Ram Karan Singh, PhD & Post Doctorate



An educationist, institutional builder, acknowledged researcher. administrator with outstanding leader ship quality Dr. Ram Karan Singh is presently Vice-Chancellor of ICFAI University Dehradun, UK, India. Earlier he was Senior Professor of Civil (Water Resources Enaineerina Environment Engineering) in the Department of Civil and Environmental Engineering in the NorthCap University, Guruaram (Previously ITM University, Gurugram) also the Founder Dean of Research

Development and Industrial Liaison & Dean of PhD studies, Chairman of the International relation office and the Nodal Officer the AIU at NCU. He has 30 years of teaching, research, administrative, and consultancy and Industrial liaison experience in top institutions/universities in India (17 years) and abroad (13years). He held various administrative positions such as Dean of Research and Development, Head of the department and Head of the Research. Development and Industrial Liaison, Chairperson International relation office in various universities during the tenure of his work. He is a fellow member of various national and international academic. research and administrative committees.

He has done degrees, B.E. (Hons.) Civil Engineering, M.E. in Civil Engineering (with specialization in Hydraulics Engineering) and Ph.D. in the area of Hydraulics &Water Resources Engineering from a premier University BITS-Pilani, Pilani India (This was affiliated with MIT USA).

Awarded by JSPS (Japan Society for the Promotion of Science) Post-DoctoralFellowship, Japanese Govt. (letter no. JSPS/FF1/185; ID No. P 02413) for a period of 2 years from 2002-2004 to carry out "Diffuse pollution modeling of water environment of Japanese low land watersheds", in Japan at Department of Hydraulics Engineering, NIRE, Tsukuba Science City, Japan 305-8609, JAPAN.

Also recipient of **best research paper award** by Secretary General International Water Supply Association, IWWA, 1996 India ,Glory of India Gold Medal, [the most coveted Institutional and globally reputed] was conferred by International Institute of Success Awareness, New Delhi 2012 for remarkable role in the field of education and administration and Bharat Jyoti Award and

Certificate of Excellence and Shiksha Rattan Awardand**Certificate of Excellence** awarded by India International Friendship Society, New Delhi at a Seminar on "Economic Growth and National Integration" at India International Center Delhi on 29th August, 2012 and 30thOctober 2012 for outstanding services, achievements and contributions in education by Dr. Bhism Narayan Singh former aovernor of Tamilnadu and Assam.

Best Researcher Award and star performer for outstanding contribution and achievements in post PhD Research during the academic year 2011-2012 at ITM University on 5th September 2012 (**Teachers Day**) by Prof. Prem Varat Vice Chancellor and Former Founder Director, IIT, Roorkee.

He has taught over 50 (fifty) different courses at the graduate, postgraduate and pre-Ph.D. classes and supervised 100 above of Master degree thesis and 12 PhD degree thesis presently there are 4 on-going PhD work under his supervision and SRC member of over 10 research scholars.

He has over **150 research papers** in reputed peer reviewed Journals and conference proceedings.

Authored **five books** "Wastewater Management in National Territory of India", Lambert Academic Publishing, Germany, (2011) and "Water Quality Assessment and Management for Delhi Stretch of River Yamuna", Lambert Academic Publishing, Germany, (2012), "Study of Groundwater Sustainability in Gurgaon District, Haryana, Scholar's Press, Germany", (2014) and "Study of Environmental Hydraulics of River Ganga, India, Scholar's Press, Germany", (2016), "Advances in Water Resources Engineering and Management" By Rafid A, Singh R.K., Subashisa D and Madhuri K, Springer Nature Singapore Pvt.Ltd, (2018).



Specialist in Water Resources Engineering, development of Optimization Model for watershed, wet land reclamation and management, Multifunctionality of agricultural activities, Modelling of Nutrients load in watershed with main emphasis on Nitrate pollution, application of Fuzzy Logic in Water Resources management, application of GeneticAlgorithms in Water Resources Management, Multicriterion Decision Making in Water Resources Management, Project Economics, Remote Sensing and GIS, Study and Modeling of Lake Limnology, Surface Water Quality Modeling, Artificial Neural Networks in Water

Resources Engineering, Hydropower and Alternate Energy Sources, Environmental Economics and Impact Assessment, **Climate Change** and Environment Adaptation and Mitigation, **Glacier Hydrology**, Green Technology and **Carbon market**.

He has visited all **major continents** on research, teaching and collaborative assignments some important one are Keimyung University, **South Korea** (December 2011), University of Michigan, Ann Arbor, **U.S.A.** (May, 2011); Michigan Technological University, Houghton , **U.S.A.** (May, 2011); NIRE, Tsukuba Science City, **Japan** (July, 2002-July, 2004); Dublin University, **Ireland** (September 2003); Omar Mukhtar University, **Libya** (Ministry of Higher Education) (October, 2008-July, 2009); and Arbaminch Water Technology University, (UNDP Funded) (October, 1998-July, 2002). Presently **Kingdom of Saudi Arabia** at King Khalid University (Ministry of Higher Education) (August 2013-till date).

He has completed the research projects funded by USIEF, **USA**,GTZ,**Germany**; JSPS,**Japan**; DAAD, Germany; UNESCO, New Delhi; SNV,**Netherland**; DST, India; and AICTE,**India** as a project principal investigator.

He has organized several international conferences i.e. on "Adaptation and mitigation options for tackling the impact of climate change on water resources" on March 10-11, 2011 at ITM University campus in cooperation with UNESCO, DST and WAPCOS India and another workshop under Indo-US bilateral funding (IUSSTF) along with Michigan Technological University, USA, University of Massachutes, USA on March5-6, 2012 on the topic "Global Challenges: climate change, water, environment and society".

He also chaired various sessions and did panel discussions in various national and international conferences, invited talks and quest lectures.

He along with multidisciplinary research team published six national and international Patents i.e. IBF-VEHICLE INTELLIGENT BALANCING VEHICLE FRAME (Under review), Machine Learning (Granted), Block Chain Technology (Granted), Steel and Mining Waste Management (Granted) in innovation category by Ministry of Commerce and Industry Government of India and Australian Government. Out of six, four Australian patents get granted and two Indian patents are published attached below in annexure.

With ability to work in technically demanding and complex research and academic works and provide diverse and **flexible support**. Can work independently or as a part of multidisciplinary team. Demonstrated ability to lead team, **coordinate multiple task** and staff, and deliver products and results in **academic, administrative and research environment**.

3. Career Objective:To create and/or sustain knowledge organizations that will create new ideas and explore new frontiers. Thoughtful leader & strategic thinker to inspire and motivate the team work.

4. **Mailing Address:**

Dr. Ram Karan Singh Sen. Prof. and Vice-Chancellor The ICFAI University, Dehradun,



Rajawala Road, Central Hope Town, Selaqui,

Dehradun - 248 011, Uttarakhand

E-mail: vc@iudehradun.edu.in

Phone: 7683014374

https://www.iudehradun.edu.in/



Chronology of Education & Experience in academic & Research
Organization Globally

4. (a) Nationality:Indian (Passport No.: G5595492, USA visa number 2011098517 0001, R B1/B2 validity up to 07 April 2021, Multiple entries).

(b) Personal data:

5. Date of Birth:01.09.1967

7. Gender: Male

6. Age:53

8. Marital Status: Married

9. Educational Qualification:

Degree	Institute	Year of completion	Subject	Percentage/ Grade
Post Doctorate.	NIRE, Japan	2004	Water Resources Engineering	Completed
Ph.D.	BITS-Pilani University, India	1996	Hydraulic & Water Resources Engineering	Excellent
M.E.	BITS-Pilani University, India	1993	Hydraulic& Water Resources Engineering	81.10% (CGPA: 8.11/10)
(a) B.E (Hons) (b) MSc. (Hons.)	BITS-Pilani University, India	1991	(a) Civil Engineering (b) Chemistry	62.90% (CGPA: 6.29/10)

Post Doctorate Topic: "Diffuse pollution modeling of water environment of Japanese low land watersheds"

Ph.D. Topic: "On some investigation in optimization methods in the area of water distribution system and water quality management"

M.E. Thesis: "Evolution of mathematical model for aquifers-Khetri Copper Complex, Rajasthan"

Awards/ Fellowship Received:

- International Research Award 2020-2021 (20 Feb.2021) by IIOR, Ministry of Micro, Small and Medium Enterprises, Government of India, Advocating Academic and Research Programs for API and Career Advancement Scheme New Delhi, India.
- 2. Dr. Ram Karan Singh Senior Professor and Vice Chancellor India, ICFAI University, Dehradun. selection of your Academic Profile for "100 Eminent Academician of 2021" (Book), "Profile has its own ethos to be reflected" Apropos the subject cited above, I wish to congratulate you for your Academic Profile having been selected for publication in the most coveted book entitled "100 Eminent Academicians of 2021", to be published by the International Institute of organized Research (I2OR) which is a registered MSME with the Ministry of Micro, Small and Medium Enterprises, Government of India and is advocating United Nation's Sustainable Development Goals through Academic and Research Programs for API and Career Advancement Scheme. It is our mountainous pleasure to congratulate you since your esteemed occupational profile.
- 3. 7th International Scientist Awards on Engineering, Science and Medicine VDISA 2020 (04 & 05- Jul-2020, Coimbatore, India. Medal, Certificate and one-year Honorary Membership received on the eve of 7th International Award ceremony held in Coimbatore on 04-05 July 2020 they conferred the outstanding scientist award certificate in the category Science, Medicine and Engineering.
- 4. The "Life Time Golden Achievement Award" with Book Citations, September-2020 by Bharat Rattan Publishing House, Award Certificate and copy of Citation received on 18th September, 2020 in New Delhi India. They conferred the "Life Time Golden Achievement Award" 2020, for outstanding contribution in the chosen area of work by Bharat Rattan Publishing House, New Delhi India the World's Most Leading Biographical specialist.
- 5. "Global Education Award" for the untiring contribution to promote Higher Education, on 10th September,2019at Marwah Studios, Film City, Noida, India awarded by "Director Education Kim Jae Hong International Youth Fellowship and President of International Mind Education Institute, South Korea".
- **6. "Award of Excellence in Academic Collaboration"** awarded by "Saudi Arabia **Ministry of Higher Education**, King Khalid University, College of Engineering", in recognition with outstanding contribution to the Department of Civil Engineering on 31st October, 2013.



Award received on 31st October 2013 by Prof. Hussein Manie Ahmed Al Wadai, Dean College of Engineering, King Khalid University, Kingdom of Saudi Arabia

Abet & NCAAA Accreditation:

I worked for the **ABET**, **NCAAA** in the Department of Civil Engineering at King Khalid University in the Kingdom of Saudi Arabia consequently Civil Engineering Program got accredited in Sep.2017 for the time period of 6 years for Abet and Nov.2018, 7 years for NCAAA.

ABET, is Accreditation Board for Engineering and Technology, Inc., is a non-governmental organization that accredits post-secondary education programs in applied and natural science, "computing, engineering, and engineering technology". The accreditation of these programs occurs mainly in the United States but also internationally. As of October 2017, 3,852 programs are accredited, distributed over 776 universities and colleges in 31 countries. ABET is the recognized U.S. accreditor of college and university programs in applied and natural science, computing, engineering, and technology. ABET also provides leadership internationally through workshops, memoranda of understanding, and mutual recognition agreements, such as the Washington Accord. ABET has been recognized by the Council for Higher Education Accreditation (CHEA) since 1997. Also, ABET evaluates programs offered in a 100-percent online format.

The National Commission for Academic Accreditation and Assessment is the accreditation facility for the nation of Saudi Arabia. It is an autonomous body but directly responsible to the council of higher education.







Felicitation on 08 April, 2019 in the Department of Civil Engineering in King Khalid University, Kingdom of saudi Arabia

- 7."Gold Star Asia International Award" awarded by "Economic Growth Society of India" at International Achievers summit and International Conference on "Indo-Nepal Friendship and Economic Co-operation" on 20th April 2013 at Hotel Soiltee Crown Plaza in Kathmandu, Nepal. for outstanding services, achievements and contributions in education. Glory of India Gold Medal, [the most coveted Institutional and globally reputed] was conferred by International Institute of Success Awareness, New Delhi 2012 for remarkable role in the field of education and administration.
- **8."Bharat Jyoti Award" and "Certificate of Excellence"** awarded by India International Friendship Society, New Delhi at a Seminar on "Economic Growth and National Integration" at Delhi on August 29th, 2012 for outstanding services, achievements and contributions in education.
- **9."Shiksha Rattan Award" and "Certificate of Excellence"** awarded by India International Friendship Society, New Delhi at a Seminar on "Economic Growth and National Integration" at Delhi on 30th October, 2012 for outstanding services, achievements and contributions in education.
- **10.Awarded JSPS (Japan Society for the Promotion of Science) Post-Doctoral Fellowship, Japanese Govt.** (Letter no. JSPS/FF1/185; ID No. P 02413) for a period of 24 months from 2002-2004 to carry out "Diffuse pollution modeling of water environment of Japanese low land watersheds", in Japan at Department of Hydraulics Engineering, NIRE, Tsukuba Science City, Japan 305-8609, JAPAN.
- **11.Prize for the best paper published in the Journal of Indian Water Works Association**(IWWA), 1995, in 28th annual convention of (IWWA), at Jodhpur awarded by Mr. Michel Slipper Secretary General of International Water Supply Association.
- 12.Government of India, Department of Science and Technology, international travel grants award to attend international conference on "Climate Adaptation Research and Understanding through Social Sciences (ICARUS)", University of Michigan's School of Natural Resources and Environment, Dana Building, 440

Church Street in Ann Arbor, Michigan, USA, from May 5 to May 8, 2011.

- **13.Outstanding performance award for excellence** in academics for the academic year June, 2010-June, 2011 by ITM University, Gurgaon (letter dated July14, 2011).
- **14.Best Researcher Award** and star performer for outstanding contribution and achievements in post PhD Research during the academic year 2011-2012 at ITM University, Gurugram on 5th September 2012 by Prof. Prem Vrat Vice Chancellor and Former Founder Director, IIT, Roorkee.
- **15.** Appreciations letter as a peer reviewer, Academic Discovery, Springer Nature, 20 March, 2020.
- **16. Special merit state scholarship** from school till graduation.

12. (a) Details of Employment in India and Abroad:

Position Held	Period	University	Nature of Job
The Vice-Chancellor	06Dec 2021-Till date	The ICFAI University Dehradun, UK, India	
Sen. Prof. & Head Civil and Environmental Engineering Dean Research Dev. Ind. Liaison Dean PhD Studies Programme Chairman International Relations Office (IRO) Nodal officer Association of Indian Universities (AIU) of NCU	01 July2019 to30 Nov2021	THE NORTHCAP UNIVERSITY, Gurgoan, India	Teaching, Research, Academic coordination, Research and Developments, PhD research supervision, Development of new academic programs

 ♣ Faculty, Department of Civil Engineering ♣ Member of Board of Director of Research ♣ Coordinator of National Commission of Academic Accreditations and Assessment Department of Civil Engineering (NCAAA), KSA and Accreditation Board of Engineering and Technology (ABET), USA. ♣ Design of new academic programme in the area of architectural Engineering 	August 2013- May2019	King Khalid University, Kingdom of Saudi- Arabia	Teaching, Research, Academic coordination, Research and Developments, PhD research supervision, Development of new academic programs
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 Professor & Head Department of Civil Engineering Dean of the Research Development and Industrial Liaison Chairman M. Tech. Admissions Programme at University level Member Secretary Board of Doctoral Research (BDR), Student School committee (SSC) at University level Member AC, SRC, DRC, SDRC, IQAC, RDIL and Directors and HOD, PhD Admission committees 	January 2010-July, 2013	ITM University, Gurgaon	Teaching, Research, Administration, Academic coordination, Research and Developments, Induction of Master degree and PhD programmes, PhD research supervision, Research projects, National and International linkages and conferences, Work at committee level.
♣ Professor & Head Department of Civil Engineering	Sep. 2009- Dec. 2009	AMITY University, Noida Campus	Teaching, Research and Administration
♣ ProfessorDepartment ofCivil Engineering	Oct. 2008 - Sep. 2009	Omar-Al- Mukhtar, University, Libya	Teaching and Research

Associate Professor and Head Dept. of Natural Resources	May 2005- Oct. 2008	TERI University, India	Teaching, Research and Projects	
Associate Professor & Dean Research and Industrial Coordination	August 2004-May 2005	KIIT University, India	Teaching, Research, Consultancy, Administrative	
♣ Post-doctoral Research Fellow	July 2002- July 2004	NIRE, Japan	Research	
AssistantProfessor & Head	Sep. 23,1998- June2002	AWTI University, Ethiopia	Teaching, Research, Consultancy & Administrative	
♣ Assistant Professor	Sep.22, 1998 - Jan.1, 1998	BITS- Pilani University, India	-Do-	
↓ Lecturer	Dec. 31,1997 - Oct. 27,1993	BITS-Pilani University, India,	-Do-	
♣ Assistant Lecturer	Oct.26, 1993- May, 21,1993	BITS-Pilani University, India	-Do-	
↓ Teaching Assistant	May, 20,1993- June, 27,1991	BITS-Pilani University, India	-Do-	
♣ Design Engineer	June, 26,1991- May, 20,1991	Dumez, Sogea, Borie-Sae, France	Analysis and Design of Hydropower Project	
	Offers and Ho	norary Appoint	ments	
♣ Professor	January 2012	Keimyung University, Dague City, South Korea	Teaching, Research, Consultancy & Administrative	

♣ Professor	May 2011	Michigan Technological University, Houghton, USA. Michigan University, Annorbar, USA	Academic & Research
Head BuiltEnvironment andNaturalResourcesDepartment	January 2008	Glasgow Caledonian Engineering College, U.K. campus in Oman	Teaching, Research, Consultancy & Administrative
♣ Professor	February 2010	University Technology Malaysia	Teaching and Research

(b) Administrative Experience:

Period	Organization	Nature of Responsibility	Designation
1 st August 2011-till date	ITM University, Gurgaon	Academic coordination, Research and Developments, Induction of Master's degree programmes and PhD programmes	 Professor & Head Department of Civil Engineering Dean of the Research Development and Industrial Liaison Chairman M. Tech. Admissions Programme at University level Member Secretary Board of Doctoral Research (BDR), Student School committee (SSC) Member AC,SRC,DRC,SDRC,IQAC and Directors and HOD, PhD Admission committees

Period	Organization	Nature of Responsibility	Designation
2 nd , November, 2010 - till date	ITM University, Gurgaon	Promotion of research and University, Industry linkages	♣ Dean Research, Development and Industrial Liaison
May 2005- October 2008	TERI University, Delhi	Introduced new master degree programme and strengthen research and project activities	♣ Head of the Department
Sep. 2004- May 2005	KIIT University, Bhubaneswar	Promotion of research and development activities	Dean of Research and Development
October 1998-July 2002	AWTI University, Arbaminch	Introduced new master degree programme and strengthen research and project activities	♣ Head of the Department
July 1996- July 1998	BITS-Pilani, Pilani	Academic counseling and registration of students	In charge academic counseling and registration division

North Cap University previously, (ITM University): www.itmindia.edu

BITS, Pilani: Birla Institute of Technology and Science, Pilani, (Rajasthan) India (www.bits-pilani.ac.in) (affiliated with MIT, USA)

NIRE: National Institute for Rural Engineering, Tsukuba Science City, Japan(www.nire.go.jp)

KIIT: Kalinga Institute of Industrial Technology, Bhubaneswar, and Orissa, India(www.kiit.ac.in)

TERI: The Energy and Resource Institute, New Delhi, India(www.teriuniversity.ac.in)

OMU: Omar-Al-Mukthar University, Libya

12. Teaching: List of some important courses taught at under graduate (UG) and post graduate (PG) programme are given as under:

Course Number & Title	UG Level / PG Level	Year taught	Whether course develope d by you
Hydro Power and Alternate Energy Sources	UG	1998	
Engineering Hydrology	UG	1998	
Environmental Impact Assessment	UG	1999	Yes
Water and Waste Treatment	UG	1996	
Hydraulic and Fluid Mechanics	UG	1995	
Transport Phenomena	UG	1994	
Water Resources Planning and Management	UG	2000	
Design of Hydraulic /Irrigation Structures	UG	2000	
River Engineering	UG	2001	Yes
Hygrometry	UG	2000	Yes
Economic Aspect of Water Resource Development	PG	2001	Yes
Optimization Techniques in Water Resources	PG	2001	
Simulation modeling and computer application in Environment Engineering	PG	2002	Yes
Environmental Modeling	PG	2005	Yes
Soil and land management	PG	2005	
Geomatics of Natural resources	PG	2005	Yes
Watershed Science	PG	2006	Yes
Operation Research and Project Management	PG	2007	Yes
Ground water hydrology	PG	2007	
Optimization and water quality modeling of water resources system	PG	2008	Yes
Drainage and Irrigation Engineering	UG	2008	
Design of hydraulic and irrigation structures	UG	2009	
Engineering geology	UG	2010	
Environmental modeling	PG	2010	
Introduction to Civil Engineering	UG	2011	Yes
Hydraulics	UG	2013	

Course Number & Title	UG Level / PG Level	Year taught	Whether course develope d by you
Geotechnical Engineering	UG	2013	Yes
Transportation System	UG	2013	Yes
Hydrology	UG	2013	Yes
Water Chemistry	UG	2014	Yes
Dynamics	UG	2014	Yes
Environmental Engineering	UG	2015	Yes
Pavement Design and Materials	UG	2015	Yes
Fluid Mechanics	UG	2019	
Advanced Concrete Technology	PG	2019	Yes
Water Resources Engineering	UG	2019	Yes
Technical Writing Skill	Pre-PhD	2019	Yes
Basic of Mechanical and Civil Engineering	UG	2020	Yes
Open Channel Flow	UG	2020	Yes
Optimization in Civil Engineering	PG	2020	Yes
Construction Technology and Management	PG	2020	Yes
Organization Management	PG	2021	Yes
Formwork and Scaffolding	PG	2021	Yes
Finite Element Analysis	PG	2021	Yes
Research Ethics	Pre-PhD	2021	Yes
Transportation Engineering	UG	2021	Yes

13. Skill Development in Computer:

♣ Software packages worked with: MIKE-11, MIKE Basin, HEC-RAS (Floodplain Mapping & Modeling), HEC-HMS (Floodplain Hydrology & Modeling), CROP-WAT, HBV- Models (Hydrology model), SSIIM (Sediment transport model), Habitat model (for EIA), Water CAD, Storm CAD, Sewer CAD, Culvert Master, Flow Master, Pond Pack, Auto Cad, EPANET, LINDO, Map info GIS, Micro soft word, Power Point, Micro Soft Excel etc.

14. Action Based Research and Field work Interest:

- Development of Optimization Model for Watershed
- Wet land reclamation and management

- Multifunctional of agricultural activities
- Modeling of Nutrients load in watershed with main emphasis on Nitrate pollution
- Application of Fuzzy Logic in Water Resources management
- ♣ Application of Genetic Algorithms in Water Resources Management
- Multicriterion Decision Making in Water Resources Management
- Project Economics
- Remote Sensing and GIS
- Study and Modeling of Lake Limnology
- Surface Water Quality Modeling
- Artificial Neural Networks in Water Resources Engineering
- Hydropower and Alternate Energy Sources
- Environmental Economics and Impact Assessment
- Carbon Capturing and Sequestration (CCS)
- Clean Development Mechanisms (CDM)
- Water Foot Print Technology
- Urban water drainage and diffuse pollution modeling
- ♣ GIS and RS based ET computation
- Use of sludge from municipal treatment plant as a construction material
- Removal of heavy metals from water

15. Professional Responsibilities Handled:

- → Singh,R.K. Advisory Board Member, (March-2018), INTERNATIONAL SEMINAR ON Sustainable Technologies for Environmental Management (STEM-18) Organized by: Department of Environmental Engineering, Delhi Technological University, Bawana Road, Shahbad Daulatpur, Delhi 110042 27th- 28th March, 2018.
- ♣ Member of Academic Council Board, DRC, SRC, BDR (Member secretary), AQAC, RDIL, INAE and Chairman of M. Tech Admission Committee at ITM, University, Gurgaon apart from the Head of Research Development and Industrial Liaison and Head of Civil Engineering Department, (January 2010- till date)
- Head, Department of Natural Resources, TERI University, May 2005-Oct.2008, New Delhi, India
- ♣ Dean of Research and Industrial Coordination Sep.2004- May 2005 at KIIT-DU
- Head of Department of Hydraulic Engineering AWTI, Arbaminch, Ethiopia (1998- May, 2002)
- Member of academic council of AWTI, Arbaminch, Ethiopia (1998-May, 2002)
- Member of research board in BITS, Pilani, India. (1996-1998)
- ♣ In charge of registration and academic council board in BITS, Pilani,

- India. (1996-1998)
- Coordinated practice school programmes at various centers in New Delhi of BITS, Pilani in India (1993-1998)
- Member of Editorial Board, Ethiopian Journal of Water Science and Technology (1998- May, 2002)
- ♣ Chaired session in 2nd International conference in emerging technology held at KIIT Bhubaneswar (Dec. 2004)
- Advisory Committee Member, International Conference on "Biodiversity, Environment and Sustainability: Challenges for Future", University of Delhi, School of Environmental Studies, September, 4-6, 2008

16. Dean of the Research, Development and Industrial Liaison ITM University, Gurgaon (November, 2010-till date):

- As a result of RDIL activities the research projects worth Rs.2.0 crores in the various department of the University funded by Department of Science and Technology (DST) Government of India, All India Council for Technical Education (AICTE), New Delhi, University Grant Commission (UGC), New Delhi and Council of Scientific and Industrial Research (CSIR), Govt. of India under my guidance as a Head of RDIL.
- MoU with UNESCO, New Delhi to have the cooperation on academic and research in the area of water nexus energy, climate change and environment.
- Organized an International Workshopon March 10-11,2011 on the topic "Adaptation and mitigation options for tackling the impact of climate change on water resources" in cooperation with UNESCO, DST, AICTE and various other national and international agencies in campus of theITM University.
- ➡ Visited to Michigan Technological University, Houghton, USA from May 2, 2011- May 10, 2011 in order to have MoU for academic and research exchange with ITM University, Gurgaon.
- Submitted a proposal with Michigan Technological University under Indo-US bilateral scheme to hold an International workshop in March 2012.
- ↓ I am also responsible in drafting various operating documents of RDIL such as guidelines for the sponsored research projects, consultancy documents, RDIL web site, IQAC manuals, projects assessment documents etc.
- As a Chairman M.Tech Admission Committee academic year 2012-13. I administered the admission process and increased the intake by four times as compare to academic year 2011-12 (70 seats) the number of application has gone to 300 seats.

17. Membership of professional/learned societies:

- Fellow of The International Institute of Organized Research (I2OR2021/F12OR-313), 5th March 2021 Ministry of MSME Government of India.
- ♣ Fellow of Institution of Environmental engineering (India), (FIEE)
- ♣ Fellow-ASCE (9125847), American Society of Civil Engineers
- ♣ Fellow of the International Association of Hydrological Sciences (IAHS), U.K.
- Fellow-International Water association (IWA), U.K.
- Fellow- of the Japan Society of Irrigation, Drainage and Land Reclamation, Japan
- ♣ Commission Member the World Conservation Union (IUCN),2008
- ♣ Expert International Human Dimension Programme on Global Environmental Change (IHDP), Bonn, Germany, 2009
- Member Global Water Partnership (GWP), Sweden, 2008
- Honorary Member of Research Board of Advisors, American Biographical Institute, USA
- ♣ Fellow of Indian Water Works Association (MIWA)
- Fellow of Institution of Public Health Engineers, India (IPHE)
- ♣ Fellow of Indian Society of Technical Education (MISTE)

ADDITIONALINFORMATION:

- ♣ ME/BE/MSc. thesis supervised: 100
- ♣ PhD thesis: 3 (ongoing) and 12completed
- PhD thesis examined: 6
- PhD research committee member: 6
- Total number of invited lecture delivered: 20
- Professional training program attended: 10
- Design of new degree program: 2
- ♣ Design of new courses: 35
- ↓ UGC EDU-SAT Channel Lectured Delivered on CDM Technology for the Central University Center in India Sep. 2007

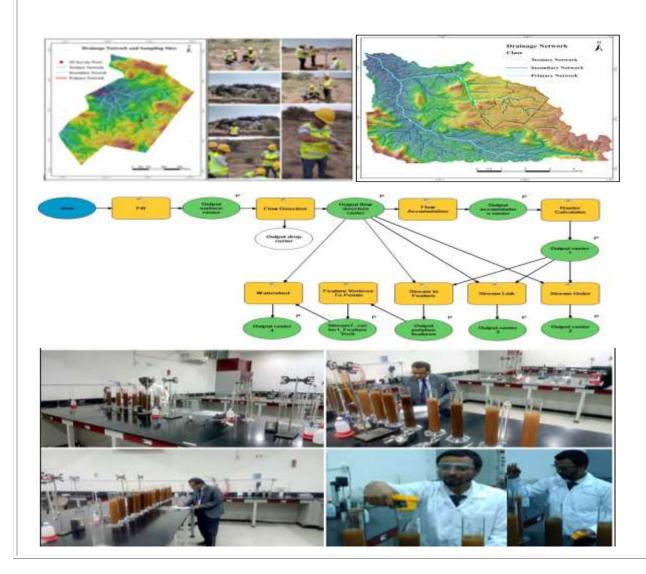
19. Sponsored Research and Consultancy Projects Completed:

Title of the Project Completed /In Progres	Duration	Amoun t of the Grant	Sponsorin g Agency	Co- investigators
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(a) Sponsored Projects:

Consultancy work, September, 2017:

Hydrological Site Investigation report King Khalid University Female Campus, Ahad Rafaida, Aseer Province, Kingdom of Saudi Arabia



Title of the Project	Completed /In Progress	Duration	Amoun t of the Grant	Sponsorin g Agency	Co- investigators
The Use of Modeling, Monitoring and Smart Technologies for Sustainable Watershed Management in Bisha Watershed, Aseer Province, Saudi Arabia	Applied	3 yrs. if granted Nov.201 8 applied	1.8.milli on SR	Ministry of Education ,KSA	Involved as a Co-PI
Assessment of decline and dieback of Junipers procera trees and planted seedlings in the natural stands of AlSouda National Park in Aseer region – Kingdom of Saudi Arabia	In Progress	Jan 2017- June 2017	SR.50,0 00	Deanship Research, KKU,Saudi Arabia	Involved as a Co-Pl
Geospatial approach on landslide susceptibility zonation and geodesign in semiarid mountainous watershed, Saudi Arabia	In Progress	Jan 2017- June 2017	SR.50,0 00	Deanship Research, KKU,Saudi Arabia	Involved as a Co-Pl
	10 m				
Geotechnical characterization and strengths studies of stabilized and tire shred mixed fly ash	Completed	2011- 2014	Rs. 23,3 0,000	DST Govt. of India	Involved as a mentor

Title of the Project	Completed /In Progress	Duration	Amoun t of the Grant	Sponsorin g Agency	Co- investigators
Developmental Rural Extension Programme (DROP), Uttaranchal State in Dehradun District (Chakrata Region) worked as Advisor and Technical Expert	Completed	2005- 2008	Rs.1.5 Crores	Uttaranch al State Governm ent	DROP Division, TERI, Involved as a Technical expert
Technological Intervention in Salt Cultivation Field in Gujarat, Surrender Nagar District	Completed	2007- 2008	Rs. 50,0 0,000	SEWA and ICICI	Dr.Pradeep Dadhich,Dr. Malini Balakrishnan, Dr.Anoop Singh, Involved as a Co-Pl
Techno-Economic Evaluation Study on the implementation of pump energization program in India of REC	Completed	2006- 2008	Rs.1.2 Crores	Ministry of Water Resources , Govt. of India	Involved as technical expert, Water Division of TERI
Diffuse Pollution Modeling from agricultural run-off in Japanese paddy fields	Completed	2002- 2004	Japan ese Yen 10 billion	Govt. of Japan	Involved as a Research Fellow, Dr.Eisaku Shiratani (PI)
Sodo City Water Supply, Ethiopia	Completed	1998- 2002	Ethiopi an Birr 1 million	Netherlan ds Develop ment Organizati on and German Technical Grant, Ethiopia.	Worked as a project PI

Title of the Project	Completed /In Progress	Duration	Amoun t of the Grant	Sponsorin g Agency	Co- investigators			
Kulfo Hydro Power Project	Completed	1998- 2002	Ethiopi an Birr 1.5 million	Netherlan ds Develop ment Organizati on and German Technical Grant, Ethiopia.	Worked as a project PI			
Abaya-Chamo Hydro Power Project and Lake Limnology	Completed	1998- 2002	Ethiopi an Birr 0.5 million	Netherlan ds Develop ment Organizati on and German Technical Grant, Ethiopia.	Worked as a project Pl			
Dul Hasty Hydro Electric Power Project	Completed	1991		Dumeg Sogea and Borie Sea	Design and Site Engineer			
(b) Consultancy Projects:								
Soil bearing capacity testing for the construction of overhead water tanks at the various locations in the Jhunjhunu district, India.	Completed	1991- 1998		PHED Rajasthan	Departm- ental consultant, BITS, Pilani			
Filter-media testing for the construction of rapid-gravity filter at the various locations in the Jhunjhunu district (Raj.), India.	Completed	1997		PHED Rajasthan	Departm- ental consultant, BITS, Pilani			

Title of the Project	Completed /In Progress	Duration	Amoun t of the Grant	Sponsorin g Agency	Co- investigators
Safety checking for over-head water tanks at Pilani, Client: PHED Rajas than,	Completed	1997		PHED Rajasthan	Department al consultant, BITS, Pilani

International Events Organized:

- ♣ Organized an international workshop on "Adaptation and mitigation options for tackling the impact of climate change on water resources" on March 10-11, 2011 at ITM University campus in cooperation with UNESCO, DST and WAPCOS India.
- ♣ Organized another international workshop under Indo-US bilateral funding along with Michigan Technological University & University of Massachutes, USA on March5-6, 2012 on the topic "Global Challenges: climate change, water, environment and society".

18. Clean Development Mechanism (CDM):

- ♣ Financing wind energy projects in India: Assessing the additionally and role of clean development mechanism (CDM) benefits of studying the CDM potential through waste heat recovery in sponge iron industry in India.
- ♣ To statistically analyze data collected from a 50-ha forest plot in Barrow Colorado Island GHG mitigation through fuel efficiency, waste heat recovery and biomass based power projects under clean development mechanism.
- ♣ CDM scope in the transportation sector in the Indian sub-continent.
- Review of validation and verification process for clean development mechanism (CDM) projects.
- Clean development mechanism (CDM) scope in renewable energy sector in India (with focus on biomass and waste heat recovery sectors).
- ♣ Greenhouse gas (GHG) mitigation through fuel efficiency, waste heat recovery and biomass based power projects under clean development mechanism (CDM) in India.

Credentials on Important web Portal:

S.No	Web-Site: Research	RG	Skill &	Research	Following
	Gate	Score	Expertise	Items	

Ram Karan Singh Vice-Chancellor					18 Jan.20	18 Jan.2022	
1.	https://www.researchgate. net/profile/Ram Singh46	16.15	63	60	435		

20. Research Publications: (Total No.: 115)

Papers in International Journals (38):

- 1. Yoshinaga, I., Feng, Y., Singh, R. K., & Shiratani, E. (2004). Dissolved nitrogen model for paddy field ponded water during irrigation period. *Paddy and Water Environment*, 2(3), 145-152.(ISI impact factor: 1.38, Citation web of Science:8,April, 2019).
- 2. Shiratani, E., Yoshinaga, Singh, R.K.; I., Feng, Y., & Hasebe, H. (2004). Scenario analysis for reduction of effluent load from an agricultural area by recycling the run-off water. Water Science and Technology, 49(3), 55-62.(ISI impact factor: 1.25, Citation web of Science:14, April, 2019).
- 3. Shiratani, E., Yoshinaga, I., & Singh, R. K. (2005). Model analysis for nitrogen effluent from upland field constructed with under-drain. Water Science and Technology, 51 (3-4), 91-98. (ISI impact factor: 1.25, Citation web of Science: 2, April, 2019)
- Sharma, D., & Singh, R. K. (2009). DO-BOD modeling of River Yamuna for national capital territory, India using STREAM II, a 2D water quality model. Environmental monitoring and assessment, 159(1-4), 231. (ISI impact factor: 1.80, Citation web of Science: 11, April, 2019)
- 5. Prasad S., Singh R.K., Singh R., (2008) "A nonlinear regression model for growth", Journal of Applied Animal Research, Taylor & Francis Group, Vol.33, Issue2, pp165-167.
- P.S. Pawar & R.K. Singh (2008) "Climate Change & Irrigation Water Demand: Some Challenging Issues of Tropical Forest-Areas", International Journal of Rural Development and Management Studies, Volume 2, Number 1, pp 73-86.
- Malik, V.S., Singh, S.K. and Singh, R.K. (2010), "Impact of Climate Change on Water Resources-A Review on Global Prespective", Internation Journal of Asian Business Management, Vol.2, No.1 pp.33-41.
- 8. Singh, R.K., (2010), "Sensitivity of Reference Evapotranspiration to Climate Change: A Case Study of Jaipur District in Rajasthan", International Journal of Rural Development and Management Studies, Vol. 4, Number 1, January-June 2010, PP 154-166.
- Malik, B.S.; Singh, R.K. and Singh S.K.; (2010), "Impact of urbanization on groundwater of Gurgaon, District, Haryana, India"; "International Journal of Rural Development and Management Studies"; Vol.5, Number 1, January-June, 2010; pp 45-57. (Citation web of Science: 5, April, 2019).
- 10. Singh, R. K., (2011), "A Critical Analysis of Yamuna Action Plan (YAP): Its achievements and failures", "An International Journal the Asian Man", Volume 5, Issue 1, January-June 2011, PP 9-15.
- 11. Singh, R. K., & Pawar, P. S. (2011). Comparative study of reference crop evapotranspiration (ETO) by different energy based method with FAO 56

- Penman-Monteith method at New Delhi, India. Eng. Sci. Technol, 3, 7861-7868. (ISSN: 2141-2839, Open Access Citation web of Science: 3, April, 2019)
- 12. Singh, R. K., et al. (2011), "Characteristics of the event mean concentration (EMCs) from rainfall runoff on mixed agricultural land use in the shoreline zone of the Yamuna River in Delhi, India" "An International Journal of Applied Water Science", December, 2011.
- 13. Singh, R. K., & Bala, A. (2012). Monitoring of evapotranspiration in major districts of Haryana using Penman Monteith method. International Journal of Engineering Science and Technology, 4(7).(ISSN: 2141-2839,Open Access, Citation web of Science: 6, April, 2019).
- 14. Malik, V. S., Singh, S. K., & Singh, R. K. (2012). Application of "Processing MODFLOW for Windows (Pmwin)" for sustainable ground water resources study for Gurgaon District, Haryana, India. International Journal of Engineering Science and Technology, 4(9), 3988-4002. (ISSN: 2141-2839, Open Access, Citation web of Science: 5, April, 2019).
- **15.** Singh, R. K., & Pawar, P. S. (2012). Comparison of reference evapotranspiration estimations across five diverse locations in India. *Int J Appl Innov Eng Manag*, 1(4), 18-27. 7. (Indexed Thomson Reuters, Impact Factor: 9.3, Citation web of Science: 2, April, 2019).
- **16.** Singh, R.K. et.al. (2013), "Unconfined compressive strength of sewage sludge stabilized with fly ash and cement", International Journal of Advances in Science and Technology, Vol.6, No.2, 2013, pp.108-118.
- 17. Varma, G., Singh, R. K., & Sahu, V. (2013). A comparative study on the removal of heavy metals by adsorption using fly ash and sludge: a review. International journal of application or innovation in engineering and management, 2(7), 45-56. (Indexed Thomson Reuters, Impact Factor: 9.3, Citation web of Science: 26, April, 2019).
- **18.** Bala, A., Singh, R. K., & Gayathri, V. (2013). Review on different surface energy balance algorithms for estimation of evapotranspiration through remote sensing. *IJETAE*, 3, 582-588. (ISSN 2250–2459, Online, Citation web of Science: 03, April, 2019).
- 19. Singh, R.K. and A. Shanmuganathan, (November 30, 2013), "Algorithm to Supply Chain Management: to Suite the Present Industrial Need", "International Journal of Innovative Research in Science and Technology" (ISSN: 2321-1156), Volume-1, Issue-5, pp.15-23.
- **20.** Singh, R.K. and Saiful Islam, (December 31, 2013), "Monitoring of Potential Evapotranspiration of Abha City, Kingdom of Saudi Arabia," "International Journal of Advanced and Innovative Research", (2278-7844), /# 269/Vol2, Issue 12, pp269-272.
- **21.**Singh, R. K., & Islam, M. S. Estimation of Potential Evapo-Transpiration of Asir Region, Kingdom of Saudi Arabia: Considering Climate Variability. *International Journal of Advanced and Innovative Research*",(2278-7844), 194.
- 22. Singh, R.K. et.al. (January-June, 2013), "Utilization of Sewage Sludge in Civil

- Engineering Applications for Sustainable Future Environmental Growth-A Review," "International Journal Geotechnics and Environment", (ISSN-0975-4288), Vol-5, Issue 1, pp63-88.
- 23. Singh, R.K. & Shwetang Kundu. (September, 25, 2014), "Review on Changing Natural Nitrogen Cycle: Special Reference to Kingdom of Saudi Arabia," "International Journal of Engineering Science Invention Research and Development", (e-ISSN-2349-6185), Vol-1, Issue-III, pp73-81.
- **24.** Singh, R.K. (Oct, 17, 2014), "Removal of trace metal (As) from groundwater using: low cost adsorbent useful in rural sector", "International journal of application or innovation in engineering and management", (IJAIEM), Vol.3, Issue 09, pp 299-306.
- **25.** Singh, R.K. et.al., (March, 02, 2016), "Analysis of potential Evapotranspiration of different Cities of Kingdom of Saudi Araba", "International journal of Advanced and Innovative Research", (IJAIR), (ISSN:2278-7844)/#48, Vol.5, Issue 02, pp 48-51.
- **26.** Singh, R.K. et.al., (March, 02, 2016), "Computation of Runoff in King Khalid University", "Journal of Computing Technologies", (JCT),), (ISSN:2278-3814)/#30, Vol.5, Issue 02, pp 30-33.
- 27. Singh, R.K. et.al., (March, 02, 2016), "Methods of Estimating ground water Recharge", "International journal of Engineering Associates", (IJEA), ISSN:2320-0804)/#30, Vol.5, Issue 02, pp 06-09.
- 28. Singh, R. K. (2018). Impact of Climate Change on the Retreat of Himalayan Glaciers and Its Impact on Major River Hydrology: Himalayan Glacier Hydrology. In Climate Change and Environmental Concerns: Breakthroughs in Research and Practice (pp. 681-694). IGI Global.



Chapter 35

Impact of Climate Change on the Retreat of Himalayan Glaciers and Its Impact on Major River Hydrology: Himalayan Glacier Hydrology

Ram Karan Singh King Khalid University, Saudi Arabia

ABSTRACT

Himalayan Glaciers are the largest freshwater resource on earth and the rivers originating from them are an important source of water. They significantly modify stream flow both in quantity and timing as annual basin run-off is enhanced or decreased in years of negative or positive glacier mass balance respectively. Although glacial advances and retreats are part of its natural cyclic phenomenon, the rate of de-glaciations has accelerated in recent times due to climatic changes and global warming caused by anthropogenic activities. Some of the important glaciers of Himalayas are receding at an alarming rate, which could have dire consequences on river hydrology of the main rivers of this region namely, Indus, Ganga and Brahmapura, Initially causing floods and the paradoxically, scarcity of water later. This chapter is an attempt to summarize some of the studies on Himalayan glacier retreats and also to assess its impact on the availability of freshwater in the sub-continent.

- 29. Qureshi, M. R. N., Singh, R. K., & Hasan, M. A. (2018). Decision support model to select crop pattern for sustainable agricultural practices using fuzzy MCDM. Environment, development and sustainability, 20(2), 641-659. (ISI impact factor: 1.38, Citation web of Science: 1, April, 2019)
- 30. Mallick, J., Singh, R. K., AlAwadh, M. A., Islam, S., Khan, R. A., & Qureshi, M. N. (2018). GIS-based landslide susceptibility evaluation using fuzzy-AHP multi-criteria decision-making techniques in the Abha Watershed, Saudi Arabia. *Environmental earth sciences*, 77(7), 276. (ISI impact factor: 1.77, Citation web of Science: 2, April, 2019)
- 31. Mallick, J., Singh, R. K., AlAwadh, M. A., Islam, S., Khan, R. A., & Qureshi, M. N. (2018). GIS-based landslide susceptibility evaluation using fuzzy-AHP multi-criteria decision-making techniques in the Abha Watershed, Saudi Arabia. *Environmental earth sciences*, 77(7), 276. (ISI impact factor: 1.77, Citation web of Science: 1, April, 2019)
- 32. Mallick, J., Singh, R. K., Khan, R. A., Singh, C. K., Kahla, N. B., Warrag, E. I., ... & Rahman, A. (2018). Examining the rainfall–topography relationship using non-stationary modelling technique in semi-arid Aseer region, Saudi Arabia. Arabian Journal of Geosciences, 11(9), 215.(ISI impact factor: 0.86, Citation web of Science: ,April, 2019).
- 33. WARRAG, E., MALLICK, J., SINGH, R., & KHAN, R. (2019). STATUS OF DIEBACK OF

- JUNIPERUS PROCERA (AFRICAN PENCIL CEDAR) IN NATURAL STANDS AND PLANTATION IN ALSOUDA HIGHLANDS, SAUDI ARABIA. APPLIED ECOLOGY AND ENVIRONMENTAL RESEARCH, 17(2), 2325-2338. (ISI impact factor: 0.72, Citation web of Science: ,April, 2019).
- 34. Singh, R. K; Mallick, Javed; et al. "simulation based ranking of vegetable cash crops for sustainable greenhouse farming practices" By: APPLIED ECOLOGY AND ENVIRONMENTAL RESEARCH Volume 17(2) page:4615-4629 Published Feb 2019 Web link: http://www.aloki.hu/indvolOF.htm.(ISI impact factor: 0.72, Citation web of Science: ,April, 2019).
- 35. Chaudhuri, S., Chakraborty, P., Das, B. and Singh, R.K., 2019. Flow Analysis of Multilayer Gravity-Driven Sisko Fluid over a Flat Inclined Plane. Arabian Journal for Science and Engineering, 44(9), pp.8081-8093. (SCI-expanded)
- **36.** Singh, Ram Karan, and Javed Mallick. "Fuzzy based multi-criteria method for sustainable green chamber farming practices." Indian Journal of Agricultural Sciences 89, no. 10 (2019): 1732-1736. (SCI-expanded).
- 37. Pawan Kumar, Deergha Sharma and Singh, R.K.; (June 2020); "Financial Performance Evaluation of Commercial Banks by AHP: An Evidence from India"; Pacific Business Review Internationa; Volume 12, Issue 12 June 2020 PP. 21-37.
- 38. Vineet Tirth 1,2,*, Ram Karan Singh 3, Saiful Islam 4, Irfan Anjum Badruddin 1, Rini Asnida Binti Abdullah 4, Ali Algahtani 1,2, Essam R.I. Mahmoud 5, Amir Arabi 1, Neeraj Kumar Shukla 6 and Parul Gupta; 09.04.2020 "Kharif crops selection for sustainable farming practices in the Rajasthan-India using multiple attribute based decision-making"; Agronomy 2020, 10, 536; doi:10.3390/agronomy10040536 www.mdpi.com/journal/agronomy, Switzerland, 2015-ongoing, page: 1-15. (ISSN: 20734395, HINDEX 14).
 - 39. Vineet TIRTH, Makrand WAGALE, Ajit Pratap SINGH, Ashoke Kumar SARKAR, Ram Karan SINGH, Ali ALGAHTANI, Saiful ISLAM; 24.05.2021 "INVESTIGATING THE ADVERSE IMPACTS OF RURAL ROADS USING A FUZZY MULTICRITERIA APPROACH"; The special issue on the 100th anniversary of Lotfi A. Zadeh (1921–2017), Journal of Civil Engineering and Management ISSN 1392-3730/eISSN 1822-3605 2021 Volume 27 Issue 6: 441–453 https://doi.org/10.3846/jcem.2021.15264, (IF:2.957, SCI- expanded).

Papers in Indian Journals (23):

- **40.** Singh, R.K., (1992), "The Impact and Assessment of Transportation System on the Environment", Journal of Indian Association for Environmental Management, NEERI, (India), Vol.19, pp87-91.
- **41.** Singh, R.K. and Singh, S.K., (1992), "Copper an Environmental pollutant," Indian, Journal of Chemical Weekly, Vol.37, No.2, pp125-130.
- **42.** Singh, R.K. and Singh, S.K., (1992), "Inorganic Trace Elements as Water pollutant", Indian, Journal of Chemical Weekly, Vol.36, No.23, pp137-144.
- **43.** Singh, R.K., (1993), "The Need of Rain Water Conservation and General Trend of Rainfall at Pilani in Rajasthan, India", Journal of Institution of Public Health Engineers, India, Vol., 1993, No.4, pp 23-26.

- **44.** Singh, R.K. and Choudhary, M.S., (1993) "Study of Physical, Chemical Parameters of Ground Water of Nagpur District: Some Correlations", Journal of Institution of Public Health Engineers, India, Vol. 1994, No. 3, pp23-29.
- **45.** Singh, R.K., and Choudhary, M.S., (1993), "The Sustainable Environmental Development", Indian, Journal of Chemical Weekly, Vol.9, No.11, pp133-135.

46.

- **47.** Singh, R.K. and Pirasnna, V., (1994), "The East Coast Road an Environment Impact Assessment", Indian, Journal of Chemical Weekly, Vol.39, No.29, pp137-140.
- **48.** Singh, R.K. and Vijay Bhaskar, P.K., (1994) "Stratospheric Ozone Depletion", Indian Journal of Chemical of Weekly, Vol. 39, No.35, pp131-137.
- **49.** Singh, R.K. and Shiv Prasad, (1995), "Decomposition Principle based Optimization of Water Distribution System", Journal of Indian Water Works Association, Vol.27, No.4, pp227-230.
- **50.** Singh, R.K. and Ganesh, R. (1996), "Potability and Suitability of Water for Irrigation purpose of various Indian Rivers", Journal of Institution of Public Health Engineers, India, Vol.1996, No.1, pp224-235.
- 51. Singh, R. K., & Anandh, H. (1996). Water quality index of some Indian rivers. *Indian Journal of Environmental Health*, 38(1), 21-34.(Hindex:23, Citation: 25, April, 2019)
- **52.** Singh, R.K. and Gupta Sandip, (1996), "Fuzzy Linear Programming Model for Olefin Cracking Heaters", Indian, Journal of Chemical Weekly, Vol. 12, No. 21, pp179-184.
- **53.** Singh, R.K. and Syam P.V.S., (1997), "Implication of Global Warming on Human Health", International Journal of Pollution Research, Vol.16 (2), pp123-127.
- **54.** Singh, R.K. and P.V.S., Syam, (1997), "Recycling Water for Boiler Feed Purposes", Journal of Public Health Engineers, India, Vol.1997, No.2, pp19-33.
- **55.** Singh, R.K. (1999), "Global Emergency due to Ozone Depletion", Annual Bulletin, AWWTI, Vol.IV, No.1, pp33-36.
- **56.** Singh, R.K., (2000), "Sustainability in Development Research & Practice", Annual, Bulletin, AWTI, No.2, pp11-16.
- 57. Singh, R.K. (2002), "Genetic Algorithm Solution for Surface Water Management Models", Journal of Indian Water Works Association, Vol. 26, No.4, 120-128.
- **58.** Singh, R.K. and Bharat, C.V., (2001), "Assessment of Air Quality Index of Indian Metropolitan and other Major Cities, Using Factor Analysis", International Journal of Pollution Research, Vol. 12(4), 120-128.
- **59.** Singh, R.K., Shiv Prasad and Reddi Naidu, N.S.J., (2002), "Assessment of Water Quality of some Indian River", International Journal of Pollution Research, Vol. 18 (2), 125-132.
- **60.** Singh, R.K. and Singh, A.P., (2000), "BOD Assimilation of River Narmada at Jabalpur, India", Journal of Environmental Pollution Control, Vol.3 (6), 16-21.
- **61.** Singh, R.K. and Getachew A., "Water Balance Modeling of Abaya and Chamo Rift Valley Lakes, Ethiopia", Ethiopian Journal of Water Science and Technology, 16(20:1-11(2002).

62. Singh, R.K.; "Future Energy Crisis & Need of Zero Energy House: A Global Challenge", Vector Tech Magnitude and Direction, Vol.10 No.3 Aug 2011- Feb 2012 pp 64-65.

Papers in International Conferences/Symposiums (30):

- **63.** Singh, R.K., (1998), "Linear Goal Programming and its Application in Multiobjective Water Resources System Planning", invited lecture to AWTI Research Publications Cell. Published in Ethiopian Journal of Water Science and Technology.
- **64.**Singh, R.K., (2000), "Application of System Approach at Micro Level Water Resources System Management", Proceedings, 5th Symposium, AWTI, Arbaminch, Ethiopia.
- **65.**Singh, R.K., (2000), "Potential Evapotranspiration of Arbaminch Town", 5th Symposium, AWTI, Arbaminch, Ethiopia.
- **66.**Singh, R.K., (2001), "Application of Genetic Algorithms in Water Resources Engineering", Proceeding, 5th Symposium, AWTI, Arbaminch, Ethiopia.
- 67. B.B. Lal, Pande and Singh, R.K., (2001), "Planning Management and Analysis of Sustainable Water Resources Development", Proceeding, 5th Symposium, AWTI, Arbaminch Ethiopia.
- 68. Singh, R.K., (2001), Proceedings, "Fuzzy rule based optimization of water supply system of Sodo Town", 19th Annual Education Seminar, Bahir Dar University, Bahir Dar, Ethiopia.
- **69.** Singh, R. K.; Shiratani, E.; Yoshinaga, I. and Hasebe, H.; (2003); "Optimization models for reduction of effluent load from paddy field by recycling use of water"; International Conference on Diffuse pollution; Dublin, Ireland Proceeding pp.3-119 to 3-124.
- **70.** Shiratani, E.; Yoshinaga, I. and Singh, R. K.; (2003); "Model Analysis for Nitrogen Effluent from Upland Field Constructed with Under-drain"; International Conference on Diffuse pollution; Dublin, Ireland Proceeding pp.3-100 to 3-106.
- 71. Singh, R. K.; Shiratani, E.; Yoshinaga, I. and Hasebe, H.; (2004); "Fuzzy multiple objective model for paddy field effluent load management by recycling through drainage system"; British Hydrologic Society, U.K.
- 72. Singh, R. K., Shiratani, E.; Yoshinaga, I. and Mukai, M.; (2004); "Optimum Land use with respect to Multifunctional role and Nutrient export of Irrigation ponds catchment's in Japan"; International Conference on Emerging Technology KIIT, Bhubaneswar, pp. 127-135.
- 73. Singh, R.K. et-al. (2006) "Fuzzy multiple objective model for paddy field effluent load management with irrigation drainage system" International Conference on Sustainable Irrigation 2006, Bolgana, Italy, Proceeding.
- **74.** Singh, R.K. et-al. (2006) "Multifunctional environmental economics and nutrient export of irrigation pond's catchments in Japan" International Conference on Environmental Economics 2006, Bolgana, Italy, Proceeding.
- 75. Sharma, D., & Singh, R. K. (2009). Do-Bod Modeling of River Yamuna Using STREAM-II for NCT Region, India. In Advances in Water Resources and Hydraulic

- Engineering (pp. 763-768). Springer, Berlin, Heidelberg.
- **76.** Singh,R.K., (2010) "Managed River Flow Himalayan River of India", International Symposium Benefitting from Earth Observation Bridging the Data for Adaptation to Climate Change in the Hindu Kush-Himalayan Region, 4-6 October 2010, Kathmandu,Nepal.
- 77. Singh, R.K. and Sakshi Gupta, (2011) "Clean development mechanisms (CDM) and land filling: study of the municipal waste processing complex at Ghazipur, Delhi", international conference on "Climate Adaptation Research and Understanding through Social Sciences (ICARUS)", University of Michigan's School of Natural Resources and Environment, Dana Building, 440 Church Street in Ann Arbor, Michigan, USA, from May 5 to May 8, 2011.
- 78. Singh, R.K. (2012) "Himalayan Glaciers retreat and its impact on river hydrology", Indo-US bilateral workshop on Global Challenges: Climate Change, Water, Environment and Society, March 5-6, 2012, ITM University, Gurgaon, India, pp.91-98.
- 79. Singh, R.K., (2012) "Climate change nexus water availability in Himalayan Rivers", International workshop on "Understanding-Water-Energy-GHG nexus for future water and food security", jointly organized by WTC, New Delhi and University of Melbourne, Australia, 27-28 September 2012.
- 80. Mallick, Javed & Singh, R.K.; 2015, "Research Day on Environmental and Renewable Energy", "GIS-Based Hydrological Modeling and Analysis of Contribution Environmental Factors: A Case Study of Abha, Saudi Arabia", (Organized by Deanship of Research, King Khalid University, KSA), October 14, 2015, Building B, Auditorium 6.
- **81.**Singh, R.K.; 2016, Key Note Address in "International Conference on Water Environment Energy and Society-2016", (Organized by Texas A & M University, USA & AISECT University, Bhopal, India), March 15-18, 2016.
- 82. Singh, R.K., 29 August-1stSeptember 2016, Eco Summit 2016 Ecological Sustainability: Engineering Change, France, 'Modeling Agricultural Area to Increase Water, Energy and Food Security Nexus in Arid and Semi-Arid Region of India', (ECOS2016_0455), http://conferences.elsevier.com/ECOS2016?email:ramkaran.singh@gmail.com&abstracts-0455.
- 83. Singh, R.K., & Singh, A.K. 29 August-1st September 2016, Eco Summit 2016 Ecological Sustainability: Engineering Change, France, 'Temporal and Spatial Analysis of Monsoon Rainfall in a River Watershed in India: Case of South-West RiverBasinOriginfromRajasthan, India', (ECOS2016_0506), http://conferences.elsevier.com/ECOS2016?email:ram@kku.edu.sa&abstracts=0506.
- **84.** Singh, R.K.& Saiful Islam, 27 April 2017, 12th Research Annual day, College of Engineering, King Khalid University, Saudi Arabia, "Estimation of Potential Evapo-Transpiration of Asir Region, Kingdom of Saudi Arabia: Considering Climate variability" pp12.
- **85.** Singh, R.K.&M.N.Qureshi, 27 April 2017, 12th Research Annual day, College of Engineering, King Khalid University, Saudi Arabia, "Fuzzy MCDM based decision support model to select crop pattern for sustainable agricultural pratices" pp13.

86. Singh, R.K., 29 August-1st September 2016, Eco Summit 2016 Ecological Sustainability: Engineering Change, France, 'Temporal and Spatial Analysis of Monsoon Rainfall in a River Watershed in India: Case of South-West River Basin OriginfromRajasthan, India', (ECOS2016_0506), http://conferences.elsevier.com/ECOS2016?email:ram@kku.edu.sa&abstracts=0506.



- 87. Mohd Abul Hasan; Mohd Ahmed; Javed Mallick & Ram Karan Singh; 2nd April, 2018, "Impact of Hazardous Waste on Human Health & Preventive Measures for Sustainable Environmet", 13th Research day Organized by the Deanship of Scientific Research in Collobration with College of Engineering Research Center, KKU, KSA, proceeding, pp. 108-118.
- 88. Ram Karan Singh; Javed Mallick& P.S. Pawar; 23 August, 2018, "Performance valuation of five Penman form of models by means of lysimetric evapotranspiration under water stress environments at New Delhi, India", 2nd INTERNATIONAL CONFERENCE, TRACE, 23rd & 24th August, 2018 Amity University Campus, Sector-125, Noida, (New Delhi NCR), India.
- 89. Singh, R.K., (17-19.12.2018), 7th SGBED International Research Symposium, Dubai and delivering an oral presentation, "Mathematical Modeling of non-Newtonian Powered Fluid flow under Gravity over an Inclined Plane", Skyline University College, UAE, Le Méridien Dubai Hotel & Conference Centre.
- and Mansvee Singh (March, 2-8, 2020), 36th International **90.** Singh, R.K. Geological Congress to be held in Delhi, India, paper abstract accepted, "The Groundwater Drawdown Study of Guru gram, Haryana, India for Sustainability using- Mudflow and Environment Psychology for Water Conservation Message", Theme 38: Hydrogeology and Sustainable Managed Development **I Symposium** 38.3 Aquifer Recharge Groundwater Resource Sustainability, Abstract number 2155.
- 91. Singh, R.K., P.S.Pawar and Mallick, V.S. (March, 2-8, 2020), 36th International Geological Congress to be held in Delhi, India, paper abstract accepted, "The computation of Evapotranspiration of New Delhi, India under climate change conditions by Penman models", Theme 21: Earth Observation System Climate Variables, Proxies and Modeling | Symposium 21.4 Air Quality, Environment and Public Health Impacts in Asia, Abstract number 6011.

- 92. Singh, R.K. (February, 19-21, 2020), "The Evapotranspiration model under Climate change conditions for the Kingdom of Saudi Arabia for Sustainable Water Resources Management", 3rd International Conference on Innovative Technologies for Clean and Sustainable Development (ITCSD2020) Chandigarh, India.
- 93. Singh, R.K. (January 6-10, 2020), "Energy Reclamation from the Municipal Solid Waste (MSW) through Clean Development Mechanism of Delhi Landfill Site in India", 8th International conference Fusion of Science and Technology, JCBUST, YMCA, Faridabad, India.
- 94. Javed Mallick & Singh, R.K. (January 6-10, 2020), "INTER-SEASONAL VARITATION OF SURFACE TEMPERATURE AND VEGETATION COVER USING THERMAL REMOTE SENSING DATA", 8th International conference Fusion of Science and Technology, JCBUST, YMCA, Faridabad, India.

Papers in Indian Conferences (32):

- 95. Singh, R.K., (1993), "Simulation in Ground Water Pollution", Proceedings U.G.C., Seminar on Environmental Pollution & Waste Treatment, BITS, Pilani, India.
- 96. Singh, R.K., Gupta, R. and Shiv Prasad, (1995), "Fuzzy Linear Programming based Optimization of Water Distribution System", 18th International Conference on Science and Technology, Alena Chemicals of Canada, Taj Palace Hotel, New Delhi, India.
- 97. Singh, R.K. and Anand, H., (1995), "Water Quality Index of some Indian Rivers using modified Delphi Method", Proceedings, National Seminar of Safe Environment for 21st Century, College of Engineering and Technology, Bhatinda, India.
- **98.** Singh, R.K., Parihar, R.S. and Singh, S.K., (1995), "Mathematical Model for Contaminant Concentration in River Water Pollution", Proceedings, National Seminar on Safe Environment for 21st Century, College of Engineering and Technology, Bhatinda, India.
- 99. Singh, R.K. and Chaudhary, M.S., (1996), "Multiregression Analysis of Rainfall Data and Need for Rainwater Conservation at Nagaur District in Rajasthan, India", Proceedings, 28th Annual Convention of IWWA, Jodhpur, India.
- 100. Singh, R.K. and Singh, A.P., (1997), "Application of Linear Goal Programming with Partion Algorithm in Water Quality Management of a River Stretch for multi objective Water Resources System Planning", Proceedings, 7th Annual Conference, H.B.T.I., Kanpur, India, 288-294.
- 101. Singh, R.K. and Parihar, R.S., (1997), "Mathematical Modeling for Surface Water Pollution", Proceedings, 7th Annual Conference, H.B.T.I., Kanpur, India, 296-305.
- 102. Singh, R.K. et-al. (2006), "Rooftop Rainwater Harvesting and its Potential -Case Studies in New Delhi" national Conference on Rain Harvest 2006, IEI, Nagpur,

proceeding.

- 103. Singh R K, Gupta P., and Pradhan A. 2007, Managed river flow-a case of Satluj river basins in Himachal Pradesh, India. 12 pp, Conference Business Optimization Research wave (BORWC 2007), organized by the IIT Bombay, Bombay, India. 31st December 2007
- 104. Singh R.K. & Pawar P. S. and (2007), "Tropical Ecology Congress", International Society of Tropical ecology, "Evapotranspiration from Tropical Forest –Areas: Some Challenging Issues", FRI Dehradoon, Dehradoon, India, 2-5 December 2007
- 105. Singh R.K. (2008), "Workshop on Sanitation and Hygiene Promotion," "Sustainability of Sanitation and Hygiene Promotion Campaign-Global issues with local focus" UNICEF and Lucknow University at Taj residency Luck now, India.
- 106. Singh, R.K. and Singh, S.K. (2008), "National Conference on Solid Waste Management: Challenges for Future" "Current State of Art & Future Threats-Nitrate Pollution Management", University of Delhi India.
- 107. Singh, R.K. and D. Sharma (2008), "National Conference on Solid Waste Management: Challenges for Future" "State of Landfill Sites in National Capital Territory and their impact on Ground Water Pollution, India", University of Delhi India.
- 108. Singh, R.K. et.al. (2008), "Seminar on Environmental Impact Assessment of Water Resources Project", "Sustainable Groundwater Management in Indian Scenario with a Case study of Western Yamuna Canal (WJC) Command, Haryana", BIS, New Delhi.
- 109. Singh, R.K. (2008), "National Conference on Solid Waste Management: Challenges for Future" "Safe fly ash disposal- challenges and problems: Case of IB-Thermal power plant, Orissa", University of Delhi India.
- 110. Singh, R.K. et.al. (2008), "Seminar on Environmental Impact Assessment of Water Resources Project", "Sustainable Groundwater Management in Indian Scenario with a Case study of Western Yamuna Canal (WJC) Command, Haryana", BIS, New Delhi, India, 26 March 2008.
- 111. Singh R.K. (2008), "National Water Policy and key challenging issues related with water resources development in India", Workshop on Water Resource Development and Eco System Security, TERI and Ministry of Water Resource, New Delhi, 17 March 2008.
- 112. Sharma, D. and Singh, R.K., 2007, Diffuse pollution load from the rainfall runoff in national capital region (NCR), India, pp. 196, ISEH V Fifth International Symposium on Environmental Hydraulics, [ed.] Don Boyer and Olga Alexandria, USA: US army research office (ARO).
- Singh, R. K. and P.S.Pawar (2008), "Sustainability of Irrigation Water Demand and Climate Change nexus: Some challenging issues of tropical forest-areas", "International Conference on issues in public policy and sustainable development", Faculty of Economics School of Social Sciences, IGNOU, New Delhi, March 26-28,2008. PP. 1-15
- 114. Singh, R.K., Grover S. and Mamta M. (2008), "Innovative Solution for

- Sustainable Rural Water Supply with Community participation -in India", International Conference on Safe Drinking Water in Rural areas community based approaches, Water Aid India, Stein Auditorium New Delhi, April 8-10,2008 PP.1-18
- 115. Singh, R.K. and Pawar P.S.; "Technological challenges for water allocation for agriculture: emphasis on evapotranspiration estimation for tropic crops"; ICWRDM Oct.23, 2008, BITS, Pilani.
- 116. Singh R.K. and Nishtha Gupta;" Sustainable groundwater management in Indian scenario with a case study of western Yamuna canal (WJC) command, Haryana, ICWRDM Oct.23, 2008, BITS, Pilani.
- 117. Singh R.K. et-al.; "Watershed management using land use change in national capital territory, India, ICWRDM Oct.23, 2008, BITS, Pilani.
- 118. Singh, R.K. and Pawar, P.S., (2011) "Comparison of reference crop evapotranspiration (ETo) by different radiation and temperature based method with FAO 56 Penman-Monteith method and using lysimetric evapotranspiration at New Delhi, India", National conference on TRACE, 28th Feb.-1st March, 2011, AMITY University, Noida Campus, India.
- 119. Singh, R.K., and Gupta, S. (2011) "Carbon capture and storage opportunities in India, "International conference on sustainable water resources management and climate change adaptation (SWRMCCA), February 17 19, 2011 at National Institute of Technology, Durgapur M.G. Avenue, Durgapur 713209, West Bengal, India.
- 120. Singh, R.K. and Malik, B.S., (2011) "Review commentary of the synthesis report of IPCC's fourth assessment report (AR4)-Climate Change 2007" International workshop on adaptation and mitigation options for tackling the impact of climate change on water resources; March 14-15, 2011 at ITM University, Gurgaon, India.
- 121. Singh, R.K. and Pawar, P.S. (2011) "Climate change and adaptive crop water requirement for maize crop under water stress and water sufficient conditions in India", National Seminar "Sustainable and Innovative Solutions for Water Woes", March, 28, 2011, DTU, Delhi, India.
- 122. Singh,R.K. "Water Disastrous Management Nexus Climate Change Scientific Findings and Sectoral Solutions", National Seminar on Managing Disaster in Urban Areas: Role of Stakeholders, July 29-30, 2011, Lucknow University, UP, India.
- 123. Ram Karan Singh, Vijender Kumar Malik, S.K.Singh "Groundwater Sustainability Versus Urbanization: A Case Study", National symposium on "Water Resources Management in Changing Environment (WARMICE-2012)", February 8-9, 2012, Organized by Indian Association of Hydrologists, Venue: NIH Roorkee PP.
- 124. Ram Karan Singh, "System Approach based Diffuse Pollution Modeling-A case study of Ibaraki Prefecture, Japan", Department of Mechanical Engineering, ITM University Gurgaon, 18.02.2012.
- 125. Singh, R.K. and Malik, V.S., "Urbanization and Sustainability of Subsurface Water Hydrology of Gurgaon, NCR Delhi & Nexus with Delhi", National workshop on "Hydrological data management in Gujarat: Present state and Trends" on 21 April 2012 at PDPU Gandhinagar under World Bank funded HP-II project.

126. Singh, R.K., "Building Climate Resilient Cities: Responding to the Emerging Water Crisis", special event of Delhi Sustainable Development Summit-2013, Taj Palace Hotel, New Delhi, jointly organized by TERI and Monash University, Australia, 30.01.2013.

Books Published:



108. Wastewater Management in National Territory of India, Lambert Academic Publishing, Germany, 2011.

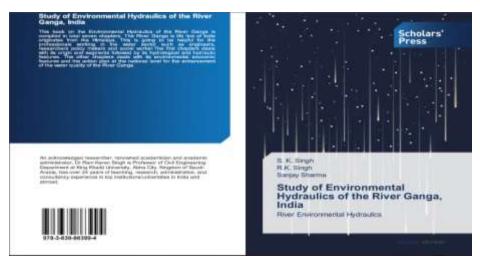


109. Water Quality Assessment and Management for Delhi Stretch of River Yamuna, Lambert Academic Publishing, Germany, 2012.

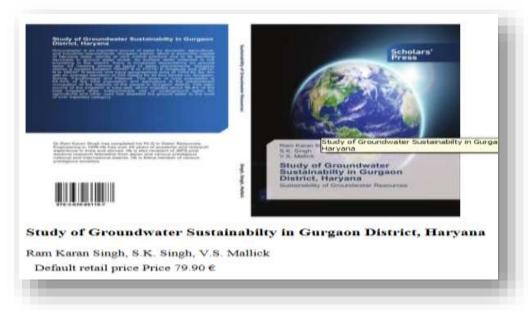


110.Study of Groundwater Sustainability in Gurgaon District, Haryana, Scholar's

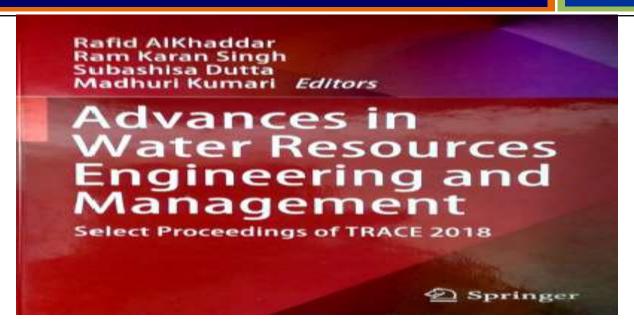
Press, Germany, 2014.



111. Study of Environmental Hydraulics of River Ganga, India, Scholar's Press, Germany, 2016.



112. Advances in Water Resources Engineeringand Mangement By Rafid A, Singh R.K., Subashisa D and Madhuri K, Springer Nature Singapore Pvt.Ltd, 2018.



Patents Granted (4) and Published (2) total (6):

- **1.** Vineet Tirth, Ram Karan Singh et al.; "PAM-Physical Fitness: PREDICTION OF FITNESS AND PHYSICAL ACTIVITY LEVELUSING MACHINE LEARNING PROHRAMMING"; Eight years from 27th August 2020, patent number 2020102010, Innovation, IP Australia of **Australia Government**, **Innovation**, **Granted**.
- **2.** Neeraj Kumar Shukla, Ram Karan Singh et.al; "MCHO BLOCK-CHAIN TECHNOLOGY, MEDICINE, CLINICAL TEST AND HEALTHCARE OBSERVATIONUSING BLOCK CHAIN TECHNOLOGY"; 8 years from 03 September 2020, IP Australia of Patent no.2020102115, **Australia Government**, **Innovation**, **Granted**.
- **3.** Vineet Tirth, Ram Karan Singh et.al; "ITPI-STEEL AND MINING WASTE MANAGEMENT INTELLIGENT TECHNOLOGY AND PROCESS MANAGEMENT FOR STEEL INDUSTRY AND MINING WASTE"; 8 years from 20 October 2020, IP Australia of Patent no. 2020102881, **Australia Government**, **Innovation**, **Granted**.
- **4.** Vineet Tirth, Ram Karan Singh et.al; "IPIT-Hazardous and Non-Hazardous Waste Management: Intelligent Process Management for Industrial Hazardous and Non-Hazardous Unused Wastes Using IoT Based Technology"; 8 years from **20 November 2020**, IP Australia of Patent no. 2020103649, **Australia Government, Innovation**, **Granted**.
- **5.** APPLICATION NUMBER 202111045775, 07/10/2021, Prof. S. K. Singh, Professor & Head, Dr. Ram Karan Singh, Dean RDIL and PhD Studies, Dr. Vineet Tirth, Associate Professor, Dr. Manisha Bhatkulkar, Assistant Professor & Head, Dr. Neeraj Kumar Shukla, Associate Professor, Saiful Islam, ADVANCED GREENBELT DESIGN FIELD OF INVENTION MECHANICAL ENGINEERING PUBLICATION DATE (U/S 11A) **29/10/2021**.

Workshops/Conference attended as a resource person:

- 1. Singh, R.K. (2005), KFT Conference on popularization of science, Bhubaneswar
- 2. Singh, R.K.; (Dec-2005) 8th Annual India ESRI User Conference, Radisson MBD Hotel, Noida, India.
- 3. Singh, R.K.; Map-India; (Feb-2006), Taj Palace Hotel New Delhi.
- **4.** International conference on Industry-Academia Collaboration: Opportunities and Challenges 3-4, March 2006, AIT Gurgaon.
- 5. Fifth Annual India ESRI User Conference, 1-2 December 2005, Radisson MBD Hotel, Noida, India.
- **6.**9th Annual International Conference and exhibitions on GIS, Technology and application, Map India 2006, 30 Jan.-1 Feb 2006, Taj Palace Hotel New Delhi
- 7. ICAR-IWMI International Workshop on "Global Irrigated Area Mapping (GIAM 07) with Focus on India" on 13th April, 2007 at NASC Complex, DPS Margh, Pusa, New Delhi.
- **8.** World Bank and IEG joint Consultation workshop for getting feedback on study methodology and findings- Study on "Cost-effectiveness of Rural Water Supply Schemes in India", 20 April 2007.
- "DAAD Workshop on Sustainable Resource Management", April 27, 2007, India International Centre, New Delhi
- 10. Delhi Sustainable Development Summit 2006
- 11. Delhi Sustainable Development Summit 2007
- 12. Water supply and waste water management in NCR, TERI University and UNESCO, 31 October 2007, New Delhi.
- 13. Vision 2025 a sustainable road map for India, 1-2 November 2007, the Oberoi Hotel, TERI, and New Delhi.

- **14.** Sustainable Development of a Rapidly Growing Economy in Climate Change Era, 5-6 December 2007, Tokyo University and TERI.
- **15.** Singh, R.K. (2007), "National Ground Water Congress-2007", Vigyan Bhawan, New Delhi, India.
- **16.**Singh, R.K, (2007), Workshop on "Environment and Higher Education in India: Challenges and Developments", IGES Japan and TERI University.
- 17. Singh, R.K., (2007), Workshop on Sustainable Development of a Rapidly Growing Economy in Climate Change Era, IR3S and TERI.
- 18. Delhi Sustainable Development Summit 2008.
- 19. Singh, R.K. (2008), International Convention on Water Resources Development and Management, Technical committee member, BITS, Pilani (Rajasthan) India, Oct. 23-26 2008.
- 20. Singh, R.K. (2009), International Workshop on Climate Change and Water Resources, Resource Person, DTU, NewDelhi 8-10 August 2009
- 21. Singh, R.K. (2009), CAD MIND works shop, Pragati Maidan, New Delhi.
- **22.**Singh, R.K. (2010), "DHI Seminar and Mike user group meet" PHD Chamber of commerce, New Delhi 24-26, and February 2010.
- 23. Singh, R.K. (2011), Session Chairman and panelist National Seminar on "Sustainable and Innovative Solutions for Water Woes", March, 28, 2011, DTU, Delhi, India.
- 24. Singh, R.K. (2011), "Workshop on Water and Environmental Issues of Ganga River Basin Management Plan", Organized by North India Chapter of EWRI of ASCE, Committee Room Civil Engineering Department, IIT Delhi, 4th November, 2011.
- 25. Singh, R.K. (2013), "Manuscript preparation using Latex", Department of CSE and IT, ITM University, Gurgaon, 21.01.2013.
- **26.** Singh, R.K. (2013) participated in workshop on, "National Commission for Academic Accreditation and Assessment", organized by Academic Development and Quality Deanship, King Khalid University, Kingdom of Saudi Arabia dated 27-28.11.2013.
- 27. Singh, R.K. (2014) participated in workshop on, "Electron Microscopy for

Nanotechnology", 2nd Floor – Hall No. 5, Faculty of Science, King Khalid University Abha, Kingdom of Saudi Arabia, Organized by Naizak-Lab Systems Division, 13.03.2014.

- **28.**Singh, R.K. (2014) participated in workshop on, "The National Commission for Academic Accreditation & Assessment (NCAAA)", 2nd Floor –Hall No. 5, Faculty of Science, King Khalid University Abha, Kingdom of Saudi Arabia, Organized by Naizak-Lab Systems Division, 13.03.2014.
- 29. Singh, R.K. (2014) participated in conference on, 4th National Architectural Heritage Forum, Headquarters of King Khalid University, Abha, organized by the President of the General Authority for Tourism and Antiquities, and the founder and president of Heritage Foundation, the Chairman of the Supreme Committee for Prince Sultan bin Salman Award for Architectural Heritage, His Royal Highness Prince Sultan bin Salman bin Abdul Aziz sponsored the ceremony, 01.12.2014.
- **30.** Design of new Architectural (B.Arch.) academic programme in the King Khalid University by Dr.Hussien Al Wadie, Dean; Dr.Ibrahim I Falqi, Vice Dean; Dr.Javed Mallick and Dr.Ram Karan Singh.
- **31.** Singh, R.K. (2016) participated in workshop on, "University Industry linkages", Crystal–Hall, First Floor, Abha Palace Hotel, Faculty of Engineering, King Khalid University Abha, Kingdom of Saudi Arabia, 30.10.2016.
- **32.** Singh, R.K., March 5, (2015) 12.00 PM-1 P.M. CET, "ICCG Webinar on Water Challenges in Agricultural Sector", by Prof.Alberto Garrido, Technical University of Madrid (UPM), (ID: 119-438-73900).
- 33. Singh, R.K., February 27, (2015) 8.00 PM-9 P.M. Saudi Arabia Time (Riyadh, GMT+03:00), "Great Lakes Indicators: Challenges and Recommendations to Assess a Complex, Binational Ecosystem", Canadian Sustainability Indicators Network (CSIN), International Institute for Sustainable Development by Prof.Karla Zubrycki, Event number: 661 392 654.
- **34.**Singh, R.K., 03.12.2014, 22.12.2014, 02.02.2015 and 16.02.2015 (2014-2015), "Strategic Planning Workshop", by MERAS Consulting, Hotel Al-Bouhaira, King Khalid University.
- **35.** Singh, R.K., May 8, 2015 1:00 PM 2:00 PM AST, "ICCG Webinar on Tackling complexity in a changing climate: the water-energy-food nexus in low income countries", by Louise KARLBERG, Stockholm Environment Institute, Sweden, Introduced by: Isabella ALLOISIO, ICCG, CMCC and FEEM, Italy (ID: 102-787-4753900).



36. Singh, R.K., Thu, May 7, 2015 4:00 PM - 5:30 PM AST, "International Water Resources Association Webinar: Towards Equitable Water Governance", by Louise KARLBERG, Stockholm Environment Institute, Sweden, Introduced by: Isabella ALLOISIO, ICCG, CMCC and FEEM, Italy (ID: 102-197-307).



- **37.** Singh,R.K., 2018 Workshop on NCAAA SSRP, Department of Civil Engineering,King Khalid University,Quality Room, Feb 12,2018 3PM.Dr.Vineet Tirth.
- **38.** Singh,R.K.,2018 Seminar on the "Master Planning and Infra Structure of King Abdullah New District in Jijan" by Dr.Nemer A. Salameh project executive manager, Feb.20,2018, Room A/1/249, KKU.
- **39.** Singh, R.K., March 27-28, 2019 International Conference on the "Research and Development", by King Khalid University, Hotel Abha Palace.
- **40.** Singh,R.K., January 22,2020 National Conference on Strategies for Drug Free Campuses, HSHEC, Takniki Shiksha Sadan Sector-4,Panchkula, Chandigarh, Haryana, India.
- **41.** Singh, R.K., January 28,2020 National Conference on "Empowering Students to be Industry Ready& how to select Right Career Path", Panasonic India Innovation Center, Hall no.2-3, Vigyan Bhawan, NewDelhi.

Professional Development Activity of Civil Engineering Department faculty (Attended and or hold August 2013-till date at KKU):

S. No.	Professional Development Activities Details					
1.	Seminar on the "Master Planning and Infra Structure of King Abdullah					
	New District in Jijan" by Dr.Nemer A. Salameh project executive					
	manager, Feb.20, 2018, Room A/1/249, KKU.					
2.	Workshop on NCAAA SSRP, Department of Civil Engineering, King					
	Khalid University, Quality Room, Feb 12,2018 3PM.					

3.	Workshop on," Badir techno program," Organized by Deanship of Scientific Research, King Khalid University, Building B, Auditorium 6, 14 November 2017.
4.	12th Research Annual day, College of Engineering, King Khalid
	University, Saudi Arabia. 27 April 2017.
5.	Workshop on," Template for write up of Senior graduation design projects," delivered by Dr. Javed Mallick, February 23, 2017.
6.	Workshop on," Introducing design components in senior graduation design project," delivered by Dr. Mohamed Hechmi Eouni, College of Engineering, King Khalid University, Abha Saudi Arabia, February 16, 2017.
7.	Workshop on," How to Apply for the general funded research projects," Organized by Deanship of Scientific Research, Lecture Hall 6, Building B, King Khalid University, November 3, 2016.
8.	Workshop on," Office 365 pro plus service," Organized by Department of Information and Technology Lecture, Hall 6 Building B, King Khalid University, November 2 2016.
9.	Symposium on," Binding Mechanisms between research and industry," Organized by King Khalid University on the side-lines of the 22nd meeting of the leaders of higher education in the Gulf Cooperation Council, October 30th – 31st 2016.
10.	Workshop on," The general research program, rules, regulations and procedures," Delivered by Dr. Ihab Shigidi, Director, College of Engineering Research Centre, King Khalid University, Room 145/A/1, 27 October, 2016.
11.	Workshop on," Preparation of Review Panel visit of EES-HES," delivered by Dr. Nasir Sarhan, Building B, King Khalid University 25/10/2016.
12.	Workshop on, "University Industry linkages", Crystal–Hall, First Floor, Abha Palace Hotel, Faculty of Engineering, King Khalid University Abha, Kingdom of Saudi Arabia, 30.10.2016.
13.	Workshop on," Research manuscript preparation," Organized by Deanship of Scientific Research, King Khalid University, May 3rd 2016.
14.	Workshop on," Significance of Value Engineering in Project efficiency in Kingdom of Saudi Arabia, delivered by chairman for Value Engineering, Abha Palace Hotel Ballroom # 4, 24 March, 2016
15.	Guest Lecture," Role of Engineering in Climate Change and Global Warming," College of Engineering, King Khalid University, Saudi Arabia, March 6, 2016.

16.	Workshop on Measuring Learning Outcomes for ABET, Delivered by
	Chairman for Quality, College of Engineering, King Khalid University,
	Abha, Saudi Arabia, 24th February, 2016.
17.	Workshop on e-assessment and accreditation, Deanship of Quality, King Khalid University, Saudi Arabia, 15th December 2015.
18.	Workshop on ABET Rubrics, delivered by Professor Loay Abusalah Vice Provost for Educational Assessment and Accreditation University of Illinois at Chicago, Organized by Vice Dean for Development and Quality, College of Engineering, King Khalid University, Saudi Arabia, 9th December 2015.
19.	Annual Scientific Research day, Environment and Renewable Energy, College of Engineering Research Centre, King Khalid University, Saudi Arabia. 14th October 2015.
20.	Workshop on COMSOL, College of Engineering, King Khalid University, Saudi Arabia, 13 March 2015.
21.	Workshop on," Template for write up of Senior graduation design projects," delivered by Dr. Javed Mallick, February 23, 2017.
22.	Workshop on, "National Commission for Academic Accreditation and Assessment", organized by Academic Development and Quality Deanship, King Khalid University, Kingdom of Saudi Arabia dated 27-28.11.2013.
23.	Workshop on, "Electron Microscopy for Nanotechnology",2nd Floor – Hall No. 5, Faculty of Science, King Khalid University Abha, Kingdom of Saudi Arabia, Organized by Naizak-Lab Systems Division,13.03.2014.

Books/ Reviewed research papers/Book Chapters/Invited lecture/projects (24):

- 1. Singh, R.K. (Nov.2019), Peer reviewer of the Springer Nature Journal 2019.
- 2. Singh, R.K. (Oct.2019), Board of referees International Journal of Research and Innovation in Engineering and Technology. (CEE2019O052).
- **3.** Singh, R.K. (March 2019) "Impact of rural road construction on the local livelihood diversification: Evidence from Pradhan Mantri Gram Sadak Yojana in Jhunjhunu district, India", Geo-Journal, GEJO-D-19-00041R1, pp1-20.
- **4.**Singh,R.K. (Jan.2019)Simplified probabilistic seismic assessment of Dampers in tall and braced structures in buildings, Iranian Journal of Science and Technology Transactions of Civil Engineering, ISTC-D-18-00291, Tanuja Singh, Megha Kalra, Anil

Kumar Misra,09 January,2019,pp1-12.

- **5.**Singh, R.K.; (Feb., 2018), "Flood routing simulation and management in hydrologic basins with artificial reservoirs the case of Arda river", Scientific Research Publishing, Angelidis P., Kotsikas M., Kopasakis K., Maris F., Kotsovinos N. Division of Hydraulics, Dep. of Civil Engineering, Democritus University of Thrace Kimmeria Campus, Building A, 67100 Xanthi, pp1-18.
- **6.**Singh, R.K., (May,2018), Estimation of tunnel desilter sediment removal efficiency by ANFIS, Iranian Journal of Science and Technology, Transactions of Civil Engineering, Manuscript Number ISTC-D-18-00153, pp 1-42.
- **7.** Singh, R.K. (Nov.2017), "Development of a HEC-HMS based watershed modeling system for identification, allocation and optimization of reservoirs in a river basin", Journal, "Environmental Monitoring and Assessment (EMAS), Elsevier http://emas.edmgr.com/"Paper ID: EMAS-D-17-02173.
- **8.**Singh, R.K. (Sep.2017), "Saltwater a viable source of Energy for Sustainable Rural Development", Journal, "International Journal of Sustainable Built Environment (IJSBE) Elsevier B.V., Radarweg 29, 1043 NX Amsterdam, The Netherlands, Reg. No. 33156677.(Paper ID: IJSBE 2017 18).
- **9.**Singh, R.K. (March.2017), "Laboratory study of gypsum and anhydrite dissolution in the case of surface flows", Journal, "the Computational Water, Energy, and Environmental Engineering (CWEEE) Editorial Board and Scientific Research Publishing (http://www.scirp.org/journal/cweee)", Ali Reza Moazzami, Seyed Mohammad Reza Imam, (Paper ID: 2570153).
- **10.**Singh, R.K. (Jan.2016), "Modelling particulate matter using optimized Artificial Neural Network for an urban highway corridor", Journal, "Atmospheric and Climate Sciences (ACS)", Anjana Reghua, Anuradha Shuklab, Ch. Ravi Sekarc, S.K. Singh, Anubha Mandale, (Paper ID:4700453).
- 11. Singh, R.K. (Jan.2016) "Managing water quality in a river through fuzzy water quality index" (Manuscript ID MEQ-04-2016-0035), Management of Environmental, Emerald.
- **12.**Singh, R.K. (Jan.2015) "fuzzy water quality index: a comprehensive technique to assess water quality in a river basin", The International Journal of River Basin Management, Singh, Ajit Pratap; Chakraborty, Sumanta; Ahalawat, Jayant; Sarkar, Ashoke; Taylor & Francis.
- **13.**Singh, R.K. (Feb.2015) "Water quality modeling for urban reach of Yamuna River, India (1999-2009) using QUAL2Kw", "Applied Water Science, Singh", Deepshikha Sharma; Arun Kansal; G.Pelletier; Springer, (Manuscript No.: AWSC-D-

15-00042).

- **14.** Deformation due to groundwater pumping in non-homogeneous anisotropic layered aquifer system," (Ms. Ref. No.: JHER-D-15-00031), Elsevier, Journal of Hydro-environment Research.
- **15.** Singh, R.K.; (Feb.18, 2015) "Assessing impacts of sea level rise on seawater intrusion in coastal aquifers with sloped shoreline boundary," (Ms. Ref. No.: JHER-D-15-00045), Elsevier, Journal of Hydro-environment Research.
- **16.** Singh, R.K. (Jul., 2015) "Controlled Environment Agriculture for Effective Plant Production Systems in a Semiarid Greenhouse" (Manuscript No.: 25-09), Japan Agricultural Research Quarterly (JARQ), Masahisa ISHII et.al, JARQ.
- 17. Singh, R.K., Project, "Investigation of the relationship between road distress data and roughness measurement inflexible pavement condition", by M.Mubaraki, Jazan University, Kingdom of Saudi-Arabia, 28 October, 2013.
- **18.** Singh,R.K. Chapter, "Impact of Urbanization on Groundwater of Gurgaon District, Haryana, India", in a book, "New Dimensions of Disaster Management in India: Perspectives, Approaches and Strategies" by A.Mishra and A.K.Singh,Vol-II, Jan 2013, Serials Publications, New Delhi, India.
- 19. Singh, R.K. Chapter, "Water Disastrous Management Nexus Climate Change Scientific Findings and Sectoral Solutions", in a book, "New Dimensions of Disaster Management in India: Perspectives, Approaches and Strategies" by A.Mishra and A.K.Singh, Vol-I, Jan 2013, Serials Publications, New Delhi, India.
- **20.** Singh, R.K., invited lecture "Nitrogen Recycling in Field to Check Safe Drinking Water Supply: A case Study of Japan", a five-day short term courses on "Water sector training and capacity building programme for the national capital territory of Delhi, India", jointly organized by Delhi Technological University, India and Nanynag Technological University, Singapore on March 11th-15th, 2013.
- **21.** Singh, R.K. (April, 2012, Reviewed) "Application of solar energy for water supply and sanitation in Arsenic affected rural areas: A study for Kaudikasa village, India", Elsevier, Journal of Cleaner Production, Ms. Ref. No.: JCLEPRO-D-12-00393, 1-18.
- **22.**Singh, R.K., (July.2012, Reviewed), "Water quality modeling for urban reach of Yamuna River, India, (1999–2009) using QUAL2Kw framework", CLEAN Soil, Air, Water, A Journal of Sustainability and Environmental Safety, Wiley VCH. Ms. Ref.No. clean.201200237.
- 23. Singh, R.K. and Sharma, D. (2010), "State of Landfill Sites in the National Capital

Territory and their Impact on Groundwater Pollution, India, Solid Waste Management Present and Future Challenges", Ed: Jagbir Singh and A.L.Ramanathan, I.K. International, 272 pp ISBN 9789380026428, 9380026420.

- **24.** Singh, R.K., "Geoinformatics in Water Resources Engineering", Springer, USA (in process Oct.2009).
- **25.** Singh, R.K., (2008, Reviewed), Book by: Martin Kaltschmitt, Wolfang Streicher and Andreas Wiese, Berlin Heidelberg New York: Springer, Renewable Energy: Technology, Economics and Environment, pages 564.
- **26.**Singh R.K. and Nitin Jakhar (2008), "Rainwater Harvesting Practices", "Rooftop Rainwater Harvesting and its potential case studies in New Delhi", The Institutions of Engineers India and UNESCO, New Delhi, PP78-85.
- **27.** Singh, R.K., Shiv Prasad and Nadiu, N.S.J., (1998) "Pollution and Biomonitoring of Indian Rivers", First- Edition, Enviro-media, Karad, India.
- **28.** Singh, R.K., Course modules on: Transportation Engineering, Wet Land Reclamation and Environmental Conservation, (1996), BITS, Pilani.
- **29.** Singh, R.K., (1997), a contributing author of an edited book "Perspectives in Environmental Research." first Edition, Enviro-media, Karad, India.
- **30.** Singh, R.K. (Nov., 2019) **Paper Reviewed** "Environmental Monitoring and Assessment Exploring Negative Impacts of Rural Roads Using Fuzzy Multicriteria Approach" Manuscript Number: EMAS-D-19-03481 Full Title: Exploring Negative Impacts of Rural Roads Using Fuzzy Multicriteria Approach Article Type: Original Research.
- **31.**Singh,R.K. (6-7 Sep. 2019) "**Session Chairperson**", "International Conference on Computational Intelligence and Data Science (ICCIDS-2019) organized by Department of CSE, NCU in Association with University of Dayton, Ohio, USA on 6-7 September 2019. (CEE20191001).
- **32.** Singh, R.K. (Dec. 2019) **Paper Reviewed** "Continuous Climatic Vulnerability Monitoring of any Hydropower Plant by Decision Making Based Neuro-genetic Models", International Journal of Global Warming (IJGW), InderScience Publisher.
- **33**. Singh, R.K. (30 Jan. 2020) **Paper Reviewed** "Financial Performance Evaluation of Indian Commercial Bank using AHP", NCU, SOM Research Scholar, Pawan Kumar with (Dr.Deergha).
- **34. Judge** for the Global Leader Conference for University Students on 28th July 2020, by IYF.

- **35.** Singh, R.K. (16.01. 2021), **Paper Reviewed** "Groundwater Contamination by Hazardous Wastes: A Review" manuscript AJSE-D-20-07128 for Arabian Journal for Science and Engineering.
- **36.** Singh R. K.; (04.03. 2021), **Paper Reviewed** "Performance of water Supply Line in post-Earthquake Scenario"; Polish Journal of Environment Study, Vol-X, No-X (2016), www.pjoes.com.
- **37.** Singh, R.K., June 2021, **Paper Reviewed** "Quality issues related to Design and Construction stage of Project in Indian Construction Industry", Frontiers in Engineering and Built Environment MS ID FEBE 05-202100024, pp1-27.

22. Monograph Published:

1. Sharma, D., Kansal, A. and Singh, R.K. (2011), Wastewater management in National Capital Territory of India, LAP LAMBERT Academic Publishing (2011-05-18), and ISBN-13: 978-3-8443-9752-9, ISBN-10: 3844397523, pp: 92.

(a) In Press:

- 1. Hydropower and Alternate Energy Sources, Vikas Publisher, New Delhi.
- 2. Geomatics in Water Resources Engineering, Springer

(b) 23.Proceedings Edited:

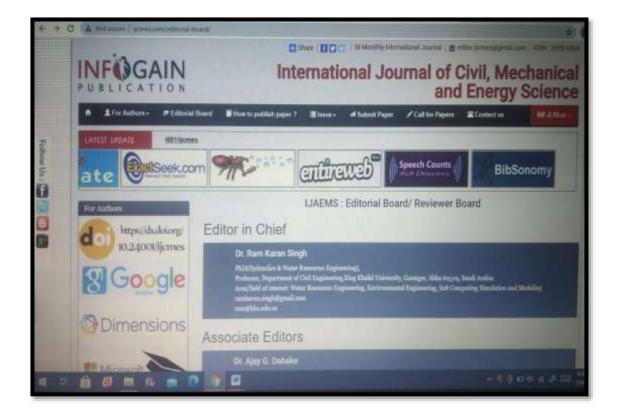
1. Global Challenges: Climate Change, Water, Environment and Society, Indo-US bilateral workshop, March 5-6, 2012, ITM University, Gurgaon, 164 pages.

24. Journals Referee:

- ♣ Energy Policy, Le Bourg, Chavagnac 16260 Cellefrou in, France.
- ♣ Journal of Cleaner Production, Elsevier (www.elsevier.com).
- ♣ Singh, R.K., (Jan., 2015) Reviewer of the International Journal of "River Basin Management", Taylor & Francis.
- ♣ Singh, R.K., (Feb.02, 2015), Reviewer, "Journal of Hydro-environment Research", Elsevier.
- ♣ Singh, R.K. (April, 2017) Computational Water, Energy, and Environmental Engineering (CWEEE) Editorial Board and Scientific Research Publishing (http://www.scirp.org/journal/cweee).

25. Journal Editorial Board:

- ♣ Scientific Research and Essays (ISSN 1992-2248)
- Editor in Chief of the International Journal of Civil, Mechanical and Energy Science, Infogain Publications doi https://dx.doi.org/10.2.24001/ijvmes Google scholar, Dimensions, Microsoft Academics and World Cat. May merge with Longdom Publishing Spain and Belgium.



- 🖶 CURIE, BITS Pilani, India
- ♣ International Journal of Business Management and Economics, Serial publication New Delhi.

- ♣ Member of the International Advisory & Editorial Board Committee of second edition of international conference on Trends and Recent Advances in Civil Engineering (TRACE 2018) hosted by Department of Civil Engineering, Amity School of Engineering & Technology (ASET) on (23rd & 24th August, 2018), Springer publisher on publication of conference proceedings as book and a book on "Advances in Water Resources Engineering & Management", Prof. Subasisha Dutta Guest Editor I.I.T Guwahati.
- ♣ Member of Editorial Board, International Journal of Advanced Engineering Research and Science (IJAERS), DOI: 10.22161/ijaers, Impact Factor: 4.192, SJIF: 4.072, IBI; 3.2, PIF: 2.465, ISRA-JIF: 1.317,Facebook.com/ijaers, 2018.
- Member Advisory committee of International conference by IMESA and IAWEES to be held in South Africa from 17-19 November 2021 on virtual platform as a first phase task reviewed 8 research papers in the thematic area of Energy, Data Management and other area.

26. Ph.D. thesis examined/completed/continuing:

(a) Ph.D. thesis examined:

- → Singh, R.K., "Trace Gases Emissions from Field Burning of Crop Residues" by Shivraj Sahai, Department of Applied Sciences, University of Delhi, Delhi (India), July, 2009.
- Singh, R.K., "Investigating the prospects for Carbon Capturing and Storage technology in India", by Rudra V Kapila, School of Geosciences University of Edinburgh, U.K. (2013).
- ♣ Singh, R.K., "Highway Drainage, Maintenance & Safety: a Case Study", by Pratap Singh Budania (ID No. 2010RCE202), Department of Civil Engineering, Malaviya National Institute of Technology, Jaipur, Rajasthan (India), Feb., 2015.
- → Singh, R.K., "Monitoring of Groundwater Quality of Nalagarh and Baddi Industrial Areas of Solan District, Himachal Pradesh, India", Department of Civil Engineering, M.M. Engineering College, Maharishi Markandeshwar University, Mullana, Ambala, Haryana (India), Nov., 2016.
- ♣ Singh, R.K., "Optimal Allocation of Land and Water Resources for Maximum Net Return from a Canal Command Area", Mr Suresh S. Khandelwal registered with Dharmsinh Desai University, Nadiad, Gujarat, India, March, 2017.

♣ Singh,R.K., "Flood Risk Assessment of Lower Tapi Basin (Gujarat) using Hydrological Modeling and Geoinformatic Techniques", Mr. Sudhakar Sharma Ph.D., Space Applications Centre, ISRO, Ahmedabad – 380 015, Nirma University, Ahmedabad, India, Cryosphere and Environment at Space Applications Centre, Indian Space Research Organization, Ahmedabad, India, May 2018.

(b) PhD Degree Completed:

No.	Name of Student	Status Litle at Thesis		Co-Supervisor
1.	Mr. Ajit Pratap Singh	awarded, 2002	Water quality modeling of Indian river stretch with special reference to Yamuna river	Dr.S.K.Ghosh
2.	Mr.Binyam Joseph	awarded,2005	Modeling of Limnoligical Parameters of Lake Abaya	
3.	Mr.Mariam	awarded,2006	Flocculation characteristics of drum stick seeds and its comparative economics with other coagulants	
4.	Mr. P.S. Pawar	awarded on 31 August 2012	"Comprehensive Analysis of Evapotranspiration Estimation Methods & Modelling Actual Evapotranspiration of Maize (Zea mays, L) Crop Under Water Deficient Conditions for Drought Proofing and Water Savings in Agriculture".	Dr. Alok Adholeya Dr.A.K.Singh
5.	Ms. Deepshikha Sharma	awarded, 2004,Batch, Thesis submitted in September 2012	Evaluation of river quality restoration plan and intervention analysis using water quality modelling with focus on the River Yamuna, Delhi (India)	Dr. A. Kansal
6.	Mr. V.S. Malik	awarded, 2008,Batch	Urbanization and Groundwater nexus for Gurgaon City	Dr. R. K. Singh

Ram Karan Singh Vice-Chancellor	18 Jan.2022
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7.	Continuing, STUDY ON STABILIZED FLY ASH-LIME SLUDGE Awarded in COMPOSITE AS PAVEMEN 2017. BASE COURSE LAYER		ASH-LIME SLUDGE COMPOSITE AS PAVEMENT	Dr.V.Gayathri
8.	Ms.Anju Bala	Continuing, 2010, Batch Awarded 10 th July 2017.	ESTIMATION OF EVAPOTRANSPIRATION THROUGH SURFACE ENERGY BALANCE MODEL USING SATELLITE DATA	Dr.V. Gayathri
9.	Ms. Geetha Varma Continuing, 2011,Batch Awarded 6 th November 2017.		ADSORPTION POTENTIALITY OF BIOMATERIALS AND BIOGEOCOMPOSITIES IN REMOVING COPPER FROM AQUEOUS SOLUTION	Dr.A.K.Misra

(c)PhD Degree Continuing:

No.	Name	Batch	Tonio	Co-
NO.	Nume	Buich	Topic	supervisor

(c) Recent M.E. / M. Tech /M.Sc. Thesis guided/Examined:

No.	Name of Student	Year	Title of Thesis	University/Institute
1.	Abhishek Kumar Singh (01/ENV/2010)	2012	"Assessment of Nitrate Contamination in Groundwater of Delhi using Mathematical Modelling"	Delhi Technological University,Delhi, 18.09.2012. (Examined)
2.	Kalyan Sagar Singhal(13992),	2012	"Study of Groundwater Contamination due to Landfills in Delhi"	Delhi Technological University, Delhi, 18.09.2012. (Examined)
3.	Diksha Gupta (03/ENV/2010)	2012	"Greenhouse Gas Emissions Inventory of Wastewater Treatment Plants of Delhi/NCR"	Delhi Technological University, Delhi, 18.09.2012. (Examined)
4.	Mr.Mohit Paliwal	2008	Ecological impacts of interlinking of the rivers in India	TERI Univeristy
5.	Ms.Akriti Anshu	2008	Wastewater Treatment Process with a Focus on Activated Sludge Process	TERI Univeristy

No.	Name of Student	Year	Title of Thesis	University/Institute
6.	Ms.Pallavi Pant	2008	Spatio –Temporal classification of surface water quality of river Ganga using water quality index	TERI University
7.	Ms.Sristi Kamal	2008	Retreat of Himalayan glaciers due to climate change and its impact on river hydrology	TERI University
8.	Ms.Poorva Gupta	2006	Managed river flow a case of Satluj river basin in Himachal Pradesh,India	TERI University
9.	Ms.Sonia Grover	2007	Innovative Solution for Sustainable Rural Water Supply with Community Participation-in India	TERI University
10.	Ms.Nitin Jakhar	2007	Rainwater harvesting potential of Delhi-A case study on IHC complex	TERI University
11.	Mr. Syam Kumar	2006	Bio diesel from jatropha plant- a case study for India	TERI University
12.	Mr. Ermias Girma	2003	Hydro power potential of Kulfo river	AWTI University
13.	Mr. Haile Selashi	2003	Limnological study on Abaya lake	AWTI University

27. Advanced Academic Skills lectures and FDP

- 1. Delivered lecture in workshop on "High Impact Teaching Skills", by Dale Carnegie and Associates Inc. &WIPRO, June 2010 (also Cambridge University Certification is in Process) the lecture was ranked top.
- 2. National Education Policy 2020 organized by Noida International University, Noida India on 25 September 2020 at 10.30 AM "Salient features and opportunities in New Education Policy".
- 3. PhD Course works by Gujarat National Law University Gandhinagar a lecture on "how to turn thesis in a research article" 09-17 January 2021.
- 4. Technical Research Paper writing in high indexed journals one day FDP by Gyan Vihar University, Jaipur on 06 February 2021.
- 5. EXPERT TALK BY PROF. RAM KARAN SINGH, VICE-CHANCELLOR, ICFAI UNIVERSITY, DEHRADUN ON "THE ACADEMIC LEADERSHIP THROUGH RESEARCH AND INNOVATION FOR SUSTAINABLE EDUCATIONAL GROWTH IN INDIAN AND INTERNATIONAL PERSPECTIVE." AICTE Sponsored Faculty Development Program (FDP) on "Leadership & Excellence-A Need in the

Era of Disruptive Transformation" from **3rd to 7th January 2022.** C. V. Raman Global University Odisha, Bhubaneswar-752054.

28. Research Gate Statistics: dated 14, October 2018:

https://www.researchgate.net/profile/Ram_Singh46 https://scholar.google.com/citations?user=hy6wONIAAAAJ&hl=en https://www.youtube.com/watch?v=YtYuYCZ5hC4 (YouTube on the overview of PhD work in NCU, India, March 2020)

29. List of Referees:

Dr R N Yadava, Ph.D.(IIT Bombay) & Raman Research Fellow

Vice Chancellor

AISECT University, Hazaribag

Jharkhand,

Mobile :+919425006984 Tel:+91-755-2464398

Email:dryadava@gmail.com

Prof. R.K.Mittal Sr.Prof.&Vice Chancellor

K.R.Manglam University Sohna Road, Gurgaon-122103,Delhi,NCR

vc@krmangalam.edu.in www.krmanglam.edu.in

M: +91-8800697001

(Colleague at BITS Pilani)

Dr. Eisaku Shiratani

Director and

Head Department of Hydraulic Engineering

2-1-6, Kannondai

305-8609, Ibaraki-ken

Tsukuba, Japan

mail:esh@affrc.go.jp

+81-(0) 29-838-7562

(Post Doc Research Supervisor in Japan)

Dr. Alex Mayer

Professor

Department of Civil and Environmental Engineering Michigan Technological University

Houghton, USA

E-mail: asmayer@mtu.edu

(Joint Research Collobration)

Dr. Pande B.B. Lal

Director General Noida Institute of

Engineering and Technology (NIET)

19, Knowledge Park-II

Institutional Area, Phase-II, Grater Noida

pandebblal@gmail.com

Phone: 091-120-2320062,2320132

Telefax: 091-120-2320062

(Colleague in AWTI University)

Signature : Ram Karan Singh Date: Jan 17, 2022

Place : Gurugram City



Award received on 31th October 2013 by Prof. Hussein Manie Ahmed Al Wadai, Dean College of Engineering, King Khalid University, Kingdom of Saudi Arabia













Award received on 5th September 2012 by Prof. Prem Vrat Vice Chancellor of ITM University, Gurgaon and Former Founder Director, III, Roorkee and Vice Chancellor of UP Technological University









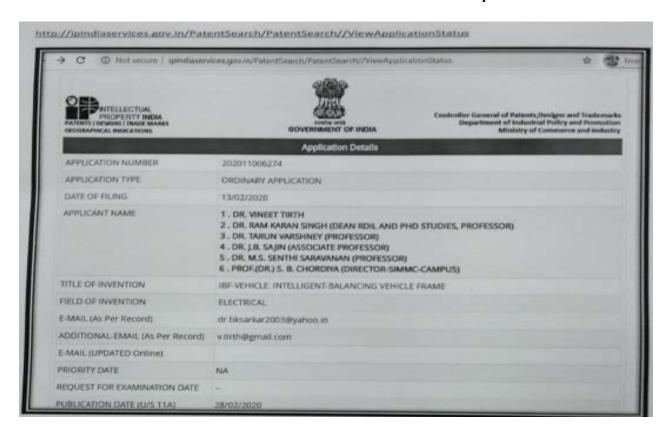




The Arizona State University USA &CINTANA with NCU for academic collaborations Feb.2020



The NCU academic Award distribution ceremony Feb 2020



Detail of the Patent Published dated 28.02.2020



Meeting with the Senior Vice-President Arizona State University, USA, March 6, 2020



7th International Scientist Award on Engineering, Science and Medicine 04-05 July 2020

Honorary membership by IAWEES Year 2020 in the honor of contributing six book chapters published by IAWEES.



Patent 2: Vineet Tirth, Ram Karan Singh et al.; "PAM-Physical Fitness: PREDICTION OF FITNESS AND PHYSICAL ACTIVITY LEVELUSING MACHINE LEARNING PROHRAMMING"; Eight years from 27th August 2020, patent number 2020102010, Innovation, IP Australia of Australia Government, Granted.



CERTIFICATE OF GRANT INNOVATION PATENT

Patent number: 2020102010

The Commissioner of Patents has granted the above patent on 16 September 2020, and certifies that the below particulars have been registered in the Register of Patents.

Name and address of patentee(s):

Vineet Tirth of College of Engineering, King Khalid, University & RCAMS, King Khalid, University, P.O. Box 9004, Abha-61413 Asir, Kingdom of Saudi Arabia Saudi Arabia

Ram Karan Singh of Department of Civil and Environmental, Engineering, The NorthCap University Gurugram, Haryana-122017 India

Manisha Bhatkulkar of Jawaharlal Nehru Arts, Commerce, and Science College, Wadi Amrawati Road, Nagpur-440023, Maharashtra India

Neeraj Kumar Shukla of College of Engineering, King Khalid, University, Abha-61413, Asir Kingdom of Saudi Arabia Saudi Arabia

M. Ramkumar Raja of College of Engineering, King Khalid, University, Abha-61413, Asir Kingdom of Saudi Arabia Saudi Arabia

Shilpi Birla of Manipal University Jaipur Jaipur-303007, Rajasthan India

S. B. Chordiya of Suryadatta Institute of Management &, Mass Communication (SIMMC) Sr. No: 342, Bavdhan, Pune-411021, MH India

Title of invention:

PAM-Physical Fitness: PREDICTION OF FITNESS AND PHYSICAL ACTIVITY LEVEL USING MACHINE LEARNING PROGRAMMING

Name of inventor(s):

Vineet Tirth; Ram Karan Singh; Manisha Bhatkulkar; Neeraj Kumar Shukla; M. Ramkumar Raja; Shilpi Birla and S. B. Chordiva

Term of Patent:

Eight years from 27 August 2020

NOTE: This Innovation Patent cannot be enforced unless and until it has been examined by the Commissioner of Patents and a Certificate of Examination has been issued. See sections 120(1A) and 129A of the Patents Act 1990, set out on the reverse of this document.



Dated this 16th day of September 2020

Commissioner of Patents

PATENTS ACT 1990

The Australian Patietts Register is the official record and about the referred for the full details pertaining to this IP Bight

Patent-3Granted: Neeraj Kumar Shukla, Ram Karan Singh et.al; "MCHO BLOCK-CHAIN TECHNOLOGY, MEDICINE, CLINICAL TEST AND HEALTHCARE OBSERVATIONUSING BLOCK CHAIN TECHNOLOGY"; 8 years from 03 September 2020, IP Australia of Australia Government, Innovation, Patent no.2020102115, Granted.



CERTIFICATE OF GRANT INNOVATION PATENT

Patent number: 2020102115

The Commissioner of Patents has granted the above patent on 23 September 2020, and certifies that the below particulars have been registered in the Register of Patents.

Name and address of patentee(s):

Neeraj Kumar Shukla of College of Engineering, King Khalid University Abha-61413 Asir Saudi Arabia

Vineet Tirth of College of Engineering, King Khalid University (KKU) Abha-61411 Asir Saudi Arabia

Tarun Varshney of ABES Engineering College, Ghaziabad Uttar Pradesh 201009 India

Mahaveer Singh Naruka of Nodal officer: Academic, State Project Implementation Unit-UP TEQIP-III, Lucknow-226031, U.P., India India

Ram Karan Singh of Depart. of Civil and Environmental Engg., The NorthCap University Gurugram Haryana-122017 India

Chanakya Kumar Jha of F 204, Devi Indrayani Society, Dehu Alandi Road, Near Talwade IT Park Talwade, Pune -412114, MH India

S. B. Chordiya of Suryadatta Institute of Management &, Mass Communication (SIMMC) Sr. No: 342 Bavdhan, Pune-411021, MH India

Vrushsen Purushottam Pawar of Flat No. 101, H1, Swiss County, Thergaon Pune- 411033, MH India

M. Nagabhushana Rao of IT Department, VJIT, Hyderabad, Telangana 500075,AP India

Beg Raj Singh of Vill- Jamuai, Post - Jamuhar, Chunar Mirzapur- 231304, UP India

Title of invention

MCHO- Blockchain Technology: MEDICINE, CLINICAL TEST AND HEALTHCARE OBSERVATION USING BLOCKCHAIN TECHNOLOGY

Name of inventor(s)

Shukla, Neeraj Kumar; Tirth, Vineet; Varshney, Tarun; Naruka, Mahaveer Singh; Singh, Ram Karan; Jha, Chanakya Kumar; Chordiya, S. B.; Pawar, Vrushsen Purushottam; Rao, M. Nagabhushana and Singh, Beg Raj

Term of Patent

Eight years from 3 September 2020

NOTE: This Innovation Patent cannot be enforced unless and until it has been examined by the Commissioner of Patents and a Certificate of Examination has been issued. See sections 120(1A) and 129A of the Patents Act 1990, set out on the reverse of this document.



Dated this 23rd day of September 2020

Commissioner of Patents

PATENTS ACT 1990

The Australian Patents Register is the official record and should be referred to for the \$41 details pertaining to this IP Right

Patent-4: Vineet Tirth, Ram Karan Singh et.al; "ITPI-STEEL AND MINING WASTE MANAGEMENT INTELLIGENT TECHNOLOGY AND PROCESS MANAGEMENT FOR STEEL INDUSTRY AND MINING WASTE"; 8 years from 20 October 2020, IP Australia of Australia Government, Innovation, Patent no.:2020102881, Granted.



Patent-5: Vineet Tirth, Ram Karan Singh et.al; "IPIT-Hazardous and Non-Hazardous Waste Management :Intelligent Process Management for Industrial Hazardous and Non-Hazardous Unused Wastes Using IoT Based Technology"; 8 years from 20 November 2020,IP Australia of Patent no. 2020103649,Australia Government, Innovation, Granted.



CERTIFICATE OF GRANT INNOVATION PATENT

Patent number: 2020103649

The Commissioner of Patents has granted the above patent on 20 January 2021, and certifies that the below particulars have been registered in the Register of Patents.

Name and address of patentee(s):

Vineet. Tirth of Mechanical Engineering Department, College of Engineering King Khalid University (KKU) Abha, Asir 61411 Saudi Arabia.

Ram Karan Singh of Dean RDIL and PhD Studies, Professor & Head, Department of Civil and Environmental Engineering The NorthCap University Gurugram, Haryana 122017 India

Satyendra: Singh of (Professor), Department of Mechanical Engineering, B.T. Kumaon Institute of Technology Dwarahat, (Almora) Uttarakhand 263653 India

Mahesh: Chand of (Assistant Professor), Mechanical Engineering Department, J.C. Bose University of Science and Technology YMCA Faridabad, Haryana 121006 India

Parul: Gupta of (Professor), Department of Mechanical Engineering, Moradabad Institute of Technology Moradabad Utar Prodesh 244001 India

Vrushsen Purushottam Pawar of (Group Director), (ASM Group of Institution), Flat No. 101, H1, Swiss County Therogen, Pune MH 411033 India

Nitiri Balkrishna Chaphalkar of 206, Simia Housing Society, Sahakar Nagar No. 2 Pune Maharashtra 411009 India

Beg. Raj of (Director), VIII- Kandaway. Post- Kandaway Churtar Morzapur, UP 231304 India

Title of invention:

IPIT- Hazardous & Non-Hazardous Waste Management, intelligent Process Management for Industrial Hazardous and Non-Hazardous Unused Wastes Using IoT-Based Technology

Name of inventor(s):

Tirth, Vineet, Karan Singh, Ram, Singh, Satyendra, Chand, Mahesh, Gupta, Parut, Purushottam Pawar, Vrushsen, Balkrishna Chaphalkar, Nilin and Raj, Beg

Term of Patent

Eight years from 25 November 2020

NOTE: This Innovation Patent cannot be enforced unless and until it has been examined by the Commissioner of Patents and a Certificate of Examination has been issued. See sections 120(1A) and 129A of the Patents Act 1990, set out on the reverse of this document.



Dated this 20th day of January 2021

Commissioner of Patents

PATENTS ACT 1990

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National Education Policy 2020:

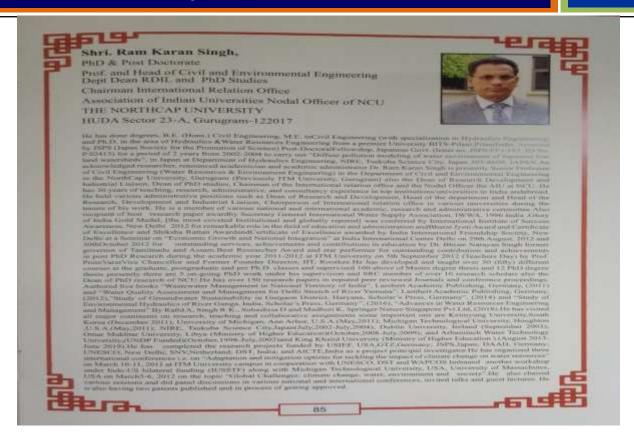


Outstanding Scientist Award:



Life Time Achievement Award Gold Medal-2020:





International Research Award 2020-2021 (20 Feb.2021) by IIOR, Ministry of Micro, Small and Medium Enterprises, **Government of India**, Advocating Academic and Research Programs for API and Career Advancement Scheme New Delhi, India.





presented to Prof. (Dr.) Ram Karan Singh

from

The NorthCap University Haryana, India







RAM KARAN SINGH

I2OR2021/FI2OR-313 Date of Issue: 5th March 2021





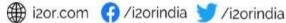
Fellow Member of I2OR India



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Singh, R.K. **Key note address** on 6th and 7th SDG of UN on utube channel in the Global Edu-Conclave 2021 (GEC2021), on **27th June 2021**, organized by International Institute of Organized Research (I2OR), India in Association with Green Thinker Z, India, Centre for Modern Construction, Western Sydney University, Australia, Sustainable Cosmos, India and Prof. G D Agrawal Centre for Scientific Development & Environment Advocacy, India.



