Giving WINGS TO TALENT

To address the need for human resource development and capacity building in science and technology, IUSSTF is committed to nurture contacts between scientists and students from India and the United States. It has been unambiguously demonstrated that providing students and young scientists with an exposure to cutting-edge scientific research experiences at a formative stage not only broadens their intellectual horizons but also leads to increased engagements in scientific and technological research careers. In this section of Connect, we share with you the experiences of some of our bright, young Interns and Fellows in their own words!

Water Advanced Research and Innovation Program

Ram Chavan
BITS Pilani, Goa Campus

I am working on development of algae based wastewater treatment systems and its integration to microalgal bio-refinery at Dept. of Biological Sciences, BITS Pilani, KK Birla Goa Campus. During summer 2017, I got an opportunity to work at Dept. of Biochemistry at the University of Nebraska-Lincoln (UNL) under the WARI Program.

Working at UNL has immensely helped me not only to understand my own self in a better way but also to change my perception about algal research. During my stay at UNL, I learned about the feasibility of novel drug like compounds with potential for production and storage of lipid in microalgae wherein we can reduce the wastewater treatment cost by using wastewater as a valuable resource and earn extra revenue out of value-added products produced from microalgal biomass.

During my internship tenure, I have visited large scale algae culture facilities at University of California and SCRIPPS Institute of Oceanography, San Diego to gain a better idea about the pros and cons of commercializing algal fuels. This Internship also helped me to attend the world's biggest microalgae event-ABO Summit-2017 that helped me intract with microalgae professionals from all over the world to explore mutual ideas, interests and possibly some fruitful collaborations in the near future. Of course all these events and my experiences will help me in strengthening my research in India.

I feel honored and privileged to have been a part of this competitive program which helped me to work with experts in this field and bestowed me with friends for lifetime. Summing up, this was an enriching program where my professional skills grew manifold and reinforced my desire for further research in this area.

Water Advanced Research and Innovation Program:
Webpage: http://www.iusstf.org/program/water-advanced-research--innovation-fellowship
E-mail: water.fellowship@indousstf.org

Bhaskara Advanced Solar Energy Program

Vamsi Krishna Narra
CSIR-Indian Institute of Chemical Technology, Hyderabad

The Bhaskara Advanced Solar Energy (BASE) Fellowship program is a great opportunity for the Ph.D students who are working in the area of solar energy. Under this program, I worked at Georgia Institute of Technology under the supervision of Prof. Seth Marder who is the former Director and currently an Associate Director of the Center for Organic Photonics and Electronics (COPE) at Georgia Tech. I worked on a project titled "Non-fullerene acceptors for photovoltaic applications". Under this, I developed my skills on electron transport layers [ETLs] and hole transport layers [HTLs] in perovskite solar cells and organic semiconductors for energy-related applications. This research could be helpful to implement the state-of-the art materials for enhancing the stability and efficiency of the solar cells. Prof. Marder's research group provided an excellent platform for the development of materials for organic electronics and organic solar cells. Additionally, I was exposed to the world-class facilities and working environment with people from all over the world and also attended notable lectures by eminent scientists. I also visited Georgia Aquarium, World of Coca-Cola, CNN Center, National Aeronautics and Space Administration (NASA). I am thankful to IUSSTF for providing me with this great opportunity which has made me a more confident researcher.

Bhaskara Advanced Solar Energy Program:
Webpage: http://www.iusstf.org/program/bhaskara-advanced-solar-energy-fellowship
E-mail: energy.fellowship@indousstf.org

IUSSTF-Viterbi Program

Arka Sadhu
Indian Institute of Technology – Bombay

I got the opportunity to work under Prof. Ram Nevatia in the Computer Vision Lab, University of Southern California and my work was based on Media Forensics which largely deals with the detection of tampered media (images in my case) and identifying the manipulations. It was extremely inspiring to work under the guidance of a professor who gives you so much time for discussing the project at length.

Los Angeles is a great city with good weather. Along with my fellow Viterbi-India Scholars, I visited a lot of places in and around Los Angeles like Universal Studios, Hollywood, Six Flags Magic Mountain, Santa Monica Beach, San Diego Zoo to name a few.

One thing I can definitely say is that the IUSSTF-Viterbi summer internship has far exceeded my expectations. If someone would have said that I would be working with a super-cool Professor on state-of-the-art research topics and working with extremely supportive colleagues, walking down the streets of Hollywood on the weekends, I would have not really believed it, but I am so glad that all of this came out to be true! Without a shred of doubt, I can say that this has been one of the most enlightening experiences which would play a pivotal role in my life. I thank the IUSSTF-Viterbi Program from the bottom of my heart for giving me this opportunity.

IUSSTF-Viterbi Program:
Webpage: http://www.iusstf.org/program/iusstf-viterbi-program
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S.N. Bose Scholars Program

Traveling to India has been a wonderful and unforgettable experience. India is a country diverse and rich in history, cultural traditions, languages, food... the list goes on. To be immersed in all of it feels thrilling, and is a beautiful adventure. But being away from home comes with challenges. You may feel culture shock, see things that disturb you, or feel isolated.

Traveling through a university program has been the perfect way to experience India for the first time. The US Bose Program is excellent in that it puts you on campus, connects you with a professor in your field, and pays for the trip. Having a safe home base to retire to amid the commotion of city life adds quite a bit of comfort to the experience. Having other students working in the same field nearby makes it easier to meet new people and learn. Plus, doing research gives you something to work toward, and helps you gain real experience. On top of that, the money from the stipend and accommodation go far in India, making it a very sweet deal. To be young and a college student, and to have access to all that this program has to offer is quite the opportunity; an opportunity I would advise anybody to take. ●

Sterling Just
University of Wisconsin-Madison

S.N. Bose Scholars Program:
Webpage: http://www.iusstf.org/program/sn-bose-scholars-program
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