Communicating Scientific Research: Presentations, Papers, Posters, and Proposals

Overview

Communicating Scientific Research teaches young scientists and engineers how to communicate their research effectively in presentations, papers, posters, and proposals. The course consists of one intensive week of training, designed especially for graduate students who have begun their research. The course combines lecture, discussion, critiquing workshops, and out-of-class assignments to give the students opportunities to not only learn the most advanced techniques for communicating scientific research, but also to speak and write about their research and to receive feedback on those efforts. Based on a graduate course taught by Professor Michael Alley at Pennsylvania State University, the University of Wisconsin-Madison, Virginia Tech, this course is designed to help graduate students make their research communications more understandable, memorable, and persuasive. The course will be based on two textbooks, The Craft of Scientific Presentations and The Craft of Scientific Writing, both of which are authored by Michael Alley, the foreign faculty member for the course.

Objectives

Participants in the course will learn about: 1. Presentations: Patiently orient your audience in the beginning by anchoring what is new with what is familiar 2. Presentations: Build technical presentations on messages 3. Presentations: Support messages with visual evidence 4. Presentations: Achieve confidence in delivery through fashioning sentences on the spot after planning and practice 5. Papers and Posters: Analyze what audience knows and why they are reading 6. Papers and Posters: Cast each idea into a precise and clear sentence 7. Papers and Posters: Connect sentences by beginning with the familiar and moving to the new 2 8. Papers and Posters: Maintain energy in paragraphs by selecting strong verbs and cutting needless words 9. Papers and Posters: Support paragraphs with thoughtful illustrations 10. Papers and Posters: Integrate paragraphs and illustrations into sections 11. Papers and Posters: Arrange sections into documents 12. Proposals: Decide when to write a research proposal 13. Proposals: Understand organization of research proposals 14. Proposals: Learn winning strategies of research proposals

Modules	A. The Craft of Scientific Presentations B. The Craft of Scientific Writing: Papers, Posters and Proposals **November 4–8, 2019** Number of participants for the course will be limited to fifty.
You Should Attend If…	▪ Executives, engineers and researchers from manufacturing, service and government organizations including R&D laboratories. ▪ Students at all levels (BS/MS/PhD) or Faculty from reputed academic institutions and technical institutions.
Fees	The participation fees for taking the course is as follows: **Participants from abroad: US $300** **Participants from Industry: INR 3000** **Participants from Govt. Organizations: INR 2000** The above fee includes all instructional materials and assignments and 24 hr free internet facility. The participants will be provided with accommodation on payment basis.

The Faculty

Michael Alley holds a master of science in electrical engineering and a master of fine arts in writing and is an associate professor of engineering communication at Penn State. He is the author three textbooks: The Craft of Scientific Presentations (2003), The Craft of Editing (2000), and The Craft of Scientific Writing (1996). Both The Craft of Scientific Presentations (2003) and The Craft of Scientific Writing have been translated to Japanese. Over the past twenty years, he has taught scientific writing and presentations to science and engineering students at Penn State, the University of Texas, the University of Wisconsin, and Virginia Tech. His professional communication workshops have been held around the world. Sites include Sandia National Laboratories, Lawrence Livermore National Laboratory, Los Alamos National Laboratory, United Technologies, the Army Corps of Engineers, the Environmental Protection Agency, Simula Research Laboratory (Norway), the Institute for Energy Technology (Norway), Kaust (Saudi Arabia), the European Space Agency (Chile), the University of Barcelona, Shanghai Jiao Tong University, Seoul National University, the University of Oslo, and the University of Seville. Alley is the founder and lead editor for the popular website "Writing Guidelines for Engineering and Science Students," which has a half-million visitors each year and is the first Google.com listing for the topic of engineering writing.

Prof. Manoj K. Arora is Vice Chancellor at BML Munjal University and former Director PEC Univ. of Technology, Chandigarh. He holds a Ph.D in Remote Sensing from Swansea University, UK. He was a post-doctoral research fellow for about two years in a NASA sponsored project in Electrical Engineering and Computer Science Department, Syracuse University, USA. He has more than 30 years of teaching, research and administrative experience in academic institutions in India, UK and USA. He works in the areas of Remote Sensing, Surveying and Mapping, Geographic Information System (GIS) & Global Positioning Systems (GPS) and their applications.

Deepak Salunke received PhD from CSIR-National Chemical Laboratory (NCL), Pune and also worked on Indo-French Sandwich Thesis program at ICSN-CNRS France. As a postdoctoral researcher, he worked at the Department of Applied Chemistry, NCTU Taiwan and Department of Medicinal Chemistry at the University of Kansas (KU), Lawrence, USA and then promoted as Assistant Research Professor at Higuchi Biosciences Centre at KU. Before joining Panjab University, Chandigarh as Assistant Professor of Chemistry, he worked at the Advinus Therapeutics and SAI Life Sciences Pvt. Ltd. Pune.

Course Co-ordinators

Prof. Dr. Manoj K. Arora
Phone: +91-9872577544
E-mail: manoj.arora@gmail.com

Dr. Deepak B. Salunke
Phone: +91-8195968252
E-mail: salunke@pu.ac.in

.....

http://www.gian.iitkgp.ac.in/GREGN