

# OCCUPATIONAL HEALTH, HYGIENE AND SAFETY A COMPREHENSIVE WORKSHOP

FIRST ANNUAL INTERNATIONAL WORK SHOP PRESENTED BY



At: INDIAN INSTITUTE OF CHEMICAL TECHNOLOGY, HYDERABAD, ANDHRA PRADESH,  
INDIA

Monday, Feb. 11 – Friday, February 15, 2008

## CO-SPONSORS



National Institute for Occupational  
Safety & Health, USA



Please Mark your Calendars  
Looking forward to meeting you

PLEASE PASS THE INFORMATION TO  
YOUR COLLEAGUES, FRIENDS AND  
PEERS

nayati can be contacted at

[services@nayati.org](mailto:services@nayati.org), [www.nayati.org](http://www.nayati.org)

A work shop design based on training modules developed by World Health Organization to provide education for professionals who are charged with the responsibility of protecting the health of workers.

- Faculty that has helped design, implement and conduct internationally accepted curriculum for educating and training occupational health & safety issues around the world and across industries.
- Comprehensive curriculum for identifying hazards and risks, through assessing, evaluating, interpreting, controlling, intervening, communicating and preventing.
- Workshop based on the premise that prevention is the optimal approach for protecting workers health.
- Interdisciplinary approach to addressing work related injuries.
- Combining lectures, demonstrations, problems solving and skills building through interactive, small group and individual activities.
- Where participants can begin applying the skills learned to their jobs and begin or improve their Health & Safety programs.

OCCUPATIONAL HEALTH, HYGIENE & SAFETY WORKSHOP (Feb 11-15, 2008)

## General Information:

The health and safety of workers is generally given a low priority across economic sectors. Sustainability, human and material resources, and production are primary concerns in both large and small enterprises. The trend toward "globalization" provides additional challenges to worker health and safety. This course is designed for health and safety personnel who are charged with the responsibility of protecting the health of workers and is designed so that the participants will become self-sufficient in learning more about Occupational Health. The goal is to give the participants knowledge, skills and tools to continue working in this area after the course has ended.

This curriculum takes an interdisciplinary approach to addressing the hazards related to work. It is based on the premise that primary prevention is the optimal approach to protecting the health of workers. Each section of this course helps to complete the puzzle of the people, methods, technology, and policy it takes to reduce worker injury. By mastering the knowledge and skills presented, participants will be able to respond to a wide range of occupational health and safety problems across industries.

The course is designed around the following principles:

- ✓ Workers are entitled to a healthy and safe work environment
- ✓ Risk evaluation requires a systematic approach that is essential for control and prevention of work related injuries and hazards.
- ✓ Sentinel health events have been traditionally used as an indicator of exposure to an occupational hazard. However, currently there is enough knowledge of workplace hazards to intervene prior to an adverse health outcome.

## The Aim

A major aim of this curriculum is to provide the participants with skills to address workplace health and safety problems in their communities. In addition to increasing their knowledge of the content material, participants will develop skills in using a framework for approaching workplace health and safety problems including hazard/risk identification and characterization, qualitative risk assessment, control strategies development and risk communication.

## Objectives:

At the end of this course participants will be able to:

- ✓ Describe the process for assessing workplace health and safety exposures
- ✓ Conduct a qualitative assessment of a workplace
- ✓ Recognize a work related injury or hazard
- ✓ Complete an occupational history
- ✓ Complete a job hazard analysis
- ✓ Conduct an incident investigation
- ✓ List exposure groups
- ✓ Complete an exposure and health effect rating chart
- ✓ Develop a strategy for collecting quantitative data
- ✓ Recommend intervention strategies for reducing exposure

- ✓ Begin a program plan for their workplaces

#### OCCUPATIONAL HEALTH, HYGIENE & SAFETY WORKSHOP (Feb 11-15, 2008)

#### Our faculty:

**Dr. Kalpana Balakrishnan, Ph.D** : is the Professor & Head of Dept. of Environmental Health & Engineering and the Director of WHO Collaborating Center for Occupational Health at Sri Ramachandra University, Chennai. Dr. Balakrishnan obtained her Doctoral degree in Bio-physics and subsequent post doctoral training in Environmental Health Engineering at the Johns Hopkins University, Baltimore, Maryland, USA. Her fields of specialization include occupational and environmental health risk assessment, exposure assessment, industrial hygiene and industrial toxicology. Her primary extra-mural research involvement has been in the area exposure assessment and environmental epidemiology. She is also involved in multi-disciplinary projects in the areas of environmental physiology & toxicology and more recently environmental genomics and impact assessments. As the head of the department her responsibilities include coordination of all activities of the department with special emphasis on management of extramural grants, industrial consultancy and administration of occupational safety and health training. Under her direction, her department provides occupational safety and industrial hygiene monitoring services to a wide cross-section of local industries and conducts graduate (Masters and Ph.D.) programs in occupational and environmental health, industrial hygiene and safety and occupational medicine.

**Dr. George Conway, MD, MPH, DABPM, AME** currently serves as Director, NIOSH Agriculture, Forestry and Fishing Program, National Institute for Occupational Safety and Health (NIOSH) US Centers for Disease Control and Prevention. Dr. Conway leads efforts toward major improvements in injury surveillance and prevention for work-related injuries in Alaska and oversees a program involving hundreds of NIOSH employees and grantees, with an annual budget of over \$25 million. Dr. Conway served intermittently as a CDC consultant to the World Health Organization and the Ministry of Health, Government of India, playing an instrumental role assisting in the development of the Indian National Field Epidemiology Training Program. He has collaborated on disease and injury surveillance and prevention projects with, and training of, public health officials in Canada, Greenland, Sweden, Finland, Norway, Russia, Iceland, Bangladesh, India, and Taiwan. He is currently collaborating with the Food and Agriculture Organization of the United Nations, Fishing Technology Service and the Bay of Bengal Program (based in Chennai) in a multi-national project focusing on improving sea safety in India, Sri Lanka, Bangladesh, and the Maldives. He remains active in areas of international health, in training occupational medicine and aerospace medical residents and Epidemic Intelligence Service officers. He is the author of over 60 scientific articles, book chapters, and monographs, many published abstracts, and the editor of four book-length proceedings, volumes and has organized and chaired many international conferences.

**CAPT Kenneth F. Martinez, MSEE, CIH** is currently the acting Deputy Director, Division of Surveillance, Hazard Evaluation and Field Studies for the National Institute for Occupational Safety and Health (NIOSH), Centers for Disease Control and Prevention. Mr. Martinez is an Engineer and Certified Industrial Hygienist and has been associated with NIOSH for more than 27 years. Previously, he served as the acting Associate Director for the NIOSH Coordinating Office of Emergency Preparedness and Response. Mr. Martinez is currently involved in planning, developing, evaluating, and managing the programs related to the management of public health and establishing overall guidelines and policies; developing basic recommendations for studies and analyses. He actively participates in and is the driver for project and program evaluations, formulates, develops and directs broad programs of active research which lead to advances in the field of occupational safety and health and determines the critical areas of needed research, develops creative approaches and solutions to both scientific and feasibility issues. His professional interests include exposure assessment and control evaluation of microorganisms in industrial, agricultural, and indoor environments. Special interests include evaluation of exposures to infectious diseases in various occupational environments and emergency response to bioterrorist events and emerging infectious diseases; sampling and analytical methods development for bio-aerosols and application of real-time aerosol measurement instrumentation in the occupational environment. He also served as an environmental team leader for the CDC emergency response to the World Trade Center attack, an environmental team leader for many of the CDC anthrax outbreak investigations, and was deployed to Toronto, Canada as part of the CDC response team for the SARS outbreak investigation. He is current member of the American Conference of Governmental Industrial Hygienists Bio-aerosols Committee (past-Chair) and past-Chair of the American Industrial Hygiene Association Environmental Microbiology Laboratory Accreditation Committee. Mr. Martinez is the recipient of several awards and commendations from US Public Health Service, served on various committees, published several peer reviewed articles and authored and co-authored several books and technical reports.

**Maharshi Mehta, CIH, CSP** currently runs an international Hygiene and safety company - International Safety Systems -with offices in USA, India, China and Brazil. He is the first person to have started the Masters program in Industrial hygiene in 1997 at the Sardar Patel University, Gujarat, in collaboration with Department of Occupational Hygiene at University of Cincinnati. The program has been running successfully for the past ten years with about 100 graduates who are all successfully employed. Mr. Mehta is a certified Industrial Hygienist and a safety professional with several years of experience as a consultant to various multinational and national corporations in India and is committed to contributing to Health and safety issues globally. He is also the current Ambassador of American Industrial Hygiene Association (AIHA) to India and is actively involved in promoting Occupational Health and Hygiene around the world.

**Ms. Leslie Nickels, M.Ed** is the Executive Director of Great Lakes Centers for Occupational and Environmental Safety and Health, a WHO collaborating center, at University of Illinois at Chicago School of Public Health. Ms. Nickels oversees administrative and programmatic activities, in education and research and global occupational health. She is involved in curriculum development, implementation of technical, undergraduate, and graduate academic courses and programs, continuing education and short courses for

professional development, training for labor inspectors, employers and workers, and train the trainer programs. As the area Manager of the WHO Network of Collaborating Centers she is responsible for coordinating the implementation of the work plan for education,

#### OCCUPATIONAL HEALTH, HYGIENE & SAFETY WORKSHOP (Feb 11-15, 2008)

#### Our faculty:

training, and technical materials; dissemination and adaptation of education and training programs and technical materials through a variety of mechanisms, with collaborating centers in occupational health in developing countries and focus on occupational health issues. Ms. Nickels' international experience includes providing assistance on training programs to South Africa National Institute of Occupational Health for capacity building, consultation on curriculum development and implementation of United Nations Development Program -GEF "Demonstrating and Promoting Best Techniques and Practices for Reducing Health Care Waste to Avoid Environmental Releases of Dioxins and Mercury" in Vietnam, Argentina, Philippines, Senegal, Latvia, Lebanon, and India; Global Administrator of the Global Environmental and Occupational Library, [www.GeoLibrary.org](http://www.GeoLibrary.org) a database of free public domain training tools and technical materials in six languages; trainer for the International Labour Organization's InFocus Program on Safety and Health at Work and the Environment (SafeWork) Addressing Psychosocial Problems at Work (SOLVE), Turin, Italy and organized courses and conferences in Ankara, Turkey, CapeTown, South Africa, Fogarty Conference on Bio Ethics in Bulgaria and Ukraine. Ms. Nickels is the author of several articles, reports and publications in reputed international journals and conferences.

**Dr. Lalitha Burra, Ph.D., CIH** is a Certified Industrial Hygienist and the founder Director of [Nayati International](http://www.nayati.com) (USA, India) a non-profit organization involved in promoting Occupational Health and safety in India. Dr. Burra obtained her doctoral degrees from University of Kanpur in India and also from Louisiana State University, Baton Rouge, USA. She has almost 20 years of experience in laboratory and analytical aspects of Occupational Health and Hygiene exposures, sampling, monitoring and assessment of chemical and biological hazards and was the technical director of accredited Industrial Hygiene Laboratories in USA for several years. She has co-founded and directed a fully equipped, chemistry and microbiology accredited Industrial Hygiene Laboratory for almost a decade. After more than 20 years of successful professional and business career in US, Dr. Burra has relocated to India to share her knowledge and expertise and help promote Health and safety through education, training and research activities.

#### Monday, Feb 11, 2008

##### Morning Session:

9.30am – 10:00am Registration

10:00am – 11:00 am (11:00 am - 11.15am Coffee Break)

Welcome to the group, Introduction of Faculty and participants. Understand and share the professional background of participants, their objectives and goals. Orient participants to the format and structure of the workshop, materials and activities.

11.15am– 1:30pm (1.30pm - 2.45pm Lunch)

Occupational health and hygiene priorities and practice in India - a situational and needs analysis.

##### Afternoon session:

2.45pm-5.00 pm (4.00pm – 4.15pm Coffee Break)

Basic concepts for evaluating worker exposure; occupational work history, characterizing workplaces, assessing and recognizing hazardous situations across industries, "Sentinel Health Events" as indicators of exposures to occupational hazards; Surveillance, its purpose, components, tools and relevant exercises. Use of various resources available including web based resources, CDROM, Texts, ILO encyclopedia, MSDS etc.

5.00pm - 5.30 pm : Questions and plans for Tuesday.

#### Tuesday Feb 12, 2008

##### Morning Session:

9.30 am – 1.30pm (11:00am - 11.15am Coffee Break)

Industry processes, Chemical exposures and health effects, Materials Handling, Risk Assessment, Case Studies, Anticipation and recognition of hazards, Exposure Groups, Additional quantitative information; Types of Hazards and Measurements.

1.30pm-2.45pm Lunch

##### Afternoon Session

2.45 pm – 5:00pm (4.00pm - 4.15pm Coffee Break)

Biological and Physical hazards, assessments and measurements

Techniques, methods, sampling protocols and equipment for measuring various occupational hazards; Demonstration of procedures and selection of appropriate methods for measurements and assessments; exercises.

5.00pm - 5.30pm

Questions and answers, plan for Wednesday.

### Wednesday, Feb 13, 2008

#### Morning Session:

9.30 am – 1.30pm (11:00am - 11.15am Coffee Break)

Controlling exposures: Engineering & Administrative, Personal Protective Equipment & Exercises.

Control banding as a tool to assess and control exposures.

1.30pm - 2.45pm

Lunch

#### Afternoon Session

2.45pm - 5.00pm (4.00pm – 4.15pm Coffee Break)

Exposures and health effects focusing on injuries and safety, Incident investigation- principles, components, questionnaire, report writing, exercises, case study, interviewing, follow up and sentinel events. Medical Surveillance, preventing exposure using surveillance.

5.00pm -5.30pm

Questions and answers, Plan for Thursday.

### Thursday, Feb 14, 2008

#### Morning Session:

9.30 am – 1.30pm (11:00am - 11.15am Coffee Break)

Workplace tour, hazard identification, assessment, group discussions and exercises.

Techniques and methods for Hazard recognition and mapping.

1.30pm- 2.45pm

Lunch

#### Afternoon Session

2.45 pm – 5.30pm (4.00pm-4.15pm Coffee Break)

Exposures in informal sector.

Risk communication, intervention, presentation and exercises.

5.00pm- 5.30pm

Questions and answers, plan for Friday.

### Friday, Feb 15, 2008

#### Morning Session:

9.30 am – 1.30pm (11:00am - 11.15am Coffee Break)

Review of frame work for preventing workplace exposures including injury and safety problems

Developing a program plan and its components; Taking program back to workplace.

1.30pm- 2.45pm

Lunch

#### Afternoon Session

2.45 pm – 5.30pm (4.00pm - 4.15pm Coffee Break)

Follow up participatory activities, Questions & Answers, professional development activities and program evaluation.

Curriculum subject to rearrangement or alterations if and as is deemed necessary.



### Registration Form

Occupational Health, Hygiene & Safety Workshop (Feb 11-15, 2008)

Organized and Conducted by Nayati International, Hyderabad, India

Venue: Indian Institute of Chemical Technology, Hyderabad

(Please make additional copies as required)

Name.....

(Please use block letters and write legibly as it should appear on the Certificate and Name Tag)

Designation.....

Department.....

Organization/Company.....

Address: .....

.....

Tel # ..... Fax#.....

Cell#..... Email.....

No. of Persons registering.....	Registration Fee (includes Lecture & study materials, Certificate of Participation, Lunch, Tea)
Amount Enclosed: INR.....	1-3 (same org..) INR 7500 / USD 200 per person
DD#.....	> 3 (same org.) INR 6000 /USD 175per person
Bank.....	Feb 5, 2008
Amount Enclosed: USD:.....	1-3 (same org.) INR 8500 / USD 250 per person
Check # .....	>3 (same org.) INR 7000 /USD 225 per person
Bank .....	Indian Registrants: Please make payments by DD and to Nayati International and mail to B-88, Sainikpuri, Secunderabad 500 094, A.P.
International Registrations: Please make Payments to: Nayati International and mail to Ms.Norma Trujillo, First National Bank, 3306 McKinzie Rd., Corpus Christi, TX 78410, USA.	

Completed Registration forms can be faxed to 040-27110377 and email information to services@nayati.org

Registration will be confirmed after payment is received.

Cancellation of registration by participants after Feb 2<sup>nd</sup> is refundable less 25% administration fee; after Feb.6<sup>th</sup> is non-refundable. Substitution of participants is allowed by prior intimation

- Workshop Organizers are not responsible or liable for any losses or damages of any kind including medical, travel or personal incurred by the participants.
- Workshop Organizers reserve the right to alter the curriculum content if and as is deemed necessary.
- Organizers have the right to cancel the workshop in case of unforeseen circumstances in which case the registration fee will be refunded. Organizers are not responsible for reimbursement of travel expenses in case the workshop is cancelled.
- Letters of invitation will not be issued for this Workshop. All international participants should make their own arrangements for valid visas, travel and health insurances and other requirements.

If you have any questions, please email to [services@nayati.org](mailto:services@nayati.org) or call 9959605980.