

MATTR

A Look at SMM & MEP Center Successes

The MEP-Assisted Technology and Technical Resource (MATTR) service offers clients of MEP Centers, small and medium-sized manufacturers (SMMs), direct access to wide-ranging, world-class technical expertise available at the National Institute of Standards and Technology (NIST) research labs and user facilities. The following examples demonstrate a variety of ways MATTR has helped MEP clients.



Connecting Client Company to Research Partner at NIST

Innovate Hawaii (the Hawaii MEP Center) contacted the MATTR service for a client, a small photonics company with a Small Business Innovation Research (SBIR) grant-developed advanced confocal microscope. This client needed help testing and evaluating their microscope with an advanced laser light source.

The MATTR service identified a NIST scientist who was very interested in pursuing a research project with the company because of the potential of the ultra-fast laser and advanced microscope pair. As a result, there is now a Cooperative Research and Development Agreement (CRADA) between the company and NIST that will also include the MEP Center.



Expert Insight into Market Applications and Contact with Potential Partner

GENEDGE (the Virginia MEP Center) worked with a new technology company to provide growth services. The company developed novel wastewater treatment technologies with extraordinary capabilities to filter and clean wastewater and recover valuable resources that would otherwise be lost. This MEP client company needed help from an expert in water reclamation to understand potential market applications for their product.

GENEDGE submitted a MATTR request and a NIST expert provided new and valuable insights for the GENEDGE client in just a brief conversation. In addition, the NIST expert put the GENEDGE client in contact with a prime player in the wastewater reclamation market who was currently evaluating new technologies. The MATTR service gave the company validating business insights and an actionable, direct channel to a strategic partner that could potentially assist in their commercialization efforts.



Connections to Expertise Beyond NIST Laboratories

A small client company of Nevada Industry Excellence (the Nevada MEP Center) needed help with characterizations of soils after treatment with their specialized product. Through the MATTR service, NIST scientific and engineering staff were identified, but no longer actively conducting this sort of research at NIST. However, the NIST experts connected the MEP client company to labs at several universities that could make the measurements.



High-Accuracy Measurements and Suggestions for Process Improvements

A New Mexico MEP client makes thin dielectric films for Department of Defense (DoD) applications. The client had issues reliably measuring the thickness and other properties of their films and sought technical assistance to improve their film characterization capability.

Through MATTR, a NIST expert in this field was identified who made extensive, high-accuracy film measurements and suggested alternatives in the MEP client's film assessment process. The company was grateful for direct access to NIST's expertise through the MATTR service.



Ideas to Fuel Expansion into New Product Areas

A small manufacturer of personal computer components wanted to expand into new product areas and sought assistance and ideas from its local MEP Center, California Manufacturing Technology Consulting (CMTCC). Through the MATTR service the MEP client company connected with the NIST Technology Partnerships Office, which maintains a library of NIST patents and inventions. Simply providing a link to the list of NIST inventions gave this MEP client company helpful ideas for potential products.



Technical Assistance and Employee Training on Manufacturing Techniques

A client of GENEDGE (the Virginia MEP Center) specializing in colorimetric sensors for chemicals and explosives requested technical assistance in developing a new, novel sensor. NIST scientists and engineers with knowledge of the field responded to the MATTR request for assistance and provided suggestions for possible manufacturing techniques suitable for the company's product. NIST experts also offered to train the MEP client's employees in these techniques at a NIST facility. Although they ultimately decided to move in a different direction, the MEP client company acknowledged the benefits in time and money saved through their interactions with NIST engineers.

MATTR by the Numbers

41 MEP Center client manufacturing companies served by MATTR

41 MATTR instances originating from MEP Centers

20 MEP Centers participating in MATTR assistance instances

7 originating from NIST Labs

1 resulting in a CRADA involving NIST and the MEP Center client

1 resulting in a pending CRADA involving NIST and the MEP Center client

Contact Us:

Do you have clients with problems needing technical or scientific solutions? Are you unsure as to where to find these solutions? MATTR can help. Please contact Dr. Marlon Walker of NIST MEP at marlon.walker@nist.gov for more information.