



Celebrating Our Beginnings

Friends of TVCOG,

This month marks the eighth anniversary of our founding! Tech Valley Center of Gravity started with a mission to cultivate a community of makers, innovators and entrepreneurs to initiate creative collisions resulting in economic and personal growth in the Capital Region. Thanks to the hard work and generous support of our founders, initial investors and equipment donors, we opened the doors to the public at our initial location in the Uncle Sam Garage for the very first time on February 9, 2013.

Opening day was full of nerves and jitters for our founding members, not just because they were about to open the doors to the first Makerspace in the Capital Region, but also because opening day happened to coincide with an enormous snowstorm! They were worried that the storm might keep guests and new members from coming, but instead they registered over a 100 new members that day. Since that founding day, we have kept growing, moving into a larger space and expanding our membership and programs, celebrating our founding day each year.

We are especially grateful to be able to celebrate this anniversary in particular, as it comes after such a uniquely difficult year. With your support, we have been able to grow and pivot to adjust to these tumultuous times, while still staying true to our mission. **So this year on February 9th, our Founders Day, we celebrate not just the founders who made opening our doors possible in the first place, but also all of you, the wonderful supporters, members and volunteers who kept our doors open these past few months. This Founders Day, we give thanks to our community for your continued support.** We look forward to another year of growth and advancement in our mission to support the maker community in the Capital Region and beyond.

— Cheryl Kennedy, Executive Director

News from the Makerspace:



How TVCOG is Preparing for Another Uncertain Year in 2021

Cheryl Kennedy, our Executive Director, took some time last month to sit down with the Albany Business Review and talk about the strategies TVCOG implemented to keep our doors open in 2020 and the importance of staying creative and connected

She also looks ahead to the New Year, discussing some of the plans and ideas we have for 2021, including some exciting possible future collaborative events, and the expansion of our virtual programs.

[Read the Interview](#)

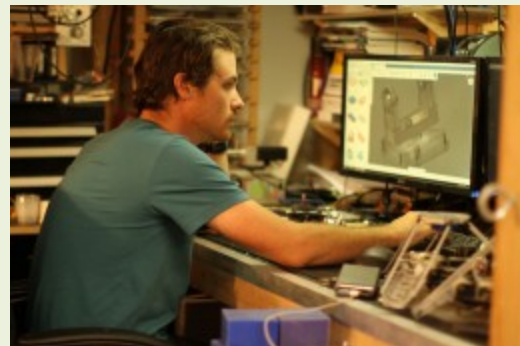
In the Spotlight...

Community Access Programs

As a 501(c)(3) charitable community organization, TVCOG wants to ensure all members of our community are able to take advantage of the opportunities our organization provides, especially now. **To support this mission, we have expanded our Community Access Programs in order to offer more resources for those who are currently experiencing financial difficulties.**

Programs include the Hardship Membership Program, which offers up to 6 months of fully subsidized membership for qualifying individuals, and the Pay-What-You-Can Program, which offers up to one year of partially subsidized membership to qualifying individuals. We have a variety of programs available, each designed to meet different needs.

[Learn More & Apply](#)



Classes, Events & Programs



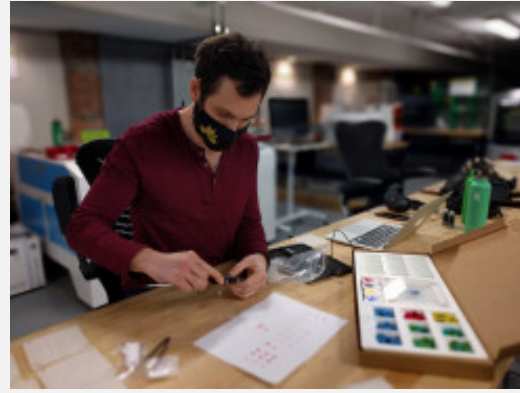
In-Person Classes Available to Members: Quick Start Guide Series

Never used power tools? You're not alone. Our Quick Start Guide class series helps beginners understand and use the basic equipment in our work zones. These one-on-one individual sessions are currently available to COG members. Each session is approximately one hour long, covers the essential knowledge needed to operate that tool, and includes hands-on experience. Machines covered include: MIG welding, TIG welding, angle grinders, the jointer & planer and more. All classes are taught by our Facilities and Incubator Director, Dan Falkenstrom. [Register for a class now.](#)

[Register for a Class](#)

Perseverance and Innovation in the Entrepreneurship, Manufacturing Communities

The Manufacturing Incubator achieved some encouraging forward momentum in 2020. After reflecting on the issues past applicants faced, we **modified the incubator's structure** to better address the problems product developers are actually facing. We now work with a **wider range of mentors and service providers**, improving our ability to match a client's weaknesses with the strengths of an experienced professional. If your application wasn't accepted in the past, or you were hesitant about your fit for the program, we encourage you to apply again! Our clients are an eclectic bunch, tackling everything from improving e-bike charging technology, reducing infant health issues by improving baby bottle designs, and developing a creativity-enhancing printing press tool. They have one thing in common, though - **they want to build effective prototypes and develop a manufacturable product.**



Stay motivated by continuing to learn and network. Every month we host **Food for Thought**, where we spend an hour covering a topic of interest; packaging, the creative process in prototyping, patent law, and more. Our monthly Meetup group **HATCHED - The Capital Region Inventors and Entrepreneurs Meetup** is a mix of project sharing group feedback sessions and talks from successful product developers. These events are virtual and open to anyone; we look forward to having you join us.

-- Dan Falkenstrom, Facilities and Incubator Director

Upcoming Incubator Events & Programs



Wednesday, February 3 from 12-1pm

Ceramic additive manufacturing (3D printing) opens doors to product development and small series manufacturing, combined with functional complexity that was traditionally cost prohibitive for many applications. This talk will share the current state of the art of ceramic 3D printing and the types of applications where this large family of materials is finding use.

Lithoz is the market leader in 3D printers and materials for advanced ceramic, for use in aerospace, medical, dental, energy, and industrial applications. Lithoz America, located in the Rensselaer Tech Park, is the US branch of Lithoz GmbH from Vienna Austria. Lithoz America performs sales and support of systems, materials & printing development and demonstration services, and production of custom materials for printing.

Mr. Shawn Allan is Vice President of Lithoz America LLC, which was established in 2017 to build and sell AM equipment to produce high-performance ceramic parts that are widely used in the electronics, aerospace, and biomedical industries. Mr. Allan has over 20 years of experience in ceramic processing, technology development, and additive manufacturing.

[Learn More & Register](#)



Next HATCHED: Thursday, February 4 @ 6:30pm

This monthly program is co-hosted by the Tech Valley Center of Gravity in partnership with the Capital District Inventors and Entrepreneurs Meetup. Through our Hatched-CDIEM partnership, we host invention and product development feedback nights and quarterly special inventor speaker presentations to foster the inventor and product development entrepreneurship community in the Capital Region of New York State.

[Join the Meetup Group](#)

News from the THINQubator:

Making Virtual Learning Hands-On



The THINQubator at Tech Valley Center of Gravity is a space designed to empower kids and families to think, tinker, collaborate, skill-build, design and make. We are committed to providing STEAM education resources to kids, teens and families during this difficult time, and have pivoted to virtual programming for the time-being. **We look forward to growing those virtual program offerings to include weekend workshops,**

summer camps etc. and to continuing with our regularly scheduled STEAM-Powered Saturday program, now in a virtual format with supplies kits available for pickup.

This month we will also be celebrating Black History Month by shining a spotlight on Black Makers and STEAM innovators, both modern and historical. Check out our [Facebook page](#) throughout February to see who is featured that day!

Upcoming Classes & Events



Next STEAM-Powered Saturday: Saturday, February 6 @ 12pm

Every 1st Saturday children ages 4-12 and their families are invited to join us for a fun, creative hands-on project. Brought to you through the generous support of the Albany Society of Engineers Foundations, these mind-expanding projects help children discover creative play through science, technology, engineering, the arts and mathematics. Our special virtual additions are brought to you with additional support from GE Healthcare and Agora Media.



This month's project is "Light-Up, Pop-Up Valentines!"

Work with LEDs and conductive tape to create light-up valentines! The video and project guide will be posted at noon on February 6 on our Facebook page. Free supplies kits will be available for pickup at [Bard and Baker Board Game Cafe](#) all month long. For those who can't pick up a kit, we recommend ordering this kit from [Make](#) or reaching out to us to learn where to purchase individual supplies.

[Go to the THINQubator Facebook Page](#)

Updates from our Creative Community:

Made at the COG

What our Members are working on right now.



Map of Middle Earth

Kris Navratil, our Volunteer Woodshop Coordinator, worked overtime on this Lord of the Rings inspired gift! Kris laser-cut this map of Middle Earth on poplar wood and finished it off with a maple frame in the woodshop.



Custom Bubble Levels

"I realized partway through that I did a metal project like a woodworker. No drawings, not a single absolute measurement. Everything was comparisons and test fitting."-- Steve Nordhauser, our Volunteer Model Shop Coordinator, on using the metal shop equipment to create these custom bubble levels.



Spoon Man

Volunteer Fiber Arts Coordinator Irene recently took our Quick Start Guide class on MiG Welding, and decided to start practicing her new skills right away. The day after her class, she took some silverware she had lying around and created this awesome Spoon Man, who is dedicated to helping others hold things.

[Follow us on our instagram @techvalleycog for more #MadeattheCOG updates.](#)

From the Desk of the Volunteer Coordinator

A Haiku

Autumn snow melted
CoG doors locked; makers resting
"Beep" says fob reader

--Steve Scotten
Volunteer Coordinator Shift Report, 12/9/20

Virtual Social Nights

Social Nights for members will continue to be virtual for the time-being; meetings are held via Zoom every Tuesday at 6:30pm. The log-in information and the meeting agenda for the regular weekly updates is sent to members via email each Tuesday.

Join Our Creative Community

We are open and operating at standard hours. Membership is open to anyone ages 18+ so [join today!](#)

You can also support us with a [donation](#).

TVCOG's COVID-19 Protocols

Tech Valley Center of Gravity is committed to following guidelines set forth by New York State and to ensuring the safety of our community members. Review our Covid-19 policies and procedures [here](#).

Tech Valley Center of Gravity is a makerspace, prototyping center, manufacturing incubator, STEAM-education center and creative community located in the heart of downtown Troy, New York. A member-supported 501(c)(3) community resource organization, the Center of Gravity serves members from Albany, Columbia, Rensselaer, Saratoga and Schenectady counties and beyond with space, tools, technology and expertise to explore and exercise their creativity, turn ideas into objects of art and/or utility, and launch new ventures based on their own ingenuity. [Click here to donate.](#)