

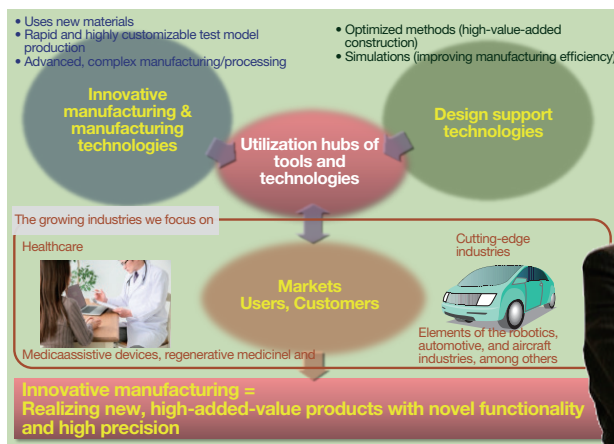
Innovative Design / Manufacturing Technologies

Innovative Manufacturing – Realizing High-value-added Manufacturing Using New Functionality

About this Project

Reinvigorating Japan with Delight Manufacturing

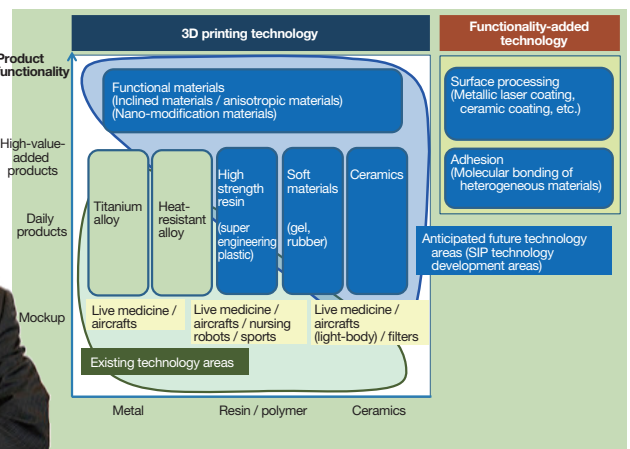
To win in today's tough, competitive international industry, we need 'delightful' manufacturing that produces high-value-added products that have never been seen before. In this program, we have built utilization hubs where we can develop and make use of innovative manufacturing technologies that meet different needs from corporate to individual. The program concentrates primarily on innovative designs and manufacturing technologies which enable products of materials and functionality that have not been seen before, and where local medium-light/medium-small businesses can do trial manufacturing runs of them. Using new ideas gleaned from our experience with these new technologies, we aim at producing high-value-added products and enhancing Japan's competitiveness in industrial competition (aiming for the top globally) as well as local production as well (realizing regional innovation).



The thinking behind Innovative Manufacturing



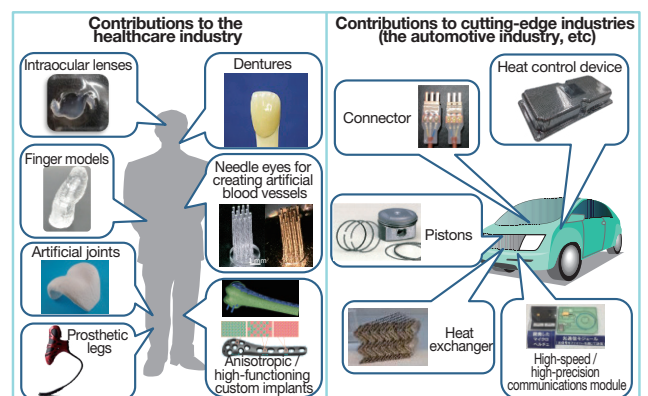
Program Director
Naoya Sasaki



This program's technology development areas

Test Uses / Application Examples

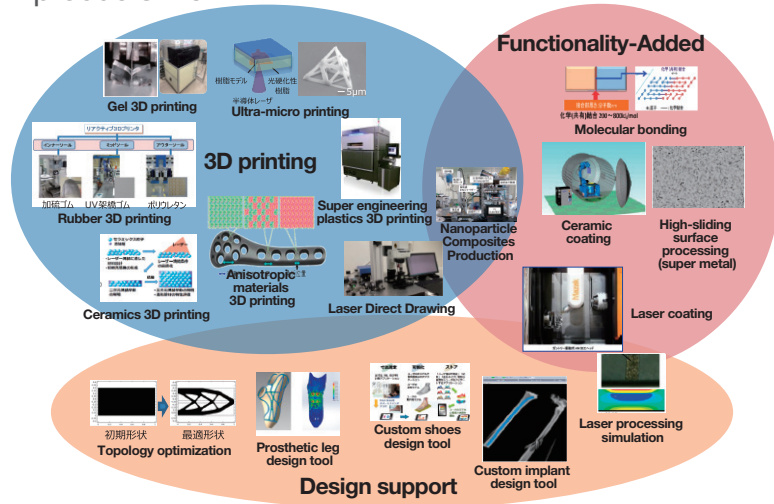
We have conducted test use cases mainly for products in growing industries and new business fields like the healthcare industry, the automotive and aircraft industries, and other cutting-edge industrial fields, and have also furthered development tools and technology implementation for them as well.



Research Achievements

■ We provide the results of our research to the industrial community, such as manufacturing facilities and software, as well as the sale or use of tools and technologies that contribute to their implementation in business.

- 3D modeling tools/technologies aimed at applicability to various different materials or to new material development 13
- Tools/technologies with added functionality like joining or surface treatments that enable various functions like high resistance 7
- Design tools/technologies for simulation and optimization, aimed at designing high-value-added products 10



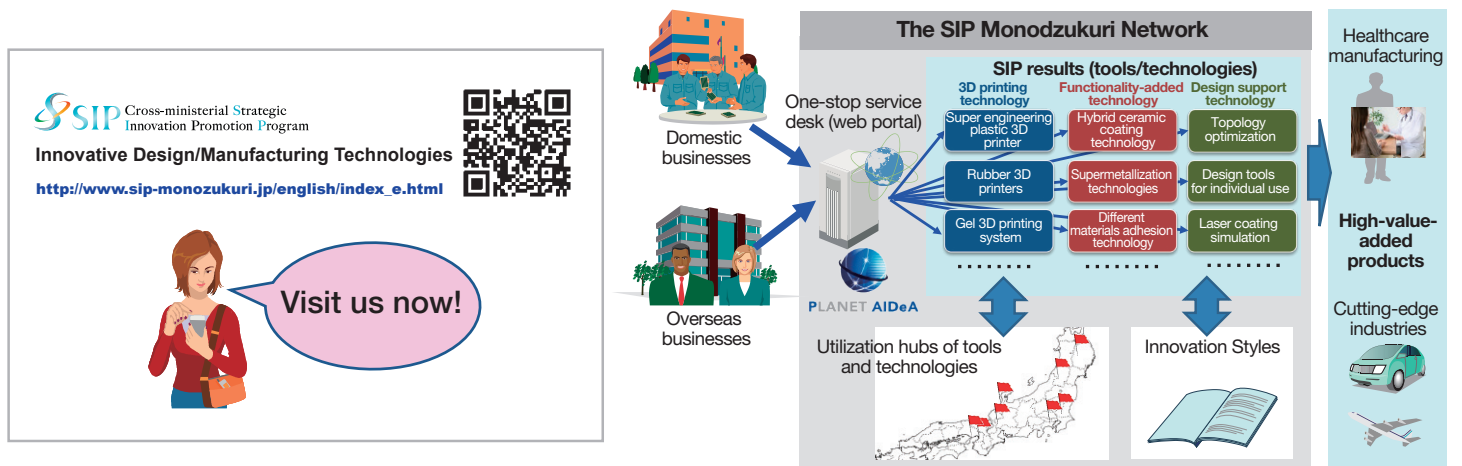
Main tools/technologies developed



Utilization Hubs

Future Outlook

To disseminate our research results, we will provide the SIP Monozukuri Network, a platform that can be used for one-stop access to information about tools, technologies, and where they are being used domestically and abroad. With our one-stop web portal as a base (<http://www.sip-monozukuri.jp/>), we continue to provide strong tools and technologies even after SIP has been completed. It is our goal that, through this network, we can not only further progress the use of the tools and technologies that are the fruits of the industrial world's labor, but through their use these successful tools and technologies will be polished even further, leading to a virtuous cycle that will bring about even better ones.



Program Name : Innovative Design/Manufacturing Technologies

Enacting Institution : Cabinet Office(Managing Agency : NEDO) <http://www.sip-monozukuri.jp/>