

NATIONAL ENERGY TECHNOLOGY LABORATORY MORGANTOWN, WEST VIRGINIA



NETL

NATIONAL ENERGY TECHNOLOGY LABORATORY

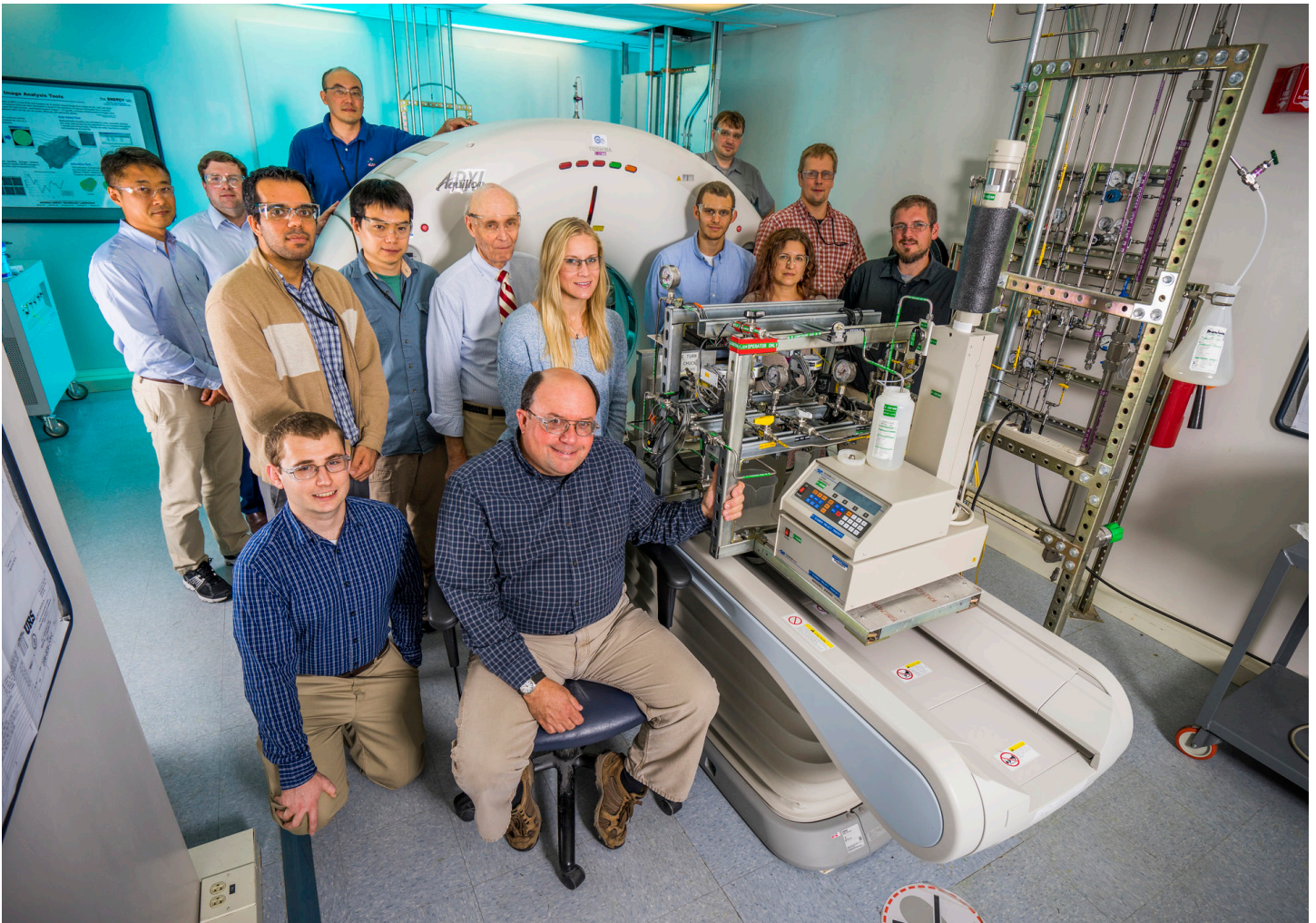
NETL's Morgantown laboratory was established in 1946 with a mission to find more efficient and cost-effective ways of gasifying coal to produce synthesis gas. Today, Morgantown researchers partner with organizations across the nation to meet the laboratory's mission to discover, integrate, and mature technology solutions to enhance the nation's energy foundation and protect the environment for future generations.

World War II sparked national interest in synthetic fuels production, leading to passage of the Synthetic Liquid Fuels Act of 1944. It was under this legislation that the Synthesis Gas Branch Experiment Station began government-sponsored, coal-gasification research at West Virginia University facilities in Morgantown, W. Va. in 1946. Administered by the U.S. Department of the Interior (DOI) Bureau of Mines, the 17-employee station was tasked with developing processes to produce synthesis gas from coal.



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By 1954, the Morgantown laboratory had become the Appalachian Experiment Station for onsite coal research with a staff of 109 employees. Construction of the Appalachian Experiment Station, which comprised an administrative building and laboratories for the study of petroleum production and coal gasification, began on Collins Ferry Road in June 1952. The new Appalachian Experiment Station represented an important step toward consolidating ongoing investigations of petroleum, coal, and synthetic fuels into an overarching program of fossil-energy research that could help guide federal energy policy.

The 1970s brought many changes as the Appalachian Experiment Station came under the purview of the new U.S. Energy Research and Development Administration in 1975 and gained a new moniker: the Morgantown Energy Research Center (MERC). Together with sister Energy Research Centers in Bartlesville (Oklahoma), and Pittsburgh, MERC began overseeing federally funded contracts for fossil energy research and development. Research areas included

the development of advanced methods for cleaning coal and combustion gases, alternative methods to substitute coal for imported oil, and enhanced oil recovery to produce more domestic oil. In 1977, the center was incorporated into the newly established U.S. Department of Energy as the Morgantown Energy Technology Center (METC). The center's responsibilities included onsite research with coal, oil, and gas technologies, as well as management of millions of dollars' worth of contracts for research and development conducted by universities, private industry, and other government research institutions.

In 1996, researchers at the Morgantown and Pittsburgh centers were united in a new Federal Energy Technology Center (FETC), and then, in 1999, FETC joined a third laboratory in Albany, Ore. These government-owned, government-operated facilities now comprise the DOE's NETL.

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Today, NETL's Morgantown laboratory is staffed with more than 500 employees and is comprised of 42 buildings. The Technology Support Facility, completed in 2008, is registered with the Leadership in Energy and Environmental Design (LEED) certification with a gold rating for its energy conservation design, which includes sustainable building practices and materials, a green roof, and judicious use of natural light and lighting controls for energy efficiency. The building exemplifies NETL's commitment to environmental stewardship. Site wide, NETL's researchers continue to investigate energy technologies related to geological

and environmental systems, advanced materials, energy conversion technologies, computational science and engineering, and systems engineering and analysis—all with the common goal of advancing NETL's mission to discover, integrate, and mature technology solutions to enhance the nation's energy foundation and protect the environment for future generations. Partnerships with local companies and powerhouse academic research institutions like West Virginia University help accelerate cutting-edge innovations that are bringing advances in the clean and efficient use of fossil energy fuels

NETL is a U.S. Department of Energy national laboratory that drives innovation and delivers technological solutions for an environmentally sustainable and prosperous energy future. Through its world-class scientists, engineers and research facilities, NETL is ensuring affordable, abundant and reliable energy that drives a robust economy and national security, while developing technologies to manage carbon across the full life cycle, enabling environmental sustainability for all Americans, advancing environmental justice and revitalizing the economies of disadvantaged communities. Leveraging the power of workforce inclusivity and diversity, highly skilled innovators at NETL's research laboratories in Albany, Oregon; Morgantown, West Virginia; and Pittsburgh, Pennsylvania conduct a broad range of research activities that support DOE's mission to ensure America's security and prosperity by addressing its energy and environmental challenges through transformative science and technology solutions.

NETL lends its expertise toward achieving a carbon-free power sector by 2035 and a net-zero economy by 2050 while catalyzing economic revitalization, creating good-paying jobs and supporting workers in energy communities, especially hard-hit coal, oil and gas, and power plant communities, across the country. One of the most rewarding aspects of NETL's research is that our innovations and our technologies have the potential to improve people's lives in meaningful ways.

