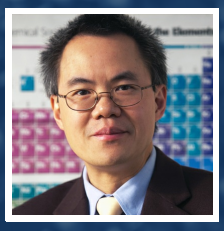
Designing and Translating Materials from the Nanoscale to the Macroscale



Stanislaus Wong
Professor, Department of Chemistry

CURRENT RESEARCH

Innovations that will yield unprecedented impacts on future applications

Materials that we completely understand at the visual macroscale are often completely different when we look at them on the scale of nanometers. Typical behaviors, such as but not limited to electrical, optical, and magnetic phenomena, are often unrecognizably distinctive within a nanomaterial. Therefore, it is an opportune time to discover and gather as much information and observations about these interesting and exciting materials created at the nanoscale. Dr. Stanislaus Wong, of the State University of New York and Brookhaven National Lab, works to innovate and develop themes and trends that impact nanoscience. Through his work, Dr. Wong believes he can "create something enduring and lasting, something positive and constructive, that might possibly transcend the vagaries of time." By methodically making and systematically studying the properties of novel nanomaterials, he and his team are building up the foundation and intellectual underpinnings of nanoscience itself. As an academic lab, focused on basic research, Dr. Wong and his team also have contributed to the development of unique and distinctive materials, what Dr. Wong coins their "toolkit," that can be applied to useful commercialized products for future practical applications.

Through Dr. Wong's strategy of focusing on creating new types and classes of nanomaterials through rational and thoughtful chemistry, he and his lab hope to tailor properties of any material that they can fabricate and synthesize, giving them an unprecedented potential to design and introduce particularly desirable functions and properties. Therefore, by understanding the underlying chemical process and efficiently characterizing the products of that process, the...

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AFFILIATION

Stony Brook University

EDUCATION

- Postdoctoral fellow in 1999-2000, Columbia University
- Ph.D. in 1999,Harvard University
- A.M. in 1996,Harvard University
- B.Sc. in 1994,McGill University

AWARDS

- Inorganic Nanoscience Award (American Chemical Society), 2015
- Faculty Honor Wall honoree (SUNY Stony Brook), 2013
- Election as American Association for the Advancement of Science (AAAS) Fellow, 2012
- Buck-Whitney Award (Eastern New York ACS Section), 2009
- Alfred P. Sloan Foundation Research Fellowship, 2006-2008
- and 1 more...

RESEARCH AREAS

Technology, Chemistry, Materials Science / Physics, Nanotechnology

FUNDING REQUEST

Your contributions will support the continued research of Dr. Stanislaus Wong, of the State University of New York, as he innovates and develops key insights into themes and trends in nanoscience. Donations will support the cost of materials, supplies, and personnel. In choosing to donate, you will play a role in contributing to the promise and potential of nanochemistry through the funding of important technologies with diverse applications.