



Syracuse University Report

Syracuse University Liaison Office

Riyad S. Aboutaha, PhD
Associate Dean

Academic Administration and Space Management
College of Engineering and Computer Science
Syracuse University, Syracuse, NY, U.S.A.

Jeongmin Ahn, Ph.D.
Associate Professor

Syracuse CoE Faculty Fellow, Fellow of ASME, Associate Fellow of AIAA
Department of Mechanical and Aerospace Engineering
Syracuse University, Syracuse, NY, U.S.A.

Tohoku University, Sendai, JAPAN
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- June 2001: College of Engineering and Computer Science Faculty-Level Agreements
- November 19, 2003: Opening of the Institute of Fluid Science, Tohoku University Liaison Office at Syracuse University
- November 21-22, 2003: “AFI-2003 Third International Symposium on Advanced Fluid Information: Fluidinformatics for Biomedical and Environmental Quality Applications”, Lubin House, NY
- November 2004: Opening of Liaison Office of the College of Engineering and Computer Science, Syracuse University at the Institute of Fluid Science, Tohoku University
- September 2008: Tohoku University-Syracuse University University-Level Academic Exchange Agreements
- November 2008: Tohoku University-Syracuse University University-Level Signing Ceremony
- April 2016, and April 2019: Extension and Amendment of Tohoku University-Syracuse University University-Level Academic Exchange Agreements!



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Prof. Jeongmin Ahn collaborative research projects with Profs. Kaoru Maruta, Takashi Tokumasu, Hisashi Nakamura, and Hiroki Nagashima.

- Solid Oxide Fuel Cells Replacement of a Traditional Catalytic Converter
- Analysis of Transport Phenomena of Oxygen Ion in Dual-Phase Electrolyte Material
- Micro-Combustion for Micro-Tubular Flame-assisted Fuel Cell Power Generation
- Analysis of Transport Phenomena of Oxygen Ion in Electrolyte of Solid Oxide Fuel Cell
- Micro Combustion for Clean and Efficient Syngas Formation and Fuel Cell Applications
- Characterization of Transport Phenomena of Oxygen Ion in Electrolyte of Solid Oxide Fuel Cell
- Transport Phenomena of Substances in Electrolyte of Solid Oxide Fuel Cell

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Other collaborative projects (National Science Foundation, USA)

- “Photosynthetic basis of temperate plant invasions: a pan-hemisphere comparison of leaf function,” Jason Fridley, Thomas KICHEY, Guillaume DECOCQ, Kouki Hikosaka.
- “Pressure Effects in Thin Water Film by Molecular Dynamics,” Shalabh C. Maroo and Takashi Tokumasu.
- “Reconstitution of protein nanopores in lipid membranes,” Liviu Movileanu, Stephen Wilkenss, Noriko Tomita and Makoto Ohta.



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The University's ten-year goals include a university that will be:

- **A university with a significantly improved student experience.**
- **A much stronger R1 private research university.**
- **A university whose culture models entrepreneurial change in academics, finance and operations.**
- **A recognized international leader in online and post-traditional education.**
- **The best university for veterans and military families.**
- **100% of SU students have abroad experience, and receive tri-advising.**

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Teaching & Student Experience

- Measurably improve the success of a diverse UG student body
- Measurably improve the success of a diverse graduate student body
- Equipping faculty to embrace online/hybrid delivery
- Finalize Academic Facilities plan for Syracuse campus and beyond

Cluster & Signature Hiring

- Hiring 100 research active faculty in five years (plus matching 100 faculty).
- Increase volume of high quality research

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Cluster & Signature Hiring (Round 1)

- 1. Aging, Behavioral Health and Neuroscience**
- 2. Artificial Intelligence, Deep Learning, Autonomous Systems and Policy**
- 3. Big Data and Data Analytics**
- 4. Bio-enabled Science and Technology**
- 5. Energy and Environment**
- 6. Innovation and Entrepreneurship**
- 7. Social Differences, Social Justice**

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Cluster & Signature Hiring (Round 2)

8. Quantum Computing and Cryptography
9. Citizenship and Democratic Institutions
10. Virtual and Immersive Interactions

College of Engineering and Computer Science (60 new Faculty)

1. Biomedical and Chemical Engineering
2. Civil and Environmental Engineering
3. Mechanical and Aerospace Engineering
4. Electrical Engineering and Computer Science (including Computer Engineering)

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Collaboration

- Higher student exchange: Provide Supplemental Scholarship
- Offer Online seminars, and semi-annual video conference
- Work with the Cluster Directors at Syracuse University
- Offering Joint Online courses
- Offer dual MS degrees
- Serving on PhD Student Committees



Thank You!

Riyad Aboutaha