

Congressman Secured Funds Using His Seat on House Appropriations Committee

Vestal, NY - Congressman Maurice Hinchey (D-NY) today visited Binghamton University to announce that he's secured a new \$5 million federal investment to further establish the school as a leader in solar energy research and development. The congressman detailed how the new money he's secured for the school's Center for Autonomous Solar Power (CASP) will spur economic growth in the Southern Tier and position the school and the region's businesses as leaders in providing cutting-edge technology for defense, aerospace, consumer and industrial markets through solar power designs that will contribute to operational and logistical efficiency.

"This \$5 million in federal funding comes at a critical time when the federal government is looking to invest heavily in research in solar and other renewable energy fields," Hinchey said. "Binghamton University has already established itself as a leading research university and these federal funds will help make the school an even bigger player in the solar energy field. I am extremely pleased that I was able to obtain this funding from Congress because I know how critical it is that we move our country away from oil and other fossil fuels and toward solar and other forms of renewable energy. The CASP and Binghamton University as a whole are going to be right in the heart of this extraordinary transition to clean energy. The research being done here at Binghamton University will pave the way for new jobs for Southern Tier residents and all New Yorkers in the rapidly expanding field of renewable energy."

Hinchey, who became a member of the House Appropriations Subcommittee on Defense earlier this year, used his position on that panel to secure the \$5 million for the CASP as part of the fiscal year 2010 Defense Appropriations bill. The House approved the defense bill with the funds for the CASP on July 30. Last year, Hinchey and U.S. Senator Charles Schumer (D-NY) secured \$4 million for the CASP. Among other things, the combined \$9 million in federal funding for the CASP will be used to support research and development, analytical expertise, operational costs, materials and supplies, equipment, sub-awards to collaborating institutions and programs, marketing, instrumentation user charges, facility usage, publications, personnel, travel and outreach to potential partners in coordination with The Solar Energy Consortium (TSEC).

Specifically, the new funding will help the CASP to develop new storage systems, or "supercapacitors," that are better suited for the solar power generation technology the center is developing -- large area thin film flexible solar modules. Supercapacitors are intended to help improve the challenges associated with gathering solar energy at peak availability for off-peak

usage. The CASP at Binghamton University is researching and developing third generation large area, flexible, light weight solar cells to meet scientific challenges in reducing the cost of solar power and enhancing energy efficiency. As part of the New York State Center of Excellence in Small Scale Systems Integration and Packaging (S3IP), the CASP will bridge the technology and commercialization gap and overcome impediments in large scale expansion of solar electricity. The federal funding will enable the CASP to utilize solar cell generated electricity by having an integrated electrical storage. New large area flexible solar technologies will result in an array of applications impacting defense and homeland security, energy and the economy.

The center will develop leading edge technology for defense, aerospace, consumer and industrial markets by specifically focusing on solar power integrated new products designs. With revolutionary large area, flexible and autonomous solar module technology, working in partnership with researchers at New York State academic institutions, and the solar industry in New York, the CASP will actively pursue commercialization of new intellectual property and contribute to the economy of the state and the nation. Large area, flexible solar modules are also strategically important in meeting the specialized energy needs of defense and homeland security. Investments in this area will enhance U.S. military superiority while strengthening US role as a global technology leader.

The CASP, whose facility is already under construction and expected to open in the fall, will conduct its work in conjunction with TSEC, which Hinchey helped organize and establish two years ago in New York. TSEC, of which Binghamton University is a partner, is a new industry-driven, non-profit organization that provides leadership, organization, resources, and support for the establishment of a major solar energy industry cluster in New York.

Hinchey noted that as a TSEC partner, the CASP and Binghamton University as a whole will continue to work collaboratively with industry partners to support the research and development necessary to commercialize cutting edge solar technology allowing for enhancements to the efficiency of photovoltaic modules and reductions in the cost of energy produced from the solar panels. Currently, TSEC is working with several companies that are interested in partnering with Binghamton University to help solve technology problems that are hindering those companies ability to bring their products to market. These funds will further enhance Binghamton University's position as an attractive research partner for TSEC companies. Because it is anticipated that partner companies would have an interest in locating their facilities near their research partners, it is likely that a number of high-tech jobs will be indirectly created as a result of these investments in Binghamton University's solar program. Additionally, CASP will also be working with a high-tech battery consortium that the congressman is currently working to create and will announce in the coming weeks. That high-tech battery consortium will be in conjunction with private companies and other research institutions.

"The Solar Energy Consortium is an extraordinary organization that has uniquely combined the talents of researchers at Binghamton University and other New York educational institutions along with solar manufacturers and marketers to position our state as a leader in the development and advancement of solar energy products," Hinchey said. "Establishing the CASP is critical to our collective goal of making New York a go-to state for solar energy, which in turn will create jobs, spur strong economic growth, and improve our environment. The CASP will also be able to play an important role in New York's development of super-efficient batteries that can be charged with power from the sun."

In addition to the creation of the CASP, Binghamton University is uniquely positioned to achieve the development of new large area, flexible solar cell technologies through: the Center for Advanced Microelectronics Manufacturing, which is also part of S3IP and provides pre-commercial manufacturing demonstration to the CASP; the Institute for Materials Research at BU, which is contributing research on the materials aspects of solar cell development; and industrial and non-profit support through the collaboration with industries in New York state, such as General Electric, Corning, and Prism Solar -- a TSEC partner, to expand solar photovoltaic activities across the state.

Now that the House has approved the funds for the CASP, the Senate is expected to take up its own version of the fiscal year 2010 Defense Appropriations bill in September.