

Global Initiative on Academic Networks (GIAN) Program

EMERGING TRENDS AND CONTEMPORARY TOOLS FOR RESEARCH AND PRACTICE IN ERGONOMICS AND SAFETY

JULY 1-5, 2020

**Department of Industrial and Production Engineering
Dr B R Ambedkar National Institute of Technology Jalandhar, (India) 144011**

About GIAN Program

The Ministry of Human Resource Development, Government of India has launched program titled Global Initiative of Academic Networks (GIAN) in Higher Education aimed at tapping the talent pool of scientists and entrepreneurs, internationally to encourage their engagement with the institutes of Higher Education in India so as to augment the country's existing academic resources, accelerate the pace of quality reform, and elevate India's scientific and technological capacity to global excellence. GIAN program facilitates participation of high quality international academicians/researchers for delivering short-term courses and programs in Indian institutions. More details on various GIAN courses are available at <http://www.gian.iitkgp.ac.in/>

Program Overview and Objectives

Overview:

Ergonomics is the science and art of fitting the job and the workplace environment to worker or employee's needs. Risk factors such as overexertion, repetitive motion, and slips, trips, and falls at work are some of the biggest ergonomics and safety risk factors facing workers in India. Studies have shown that an increase in the awareness of ergonomics and safety benefits a variety of industry sectors in terms of reduction in injuries and associated costs, increase in productivity, and thus morale and job satisfaction, however training in ergonomics and safety is still taking a backseat in industrially developing countries such as India. A well-trained but healthy workforce is essential for India's successful growth in global competitiveness. This course will ensure our industrial workforce, as well as students, are empowered to accomplish their responsibilities by learning the latest research and best work practices in ergonomics and safety. With interactive sessions and hands-on tutorials, this course will also provide attendees a variety of practical tools that they can directly implement at their workplace.

Objectives:

The primary objectives of the course are to:

1. Educate participants from a variety of educational backgrounds and industry sectors to the latest and established research and practice methodologies in ergonomics and safety;
2. Provide participants with the emerging trends and tools in ergonomics and safety (including hands-on tutorials) to successfully accomplish their job responsibilities in industry sectors such as Manufacturing, Automotive, Distribution, Construction, Mining, and Healthcare; and
3. Enhance participants' ability to find solutions for their workplace ergonomics- and safety-related problems, and implement a successful ergonomics and safety program at their workplace.

International Faculty

Rammohan V. Maikala, PhD

Providence Regional Medical Center
Injury Prevention and Ergonomics Department
Everett, WA 98201, USA

Email: Rammohan.maikala@providence.org

Phone: 1-971-330-7051

Editor-in-Chief, Ergonomics in Design

Editor, International Journal of Industrial Ergonomics



Biography:

Dr Rammohan Maikala is an Injury Prevention and Ergonomics Program Specialist at Providence Regional Medical Center in Everett, Washington. Before his arrival at Providence Regional Medical Center in October 2014, Dr Maikala was a Research Scientist for 12.9 years at the Center for Physical Ergonomics, Liberty Mutual Research Institute for Safety in Hopkinton, MA. For the last nine years, Ram has been actively involved in the National Occupational Research Agenda (NORA) – Transportation, Warehousing and Utilities planning and executive meetings at the Centers for Disease Control and Prevention. Most recently, Ram became the Vice-Chair of the Technical Advisory Group - Ergonomics of human-system interaction (ANSI/HFES to ISO Technical Committee 159/Subcommittee 4). He is also part of the Technical Advisory Group - Anthropometry and Biomechanics (ANSI/HFES to ISO Technical Committee 159/Subcommittee 3) – Ergonomics. Ram is the current Editor-in-Chief of Ergonomics in Design, a quarterly peer-reviewed periodical of Human Factors and Ergonomics Society, USA. Ram is the immediate past president of Puget Sound Human Factors and Ergonomics Society, and the past president of The International Society for Occupational Ergonomics & Safety. Ram has a Doctoral degree in Rehabilitation Science from the University of Alberta, Edmonton, Canada, Masters in Industrial Engineering with special emphasis on Ergonomics and Safety Engineering from West Virginia University, Morgantown, West Virginia, and Bachelors in Mechanical Engineering from Osmania University, India.

Host Faculty and Program Co-ordinators

Dr. Lakhwinder Pal Singh

Associate Professor
Department of Industrial and Production Engineering
Dr. B R Ambedkar National Institute of Technology
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Email: singhl@nitj.ac.in,



Biography:

Dr Lakhwinder Pal Singh has completed his B Tech in 1999 from REC (NIT) Jalandhar and M Tech in 2006 and PhD from NIT Jalandhar, Punjab (India). Since 2000, he is working as a faculty in the Department of Industrial and Production Engineering at Dr. B R Ambedkar National Institute of Technology, Jalandhar. He has more than 19 years' experience in teaching and research, and has published more than 45 papers in national and international journals and 50 papers in conferences and contributed a number of 6 book chapters and five books out of which Work study and Ergonomics (Cambridge University Press) is well accepted at Global level. His areas of research interest are Ergonomics and Human Factors Engineering, Occupational Health and Safety, Lean manufacturing, Operations and Supply Chain management. He is a life member of more than seven societies mainly including; IIE, IEI, ISTE, GIFT and ISE. He has organised seven International conferences and 12 short term courses in various capacities, he has also been Co-Chair and Organising Secretary of 14th International Conference (HWWE-2016) and 17th (HWWE-2019) of Indian Society of Ergonomics held from 8th-10th November, 2019. He has guided 6 PhD and two are in process, 45 M Tech and 2 are in process. Filed one patent filed "*Ergonomic Design of Transfer Assisting Device (portable stretcher) for Shifting of Patients' after major Surgery (from operation table to Stretcher, stretcher to bed and vice versa)*" Patent Application File No. 201611016124 by Dr Lakhwinder Pal Singh, Dr B R Ambedkar NIT Jalandhar. Beside he has delivered many expert talks at various institutions in India and Abroad. He has visited different countries including USA, UK, Australia, Dubai, Malesia, Mauritius, Italy, and Turkey.

Dr. Kapil Kumar

Assistant Professor.
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Biography:

Dr. Kapil Kumar Goyal has obtained his BE in 1999 from NIT Kurukshetra and did MTech from NITTTR Chandigarh, India. He did PhD from IIT Roorkee. Presently he is working as Assistant Professor in the Department of Industrial and Production Engineering at Dr B R Ambedkar National Institute of Technology, Jalandhar. He is having 18 Years of teaching experience and 6 Years of Industrial Experience. He has more than 40 publications to his credit and his research

articles appeared in the renowned publishers like Elsevier Taylor & Francis, Springer and Inderscience. He has been awarded with the Best Paper Award in the international conference and has been awarded with best employee award. His research interests include Evolutionary algorithms, Multiple objective optimization, Neural Networks, Decision Sciences and Manufacturing systems and processes planning and optimization. Dr. Goyal has delivered expert lectures in the various premier institutes including IITs and NITs and has chaired sessions in the international and national conferences. He has also been serving as editor on the board of various international journals and also acting as reviewer in various reputed international journals

Who Can Attend

Occupational Safety and Health Executives, Researchers from Government Institutions and Laboratories, Healthcare Executives, Industrial Engineers, Physical and Occupational Therapists, Occupational Health Nurses, and Health and Safety Inspectors, Safety Engineers. Faculty from other Engineering and Medical Colleges and Technical Institutions. Students at all levels (Engineering – Undergraduate, Post-graduate, and Post-Doctoral Students; Physical and Occupational Therapy - Undergraduate, Post-graduate; Occupational Medicine and Occupational Nursing Students)

Program Registration Process

Step-1:

One time Web (Portal) Registration: Visit GIAN Website at the link:

<http://www.gian.iitkgp.ac.in/GREGN/index> and create login User ID and Password.

Fill up the blank registration form and do web registration by paying ₹500 online through NetBanking/Debit/Credit card. This provides him/her with life time registration to enroll in any number of the GIAN courses offered.

Step-2:

Course Registration (Through GIAN Portal): Log in to the GIAN portal with the user ID and Password created. Click on “Course Registration” option given at the top of the registration form. Select the Course titled ‘**EMERGING TRENDS AND CONTEMPORARY TOOLS FOR RESEARCH AND PRACTICE IN ERGONOMICS AND SAFETY**’ from the list and click on ‘*Save*’ option. Confirm your registration by Clicking on ‘*Confirm Course*’.

GIAN Registration Fee: ₹ 500 (mandatory for all) +

Students/Research Scholars	:	₹ 500
Faculty/Staff of Academic Institutions	:	₹ 1000
Industry/Research Organizations	:	₹ 2500
Participants from abroad	:	\$ 200

Program fee covers only course material. ***Boarding and lodging will be provided on payment basis subject to availability.*** Limited shared accommodation is available in Institute Guest House/Hostels on request against the advance payment on first-come first serve basis.

Course Coordinators

Dr Lakhwinder Pal Singh, Email: singhl@nitj.ac.in, (Mobile: +91-8288947954)
Dr Kapil Kumar Goyal, Email: goyalkk@nitj.ac.in (Mobile: +91-8059000377)

About the Institute

Dr B R Ambedkar National Institute of Technology was established in the year 1987 as Regional Engineering College and was given the status of National Institute of Technology (Deemed University) by the Government of India on October 17, 2002 under the aegis of Ministry of Human Resource Development, New Delhi. The Ministry of Human Resource Development, Government of India has declared the Institute as ‘Institute of National Importance’ under the act of Parliament-2007. As one of the NITs, the Institute has the responsibility of providing high quality education in Engineering, Technology and Sciences to produce competent Technical and Scientific manpower. The Institute offers B Tech, M Tech, M Sc, MBA and Ph D programs in several disciplines of Engineering, Science & Technology, and Management.

About the Department of Industrial and Production Engineering

Industrial and Production Engineering is emerging as a specialized branch of Mechanical Engineering with an objective of enabling engineers to improve efficiency and effectiveness of both manufacturing and service sector Industries. A strong emphasis is laid on designing of such systems of Man-Machine symbiosis, which facilitate optimum utilization of scarce resources. It is concerned with the design of Man-Machine System that attempts to optimize the resources, which are becoming increasingly scarce. Its Alumni are occupying eminent positions in industries, research and academic institutions in India and abroad. Department is presently offering PhD in all relevant streams, two PG course in Industrial Engineering and Manufacturing Technology, along with UG course in Industrial and Production Engineering and one minor degree in Industrial Engineering.

Patron

Professor Lalit Kumar Awasthi

Director

Dr B R Ambedkar National Institute of Technology
Jalandhar, India – 144011

Co-Patron

Prof. R K Garg, Dean Faculty Welfare

Prof. Arvind Bhardwaj, Professor, IPE

Head of the Department

Dr Rajeev Trehan

Associate Professor

Department of Industrial and Production Engineering

Dr B R Ambedkar National Institute of Technology

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Local GIAN Co-ordinator

Dr Rajneesh Rani

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<p><u>Registration Form</u> EMERGING TRENDS AND CONTEMPORARY TOOLS FOR RESEARCH AND PRACTICE IN ERGONOMICS AND SAFETY JULY 1-5, 2020 Dr B R Ambedkar National Institute of Technology Jalandhar</p>
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Name	
Designation	
Department	
Organization	
Address for Correspondence	
Email ID	
Mobile Number	
Field of Specialization	
Experience (in years)	
Details of Fee Paid DD/NEFT etc.	
Signature of the Applicant with date	

Recommendations of the Sponsoring Authority

The applicant is hereby sponsored for GIAN program on ‘EMERGING TRENDS AND CONTEMPORARY TOOLS FOR RESEARCH AND PRACTICE IN ERGONOMICS AND SAFETY’ and will be permitted to attend, if selected.

Signature and Seal of the Sponsoring Authority	
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