


Brief Biodata

Name: Dr. Neeraj Bhanot

Designation:	Scientist & Assistant Professor (AcSIR)	
DP No. and Name:	7.02 and Business Development Group	
DU No. and Name:	7 and Directorate	
Email:	neeraj.bhanot@nplindia.org	
Date of Joining CSIR-NPL:	22 October 2020	
Phone (office)	011-45608350	
Mobile (optional)	-	

Research Area/ Interest

Industrial Engineering; Sustainability Assessment; Performance Benchmarking; Digital Metrology; Application Perspectives of Digital technologies such as Internet of Things, Big Data Analytics, Artificial Intelligence and Blockchain.

Educational Qualifications

Degree	Subject	University/ Institute	Year
PhD	Industrial Engineering	IIT Delhi	August 2017
M.Tech	Industrial Engineering	GNDEC Ludhiana	May 2012
MBA (Correspondence)	Sales & Marketing	IGNOU, New Delhi	December 2012
B.Tech	Mechanical Engineering	GNDEC Ludhiana	May 2009

Academic / Research Experience

Grade / Post	Institute	Duration		Research Field
		From	To	
Scientist	CSIR–National Physical Laboratory	22/10/2020	Present	Digital Transformation; Industrial Engineering; Project Management
Assistant Professor	Indian Institute of Management Amritsar	05/01/2018	20/08/2019	-do-
Assistant Professor	Dr B R Ambedkar National Institute of Technology Jalandhar	21/07/2016	15/12/2017	-do-
Assistant Professor	Guru Nanak Dev Engineering College Ludhiana	01/08/2012	31/12/2012	-do-
Graduate Engineer Trainee	Shapoorji Pallonji & Company Limited Mumbai	01/10/2009	15/03/2010	Project Management

No. of Publications

No. of Publications in SCI Journals	No. of Publications in non-SCI Journals	No. of Publications in Conference Proceedings	Books/ Book-Chapters	Total
8	13	18	4	43

Selected Publications

1. Abdul Gani, Neeraj Bhanot, Faisal Talib and Mohammad Asjad (2022) “An Integrated DEMATEL-MMDE-ISM Approach for Analyzing Environmental Sustainability Indicators in MSMEs”, *Environmental Science and Pollution Research*, Vol. 29, pp. 2035–2051, <https://doi.org/10.1007/s11356-021-15194-6>. (SCI; I.F. –4.223)
2. Amanpreet Kaur Sodhi, Neeraj Bhanot, Rajwinder Singh and Mohammed Alkahtani (2021) “Effect of integrating industrial and agricultural wastes on concrete performance with and without microbial activity”, *Environmental Science and Pollution Research*, <https://doi.org/10.1007/s11356-021-16445-2>, 2021. (SCI; I.F. –4.223)
3. Rajdeep Singh and Neeraj Bhanot (2020) “An Integrated DEMATEL-MMDE-ISM Based Approach for analyzing the Barriers in IoT Implementation”, *International Journal of Production Research*, Vol. 58, No. 8, pp. 2454-2476, doi: 10.1080/00207543.2019.1675915. (ABDC–A; SCI; I.F. –3.199)
4. Maraboina Raju, Munish Kumar Gupta, Neeraj Bhanot and Vishal Sharma (2019) “A hybrid PSO–BFO evolutionary algorithm for optimization of fused deposition modelling process parameters”, *Journal of Intelligent Manufacturing*, Vol. 30, pp. 2743-2758, <https://doi.org/10.1007/s10845-018-1420-0>. (SCI; ABDC–B; I.F. – 3.535)
5. Neeraj Bhanot, P.V. Rao and S.G. Deshmukh (2017) “An Integrated Approach for analysing the Enablers and Barriers of Sustainable Manufacturing”, *Journal of Cleaner Production*, Vol. 142, No. 4, pp. 4412-4439, doi: 10.1016/j.jclepro.2016.11.123. (SCI; SJR–A*; I.F. – 6.395)

Patents/Copyrights

1. Copyright titled “**LEKHAK 1.0: Program for Analyzing Key Trends in Research Dataset**” granted with Registration Number “SW-10310/2018”: This tool has been designed in Python and aims to help research scholars for carrying out detailed content analysis based on the available research database in any domain.
2. Copyright titled “**A Digital Image Processing Based Attendance Assessment Framework**” granted with Registration Number “SW-10697/2018”: This interface has been developed using JAVA and will ease the task of taking attendance with large number of students present in the class as it compares the live image with the one available in the database and all detailed record is managed by the tool itself.
3. Copyright titled “**Program for Identifying Cause and Effect Relationships between different Factors**” granted with Registration Number “SW-10923/2018”: This tool has been designed in Python and aims to help management scholars in easing their task

of calculations for huge amounts of survey data while applying techniques such as Decision Matrix Trial and Evaluation Laboratory, Maximum Mean De-Entropy Algorithm and Interpretive Structural Modeling.

4. Copyright titled “**Digital Image Processing and Industry 4.0 based Conceptual Surveillance Architecture for Line and Functional Layout in Manufacturing Industry**” granted with Registration Number “L-79782/2018”: The current work in focus tends to propose a conceptual surveillance architecture in the manufacturing domain.
5. Copyright titled “**Program for Matrimonial Matchmaking with Reliability Analysis**” granted with Registration Number “SW-12849/2019”: The tool has been designed targeting the matchmaking services provided by other matrimonial websites in much more enhanced manner with better quality results.
6. Copyright titled “**T-App: Travel on Time**” granted with Registration Number “SW-13551/2020”: A Mobile Application for Indian Railways has been developed to get the information from the passengers traveling in the specific train uploading their current location on the cloud and fetching that information, providing ease to the passengers to easily detect the real location of the train.

Current Activities

I am performing duties covering following departmental responsibilities:

- (1) Acting as an interface between the Industries and CSIR-NPL scientists along with mapping industry issues with NPLs technical team;
- (2) Licensing of Technology/knowhow;
- (3) Management of collaborative, consultancy, sponsored and technical services projects;
- (4) BDG Data management;
- (5) Science and Technology Information Dissemination.

Honour(s)/Award(s)/ Fellowship(s)

1. Awarded “**Best Young Researcher Award (Male – Below 40 Years)**” by International Academic and Research Excellence Awards – 2019.
2. Research paper for tackling paddy burning through utilisation in biocement has been awarded with **Best Paper Award** in International Conference on Sustainable Waste Management through Design held at Guru Nanak Dev Engineering College Ludhiana in 2018.
3. Research Work on effective healthcare management awarded with **Silver Medal** in Indian Institution of Industrial Engineering’s National Essay Competition 2017.
4. Received “**Young Engineer Award**” in 32nd National Convention of Production Engineers of The Institution of Engineers (India), Kolkata held in Ranchi during 27-28 May 2017.
5. Received “**Mekaster Young Scientist Award**” in 20th Punjab Science Congress organised by Punjab Academy of Sciences, Patiala at IET Bhaddal, Ropar during 7-9 February 2017.
6. Received **travel grant** from IIT Delhi to attend 23rd CIRP International Conference on Life Cycle Engineering to be held at Technical University Berlin.
7. Received **travel grant** from Department of Science & Technology (DST) to attend 22nd CIRP International Conference on Life Cycle Engineering held at UNSW, Sydney.
8. Received **Best Paper Award** (Student Category) during National Institute of Industrial Engineering (NITIE) – Production and Operations Management Society (POMS) International

Conference held in NITIE, Mumbai (December 18-21, 2014).

9. Received **Gold Medal of the University**, 2013 for academic excellence in M.Tech.
10. **MHRD Scholarship** Awarded (Research) from 01.01.2013 onwards for PhD at IIT Delhi, India.
11. Secured 96.43% in Management Aptitude Test by All India Management Association in December, 2008.
12. National level **pistol shooter** and won various medals at district and state levels.

Contributions to AcSIR

Dr. Neeraj Bhanot is currently associated with AcSIR as **Assistant Professor** in the field of **Engineering Sciences** and already supervising one PhD candidate as Co-Guide.

Membership of Professional Societies/ Institutions

Metrology Society of India; POMS, USA

Any other Information

Dr. Neeraj Bhanot has incredibly good exposure in dealing with Operations and Supply Chain issues conducted in the form of social impact projects in Punjab. His efforts in managing projects in different contexts such as Supply Chain Design to Tackle Paddy Burning; Supply Chain study for Golden Temple & Ayush Bharat Scheme; Managing BRTS Operational Efficiency; etc. have been praised by reputed media houses as well. He is also actively involved in disseminating his research works through articles in different media outlets and invited talks in different institutes.

His main research interests are Sustainable Manufacturing, Performance Benchmarking and Digital Transformation leading to software product development considering application perspectives of Big Data Analytics, Internet of Things, etc. He also serves as a Reviewer in various journals such as Benchmarking: An International Journal, International Journal of Production Research, etc. Apart from research activities, he has been a National Level Pistol Shooter and won various medals at district and state-level competitions. **Any student interested in exploring research opportunity under his guidance can approach him for further discussion.**