YINGFEI JIANG

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EDUCATION

Master of Environmental Science and Management (Expected June 2020)
Bren School of Environmental Science & Management – University of California, Santa Barbara (UCSB)

Specialization: Energy and Climate, Economics and Politics of the Environment
Highlighted Coursework: Life Cycle Assessment, Carbon Accounting, Cost Benefit Analysis, Natural Resources Management, Climate Change Impact and Adaptation, Earth System Science, Economics of Environment Management

Master of Science, Materials Science and Engineering (June 2018)
School of Engineering and Applied Science – University of Pennsylvania, Philadelphia

Highlighted Coursework: Energy Storage and Technology, Energy Systems and Policy, Climate Policy and Technology, Polymer and Biomaterials, Atomic Modeling in Materials Science, Semiconductor Science
Thesis/Research: Researched on the energy system of Taiwan; analyzed the potential of off-shore wind turbine as a renewable energy source for Taiwan

Bachelor of Science, Physics; Bachelor of Arts, Chinese Language and Literature (May 2016)
School of Physics, School of Literature – Nankai University, Tianjin, China

Specialization: Physics for Materials
Award/Honors: Gongneng Scholarship
Thesis/Research: Employed the method of liquid exfoliation to prepare MoS_2 thin film (~20 nm); studied the morphological and optical properties of the samples
Leadership/Involvement: Center for Student Service and Interests Director, Nankai University Admission Committee

RESEARCH EXPERIENCES

Adopt a Cookstove – Initiative on Improving Cooking Conditions in Rwanda (2/19 - ongoing)
University of California, Santa Barbara, Santa Barbara, CA

- Employed life cycle assessment (LCA) method to analyze the environmental impacts for common types of cookstove used in the developing world (three stone wood stove, charcoal stove, liquified petroleum gas stove, wood-pellet gasifier stove)
- Analyzed the depletion pattern of Rwandan forestry resources due to local cooking fuel consumption
- NGO initiative to distribute high efficiency cookstoves to underprivileged communities in Rwanda

Waste Watcher – Analyzing the Environmental Impacts of an Organic Food Preservative (1/19 - ongoing)
University of California, Santa Barbara, Santa Barbara, CA

- Group project with Apeel Sciences; serving as data manager
- Identifying the most sustainable sourcing practice of agricultural waste feedstocks to produce an organic preservative
- Employing life cycle assessment and cost benefit analysis

Atomic Model Lab (9/17-12/17)
University of Pennsylvania, Philadelphia, PA
- Employed molecular dynamics method and the Monte Carlo method to construct atomic models of Argon crystal
- Constructed the models with Fortran 90
- Analyzed the physical and chemical properties of Argon

Stanford Environmental & Water Studies Summer Program (6/17-8/17)
Stanford University, Stanford, CA
- Intensive summer program with graduate level courses focusing on generating environmental solutions
- Coursework including Water Resource Management, Behavior Change (Psychology for Public Communication), and Smart Cities
- Wrote a research paper on Bolivian water resource management

Material Preparation and Characterization Research Assistant (6/14-9/14)
Ningbo Institute of Material Technology & Engineering, China Academy of Science (CAS), Ningbo, China
- Employed magnetron sputtering systems to make magnetic thin films
- Prepared Neodymium-Iron-Boron and Samarium-Cobalt target material; dealt with cracking issue
- Used Thin Film Deposition Magnetron Sputtering Systems to sputter thin film

Engineering Physics Lab (8/13-5/14)
Nankai University, Tianjin, China
- Employed atomic layer graphene as a saturable absorber for ultrafast pulsed lasers
- Prepared and cleaned the graphene flake; transferred the sample to the laser diode in extremely clean environment (Class 1000 or IOS 6 equivalent)
- Managed to acquire pulse signal as expected; proposed to transfer the flake in cleaner environment (Class 100 or less) to fully achieve the desired laser pulse

ADDITIONAL EXPERIENCES

Poetry Studies on *A Tour to Fuchun Mountain with Gongwang Huang* by Yongming Zhai (1/16-4/16)
Nankai University, Tianjin, China
- Dissertation project led to the attainment of the Bachelor's degree in Chinese Language and Literature
- Addressed Chinese traditional imagist poetry and female subjectivity

SKILLS

Computer/Programming Languages:
- Proficient with R, Python, Java, Fortran 90;
- Familiar with C++, MATLAB;
- Proficient with Microsoft Office Suite (Excel, PowerPoint, Word)

Languages: Fluent in Mandarin Chinese