Westchester Chemical Society New York Section of the American Chemical Society

SPECIAL SEMINAR – FREE AND OPEN TO THE PUBLIC

WEDNESDAY, DECEMBER 9, 2015

Refreshments 5:30 p.m. Lecture 6:00 p.m.

Chemistry in Neutrino Experiments

Sunej Hans, Ph.D.

Assistant Professor

Department of Chemistry and Chemical Technology,
Bronx Community College, City University of New York

Study of the neutrino, the smallest particle coming from natural or artificial sources, is of great interest for the science community. Each year several neutrino projects are funded through the U.S. Department of Energy to study various mixing parameters of neutrino, which could have use in various applications, such as a way to x-ray the earth (geo-neutrino), to monitor the nuclear fuel or nonproliferation (reactor-neutrino), or to communicate with the universe (solar and supernova neutrinos). The SNO+ and Daya Bay Antineutrino Experiments are examples of the international neutrino projects' detector medium filled with tons of organic solvent loaded with various metals as the detection targets. Since each neutrino experiment needs to be operated for many years for statistics, sub-PPT level purity and long-term stability of detection liquids are the main keys to ensure the success of projects and require comprehensive inputs from prior analysis of the liquid.

Sunej Hans is a graduate of Hunter College, City University of New York. She received her M.S. and Ph.D. in organic Chemistry from the City University of New York. She did her Postdoctoral Fellowship at the Brookhaven National Lab (BNL) followed by two years working as a Research Scientist at BNL. Simultaneous with her graduate and post-doctoral work, she also served as adjunct lecturers at bot Hunter College and Brooklyn College. Since the fall of 2014, she has been an assistant professor at Bronx Community College and is collaborating on research projects at BNL.

Westchester Community College 75 Grasslands Road, Valhalla, NY 10595 Gateway Building Room 110 Directions attached

For more information, contact

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Inclement Weather: Cancellation Due to Inclement Weather

Should Westchester Community College's Valhalla campus close due to inclement weather (or has delayed opening or closes early) the meeting will be cancelled. Decisions about delay/closure are made around 6am for day courses and 3pm for evening courses. The college will communicate delays, closings or early dismissals on their website (www.sunywcc.edu), Facebook, Twitter, and the 914-606-6900 phone line.

Directions To WCC Campus

From the Bronx River Parkway.

Take Virginia Road, Exit 26. Southbound, turn right; Northbound, turn left. At end of Virginia Road, turn right onto Route 100. Westchester Community College entrance is approx. 1/4 mile on left.

From Cross-Westchester Expressway (Route 287).

Take Hartsdale Exit 4. Eastbound, turn left; westbound, turn right. North on Knollwood Road (Route 100A). Right at Route 100. Approx. 1-1 1/2 miles to Westchester Community College entrance on right.

From the Sprain Parkway.

Take Eastview Exit. Northbound, turn right; Southbound, turn left. At the light, continue straight onto Route 100. Westchester Community College entrance is approx. 1-1 1/2 miles on right.

From the Saw Mill River Parkway.

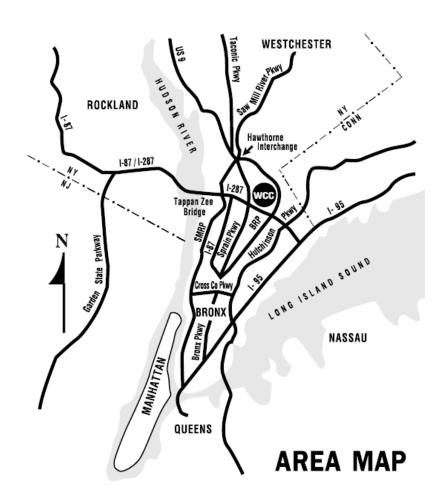
Take Eastview Exit. Northbound, turn right; Southbound, turn left onto Saw Mill River Road. After passing under a building that has a passage over the road, bear left onto Route 100C. After passing the Sprain Parkway interchange, continue straight at the next light (becomes Route 100). Westchester Community College entrance is approx. 1-1/2 miles on right. **By Bus or Train.**

Bee-Line buses No. 1-C, 15, 40 & 41 come onto the campus. For a bus schedule, call 914-813-7777. Harlem Line train should be taken to White Plains, where you can take the 40, 41 or 15 bus or a taxi. For a train schedule, call 1-800-638-7646.

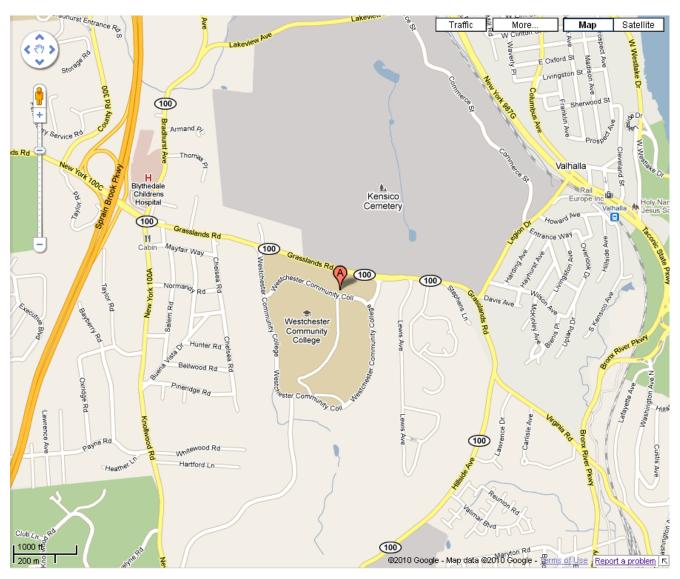
Parking for Disabled Persons.

For information, call the Student Health Office at 914-606-6610.

Area Map:



Area Map:



On Campus Directions Next Page

On Campus Directions:

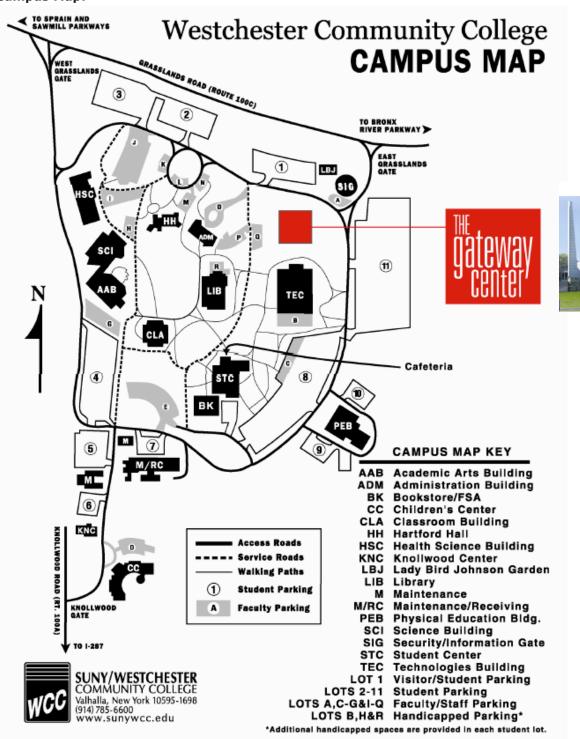
Gateway Building Room 110

This is the new building on campus with the big glass windows

Parking lot #1: Visitor Parking or else if there is space.

Space is limited, please car pool and come early

Campus Map:



Gateway Center