

NORTHWEST INSTITUTE FOR MATERIALS PHYSICS, CHEMISTRY, AND TECHNOLOGY (NW IMPACT)

From the stone age to the silicon age, innovations throughout history have relied on materials science and technology. In recognition of the importance of materials science, two prominent research institutions in Washington state—the U.S. Department of Energy’s Pacific Northwest National Laboratory and the University of Washington—have established a new collaborative institute that combines their passion, resources, and expertise to advance the science of making materials.

PNNL and UW launched the Northwest Institute for Materials Physics, Chemistry, and Technology, or NW IMPACT, in January 2018. NW IMPACT aspires to make the Northwest the nation’s leader in research and workforce development for creating next-generation materials in energy, security, manufacturing, transportation, biomedical and information technologies.

THE MAGIC OF MATERIALS

Advancements in materials gave the world lightweight cars and planes, artificial limbs and tissues, and semiconductors that enable today’s ubiquitous computers and phones. To make new and better materials, scientists must first understand where atoms should be placed precisely in a material to obtain the right properties, and then develop processes that can direct atoms to these specific locations.

By combining this scientific knowledge with the latest instrumentation and computing resources, NW IMPACT participants will develop materials with the potential to transform the ways in which we live and work.

COMBINING RESOURCES FOR GREATER IMPACT

The Institute offers collaborative research and educational opportunities for staff, faculty, and

students at the campuses of both institutions. Participants can tap into dual appointments, co-mentoring and training for graduate students, and leading-edge materials research facilities at the UW and PNNL.

With the collective strengths of PNNL and UW, NW IMPACT is expected to make materials discoveries that could catalyze new industries, while also attracting top scientific talent to the region.

CONTACT

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