

# The Future of Business in Pittsburgh

February 2023

## YKK AP Technologies Lab Explores “Virtual Factory” in Pittsburgh

YKK AP Technologies Lab (NA) Inc. has leased space at Pittsburgh’s Mill 19 to explore the feasibility of a “virtual factory.” According to a release from the Regional Industrial Development Corporation of Southwestern Pennsylvania (RIDC), YKK AP Technologies Lab (NA) Inc. will be engaged in research and development of digitization technologies that enable production and installation activities to be simulated in a “virtual factory.” Its work will allow for the creation of engineering and supply chains in a virtual space, aiming to create a “digital twin.” This work is occurring as the problems of workforce shortages and aging installation technicians become more severe.

“YKK AP Technologies Lab (NA) Inc. is a great fit alongside the advanced manufacturing and robotics companies at RIDC Mill 19,” said Donald F. Smith, Jr., RIDC President. “Their focus on solving immediate industry issues meshes well with the missions of their neighbors Catalyst Connection, Advanced Robotics for Manufacturing Institute and Manufacturing Futures Institute. RIDC Mill 19, which also is home to autonomous vehicle company Motional, is an innovation hub ripe with opportunity.”



YKK AP Technologies Lab (NA) Inc. has leased space at RIDC Mill 19.  
(<https://ridc.org/news/ykk-ap-technologies-lab-na-inc-leases-space-at-ridc-mill-19/>).

This isn’t the first YKK AP venture into Pittsburgh. YKK AP opened a “Pittsburgh R&D office” in 2019 when they launched collaborative research into construction technology with Carnegie Mellon University. According to a release, the purpose of the joint research is to develop new technology using cutting-edge robots and IT to improve construction productivity and quality. YKK AP and CMU are investigating virtual reality, augmented reality and mixed reality technologies to bring enhanced innovation to the construction industry.

CMU in Pittsburgh, a city that has grown as a technology hub in the US, specializes in applied research utilizing robots and IT, and its academic culture emphasizes industry-academia collaboration. YKK AP determined a long-term R&D and technology development partnership would be mutually beneficial for the industry. YKK AP researchers are working with CMU’s Computational Engineering and Robotics Laboratory (CERLAB), led by Professor Kenji Shimada, on the real-world application of IT, engineering and robotics.

## Representatives from Saitama City Explore Collaborations in Pittsburgh

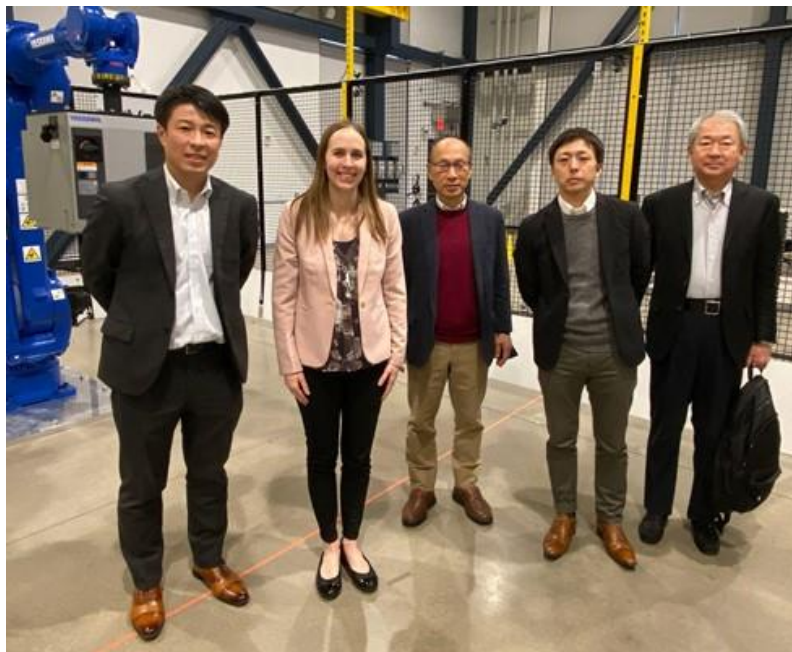
Representatives from the Saitama City Foundation for Business Creation (SFBC) visited Pittsburgh in February to learn more about the major industries in the area, and to explore potential business partnerships between the Pittsburgh-based companies and Saitama-based companies.

The visit included meetings with Carnegie Mellon University, the Pittsburgh Robotics Network, the Pittsburgh Regional Alliance, the Pittsburgh Technology Council and the Japan-America Society of Pennsylvania.

Pittsburgh and Saitama City are “sister cities” and there has been ongoing communication and collaboration efforts seeking to strengthen connections and business ties. Most recently, in December of 2022, JETRO’s Ryan O’Shea visited Saitama City and met with the SFBC, as well as with numerous businesses operating in Japan that are interested in exploring opportunities with Pittsburgh companies.

These trips mark a return of in-person business matching initiatives, which have been largely paused since 2020 due to the global COVID-19 pandemic. Business matching efforts continued during that time but they took place mostly online, including an October 2021 “Sister Cities Business Meet and Greet” hosted by the Pittsburgh Technology Council with the support of the SFBC and JETRO.

Prior to the pandemic, in 2019, Pittsburgh-based Gecko Robotics participated in Biz Saitama shortly before they announced \$40 million in new investment, including from a senior managing partner at SoftBank. Companies from Saitama and Pittsburgh that are interested in getting involved in these business matching initiatives are encouraged to reach out to JETRO to begin the process.



Visitors from the SFBC toured the Advanced Robotics for Manufacturing Institute at Mill 19.

## Pittsburgh Business News and Updates

- Innovation Works' Ven Raju sees 'vibrant' climate for Pittsburgh tech firms (<https://nextpittsburgh.com/business-tech-news/innovation-works-ven-raju-sees-vibrant-climate-for-pittsburgh-tech-firms/>)
- Humotech is building the foundation for wearable robotics (<https://nextpittsburgh.com/business-tech-news/inside-pittsburgh-tech-humotech-is-building-the-foundation-for-wearable-robotics/>)
- Pittsburgh Robotics Factory announces Aviation & Robotics Summit (<https://robopgh.org/the-pittsburgh-robotics-network-announces-its-support-for-the-inaugural-robotics-factory-event-the-aviation-robotics-summit/>)
- French biotech startup to establish its U.S. headquarters in Pittsburgh (<https://www.bizjournals.com/pittsburgh/inno/stories/profiles/2023/01/23/french-biotech-startup-pittsburgh.html>)
- Casey Neistat tests Shift Robotics' Moonwalkers for 12.5 million YouTube subscribers ([https://youtu.be/34k7UI-DR\\_8](https://youtu.be/34k7UI-DR_8))



### About Ryan

Ryan O'Shea is a JETRO Investment Advisor focused on connecting Japanese companies to opportunities in Pittsburgh, Pennsylvania. He is the host of Future Grind, a podcast that explores the ethics and impact of emerging science and technology, and also works with the Pittsburgh Robotics Network. In 2017, Ryan co-founded an artificial intelligence startup that was named a Top 10 team in the IBM Watson AI XPRIZE. Ryan has represented NASA and CalTech's Jet Propulsion Laboratory as a Solar System Ambassador and serves both as a World Economic Forum Global Shaper and an ambassador for Pittsburgh AI. He is a graduate of the University of Pittsburgh & serves on the boards of multiple non-profit organizations.