-D or 3-D digital fabrication tools to cut, machine, drill, and sculpt in 3-D

[Online Custom Laser Cutting Service - Used By Apple - FREE Sample](https://www.ponoko.com/)

Online laser cutting for business - Free instant proofs, quotes & ordering - Make just 1 or 10,000 - Delivered as fast as tomorrow - Free shipping

[Bennett Plastics | Custom Plastic, Injection and 3D Printing Manufacturer in NJ](https://www.bennettplastics.com/)

Established in 1982 in Paterson, New Jersey, Bennett Plastics is a privately owned, custom plastic injection molder. Located 15 minutes from New York City, we manufacture millions of parts each year in our 36,000 square foot facility on advanced injection molding equipment which range from 75 to 400 tons of pressure.

[3D Brooklyn](https://3dbrooklyn.com/)

3D Modeling, Laser Cutting, Injection Molding and 3D Printing Service in Brooklyn New York. We design useful products from 100% compostable & 100% recyclable materials.

[You are being redirected...](https://makelab.nyc/)

[i.materialise](https://www.materialise.com/en/manufacturing/imaterialise)

[3D Hubs | On-demand Manufacturing: Quotes in Seconds, Parts in Days](https://www.3dhubs.com/)

From prototypes to end parts. Get your parts into production in less than 5 minutes. Services: 3D Printing ● CNC Machining ● Injection Molding

[3D Printing Service | Shapeways](https://www.shapeways.com/)

Shapeways is the #1 3D printing service company. Working with over a million customers since 2007 - Get 3D products and parts delivered to over 100 countries.

[Protolabs | Rapid Prototyping & On-demand Production](https://www.protolabs.com/)

Protolabs is the world’s fastest source for custom prototypes and low-volume production parts. Get an interactive quote with free design analysis within hours.

**Creating a Fabrication Lab**

[open sourced work space studio by twintip](https://www.designboom.com/readers/open-source-work-space-studio-by-twintip/)

using open sourced furniture from wikihouse, the project demonstrates the potential of crowd-sourcing and collaboration.

[Fab Academy 2020](http://fabacademy.org/2020/)

[Fab Academy](http://fabacademy.org/)

How to make almost anything

[The Fab Charter](http://fab.cba.mit.edu/about/charter/)

[Fab fund](http://cba.mit.edu/events/09.08.FAB5/FabFund.pdf)

[What is a FabLab?](http://www.openp2pdesign.org/2013/spaces/what-is-a-fablab/)

This is a post I’ve been waiting to write for a long time, either because I’ve been very busy or because I’ve wanted to write something meaningful and with a direct experience. After working on the development of the Aalto FabLab, after doing the one week Fab Boot Camp (January 2012) in FabLab Barcelona and […]

[Getting Started with Fab Labs](https://fabfoundation.org/getting-started/)

Bridging the Digital Divide Design / Fabricate / Share. We work to provide access to the tools, the knowledge and the financial means to educate, innovate and invent using technology and digital fabrication to allow anyone to make (almost) anything. We create opportunity.

[FabLab Guide - how to set up your lab and maximise its impact](https://issuu.com/j_johns/docs/bu_fablabs_document_final)

A guide outlining the main challenges and issues for those who run, or are thinking of setting up, FabLabs (digital fabrication spaces). It covers the background to FabLabs and the Maker Movement, how to set up a FabLab - including planning, permissions, revenue generation, staffing, equipment, launch and marketing. Guidance is provided on how to connect with industry and using online and offline knowledge. The educational aspects of FabLabs and their social and economic impacts on different communities is explained. The guide concludes with the global connections of FabLabs.

[MiniFablab](https://www.minifablab.nl/)

How to make almost anything

[Fablab instructable](https://www.fablabamersfoort.nl/downloads/fablab-instructable.pdf)

[Fab Lab Inventory](https://docs.google.com/spreadsheets/u/0/d/1U-jcBWOJEjBT5A0N84IUubtcHKMEMtndQPLCkZCkVsU/pub?single=true&gid=0&output=html)

**Business**

[Glossary >> globalEDGE: Your source for Global Business Knowledge](https://globaledge.msu.edu/reference-desk/glossary)

Global business knowledge portal connecting international business professionals to a wealth of information, insights, and learning resources on global business activities. globalEDGE is a gateway to specialized international business research knowledge on countries, cross-border business transactions, and cross-cultural management.

[Online Course Modules >> globalEDGE: Your source for Global Business Knowledge](https://globaledge.msu.edu/reference-desk/online-course-modules)

Global business knowledge portal connecting international business professionals to a wealth of information, insights, and learning resources on global business activities. globalEDGE is a gateway to specialized international business research knowledge on countries, cross-border business transactions, and cross-cultural management.

[‎globalEDGE Online Course Modules Podcast - exporting: Pricing, Quotation and Terms on Apple Podcasts](https://podcasts.apple.com/us/podcast/pricing-quotation-and-terms/id518643758?i=1000408686270)

‎Show globalEDGE Online Course Modules Podcast - exporting, Ep Pricing, Quotation and Terms - Apr 6, 2018

[‎globalEDGE Online Course Modules Podcast - exporting: Business Travel Abroad on Apple Podcasts](https://podcasts.apple.com/us/podcast/business-travel-abroad/id518643758?i=1000408686136)

‎Show globalEDGE Online Course Modules Podcast - exporting, Ep Business Travel Abroad - Apr 9, 2018

[‎globalEDGE Online Course Modules Podcast - exporting on Apple Podcasts](https://podcasts.apple.com/us/podcast/globaledge-online-course-modules-podcast-exporting/id518643758?mt=2)

‎Education · 2018

[Research Guides : Art & Cultural Heritage Law Research Guide: International Law](https://guides.law.fsu.edu/art/international)

[Guides to doing business](https://www.lexmundi.com/lexmundi/Guides_To_Doing_Business.asp)

Lex Mundi is the world's leading network of independent law firms with in-depth experience in 100+ countries. Through close collaboration, our member firms offer their clients preferred access to more than 21,000 lawyers worldwide - a global resource of unmatched breadth and depth.

[Doing Business](https://www.doingbusiness.org/)

The Doing Business project provides objective measures of business regulations for local firms in 190 economies and selected cities at the subnational level.

[Artists From Abroad :: Introduction](https://www.artistsfromabroad.org/tax-requirements/introduction/)

[About the author](https://www.artbusinessinfo.com/about.html)

About this site 'Art Business for Artists' and its author Katherine Tyrrell, author of 'Making A Mark'

[CAA Guidelines | Standards & Guidelines | CAA](https://www.collegeart.org/standards-and-guidelines/guidelines)

Founded in 1911, the CAA promotes excellence in scholarship and teaching in the visual arts. It is the oldest and largest support organization for those working in the visual arts.

[Are You an Artist (or Artistically Inclined)? License Your Work: You'll Make Money.](https://www.entrepreneur.com/article/315651)

And you don't need an agent or a booth at a trade show.

**Sustainable Materials for Machining**

[Home](https://thealttex.com/)

[Eastman makes the promise of sustainability a reality with Naia Renew](https://www.eastman.com/Company/News_Center/2020/Pages/Eastman-makes-the-promise-of-sustainability-Naia-Renew.aspx)

Naia Renew cellulosic fiber is traceable with certified biodegradability that captures the value of hard-to-recycle materials that would otherwise be destined for landfills.

[About us](https://www.econyl.com/about-us/)

Imagination is infinite. So is ECONYL®

[SEM Renewed City - Our vision](https://semvr.fr/decouvrir-la-sem/ville-renouvelee/)

À la fois aménageur urbain, constructeur, et maître d'oeuvre, la SEM Ville Renouvelée vous accompagne en métropole Lilloise et Porte du Hainaut.

[malai](https://malai.eco/about/)

Malai is a flexible, durable biocomposite material with a feel comparable to leather or paper.

[Piñatex - Piñatex](https://www.ananas-anam.com/)

[Healthy Materials Lab | The next generation of materials](https://healthymaterialslab.org)

We're continuing our work to narrow inequalities laid bare during this pandemic by providing practical resources for healthier design.

[Cascading](https://www.ceguide.org/Strategies-and-examples/Dispose/Cascading)

[Global Polyethylene Furanoate Market 2018-2025 - Ongoing Quest to Decrease the Global Carbon Footprint is a Major Driver](https://www.prnewswire.com/news-releases/global-polyethylene-furanoate-market-2018-2025---ongoing-quest-to-decrease-the-global-carbon-footprint-is-a-major-driver-300689405.html)

/PRNewswire/ -- The "Global Polyethylene Furanoate Market: Focus on Application (Bottle, Film, and Fiber), Market Share Analysis, and Capacity Development -...

[YXY - Avantium](https://www.avantium.com/technologies/yxy/)

[Upcycling spongy plastic foam from shoes, mattresses and insulation](https://www.nsf.gov/discoveries/disc_summ.jsp?cntn_id=300522&WT.mc_id=USNSF_1)

New method turns foam into higher-value rubber and hard plastics

[Plastic Blocks and Rods for Machining | Plasti-Block | Canada](https://www.plastiblocks.com/)

Low cost plastic extrusion and injection molding. Plastic parts manufacturing from virgin, regrind and up to 100% post-concumer recycled plastic. Specializing in Large parts, Thick walls, Short production runs. Using low pressure, low energy system with a new molding and mold making processes.

**Laser Cutting**

[FABEANDO](https://fabeando.com/)

Fabricando mis ideas

[Laser cutting and engraving of wood with Trotec laser machines](https://www.troteclaser.com/en-us/applications/wood/?source_campaign=7014I000000hkmGQAQ)

Laser cutting and engraving of wood for additional value through personalization and precision. ✔plywood ✔mdf ✔balsa wood ✔solid wood

[LC40 Laser Cutter | Dremel Digilab](https://digilab.dremel.com/products/lc40-laser-cutter)

Easily cut and engrave projects for your school, small business, or home with the Dremel DigiLab LC40 Laser Cutter.

[Beambox | Desktop Laser Cutter and Engraver](https://flux3dp.com/beambox/)

Inspired by the laser engraving feature of our multifunctional 3D printer, FLUX Delta. We enhanced the laser technology and created a more powerful laser cutter and engraver, the powerful CO2 laser cuts and engraves on wood, leather, acrylic and more. With our highly intuitive software Beam Studio, you have everything you need to bring your ideas to life. Beambox meets all your expectations, and goes way beyond.

[beamo | The world’s smallest CO2 laser cutter/engraver](https://flux3dp.com/beamo/)

Inspired by the laser engraving feature of our multifunctional 3D printer, FLUX Delta. We enhanced the laser technology and created a more powerful laser cutter and engraver, the powerful CO2 laser cuts and engraves on wood, leather, acrylic and more. With our highly intuitive software Beam Studio, you have everything you need to bring your ideas to life. Beambox meets all your expectations, and goes way beyond.

[Trotec Laser USA](https://www.youtube.com/user/lasersRfun)

Trotec Laser is the world's leader in laser technology. We offer a wide range of high-quality CO2 Laser, Fiber Laser, and Galvo laser solutions for all your ...

**Seeking Funding**

[Office of Research | FSU Office of Research](https://www.research.fsu.edu/limitedsubmission)

[Proposal Help | FSU Office of Research](https://www.research.fsu.edu/research-offices/ord/proposal-help/)

[About Us | CAA](https://www.caa.com/about-us)

[Gpg print](https://www.nsf.gov/pubs/policydocs/pappguide/nsf15001/gpg_print.pdf)

**Fusion 360**

[QUICK TIP: Render Your Fusion 360 CAM Paths](https://www.youtube.com/watch?v=DcQ2N_Pj8Ng&ab_channel=AutodeskFusion360)

Want to know how your CAD part is actually going to machine? Differences in cam paths, step over values, and tool diameters can make all the difference in what a part ends up actually looking like. This tip video by Fusion 360 Evangelist Mike Aubry shows how Fusion's CAM and Rendering functionality work together to help you get highly accurate visualization that help you really understand what your parts will look like before you ever commit to machining them. ► Get Fusion 360 | http://autode.sk/25Kq5Y7 SUBSCRIBE | http://autode.sk/11vxXeD FACEBOOK | http://autode.sk/19jII5A TWITTER | http:...

[Rendering Toolpaths with Fusion 360](https://www.youtube.com/watch?v=WqPaQp-iFAY&ab_channel=AutodeskFusion360)

Ever wondered how people create beautiful images of rendered toolpaths within Fusion 360? Technical Evangelist, Curt Chan (@Curt\_Chan) shows you how to do it in minutes! ► Get Fusion 360 | http://autode.sk/1ZJbgj6 SUBSCRIBE | http://autode.sk/11vxXeD FACEBOOK | http://autode.sk/19jII5A TWITTER | http://autode.sk/19jIJXc

[Fusion 360 Help - Learn & Support](https://help.autodesk.com/view/fusion360/ENU/?guid=GUID-1C665B4D-7BF7-4FDF-98B0-AA7EE12B5AC2)

[Fusion 360 - Creating a Tool Library](https://help.autodesk.com/view/fusion360/ENU/courses/AP-TOOL-LIBRARY)

CNC Milling, Creating a Tool Library

[Fusion 360 - Self-paced Learning](https://help.autodesk.com/view/fusion360/ENU/courses/)

**3D Modeling**

[Choosing the Best 3D CAD Software: A Comprehensive Guide](https://formlabs.com/blog/cad-software?mkt_tok=MDYwLVVJRy01MDQAAAF-zhGKzbUEqEQTrg9tNtIEJQYH45WRrJ7FJTX1dGACfCl2wVPPSkXXgKP9T1VobF90-AtaFGIvIRVoRs-DYh8CYzt9Qg6KvV-AwlOlRT-Q-VR00Q&newsletter-august-2021=)

Let’s take a look at the CAD software offerings so that you can make the right choice in selecting a virtual work environment.

[Adding Screw Threads to 3D Printed Parts (New Video)](https://formlabs.com/blog/adding-screw-threads-3d-printed-parts/?utm_source=direct&utm_medium=email&utm_campaign=email-nurture-en-engineer-and-default&utm_content=adding-screw-threads-to-3d-printed-parts-a&mkt_tok=eyJpIjoiWmpnM1pqVm1ZbU01TkRobCIsInQiOiJ5NHVuSUNYT2VHc1BLUG5sVzJ3NExVSW5vUVNBWkJMc1pOc3BIbEdaWk51RnZ1N1VTK0I0R3NHclhRZTJOeHNpZUxjamd1dTVwRVJJQ2RIUHc5WitHQ1UxZXExVjNQandCb1hMZWdKWGRORmM1Yk9TMlVCc2xPeG9KZWpKUkdZRCJ9)

Learn about the various ways to add screw threads and combine multiple 3D printed parts for a robust mechanical fastening.

[Cloud Powered 3D CAD/CAM Software for Product Design | Fusion 360](https://www.autodesk.com/products/fusion-360/overview)

Fusion 360 CAD/CAM software connects your entire product design & development process in a single tool. Subscribe for $495/year or get a free trial today.

[GrabCAD: Design Community, CAD Library, 3D Printing Software](https://grabcad.com/)

GrabCAD is the largest online community of engineers, designers, manufacturers & students. Join now to access free CAD files & designs. Download our 3D printing software GrabCAD Print and CAD collaboration tool Workbench.

**CNC Milling**

[Modela mdx 20 3d milling machine](https://rolanddga.com/support/products/milling/modela-mdx-20-3d-milling-machine)

[polish pavilion at shanghai world expo 2010](https://designboom.com/architecture/polish-pavilion-at-shanghai-world-expo-2010)

the concept of the polish pavilion by WWA architects is based around traditional polish folk art paper cut-outs,

[Differniture](https://differniture.com)

A sustainably designed range of furniture, which focuses on blending the sculptural aspect of art with the functional sensibility of design.

[Strata Bench / Fabrication / Part 3 of 3](https://instructables.com/Strata-Bench-Fabrication-Part-3-of-3)

Strata Bench / Fabrication / Part 3 of 3: This project is an exploration into form and workflows - a combination of using manual hand skills, computer aided design (CAD), and digital fabrication techniques - to create a sculptural and functional bench made from stacked and carved plywood.…

[Learn CNC the Art Way](https://instructables.com/Learn-CNC-The-Art-Way)

Learn CNC the Art Way: CNC machines can be extremely powerful in enabling your creativity as a designer, artist, engineer, or even a hobbyist. Learning how to operate a CNC machine requires a great amount of effort, and no instruction can surpass the instructable Learn CN…

[CNC-made wooden skull jumpstarts artist's career](https://woodworkingnetwork.com/news/woodworking-industry-news/cnc-made-wooden-skull-jumpstarts-artists-career)

An artist's CNC-made skull has gotten him attention from many clients, including Chevrolet.

[Learn CNC the Art Way](https://instructables.com/Learn-CNC-The-Art-Way)

Learn CNC the Art Way: CNC machines can be extremely powerful in enabling your creativity as a designer, artist, engineer, or even a hobbyist. Learning how to operate a CNC machine requires a great amount of effort, and no instruction can surpass the instructable Learn CN…

[CNC machine engraving on copper](https://youtube.com/watch?v=05SpQC6ga-0)

Máquina CNC fresando em cobre Fabricada no Brasil Para maiores interessados entrar em contato com joni.joel@yahoo.com.br

[Sawmill Creek Woodworking Community](https://sawmillcreek.org/index.php?source_campaign=7014I000000hkmLQAQ)

Sawmill Creek Woodworkers Forums

[Carbide 3D](https://www.youtube.com/channel/UCNmhZxXrhuBxXaAazUf1Qow)

Carbide3D designs and sells desktop CNC milling machines and accessories.

[Machining Miniature Models from 4 Sides - #FusionFriday](https://www.youtube.com/watch?v=IQ3dzFRZlKM)

Sometimes a flip jig isn't enough. For situations like those, creative setups and workholding can help you machine more complex shapes from more than 2 sides...

[Nomad883 feeds 125](https://docs.carbide3d.com/support/supportfiles/Nomad883_feeds_125.pdf)

[Carbide 3D CNC Feeds and Speeds](https://public.tableau.com/profile/willadams#!/vizhome/Carbide3DCNCFeedsandSpeeds/Sheet1?publish=yes)

Carbide 3D CNC Feeds and Speeds

[RotoMetals-Hard to find Metals and Custom Alloys and other Cool Stuff](https://www.rotometals.com/)

sales@rotometals.com

**Electronics**

[Elon Musk demonstrates brain-computer tech Neuralink in live pigs](https://angel.co/today/stories/elon-musk-demonstrates-brain-computer-tech-neuralink-in-live-pigs-29147)

Elon Musk's brain-machine interface company, Neuralink, conducted a live demo of its technology on Friday, showing a coin-sized device without wire...

[3-D printed batteries handle the squeeze](https://phys.org/news/2020-07-3d-batteries.html)

While flexible and stretchable electronics technologies have progressed in leaps and bounds over the past 10 years, batteries to power them have some catching up to do. Researchers in Singapore and China ...

[Home | Tinkerforge](https://www.tinkerforge.com/en/)

[Smart Materials](https://www.centi.pt/en/competences/smart-materials)

CeNTI's Smart Materials department develops sensors and actuators that allow the introduction of controlled responses to external stimuli.

**Injection Molding**

[Precious Plastic Bazar](https://bazar.preciousplastic.com/)

Plastice to sell products, machines, and plastic. Empowering our recycling ecosystem around the world.

[Nanofabrica - 3D printers for precision engineering](https://www.nano-fabrica.com/)

At Nanofabrica we deliver patented additive manufacturing printers and proprietary materials that reach an unprecedented 1 micron resolution over an impressive build volume of 50X50X100 mm3

[Freeform Injection Molding by AddiFab](https://www.addifab.com/)

**Maintaining Resource Integrity**

[SHARPEN Your X-acto Knife Blades DON’T Replace Them It’s Cheaper and Faster](https://www.instructables.com/id/SHARPEN-Your-X-acto-Knife-Blades-DONT-Replace-Them/)

SHARPEN Your X-acto Knife Blades DON’T Replace Them It’s Cheaper and Faster: Just imagine, if you could sharpen your X-Acto knives instead of replacing them. Think of the money you save. I’ve been using an X-Acto knife for years and years. At this point I can sharpen the blade faster than I can change it out. Several swipe...

[How to Keep Your Xacto Knives Sharp](https://m.youtube.com/watch?v=H98TWKsohug)

Quick tip on sharpening Zacto Knife Blades

**3D Printing**

[Zenodo](https://zenodo.org/search?page=1&q=fab16&size=20)

[BioPrinter](http://www.fablab.uchile.cl/proyectos/438/bioprinter)

El mundo de la impresión 3D La impresión 3D es un método de fabricación aditiva, que consiste en una técnica de producción controlada por computadora que construye un producto capa por capa. Aunque existen diferentes técnicas disponibles, los tres componentes básicos son[1]:   Diseño digital. Tecnología de impresión 3D. Material utilizado.  Las tecnologías de impresión 3D se pueden dividir en varias clases, esquematizadas en la siguiente figura. En principio, todo tipo de materiales puede ser utilizado para manufactura con técnicas de impresión 3D; desde arena a metales, cerámica, comida, células vivas y plástico. Las características principales de interés son la temperatura de fusión, viscosidad de fusión y tiempo de coagulación[1]. En los últimos años, el plástico se ha posicionado como el material más utilizado en manufactura, alcanzando una producción global anual de 300 millones de toneladas aproximadamente. El consumo de plástico en Chile es del orden de las 900.000 toneladas anuales (50 kg/habitante/año), siendo los plásticos más utilizados los polietilenos de alta y baja densidad (PEAD y PEBD), polipropileno (PP) y polietilentereftalato (PET). Se estima que el 10% del plástico producido globalmente se convierte en desechos oceánicos, representando una significativa amenaza ecológica y a la salud humana[2].   Debido a sus propiedades mecánicas y su bajo costo económico, el plástico es el material más utilizado para impresión 3D.   Plásticos más utilizados​​   Los plásticos para impresión 3D corresponden a filamentos, empaquetados en bobinas, los que corresponden a: PLA, ABS y PET. A continuación se presentan ventajas y desventajas de cada material, además de aplicaciones típicas de los mismos.   Poliácido Láctico (PLA) Este es el material más utilizado por quienes se inician en el mundo de la impresión 3D, se utiliza especialmente para fabricación de elementos decorativos, figuras como maquetas y prototipos.  Ventajas  Desventajas  - Facilidad de impresión.  - No necesita cama caliente.  - Muy estable.  - Velocidad de impresión más rápida que otros materiales.  - Procede de materia orgánica (maiz, trigo, yuca, etc.).  - Biodegradable.  - Reciclable.  - Baja resistencia térmica (Se vuelve endeble a partir de los 60°C).  - Baja resistencia mecánica.  - Sensible a la humedad.   Acrilonitrilo Butadieno Estireno (ABS) Este material procede del petróleo, es muy utilizado en la indstria para fabricación de elementos mecánicos, piezas de automoción, entre otros. También se puede utilizar para elementos decorativos y otras aplicaciones.  Ventajas  Desventajas  - Muy estable a altas temperaturas (de 80°C a 90°C).  - Conserva tenacidad a temperaturas extremas (de -40°C a 90°C).  - Alta capacidad de mecanizado (lijar, perforar, etc.).  - Resistente a ataques químicos.  - Muy resistente a impactos.  - Requiere de experiencia en impresión 3D.  - Dificultad de impresión.  - Contracción entre capas más rápidas que el PLA, pudiendo resquebrajarse.  - Puede producirse efecto warping.   Tereftalato de Polietileno (PET) Es muy utilizado para fabricar cualquier tipo de objeto o envase de uso alimenticio, elementos decorativos con transparencia, y otros.  Ventajas  Desventajas  - Alta transparencia, incluso en filamentos de color.  - Alta resistencia al desgaste y corrosión.  - Buena resistencia química y térmica.  - Resistente a impactos.  - Impermeable.  - Resiste esfuerzos permanentes (flexibilidad).  - Baja absorción de humedad.  - En el uso doméstico, permite cocción en microondas.  - Alta capacidad de mecanizado.  - Resistente a ácidos, bases y grasas.  - Levemente tóxico.  - No es biodegradable.  - Se vuelve endeble a partir de 70°C.   Biomateriales   Como se expuso anteriormente, el amplio uso de plásticos ha generado una verdadera crisis ambiental, con lo que se hace necesario incentivar el uso de materiales amigables con el medioambiente, que permitan una mejor gestión de residuos. Es aquí donde toman protagonismo los biomateriales, los que son fabricados a partir de abundantes fuentes de ingredientes naturales, por ejemplo: minerales, alimentos, desechos de la agricultura, entre otros.   En el caso de alimentos para producir biomateriales, se pueden usar numerosos tipos de cultivos para extraer azúcares, almidones, aceites o lignocelulosas, desde remolacha azucarera, maíz, colza, pastos perennes hasta residuos de cultivos. Estos cultivos pueden convertirse en productos químicos a granel de base biológica a través de diferentes técnicas de conversión. Los productos químicos a granel de base biológica a menudo son productos intermedios y se pueden convertir en una amplia gama de plásticos de base biológica[1].   Biomateriales extruibles   Debido a la gran diversidad de materias primas que son útiles para formar un biomaterial, estos poseen una variada cantidad de propiedades interesantes, que pueden ser aplicadas en distintos ámbitos, ya sea desde un biomaterial comestible a incluso uno capaz de neutralizar olores. Debido a que en este proyecto se busca imprimir y construir figuras 3D, se buscan biomateriales pastosos, con el fin de que sean fáciles de extruir. Dentro del FABLAB se manejan ciertos materiales con esta característica.   Para lograr imprimir con distintos materiales se debe utilizar un cabezal intercambiable según la densidad del material. Además, el material de impresión debe cumplir con el requisito de solidificar a temperatura ambiente. Aunque otra posibilidad es acoplar elementos a la impresora, tales que permitan variar la temperatura de extrusión y secado del respectivo material, por ejemplo, añadir una hot bed en la superficie de impresión hace posible modificar la temperatura de secado, ampliando la gama de materiales disponibles. En la página Materiom.org se proporcionan diversas recetas de biomateriales que se pueden testear en este dispositivo.     Componentes y detalles; BioPrinter   El modelo original de esta máquina corresponde a una MakerBot Replicator 2, donde el software para manejarla fue modificado con Arduino y ciertas componentes aditivas especiales para impresoras 3D. El programa de Arduino maneja todas las especificaciones de la máquina, asi como la velocidad del movimiento de los ejes, la pantalla de control, temperatura en caso de trabajar con este requerimiento, entre otros.    Se agregó una fuente de poder de 12V y 20 amperes para alimentar todos los componentes presentes en la impresora de biomateriales. Todas las especificaciones técnicas y eléctricas respecto al funcionamiento ya estan cubiertas para el presente proyecto, por lo que se han omitido en esta información.   Extrusor Dado que el extrusor de la Makerbot2 está diseñado para un filamento de plástico, para lograr depositar un biomaterial es necesario diseñar un extrusor cuya boquilla sea acorde al material, además de tener una resistencia a la presión suficiente para poder comprimirlo. Otro punto a tener en consideración consiste en el depósito de material, dado que en este caso, no corresponde a un filamento.    Si el material a imprimir se encuentra arriba junto con el extrusor, se tendría una posible sobrecarga para los motores que mueven los ejes, lo cual puede desencadenar en alguna falla de estos mismos. Incluso existiría el riesgo de caída del material hacia la impresion, evento totalmente indeseable en el desarrollo de esta.   Por ende, el diseño inicial contaba de un depósito que se conecta a la boquilla mediante una manguera. Este consistía en un contenedor con un tornillo sin fin para empujar el material, el problema de este diseño era la restricción que se generaba en la cantidad de material, por lo que se desecho este prototipo.   Para evitar restringir la cantidad de material disponible para la impresión, se diseña un contenedo rellenable, con un tornillo de Arquímides, capaz de impulsar el material hacia la boquilla. Este se puede observar en la siguiente figura.   La boquilla a utilizar queda presente en la siguiente figura. Como se puede observar en la figura anterior, la boquilla presenta dos agujeros por los cuales las mangueras se conectarían, llenando asi parcialmente el contenedor y tendría un continuo flujo de material para imprimir. El transporte del material por las mangueras se puede hacer con un compresor.   Chasis   Para el diseño del chasis se buscó plasmar la idea open source, persiguiendo la mayor visibilidad de la impresora, para esto se pensó en 2 paredes transparentes de acrilico en los costados laterales, para que se pudiera apreciar la máquina trabajando. Para la cara trasera se colocaría una pared de aluminio por estetica y para la cara delantera se busca cubrir solo los bordes, es decir, el esqueleto de la impresora original, para evitar dificultades al retirar la impresión 3D, igualmente con aluminio. En la siguiente figura se plasma lo buscado.     Referencias [1] Wijk, A. and Wijk, I. (2015). 3D printing with biomaterials. Amsterdam: IOS Press. [2] Replacing Plastics with Biomaterial (Penn State College of Agricultural Sciences). (2019). [online] Available at: https://agsci.psu.edu/research/impacts/replacing-plastics-with-biomaterial [Accessed 30 Dec. 2019]. [3] Materiom.org. (2018). [online] Available at: https://materiom.org/ [Accessed 30 Dec. 2019].

[Digital Light Processing - an overview | ScienceDirect Topics](https://sciencedirect.com/topics/engineering/digital-light-processing)

[SLA vs. DLP: Guide to Resin 3D Printers](https://formlabs.com/blog/resin-3d-printer-comparison-sla-vs-dlp)

Learn about the key differences between SLA and DLP resin 3D printers and what that means for final prints.

[GE Additive](https://ge.com/additive)

3D printing - Electron Beam Manufacturing

[Freemelt ONE: The 3D printer for materials R&D](https://freemelt.com/freemelt-one#demo)

Freemelt ONE is designed to make materials not yet known to mankind. Materials that engineers dream about that give us lighter and more efficient products.

[Direct Manufacturing: ARCAM](https://youtube.com/watch?t=17s&v=M_qSnjKN7f8)

View our additive manufacturing capabilities for production of fully dense metal parts layer-by-layer from metal powder using ARCAM's Electron Beam Melting

[JEOL, Ltd.](https://jeol.co.jp/en)

3D Printing - Electron Beam Melting (EBM)

[PostProcess Technologies](https://postprocess.com)

PostProcess Technologies is revolutionizing additive manufacturing with the only automated and intelligent post processing for 3D printed parts.

[Natural Machines - Foodini](https://naturalmachines.com/foodini)

The first smart kitchen appliance speeding up the process of making food fresh ingredients: all via a next generation 3D food printer and IoT/Internet of Things kitchen appliance.

[Foodini Quick Training: First Print](https://youtube.com/watch?v=KFRQ0BEmvIE)

New to using Foodini? Here you can see the process of creating your first print. 00:00 Prepare Ingredient 01:16 Fill Capsule 02:19 Connect To WiFi - For your first print, it's always best to make sure the software is the most recent version. In order to update the software, Foodini must be connected to WiFi. 02:41 Make Sure The Software Is Updated - Chances are there is a software update that was released from the time your Foodini left the factory and is now in your hands, so it's best to check for updates. You do not have to do this process every time before you print, but we do recommend updating your software when Foodini is newly out of the box and when Foodini alerts you that updates are available. 03:05 Let's Print! Also see our support site: https://support.naturalmachines.com/portal/en/kb/articles/make-your-first-print

[3D Printing Guides, White Papers, Webinars, and More](https://formlabs.com/resources#collection)

Hone your 3D printing skills with our resources library of in-depth guides, step-by-step tutorials, white papers, webinars, videos, e-books and more.

[X re:3D HOME](https://re3d.org)

[FUNMAT PRO 410](https://www.intamsys.com/funmat-pro-410-3d-printer/)

The FUNMAT PRO 410 is an industrial additive manufacturing 3D printer. It features a dual extruder which operate in a large 305 x 305 x 406 mm build chamber

[Impossible Objects | Composite 3D Printing](https://impossible-objects.com)

We are a science-driven company pioneering advancements in the additive manufacturing and composite-based additive manufacturing technology (CBAM) is an entirely new process that is fundamentally different from conventional additive manufacturing technologies.

[DWS Systems | Additive manufacturing](https://www.dwssystems.com)

3D printers for the gold jewelry sector, dental sector and industrial applications. The only Italian company developing stereolithographic technology.

[COBOD - Modular 3D Construction Printers - 3D Printed Buildings](https://cobod.com/)

We develop modular 3D construction printers for projects of any size. With our newest BOD2 printer you choose the number of modules your 3D construction printer needs to 3D print your building or house. We 3D printed the first building in Europe, and use that experience to move the construction industry further.

[FLEX 510 3D Printer | INTAMSYS](https://www.intamsys.com/flex-510/)

Designed for the production of sporting goods, medical rehabilitation equipment and tooling, the FLEX 510 is INTAMSYS latest cutting-edge 3d printer.

[ExOne | Industrial 3D Printers – 3D Printing Systems](https://www.exone.com/en-US/3D-printing-systems)

ExOne's binder jet industrial 3D printers are designed to scale into larger production volumes, develop complex parts and serve diverse applications. With the purchase of a sand or metal industrial 3D printer, our customers have the full partnership and support of our skilled technicians and consultants.

[Nautilus - Industrial-Grade Desktop 3D Printer | Hydra Research](https://www.hydraresearch3d.com/nautilus)

Reliable Industrial 3D Printing comes to the desktop — Precise and repeatable desktop manufacturing with engineering materials. High resolution or rapid drafting thanks to quick change Tool Cartridges, all with features designed to streamline your workflow. Rapid prototyping, custom parts, jigs &

[Compatibility Chart - 3Doodler](https://learn.the3doodler.com/compatibility/)

[formlabs](https://formlabs.com/3d-printers/)

What is 3D printing? Learn how a 3D printer works, explore the different types of 3D printers, materials, and see the main applications it can be used for.

[3D Printers for Educators & Professionals | MakerBot](https://www.makerbot.com/)

Experience why we are global leaders in 3D printers. For commercial, education or professional use, discover the 3D printing solution that's right for you.

[Buy Two Trees Sapphire Pro CoreXY 3D Printer](https://www.3dprintersbay.com/corexy-3d-printers/sapphire-pro)

Sapphire Pro Top Features:Automatic leveling,BMG Dual Drive Extruder,Double Turbo fan,Filament sensor,Auto resume print,Large build volume,Touch display,Max Nozzle Temp 260,Max Bed Temp 120,Multi filament compatibility

[IDEX 3D Printer - E2 | $3,499 | Raise3D](https://www.raise3d.com/e2/)

E2 by Raise3D is an easy-to-use, enclosed desktop 3D printer powered by IDEX technology. With a large build volume, auto bed leveling, and flexible build plate!

[HOME](https://www.qd3dprinter.com/)

My wordpress

[Flashforge Professional 3D Printer Manufacture](https://www.flashforge.com/consumer/consumer%203d%20printer?id=5)

Flashforge is one of global 3D printing suppliers, offers professional, commercial and consumer 3D printers, filaments, software and solutions

[Creality3D® Printers : Online Store Discount Sale](https://creality3d.shop/?gclid=EAIaIQobChMI0PX2zPj06QIVEo-GCh0BGAQlEAAYASAAEgKqPfD_BwE)

Creality® 3D Printers Online Sale, Up to Extra $50 Coupon. CR10S $469, Ender3 $199. CR10s Pro $609. Get original Creality 3D printers at the lowest price. Free shipping and 1-year warranty. The best printer under $200 Ender3, largest print size CR10 S5, new arrival Ender3 pro. Creality sweet discount for you.

[Creality3D Ender-3 3D Printer Economic Ender DIY KITS](https://www.creality3d.shop/products/creality-ender-3-3d-printer-economic-ender-diy-kits-with-resume-printing-function-v-slot-prusa-i3-220x220x250mm)

$199 Free shipping.Creality3D Online Store. Tax Exemption & Duty-Free Ender-3 3D Printer Economic Ender DIY KITS.

[Anycubic 3D Printing: Best & Affordable 3D Printers | Materials | Part](https://www.anycubic.com/)

Have a design in mind? With a Anycubic SLA/FDM 3D printer, you can build and make it a reality in just hours. Buy a budget 3d printer now, FREE SHIPPING & best after-sales service. 3Dream, for freedom to make!

[Dremel Digilab](https://digilab.dremel.com/)

[Ultimaker 2+: Robust single extrusion](https://ultimaker.com/3d-printers/ultimaker-2-plus)

Affordable, reliable, user-friendly. Ultimaker 2+ and Ultimaker 2 Extended+ deliver consistent single extrusion – ideal for rapid prototyping and concept models.

[Objet30 Pro Desktop 3D Printer for Rapid Prototyping](https://www.stratasys.com/3d-printers/objet30-pro)

High quality and versatile 3D printing on your desktop with Stratasys Objet30 Pro. This versatile printer will help to cut costs and time to market.

[Objet geometries](https://www.youtube.com/user/ObjetGeometries)

[Polaroid 3D](https://www.youtube.com/channel/UCnhz2KTwjTe-cAVzPkHJIoQ/videos)

[Play 2](https://www.polaroid3d.com/en/play-2/)

[Shop | Tethon 3D](https://tethon3d.com/shop/)

[3D FRESH Printing | Fluidform 3D FRESH Printing](https://www.fluidform3d.com/3d-fresh-printing)

FRE and FRESH printing harness the power of non-newtonian gels to allow movement through a material like it’s a liquid, while supporting deposited material like it’s a solid. Learn more today!

[Bioprinting, Simplified | 3D Bioprinters & Bioinks - Allevi](https://www.allevi3d.com/)

Allevi 3D bioprinters and bioinks are trusted by bioprinting researchers globally for tissue engineering, organ on a chip, pharmaceuticals, and more.

[WASP Team](https://www.youtube.com/channel/UCaO-f7F5-ozt3F4uR-3EZjw)

We’re dreamers, we’re Makers: we start from 3D printing to save the world.

[InFoam Printing](http://materiability.com/portfolio/infoam-printing/)

[snapmaker](https://snapmaker.com/)

[ZMorph VX | ZMorph](https://zmorph3d.com/product/zmorph-vx)

Meet the most versatile, the most practical multitool 3D printer.

[ATOM 2.5 FX 3D Printer｜Best 3D Printer 2020, 3d delta printer](https://atom3dp.com/en/atom-25-fx/)

[FLUX Delta+ | The Most Versatile 3D Printer - 3D Printing, Laser Engraving, Vinyl Cutting, Drawing](https://flux3dp.com/delta-plus/)

beamo is a small, affordable, and easy to use desktop CO2 laser cutter and engraver for maker, educator, and creator that doesn’t compromise space, quality, or functionality.

[Stratasys Virtual Experience](https://www.experiencestratasys.com/showcase)

[Prusa3D - Open-Source 3D Printers from Josef Prusa](https://www.prusa3d.com/)

Prusa Research is a 3D printing company based in Prague, Czech Republic. It was founded by Josef Prusa, one of the core developers of the Open Source project RepRap, in 2012 as a one-man startup and grows to a 400+ team now. His open-sourced Prusa i3 design is according to 3DHubs the most used 3D printer in the world. We are shipping more than 6000 Original Prusa i3 printers per month to over 160 countries directly from Prague. Our MK3/S printer is the best 3D printer for 2018 and 2019 according to MAKE: Magazine US and the best FFF printer according to 3D Printing Industry Awards.

[Mason 3D Printer](https://www.slant3d.com/mason_printer.html)

The Mason 3D Printer and Onsite subscription are a great way to place additive manufacturing in your business that can scale from prototype to production.

[LED instead of laser or electron beam: New technology revolutionizes 3D metal printing](https://www.tugraz.at/en/tu-graz/services/news-stories/media-service/singleview/article/led-statt-laser-oder-elektronenstrahl-neue-technologie-revolutioniert-3d-metalldruck0/)

A technology developed at Graz University of Technology uses LED instead of laser sources for the additive manufacturing of metal parts and optimizes 3D metal printing in terms of construction time, metal powder consumption, equipment costs and post-processing effort.

**Florida Resources**

[Foraging in Florida](http://www.eattheweeds.com/foraging-towards-the-equator/)

Of all the “survival” skills foraging is probably the most difficult to learn, or certainly the one that takes the most time and personal fortitude. It is one thing to say “yeph, that plant is edible.” It is another to eat it with confidence. Where you learn to forage makes a difference as well. The […]

[ArcGIS Web Application](https://www.fnai.org/webmaps/ConLandsMap/)

[Florida Foraging](http://www.floridaforaging.com/)

Highly detailed profiles of Florida's Plants, Mushrooms, and Animals make up the bulk of Florida Foraging - along with Harvest and Event Calendars, Expert profiles, Maps, and Articles - curated by Florida's top-most Experts.

[62D-2.014. Activities and Recreation, 62D-2. Operation Of Division Recreation Areas And Facilities, 62D. Division of Recreation and Parks, 62. Department of Environmental Protection, Florida Administrative Code](http://flrules.elaws.us/fac/62d-2.014)

Florida Administrative Code (FAC) is the official compilation of administrative rules for the state of Florida.The unofficial compilation of FAC based on the official version managed by Florida Department of State.Including florida rule,register.

[Contact Us](https://floridapoisoncontrol.org/contact/contact-us/)

Please select the poison control center closest to your location from the listing below. The Jacksonville Center serves North Florida and the Panhandle. The Miami Center serves South Florida and the Tampa Center serves Central Florida. Thanks for reaching out to your local poison control center!

**Recylcing**

[Best practices for attribution - Creative Commons](https://wiki.creativecommons.org/wiki/best_practices_for_attribution)

[Coperion Supplies Twin Screw Extruder for Chemical Plastic Recycling – Coperion](https://coperion.com/en/news-media/newsroom/2021/coperion-supplies-twin-screw-extruder-for-chemical-plastic-recycling)

Chemical Plastic Recycling ► Coperion Supplies Twin Screw Extruder to Ghent University.

[AIMPLAS - Technological Institute of Plastics](https://www.aimplas.net)

Solutions for companies in the plastics sector, R&D projects, technical advice, analysis and testing, competitive intelligence and training.

[Wornagain](https://wornagain.co.uk/)

[Social Plastic - Recycled Ocean Bound Plastic - Plastic Bank](https://plasticbank.com/social-plastic)

[Recycle Silicone Rubber Scrap, Silicone Oil & Fluid](https://www.ecousarecycling.com)

We recycle silicone rubber scrap, expired and surplus silicone oil & fluids, polydimethylsiloxane (PDMS), liquid silicone rubber, silicone sealant RTV, and more.

[Recycling and Conservation](https://search-credoreference-com.proxy.lib.fsu.edu/content/entry/viptab/recycling_and_conservation/0?institutionId=2057)

[Swiss waste-management policy, a peek behind the curtains of one of the most efficient country in the world.](https://solarimpulse.com/news/swiss-waste-management-policy-a-peek-behind-the-curtains-of-one-of-the-most-efficient-country-in-the-world)

[Smart Waste Management Solution - Sensoneo](https://sensoneo.com/)

SENSONEO is your partner for an innovative & environmental waste management services. Smart IoT sensors and data analytics apps are ready to manage your waste smarter.

[The Path to Zero Waste: New Data. New Habits - Compology](https://compology.com/blog/path-to-zero-waste)

This is the excerpt for your very first post.

[Bigbelly World Leading Smart Waste & Recycling System](https://bigbelly.com/platform/)

Platform deployed in the public right-of-way that delivers much more than smart waste & recycling. Modernizes a core service & optimal for hosting apps.

**Inspiring**

[Remix El Barrio Catalogo - English version](https://issuu.com/iaac/docs/remix_el_barrio_catalogo_en__1__compressed)

[Presenting 'Remix el Barrio' – Designing and crafting from food waste (EN)](https://youtube.com/watch?v=QWvR4iG5bgQ)

👩🏾‍🔬 Designing and crafting from food waste in the neighbourhood of Poblenou, Barcelona, 'Remix el Barrio' is a local ecosystem of ‘Food Waste Material Makers’ designing a series of biomaterial products and experiences from food surplus and waste. ⚡️ Nine projects incubated during an eight-month co-creation learning experience facilitated by Fab Lab Barcelona during 2019-2020. 👀 Fab Lab Barcelona worked with the designers to create a series of how-to videos and recipes which you can follow to re-create the materials in your own home. Check them all here: https://www.youtube.com/watch?v=B\_o5bpXIKjg&list=PL33KKs9g8Y1K4MJGAUHpMZn-wMcbOVhnV 'Remix el Barrio' was created during the SISCODE project which has received funding from the European Union’s Horizon 2020 under grant agreement No 788217.

[LAB01 - Co-Work, Fab LAB et Living LAB - Amberieu-en-Bugey](http://lab01.fr)

[Aegean Idea Lab Home](https://aegeanidealab.com)

Short workshops, semester study abroad, & inventor in residence programs in technology and arts. Paros, Greece. Our courses include a wide range of topics in digital fabrication including 3D printing & design, fashion technology, 2D design with lasers, web application development, the invent

[New Sustainable Method to Produce Cellulose-based Hydroplastic Polymers](https://omnexus.specialchem.com/news/industry-news/cellulose-based-hydroplastic-polymers-000225326?_hsenc=p2ANqtz-8fYvRlXCn4RiHuCYoDCRZ8EITh0LlISoy9H-SqAx2RV3o3vr26ZQ_tNZ47pPLeKBi64cypeVR4l_UFhe0-psWeAVy-EQ&_hsmi=144728685&lr=chalca_om_green_biod290721om)

Researchers at the University of Göttingen have found a sustainable method – “hydrosetting”, which uses water at normal conditions – to process and reshape a new type of hydroplastic polymer called cellulose cinnamate (CCi).

[Scientists Develop Pine Sap-based Thermally Stable Plastic for Multiple Applications](https://omnexus.specialchem.com/news/industry-news/pine-sap-plastics-fsu-000225359?_hsenc=p2ANqtz-92Zj6NudmKZPuJQVSnZBKJ5caRdweOcsPnl8kXu2nV9NPtr2WyUK-wkKZZiHUgNpoyz07aMrezo6R0qJFal7lSndxAUA&_hsmi=144728685&lr=chalca_om_green_biod290721om)

A Florida State University research team’s discovery of a new plastic derived from pine sap has the potential to be a gamechanger for new sustainable materials.

[Striatus an arched 3Dconcreteprinted bridge in Venice | Floornature](https://www.floornature.com/striatus-arched-3d-concrete-printed-bridge-venice-16432/)

On the occasion of the Venice Architecture Biennale an arched bridge printed in 3D concrete – the first of its kind – was installed and inaugurated at the

[Group Overview ‹ Mediated Matter](https://www.media.mit.edu/groups/mediated-matter/overview)

Designing for, with, and by nature

[Factum Arte](https://factum-arte.com/en/inicio)

Contemporary art workshop

[ONCOFOOD - 3D food printing with Foodini](https://youtube.com/watch?v=xVPzatIyucE)

Natural Machines is part of ONCOFOOD. Many participants of the project who have dysphagia/ require soft food diets preferred print designs that are fun, like this one made with salmon and red & green pepper. ONCOFOOD is a project funded by EIT Food, proposing the design and development of new innovative food solutions addressed to cancer patients considering not only their nutritional requirements but also their sensory alterations, promoting the pleasure of eating and preventing malnutrition.

[Condensing Years of Internet Browsing History into a Single Frame](https://hyperallergic.com/466191/condensing-years-of-internet-browsing-history-into-a-single-frame)

Kazuki Umezawa's “internet landscapes” vividly capture the schizophrenic experience of the internet.

[Japanese tech powers the creation of art -- and profits](https://asia.nikkei.com/Life-Arts/Arts/Japanese-tech-powers-the-creation-of-art-and-profits)

Expert engineering is redefining the creative process

[Northeast Sculpture](https://ne-sculpture.org/jill-stauffer)

[Post-Digital Printmaking](https://mlyon.com/2012/post-digital-printmaking)

Chapter 10: Mike Lyon - an excerpt from "Post-Digital Printmaking" by Paul Catanese and Angela Geary, A&C Black Publishers, an imprint of Bloomsbury Publishing, Plc

[wei wei](https://instructables.com/member/wei%2Bwei)

Wei Li is an artist and designer that currently lives and works in San Francisco. Li uses her work to explore fantasies and desires with visual, visceral and whimsical language. Incorporating pure sensations to push the boundaries of people's comfort zones, Li prods taboo subjects in a manner that some refer to as “intriguingly uncomfortable.” She hopes to evoke a direct emotional response from her audience and for them to become empowered enough to submit to their own fantasies.

[Learn CNC the Art Way](https://instructables.com/Learn-CNC-The-Art-Way)

Learn CNC the Art Way: CNC machines can be extremely powerful in enabling your creativity as a designer, artist, engineer, or even a hobbyist. Learning how to operate a CNC machine requires a great amount of effort, and no instruction can surpass the instructable Learn CN…

[Will your future clothes be made of algae?](https://rochester.edu/newscenter/will-your-future-clothes-be-made-of-algae-476562)

For the first time, Rochester researchers have used 3D printers and a novel bioprinting technique to print algae into living, photosynthetic materials that are tough and resilient.

[Seeing through art: creatives visualise ‘translucency’ in Tallinn](https://wallpaper.com/art/translucency-exhibition-tallinn-applied-art-triennial)

The 8th Tallinn Applied Art Triennial’s headline exhibition is a cross-disciplinary exploration of optics and the ambiguity of translucent materials

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[Miguel CHEVALIER Coraux Fractal 1 - 2021 (version courte)](https://vimeo.com/563757617)

Un film de Claude Mossessian Claude Mossessian© CORAUX FRACTALS Intervention artistique sur le Phare de Saint-Tropez dans le cadre de la 4ème édition de Saint-Tropez Couleur Bleu Marraine de l'évènement : Maud Fontenoy Du 12 juin au 4 novembre 2021 Partenaires : Ville de Saint-Tropez, Phares et Balises de la Méditerranée, Port de Saint-Tropez, Société Nautique de Saint-Tropez, Maud Fontenoy Foundation, ABICA (association de bourses internationales pour la création artistique), Global TV Saint-Tropez, Hôtel de Paris Saint-Tropez. Saint-Tropez Couleur Bleu est un évènement unique en France qui allie Culture, Patrimoine et Environnement. Évènement original créé et conçu en 2018 par Agnès Bouquet, tropézienne d’adoption fortement impliquée dans la vie artistique de la Presqu’île. Cet évènement a pour objet d’habiller d’une oeuvre artistique signifiante sur le Phare de Saint-Tropez, afin de le transformer en un Manifeste de couleur, en faveur des Océans. Coraux Fractals est une oeuvre réalisée sur une toile installée sur le cylindre extérieur du phare de Saint-Tropez, symbole historique de la ville. Cette création mêle des parties imprimées et des parties peintes à la main en couleurs fluorescentes. Le travail de Miguel Chevalier explore sur un mode poétique et métaphorique, la question du lien entre nature et artifice qui aujourd’hui coexistent et s’enrichissent mutuellement. L’oeuvre Coraux Fractals s’intéresse à la faune sous-marine, notamment les coraux, qui représentent un territoire extraordinaire pour l’imagination. Miguel Chevalier revisite les formes extraordinaires des coraux par le prisme du numérique. L’oeuvre Coraux Fractals représente de grands coraux aux couleurs fluorescentes qui ont fait du phare leur substrat. Ce «jardin» sous-marin aux multiples ramifications ressemblant à des branches, avec sa topologie fractale se détache sur un fond dégradé bleu. Cette oeuvre graphique aux couleurs irréelles et contrastées, rappelle les papiers découpés de Matisse. Par ses couleurs vives, elle se dégage du ciel et crée la surprise. De nuit, Miguel Chevalier imagine une mise en lumière de l’oeuvre qui en métamorphose ses couleurs. Un éclairage du phare avec des spots de lumières UV fait ressortir les couleurs fluorescentes et matérialise l’énergie irradiante de son oeuvre. Ce récif de corail aux formes démesurées, devient luminescent à l’image de la bioluminescence (production et émission de lumière par des organismes vivants) répandue chez les animaux marins des grandes profondeurs où la lumière du soleil ne parvient pas. Cette oeuvre, entre rêve et réalité, nous plonge face à l’inconnu, à l’image des grands fonds océaniques dont 95 % restent inexplorés. Coraux Fractals explore notre relation avec le vivant, visible ou invisible. Elle interpelle sur la fragilité des ces écosystèmes les plus menacés au monde et sur une biodiversité à préserver. Elles cherchent à recréer les conditions d’une symbiose entre l’homme et la nature.

[The Making of the Dior Men Summer Show Set](https://youtube.com/watch?v=NOQAo7IGs7Y)

Discover the story behind the scenography for the Cactus Jack Dior show unveiling the Summer 2022 men’s collection by Kim Jones in collaboration with Travis Scott, and the additional Europe-wide collaborative effort it represented. The initial sketch of a row of cacti transforming into a row of roses was adapted on an outsized scale along an 80-meter-long runway like an arid desert abloom with recreations of succulents from Scott’s native Texas and elements of Monsieur Dior’s own garden. ©Es Devlin

[Just Dance 2020: Creative Spotlight | God Is A Woman | Ubisoft [US]](https://youtube.com/watch?v=NyJL32QxD7I)

Come see the making of Just Dance 2020 and check out behind the scenes footage of God Is A Woman by Ariana Grande! Visit our website - https://www.ubisoft.com/en-us/game/just-dance-2020/ Join us on Facebook - https://www.facebook.com/justdance.usa/ Follow us on Instagram -https://www.instagram.com/justdancegame\_us/ Follow us on Twitter - https://twitter.com/justdancegame Subscribe to our YouTube - https://www.youtube.com/user/justdancegame/ ABOUT JUST DANCE 2020: Gather your friends and family and Just Dance like nobody’s watching with Just Dance® 2020! The #1 Music Video Game Franchise of All Time\*, with over 67 million units sold\*\*, is back this fall. The newest, freshest Just Dance celebrates 10 years of bringing people together with 40 new hot tracks, more stunning universes and exclusive surprises for the players to discover! Join a community of more than 120 million players around the world and get ready to set the dancefloor on fire. Whether there’s something to celebrate or for no reason at all, Just Dance is there for every occasion! Features: Just Dance 2020 comes with 40 new songs from the top of the trends for the whole family to enjoy! From chart-topping hits to family favorites, from viral internet phenomenons to the latest emerging artists, there is something for everyone to have fun in Just Dance. Just Dance 2020 celebrates a decade of bringing people together with exciting new content! Team up with friends for more fun in our Co-op mode, returning to the Just Dance franchise for Just Dance 2020. Co-op mode brings players together to combine scores and rule the dancefloor! Exercise while having fun with the Sweat Mode! Track your calories burned, time spent dancing, and keep yourself motivated with our dedicated sweat playlists. Enjoy a wide range of creative universes, created using new production techniques, never before seen in Just Dance. Little ones can join in on the fun with the acclaimed Kids Mode! The dedicated mode allows the youngest players to enjoy in full with 8 new kid-friendly curated songs, coming along with a fun dance experience tailored to kids' needs. With Just Dance Unlimited, the dance-on-demand subscription streaming service, you have access to 500+ songs and more! Every copy of the game comes with a month’s access! Experience Just Dance in a brand new way on Google Stadia. No console? No worries! Jump right into the Just Dance experience directly from your Chrome browser. Be the star of your own show! Just Dance 2020 is more personalized than ever with an enhanced recommendation system. The game learns your dancing habits and pushes you content you will like, at the time that’s right for you! Follow your instincts and pick the perfect pre-made playlist to match your mood, or let the game make recommendations created just for you. For every moment, there’s a Just Dance playlist. With the intuitive interface, personalizing your game experience has never been so easy. Pick your favorite songs among the ever-growing Just Dance catalog and create your own playlists to customize your Just Dance parties! Bust a move! The party never stops with Just Dance 2020. There is always something going on in Just Dance 2020! Check out the enhanced home page for the latest news on in-game seasonal events and more recommendations on songs or playlists to dance to and videos to watch. Make sure to visit the World Dance Floor to party online with the Just Dance community and enjoy themed events, Happy Hours, tournaments and new boss families to defeat, all year long! Keep the party going with Just Dance Unlimited! More songs and content will be added throughout the year to enrich Just Dance 2020 players’ experience. No additional accessories are required to join the fun! Just use your smartphone with the Just Dance Controller app! (iOS, Android, compatible with Xbox One, PS4 and Google Stadia) Use your smartphone to navigate in-game, track and score your moves – no camera, Kinect, or PS Move required! Up to 6 players can play with their phones simultaneously. Just Dance 2020: Creative Spotlight | God Is A Woman | Ubisoft [US] https://www.youtube.com/JustDanceGame

[Tonello Laundry (R)Evolution: Laser Blaze](https://youtube.com/watch?v=3jLK9OLbMfM)

Episode #3: Laser Blaze. Say good-bye to manual scraping; say hello to Laser Blaze! Thanks to Tonello’s research, you can choose between following the crowd or finally standing out from the pack. In the latter case, Laser Blaze gives you all the tools to fly high. The greatest denim designs always start with a good base.

[Tonello THE Laser Official Video](https://youtube.com/watch?v=s5u1CQVO6wM)

Be ready for THE change. Nothing will be the same as before. The big turning point that the denim world has been waiting for has finally arrived: after a long period of research, refinement, and fine tuning, Tonello is launching THE Laser on the market, the range that is destined to represent the new benchmark for the entire sector.

[huue.](https://huue.bio)

[House of Gold](https://houseofgold.la)

[Inspiring](https://tonello.com/en/inspiring/all)

Trends, influences, inspirations, images, photos, drawings… This websites section will be some sort of specialized board, with new examples and photos of samples made with Tonello technology, our collections and some visual inspirations for our everyday work.

[Early pre-Hispanic use of indigo blue in Peru](https://advances.sciencemag.org/content/2/9/e1501623.full)

Archaeological research has identified the use of cultivated cotton ( Gossypium barbadense ) in the ancient Andes dating back to at least 7800 years ago. Because of unusual circumstances of preservation, 6000-year-old cotton fabrics from the Preceramic site of Huaca Prieta on the north coast of Peru retained traces of a blue pigment that was analyzed and positively identified as an indigoid dye (indigotin), making it the earliest known use of indigo in the world, derived most likely from Indigofera spp. native to South America. This predates by ~1500 years the earliest reported use of indigo in the Old World, from Fifth Dynasty Egypt [ca. 4400 BP (before present)]. Indigo is one of the most valued and most globally widespread dyes of antiquity and of the present era (it being the blue of blue jeans).

[Adriano Goldschmied - HOUSE OF GOLD - Seed of Joy x TENCEL™ Modal with Indigo Technology Main Video](https://youtube.com/watch?v=0Hzqzgkp2to)

Lenzing unveils pioneering TENCEL™ Modal fiber with Indigo technology to help elevate sustainability in the denim industry • TENCEL™ branded modal fiber with Indigo technology uses a one-step spun-dyeing process to deliver indigo color whilst using substantially fewer resources. • TENCEL™ Modal fibers with Indigo technology are awarded with the EU Ecolabel for meeting high environmental standards. The Lenzing Group is enhancing sustainable offerings for the denim industry with TENCEL™ branded modal fibers with Indigo technology. The pioneering Indigo technology behind this new market offering incorporates indigo pigment directly into TENCEL™ branded modal fibers using a one-step spun-dyeing process. This delivers superior color fastness relative to conventional indigo dyeing whilst using substantially fewer resources. This innovative offering is awarded with the EU Ecolabel , a label of environmental excellence awarded to products meeting high environmental standards throughout their life cycle . Development of Indigo technology to enhance denim sustainability The denim industry’s demand for eco-responsible alternatives is growing rapidly, as brands and supply chain partners seek greater sustainability. Lenzing has been working closely with such partners to counteract environmentally harmful denim production processes via the botanic origin of its raw materials and responsible production processes. Denim remains an important market for Lenzing, and the introduction of TENCEL™ Modal with Indigo technology is designed to help reduce the ecological footprint of denim fabrics and garments. Produced in Austria, predominantly from beech wood derived from sustainably managed wood sources, this new offering has been designated BioPreferred® by the United States Department of Agriculture (USDA). “Innovation is at the core of what we do, from sustainable fiber sourcing through industry leading features and production processes, with the ever-present goal of safeguarding our environment,” says Florian Heubrandner, Vice President Global Textiles Business at Lenzing AG. “By upending traditional manufacturing processes and implementing our pioneering technology along with renewable and eco-responsible materials, TENCEL™ Modal with Indigo technology sets a new benchmark for indigo application and sustainability in the denim industry.” Among early launch collaborators for TENCEL™ Modal with Indigo technology is Adriano Goldschmied, founder of House of Gold, who is widely regarded as the “Godfather of Denim” for his progressive vision in denim development. “The TENCEL™ brand is leading revolutionary change for the denim industry and it has always been one of my go-to eco-fibers for my collections,” states Goldschmied. “We are thrilled to collaborate and launch the ‘Seed of Joy’ concept capsule with woven, circular and sweater knit fabrics using TENCEL™ Modal with Indigo technology. Indigo technology elevates production standards and significantly reduces waste Indigo technology builds upon the strong credentials of TENCEL™ Modal fibers with new benefits. Compared to conventional indigo dyeing, the color retention of TENCEL™ Modal with Indigo technology is superior through dry and wet crocking and rubbing. Compared to water and energy intensive conventional indigo dyeing, this technology provides indigo coloration with substantial water, chemical and electricity savings, along with less wastewater produced, and no heat energy used. In addition, a specially commissioned indigo pigment from dyestuff manufacturer DyStar®, ensures that TENCEL™ Modal with Indigo technology can be certified with STANDARD 100 by OEKO-TEX®, guaranteeing ultra-low levels of aniline. Günther Widler, Head of Technology, Denim of DyStar® says, “This specially commissioned indigo pigment is based on more than a decade of our working experiences on Indigo Synthesis in Germany. Twenty-five years ago, we invented the most eco awarded DyStar® Indigo Vat 40% to meet the demand for sustainable manufacturing and production.” Directed by Sadia Rafique / ENDRIME® for TENCEL™ Modal with Indigo Technology Project - Feb 2021

[Direct-to-Textile 3D printing with Ganit Goldstein](https://youtube.com/watch?t=269s&v=BdXBqfczzrI)

Ganit Goldstein teams up with Stratasys to achieve her mission of customized fashion design by combining craft methods with direct-to-textile 3D printing to produce a Japanese-style dress. Using PolyJet Technology, the digital designs were 3D printed directly onto sustainable fabrics in vivid colors, creating a shimmer effect when the garment is in motion, while maintaining the comfort and wearability of fabric garments. The work is part of Re-FREAM, a collaborative research project funded by the European Union. Video by Ganit Goldstein Stratasys Creative Director, Naomi Kaempfer

[ADAM – Acoustics by parametric Design and Additive Manufacturing](https://youtube.com/watch?v=ZZfjUP6CjQk)

Imagine this: you can control the acoustics of your environment, no matter the size and shape of the space around you, your access to electricity, and the type of sound you’d like to control. That is what the ADAM prototype offers. The parametric design and additive manufacturing process of ADAM allows the creation of tailormade tuned PDI absorbers. Find out more here: bit.ly/ADAMacoustics

[Aectual | 3D printed architecture & interiors](https://aectual.com)

Circular customizable products by and for architects, designers and designlovers. Check our collection now!

[Aectual launches mass customized 3D printed acoustic panels](https://www.3dprintingmedia.network/aectual-launches-mass-customized-3d-printed-acoustic-panels)

Dutch company Aectual has launched customizable 3D printed acoustic diffusion panels made from 100% circular plant-based materials.

[Computer scientist works with artificial intelligence to keep people in state of flow](https://www.uta.edu/news/news-releases/2021/06/09/torres-in-zone?utm_source=miragenews&utm_medium=miragenews&utm_campaign=news)

Cesar Torres, assistant professor in the Computer Science and Engineering Department at The University of Texas at Arlington, has recently received a grant of approximately $175,000 from the National Science Foundation to use machine learning and artificial intelligence (AI) techniques to identify when a person is falling out of flow and introduce an intervention to regain flow.

[Home](https://www.transaera.com)

Transaera is developing a new class of affordable, energy-efficient, sustainable cooling systems and residential air conditioners.

[Home](https://humatlab.net)

A research lab at Penn State architecting materials for human well-being.

[Improving recycling of plastic packaging](http://www.buffalo.edu/ubnow/stories/2021/05/remade-grant.html)

A UB-led project, supported by the REMADE Institute, aims to find new uses for these multilayered films.

[ESTRATA BENCH I Made from recycled Tetra Pak](http://nos.mx/en/proyecto/estrata_bench_/)

As part of the Circular Economy projects, we created a modular system of benches and garbage dumps made with recycled Tetra Pak to close the reuse cycle with products that consume a high volume of this material.

[Digital Structures](http://digitalstructures.mit.edu/tags/timber)

[Elaine Ng Yan Ling](https://www.elaineyanlingng.com)

Innovating Future

[Harold Cohen Home Page](http://www.aaronshome.com/aaron/index.html)

[2017\_Recitation: Why to make almost anything by Fab Academy • A podcast on Anchor](https://anchor.fm/fab-academy/episodes/2017_Recitation-Why-to-make-almost-anything-e1fb39)

2017\_Recitation: Why to make almost anything by fabacademy

[TRANS-DOCK](https://vimeo.com/389770163)

Expanding the Interactivity of Pin-Based Shape Displays by Docking Mechanical Transducers Authors: Ken Nakagaki, Yifan (Roger) Liu, Chloe Nelson-Arzugana, and Hiroshi Ishii Project Page: http://tangible.media.mit.edu/project/transdock/

[Presence of Abscence - Tangible Media Group](https://vimeo.com/455883074)

Presence of Abscence - Tangible Media Group

[DefeXtiles](https://vimeo.com/465508515)

https://dl.acm.org/doi/abs/10.1145/3379337.3415876 Created at the MIT Media Lab, DefeXtiles is our attempt at high fidelity coupling of digital bits and physical atoms. While defects are often seen as negative, this works leverages the periodic gap defects that arise from the underextrusion of thermoplastic to produce flexible and thin substrates. These soft and stretchable substrates can be quickly printed into complex 3D forms with many materials using an unmodified inexpensive 3D printer. We are able to print full-sized garments, e-textiles, durable shuttlecocks, and miniature dresses am...

[Best Sustainable Packaging Awards 2019 - Eco Friendly Packaging Brands & Trends](https://www.goodhousekeeping.com/beauty-products/a29459394/best-sustainable-packaging-brands/)

Brandless’s cleaning product is a mix-it-yourself system we can get behind. The starter kit comes with an empty spray bottle and cleaning pack — you add water and shake. It cut through grease and grime well in our tests. LAB RESULTS We love that the design encourages you to reuse the bottle (buy refill packs when you run low), and since you add the water, shipping emissions are reduced. The line also has other cleaners like a multi-surface one.

[Upcycling and Biopolymers: How We’re Working to Make Earth-Friendly Furniture - Model No.](https://model-no.com/blog/upcycling-and-biopolymers-how-were-working-to-make-earthfriendly-furniture/)

Recent months have caused substantial upheaval around the world. As we look to make meaningful changes in our regular routines going forward, we think it’s important to look at the choices we make both now and in the future. In fact, it is our concern for that global future that is one of the driving forces behind how we at Model No. make furniture today. You see, sustainability isn’t just a buzzword for us, it’s an essential part of the process. And with Earth Day right around the corner, we thought now would be a good time to take a moment to reflect on those processes and shed some light...

[Home](https://model-no.com/)

Model No. Furniture. One Size Doesn't Fit All. Custom furnishings made-on-demand to fit your style, home, and budget.

[OESH Shoes | Healthy by Design, Shoes for Women](https://oeshshoes.com/)

OESH Shoes are the only footwear you can buy that has been designed exclusively on principles of peer-reviewed medical science.

[Huntsman and OESH Co-develop 100% Recyclable TPU-based 3DP Shoe Sole](https://omnexus.specialchem.com/news/industry-news/huntsman-oesh-recyclable-sole-000222832?lr=iom20101975&li=200310283&utm_source=NL&utm_medium=EML&utm_campaign=iom20101975&m_i=nPTEa%2BOAy2IAhLOBZedVF603jKgoChcYH_5anOQ2HpqEjFNkzLzFnLTVBqjo9qbRFgyKo%2B_GrvB9FDzvYheOVX2Dy3x_nh&status=valid)

OESH® Shoes has been evaluating how Huntsman’s thermoplastic polyurethane (TPU) materials can be used to create a 100% recyclable shoe sole via 3D printing – with positive results.

[Tech as catalyst for Inner and Outer Peace: Mikey Siegel at TedxSantaCruz](https://www.chi.is/resource/enlightenment-engineering/?mc_cid=0fc758e194&mc_eid=ec0f98f696)

Mikey Siegel discusses how to use technology to facilitate extraordinary states of wellbeing by helping to reduce stress and increase joy.

[Earwig fan designing: Biomimetic and evolutionary biology applications](https://www.pnas.org/content/117/30/17622)

We report a geometrical drawing method enabling to reproduce the complex wing-folding pattern of earwigs. Although the earwig wing has unique properties with an outstanding potential for engineering, such as an extreme compactness when fully creased or self-folding behavior, its design process had not been resolved, which limited practical applications. We provide the means of reconfiguring the modeled earwig wing to satisfy flexible designing needs, including a dedicated software. The new method can also reconstruct the wing folding of Paleozoic earwig relatives, which provides the rare chance to infer evolutionary patterns based on spatial (morphofunctional) constraints. This research represents a step toward using the earwig wing as a model for artificial deployable structures of various sizes and materials. All crease patterns, 3D models, and custom codes used in this study are available in ref. [30][1]. [1]: #ref-30

[Projects — Viewport Studio](https://www.viewportstudio.co.uk/projects)

[Weekly show](https://www.ellenmacarthurfoundation.org/our-work/activities/live-online-events/weekly-show?utm_campaign=He_092020&utm_medium=email&utm_source=newsletter_mailchimp&utm_content=weekly-show&utm_term=&utm_source=Higher+Education+Academic+List&utm_campaign=a0155dabf6-from_linear_to_circular_he_feb_2020_COPY_01&utm_medium=email&utm_term=0_b248201008-a0155dabf6-87913919&mc_cid=a0155dabf6&mc_eid=9338a09804)

Ellen MacArthur Foundation

[Vine eco friendly 40mm apple watch band](https://pelacase.com/collections/vine-eco-friendly-40mm-apple-watch-band?utm_campaign=Vine%20Series%206%2FSE%20%28RFyTbQ%29&utm_medium=email&utm_source=Pela%20Planet%20Email%20Openers%20Last%2090%20Days&_ke=eyJrbF9lbWFpbCI6ICJjYWl0bGluZHJpdmVyQGdtYWlsLmNvbSIsICJrbF9jb21wYW55X2lkIjogInJRbURnVCJ9)

[New Recyclable 3DP Material for Self-healing Prosthetics & Aircraft Wings](https://omnexus.specialchem.com/news/industry-news/temperature-controlled-recyclable-material-000222599?lr=iom20091968&li=200310283&utm_source=NL&utm_medium=EML&utm_campaign=iom20091968&m_i=Za5BXXrHAVLj2kybZDvIGUx76duyHB2mm0IdQ1aQSTmv2aQJkZ8D0T18kfKbnVC6vPh5s_xjCweIQhwHOfTULhrk4CdvZe&status=valid)

Researchers at Texas A&M University and the U.S. Army Combat Capabilities Development Command Army Research Laboratory have created a family of synthetic materials that range in texture from ultra-soft to extremely rigid by tweaking the chemistry of a single polymer. The researchers said their materials are 3D printable, self-healing, recyclable and naturally adhere to each other in air or underwater.

[This sustainable packaging was inspired by orange peel](https://www.weforum.org/videos/19219-tipa-uplink)

The World Economic Forum is an independent international organization committed to improving the state of the world by engaging business, political, academic and other leaders of society to shape global, regional and industry agendas. Incorporated as a not-for-profit foundation in 1971, and headquartered in Geneva, Switzerland, the Forum is tied to no political, partisan or national interests.

[We Believe We Can End The Water Crisis In Our Lifetime](https://www.charitywater.org)

charity: water is a non-profit organization bringing clean, safe drinking water to people in developing countries. 100% of public donations go to water projects.

[Mississippi State architecture students take second in national masonry unit design competition](https://www.caad.msstate.edu/news/2020/08/mississippi-state-architecture-students-take-second-national-masonry-unit-design)

Juniors Jack Harrell, Caya Perry, Ruthie Southall and Jon Zeipen submitted their team’s video presentation of “The Void” brick design for the National Concrete Masonry Association 2020 Midyear Meeting in early August.

[adidas Online Shop](https://www.adidas.ca/en/4D)

3D Printed Insoles

[Kitrvs winery's facades built from 13,596 individually rotated bricks](https://www.dezeen.com/2020/07/16/augmented-bricklaying-kitrvs-winery-eth-zurich-gramazio-kohler-research/)

Swiss university ETH Zürich has created the facades of a winery in Greece from 13,596 individually placed bricks using "augmented bricklaying".

[Ecobean | BEAN TO CUP. WASTE TO ENERGY.](https://ecobean.pl/)

We turn waste left over from your daily cup of coffee, that would otherwise end up in the landfill, into clean energy products.

[About](https://faberfutures.com/about/)

[REFLOW – Co-creating circular and regenerative resource flows in cities](https://reflowproject.eu/)

REFLOW is a project that seeks to understand and transform urban material flows, co-create and test regenerative solutions at business, governance, and citizen levels to create a resilient circular economy.

[Sustainable Impact](https://www8.hp.com/us/en/hp-information/sustainable-impact.html)

HP's Sustainable Impact creates lasting, positive change for the planet, our people, and the communities where we live, work, and do business. Find our report here.

[Design & 3D Scannen | Zuid Holland, Javid Jooshesh](https://www.javidjooshesh.com/)

Interdisciplinary Design Studio in Rotterdam | 3D Scanning, Generative Design, 3D Modelling, Form-Finding & Optimization, Reverse Engineering, and Large Scale 3D Printing,

[Who We Are | A Source Cause Solution for Ocean Plastic - Plastic Bank](https://plasticbank.com/about/)

Plastic Bank is a global social profit enterprise that strives to stop Ocean Plastic while improving lives and empowering people. Join the Movement!

[How This Food Computer Will Allow Anyone to Be a Farmer](https://www.youtube.com/watch?v=AMbZyVlHF_k)

Caleb Harper of MIT creates "food computers" that are helping to change the landscape of our food system. SUBSCRIBE to ABC NEWS: https://www.youtube.com/ABCN...

[From FABLabs to OpenEcoLabs](https://miro.com/app/board/o9J_kogH17g%3D/)

[makers 4 humanity](https://www.makers4humanity.org/)

[About | Open Source Ecology](https://www.opensourceecology.org/about-overview/)

The mission of Open Source Ecology (OSE) is to create the open source economy. An open source, libre economy is an efficient economy which increases innovation by open collaboration. To get there, OSE is currently developing a set of open source blueprints for the Global Village Construction Set (GVCS) – a set of the 50 most important machines that it takes for modern life to exist – everything from a tractor, to an oven, to a circuit maker.

[Open-Island - wechange](https://wechange.de/project/open-island/)

"Open-Island" is an open-source system for modular floating islands made from recycled and renewable materials. It was developed in India and Germany by the makers4humanity collective and was used on different water bodies worldwide for different purposes. Our current project is the "Lake of Change". Together with landscape planners, engineers, eco-activists and cultural-creative folks from Bangalore and all over, we together focus on urban water bodies. „Lake of change“ starts as a participatory process and cross-cultural happening on a "Kalyani" (Indian temple-tank) in Bangalore/India. Our goal is to prototype a variety of EcoDesigns, capable to improve the treatment and overall quality of the city's water bodies. The approach is interdisciplinary and experimental: we welcome all ideas, designs, concepts and best-practices that can help transform the neglected water bodies into creative, healthy public spaces. We envision productive lakes with local food production, social entrepreneurships and culture, sports and leisure facilities on and around the patronized biospheres. The huge potential of urban water-bodies is waiting to be discovered at the "Lake of change" and beyond. Welcome aboard! "Let us be the change we want to see in this world." - Mahatma Gandhi

[Water Retention Landscape – a holistic and regenerative approach](https://www.tamera.org/water-retention-landscape/)

The Water Retention Landscape is a model for ecosystem restoration based on natural & decentralized water management in regions threatened by desertification.

[U+: Call for Futures Fragments](https://ff.plurality-university.org/)

Think of the future you want to live in, the future you fear, the funniest or the most intriguing future, the future of trees, of species (incl. humans), of cities, of space, your own or our collective future: What form does it take? Is there an image, a text, a video, that best represents this future?

[Jeremy Bonvoisin](https://researchportal.bath.ac.uk/en/persons/jeremy-bonvoisin)

[Gramazio Kohler Research](https://gramaziokohler.arch.ethz.ch/web/e/projekte/330.html)

ETH Zurich - Architecture und Digital Fabrication

[Jeongwon Ji](https://www.rca.ac.uk/students/jeongwon-ji/)

Royal College of Art

[Piedra Preciosa II - bernarditamarambio](https://www.bernarditamarambio.cl/Piedra-Preciosa-II)

[bernarditamarambio](https://www.bernarditamarambio.cl/)

[Story - hettler.tüllmann](https://www.hettlertullmann.com/about/story/)

hettler.tüllmann is the collaboration between designer Katja Hettler and architect Jula Tüllmann. After many years working abroad in Paris and New York they returned to Berlin and founded hettler.tüllmann in 2005 and the label redmaloo – accessories for electronic devices in … Weiterlesen

[Studio Aisslinger | InnoTrans Fair](https://www.aisslinger.de/innotrans-fair/)

[index](https://marjanvanaubel.com/)

[foodmade - nips - use design](https://inhabitat.com/foodmade-designers-turn-food-into-a-new-medium-for-industrial-design/foodmade-nips-use-design/)

Designers use food to create incredible pieces of furniture and decor at the 2013 Milan Furniture Fair.

[uovodesign](https://inhabitat.com/foodmade-designers-turn-food-into-a-new-medium-for-industrial-design/inhabitat-irenemilan-c16_52-uovodesign/)

Designers use food to create incredible pieces of furniture and decor at the 2013 Milan Furniture Fair.

[Michal EN](https://www.youtube.com/watch?time_continue=1&v=K3Cc3IxmhOU&feature=emb_logo)

[Meet the people balancing nature and business](https://www.youtube.com/watch?v=WiOhsLFvmJU)

Mimicking nature's cycles on a buffalo farm, growing leafy greens and other plants under London's tube lines, and more from the team at Ooho. Watch the third...

[MIdushi Kochhar](https://midushikochhar.squarespace.com)

[3DPrint.com | The Voice of 3D Printing / Additive Manufacturing](https://3dprint.com/)

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[E-NABLE COMMUNITY CHAPTERS](https://enablingthefuture.org/e-nable-community-chapters/)

e-NABLE Community Chapters With the e-NABLE Community of volunteers growing rapidly in recent years, there are numerous chapters that have been formed by students, groups, libraries, schools and ma…

[Resinance](http://materiability.com/portfolio/resinance/)

**Service Bureaus**

[GrabCAD Print | 3D Printing Software Made Easy & Simple](https://grabcad.com/print?mkt_tok=NTMzLUxBVi0wOTkAAAF-NVYmIad62Z8kc9LnkAfY1jfTdsGMkLOT5g14jxt1dJdvrGfNgtLuyarmWaNPyMgVWYaEh7d0MlRkGULAh2AUmJkXgoLTl8sXUr8n7TYLikjMyw)

Free 3D printing software with slicer technology & Advanced FDM and PolyJet applications. Easily manage Stratasys 3D printing workflows.

**Sustainability**

[Home | U.S. Plastics Pact](https://usplasticspact.org)

U.S. industry leaders recognize that significant, systemwide change is needed to realize a circular economy for plastic; individualized action isn’t enough and thus, The U.S. Plastics Pact brings together companies, government entities, non-governmental organizations (NGOs), researchers, and other stakeholders in a pre-competitive platform for industry-led innovation. The U.S. Plastics Pact will drive collaborative action and deliver a significant system change toward a circular economy for plastic.

[Dissolvable Template Nanoimprint Lithography: A Facile and Versatile Nanoscale Replication Technique](https://pubs.acs.org/doi/10.1021/acs.nanolett.0c01547)

Nanoimprinting lithography (NIL) is a next-generation nanofabrication method, capable of replicating nanostructures from original master surfaces. Here, we develop highly scalable, simple, and nondestructive NIL using a dissolvable template. Termed dissolvable template nanoimprinting lithography (DT-NIL), our method utilizes an economic thermoplastic resin to fabricate nanoimprinting templates, which can be easily dissolved in simple organic solvents. We used the DT-NIL method to replicate cicada wings which have surface nanofeatures of ∼100 nm in height. The master, template, and replica s...

[Pollution Prevention - an overview | ScienceDirect Topics](https://www.sciencedirect.com/topics/earth-and-planetary-sciences/pollution-prevention)

[Learn About Pollution Prevention | Pollution Prevention (P2) | US EPA](https://www.epa.gov/p2/learn-about-pollution-prevention#:~:text=Pollution%20prevention%20(P2)%20is%20any,%2C%20treat%2C%20or%20dispose%20of.)

Pollution prevention is reducing or eliminating waste at the source by modifying production, the use of less-toxic substances, better conservation techniques, and re-use of materials.

[Pollution Prevention (P2) | US EPA](https://www.epa.gov/p2)

The Pollution Prevention (P2) web site provides specific information on the law, grant program, and where to find technical assistance for businesses or organizations that want to adopt P2 practices.

[Going Green: Sustainable Living and Development Guide - Sustainability, Ecofriendly, Going Green News, Resources, FAQs, Definitions, Technologies, Websites- Middletown Thrall Library Special Coverage Center](https://www.thrall.org/special/goinggreen.html#Books)

[Going Green: Sustainable Living and Development Guide - Sustainability, Ecofriendly, Going Green News, Resources, FAQs, Definitions, Technologies, Websites- Middletown Thrall Library Special Coverage Center](https://www.thrall.org/special/goinggreen.html#About)

[1.8 Life Cycle Costing | GSA](https://www.gsa.gov/node/81412)

Life Cycle Costing (LCC) is an important economic analysis used in the selection of alternatives that impact both pending and future costs.

[Estimating Appliance and Home Electronic Energy Use](https://www.energy.gov/energysaver/save-electricity-and-fuel/appliances-and-electronics/estimating-appliance-and-home)

Learn how to estimate what it costs to operate your appliances and how much energy they consume.

[Eco-Friendly Product Company | Sustainable Packaging Supplier](https://investor.goodnaturedproducts.com/about/)

good natured is an eco-friendly packaging company and sustainable packaging supplier seeking investors to expand operations throughout North America.

[Labels](http://www.worldcentric.org/images/newsletter/Compostable%20vs%20%20Biodegradable.pdf)

[Composting Facilities - GreenGood USA](http://www.greengood.com/composting/composting.htm)

**Tutorials**

[Course](https://inst.eecs.berkeley.edu/~cs194-28/sp19/data/course.pdf)

[Laser engraving training](https://www.troteclaser.com/en-us/news/2019-02-thrdthurs/)

Join us every third Thursday for free workshops and learn how to use a laser machine to increase profits for your business

[Laser Samples with step-by-step instructions and template files](https://www.troteclaser.com/en-us/knowledge/do-it-yourself-samples/)

DIY laser samples with step-by-step instructions, tested laser parameters and free graphic files. Find inspiration for laser applications made of wood, acrylic, paper, cardboard and much more.

[The Fab Foundation](https://m.youtube.com/c/fabfndn/playlists)

Facilitating & supporting growth of the International #FabLabNetwork

[FABxLive Workshops](https://docs.google.com/spreadsheets/u/0/d/1P3YzwI-OcY5iIgDXYcMiFjB0pZCgvfDrRSfllWUsbd8/htmlview#gid=0)

**Bio Plastics**

[VTT’s New Technology to Develop Bio-based PEF Plastics Using Citrus Peels](https://omnexus.specialchem.com/news/industry-news/vtt-pef-plastics-citrus-peels-000223449)

New technology developed at VTT enables the use of pectin-containing agricultural waste, such as citrus peel and sugar beet pulp, as raw material for bio-based PEF-plastics for replacing fossil-based PET. The carbon footprint of plastic bottles can be lowered by 50% when replacing their raw material of PET with PEF polymers, which also provides a better shelf life for food.

**Clean Building Materials**

[About](https://biomason.com/about/)

Biomason are leading the global transition to planet-friendly construction.