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2016

# Industry-University Partnership for Innovation and Workforce Training

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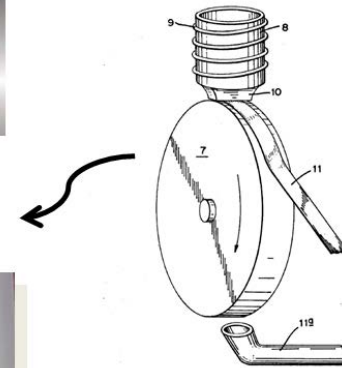
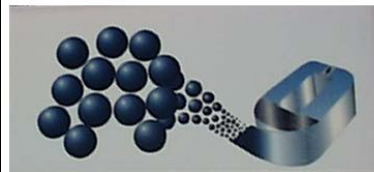
Through the ICP program, CCMR facilitates fast and cost effective access to innovation and provides a highly skilled workforce for companies from all around the world. Metglas, the world-leading producer of amorphous metals, used in high efficiency electrical distribution transformers, seized the opportunity!

Metglas solidifies its molten alloys at a rate of approximately one million degrees Celsius per second. Incorporating fine features into the metal during the high-speed solidification process can improve their electromagnetic properties. Metglas is using the ICP program to develop a single-step process based on planar-flow casting to integrate nano features into thin ribbons with the help of Prof. Paul Steen, Chemical & Biomolecular Engineering.

Metglas used the program with multiple goals in mind: create the Ryusuke Hasegawa Graduate Fellowship to honor its former VP of research, select future employees, and train them on novel manufacturing processes of strategic importance. The first Hasegawa Fellow, David Kemmenoe, Ph.D. student in Mechanical and Aerospace Engineering.



metals sheet wound to transformer core



planar-flow casting  
(freeze to glassy metal sheet)



stingy energy distribution via  
ultra-efficient transformers

