

UIDP Xurban 2022

Bahgat Sammakia, Binghamton University

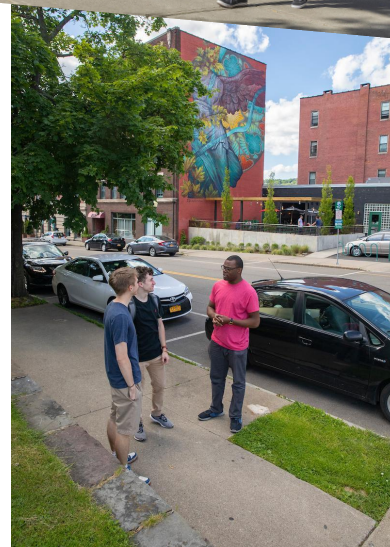




About Greater Binghamton

Greater Binghamton economic development leaders like to say this small metro punches above its weight. Why?

- Geography: A strategic location that's half a day's drive to every major Northeast metro
- Culture: Home to the Mets' Double-AA affiliate, a tournament on the Champion's Tour, a philharmonic orchestra and an opera company
- Education: About 45% of Broome County residents have earned a bachelor's or post-graduate degree





About Binghamton University



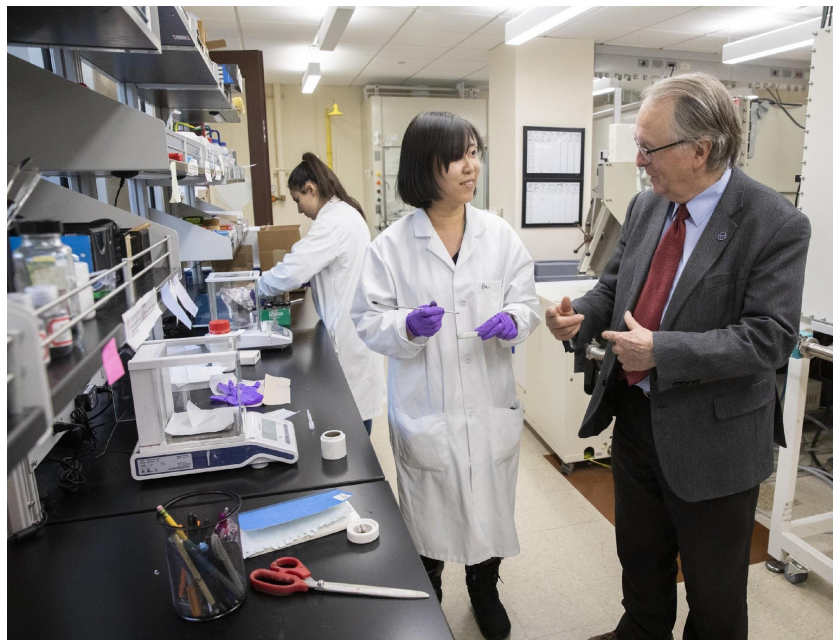
Binghamton University, part of the SUNY system, had research expenditures of \$46.5M in 2020-21. An R1 campus that enrolls about 18,000 students, Binghamton has embraced its role as a driver of the regional economy. That means:

- Research centers, including the S3IP Center of Excellence, nurture industry partnerships
- Campus expansions benefit area downtowns
- Entrepreneurship team focuses on startups, tech transfer



S3IP, a New York State Center of Excellence

S3IP addresses pressing problems in the systems integration and manufacturing of electronics. There are centers focused on electronics packaging, flexible electronics, energy-efficient data centers and energy harvesting and storage. S3IP has contributed over \$1B in economic impact to New York State since 1996.



S3IP is the research home of chemist M. Stanley Whittingham, 2019 Nobel laureate.

B S3IP Org Chart



Dr. Bahgat Sammakia, Director and VP for Research
 Dr. Steve Czarnecki, Associate Director



Binghamton University Faculty & Students

Prof. SB Park Director

Prof. Ganesh Subbarayan (Purdue), Prof. Bahgat Sammakia; Prof. Kanad Ghose; Co-directors

Prof. Mark Poliks Director

Prof. Kanad Ghose Director

Prof. Tara Dhakal Director

Prof. Stan Whittingham Director



IEEC
 Electronics Packaging

NYS CAT

CHIRP
 Heterogeneous Integration

SRC

CAMM
 Flexible Electronics

DoD Manufacturing USA
 NYS CAT

ES2
 Energy-Smart Electronic Systems

NSF I/UCRC

CASP
 Advanced Solar Energy

NSF Partnership for Industry

NECCES
 Advanced Batteries

DoE EFRC

Analytical and Diagnostics Laboratory Dr. Jennifer Amey, Chief Business Development Officer and Research Scientist



Transforming area downtowns



Binghamton's University Downtown Center helped revive Binghamton, especially downtown dining and housing, when it opened 15 years ago.

The Health Sciences Campus in Johnson City aims to have the same impact on that community. The School of Pharmacy opened there in 2018, joined by the College of Nursing and Health Sciences in 2021.

Next: We have our eyes set on a big project in nearby Endicott.



Entrepreneurship at Binghamton

Binghamton Incubator Program companies reported 353 full-time equivalents and 82 interns in FY2021.



KOFFMAN SOUTHERN TIER INCUBATOR

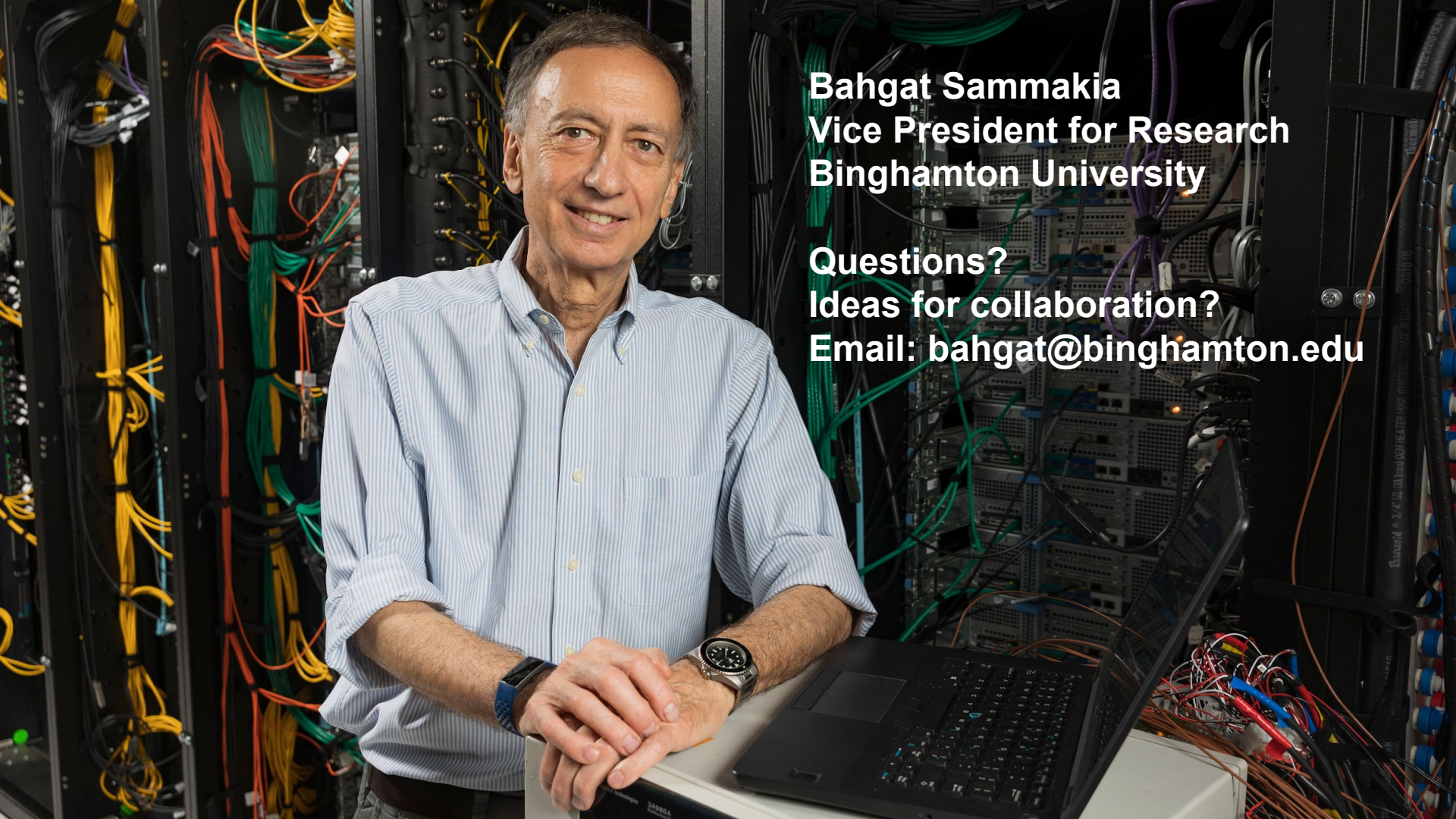
Home to the Binghamton Incubation Program

Opened in **2017**

Versatile spaces (wet- and dry-lab, high-bay, offices, collaboration spaces, event center)

37,000 square feet

54 start-up clients (on-site and virtual),
25 co-workers, **19** graduates

A photograph of Bahgat Sammakia, a middle-aged man with short grey hair, wearing a light blue and white striped button-down shirt. He is standing in a server room, leaning on a desk with his hands clasped. In front of him is an open black laptop. The background is filled with server racks, numerous colorful cables (yellow, green, orange, purple), and server hardware. The lighting is focused on him, with the server room lights providing a dim background.

Bahgat Sammakia
Vice President for Research
Binghamton University

Questions?
Ideas for collaboration?
Email: bahgat@binghamton.edu