

## Format for Bio-Data

1. Name: Dr Raj Shekhar Singh
2. Date of Birth: 15<sup>th</sup> September 1960
3. Current Position and Address: Principal Scientist, CSIR-CIMFR  
(with E-mail & Phone no.) rajcimfr@gmail.com



4. Educational qualifications: (Graduation and above)

Sl. No.	Degree/ Certificate	Year of Passing	University/ Institute	Subjects
i	<b>Ph.D.</b>	1991.	Kumaun	Botany (Forest Ecology)
ii	<b>M. Sc.</b>	1986	Kumaun	Botany (Forest Ecology)
iii	<b>B.Sc.</b>	1982	Ranchi	Botany (Hons), Zoology

5. Work experience

Designation	Institution/company	From	To	Nature of work
I Principal Scientist	CSIR-CIMFR	2008	till date	R&D & Consultancy
Ii Scientist EI	CSIR-CMRI	2004	2008	R&D & Consultancy
III Scientist C	CSIR-CMRI,	2000	2004	R&D & Consultancy
IV Scientist B	CSIR-CMRI	1995	2000	R&D & Consultancy
V Res. Associate	CSIR-CMRI	1992	1995	R&D
VI SRF	BHU	1989	1992	R&D
VII JRF	BHU	1987	1989	R&D

6. Area of specialization: Ecology and Environment

7. Honors/Awards received:

- National Coordinator Advisory Committee Member: Coal Quality Monitoring Project of CSIR-CIMFR, Dhanbad.
- Nominated Expert Member of DEIAA/DEAC of Dhanbad & Bokaro, 2016, OM 125MoEF &CC, New Delhi.
- Indian Project Leader: MoU with University of Greenwich, UK
- Indo-UK Seminar 2015 by Royal Society, London & DST, New Delhi
- Delegation Scientist to Germany, 2013, DST, New Delhi
- UK Commonwealth Award, 2012
- Director (R&D), GreenEarthCitizen, Sweden, 2012
- Best Technical Rajbhasha Paper Prize, CIMFR, Dhanbad -2011; 2010, 2008, 2007...2003.
- CMRI-Patent Award, 2004, 2005,2006
- CSIR Shanti Swarup Bhatnagar Essay Competition Prize – 2005, ITRC, Lucknow
- CSIR-GoldenJubilee Whittaker award, CMRI, 1995.
- CSIR Research Associate award, 1992
- Fellow, International Society for Tropical Ecology, BHU, Varanasi
- Editor, WildFire, International Society for Wildland Fire, Fairfield, USA
- Ph.D. Supervision: 2 Awarded + 1 (Sumitted)

8. Fellowships/Scholarships:

- UK Commonwealth Fellowship, 2012
- CSIR Research Associate Fellowship, 1992

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- Senior Research Fellow, 1987 by BHU, Varanasi
  - Junior Research Fellow, 1987 by BHU, Varanasi
9. No. of Research Publications: 162
- Papers in journals: 102
  - In conference proceedings: 55
  - Invited/key-note addresses: 05
  - List of best 05 publications:
1. Singh, J.S. Raghubanshi, A.S. **Singh, R.S.** and Srivastava, S.C. (1989). Microbial biomass acts as a source of plant nutrient in dry tropical forest and savanna. *Nature (London)* 338: 499-500. **(IF 42.35)**
  2. **Singh, R.S.** Srivastava, S.C. Raghubanshi, A.S. Singh, J.S. and Singh, S.P. (1991). Microbial C, N and P in dry tropical savanna: Effects of burning and grazing. *Journal of Applied Ecology.* 28: 869-878. **(IF 4.564).**
  3. Tripathi, N. **Singh, R.S.** and Singh, J.S. (2009). Impact of post-mining subsidence on nitrogen transformation in Southern Tropical Dry Deciduous Forest, India, *Environmental Research.* 109 (3):258-266. **(IF 4.373)**
  4. Gupta, P. **Singh, R.S.** Sachan, A., Vidyarthi, A.S., Gupta, A. (2012). A re-appraisal on intensification of biogas production. *Renewable and Sustainable Energy Reviews (Elsevier).* 16 : 4908–4916. **(IF 5.901)**
  5. Tripathi, N. **Singh, R.S.** and Nathanail, C.P. (2014). Mine spoil acts as a sink of Carbon dioxide in Indian Dry Tropical Environment. *Science of the Total Environment, (Elsevier).* V468-469, 1162-1171 **(IF 4.099).**
10. Number of Books authored/edited:  
Authored: 01  
Proceedings edited:10.
11. (a) No. of Patents granted:: 3  
(b) Technologies developed, Licensed and/or commercialized:00
12. **Foreign visits:** Athens (**Greece**) during 23-30 June 1997 **UK**, University of Nottingham during Oct2012-Jan2013, **Germany**, Frankford, Berlin, Franhoffer, May-June 2013.
13. Details of Professional memberships:
- Society of Environmental Toxicology and Chemistry, Florida, USA (April 2014)
  - Administrative Staff College of India, Bella Vista, Hyderabad (Jan. 2011). (LM)
  - Xavier Institute of Social Service, Ranchi (2005)
  - Indian Association of Soil & Water Conservationist (Since 2005) (LM)
  - Indian Institute of Mineral Engineers (Since 2004) (LM)
  - Biotech Research Society of India, Trivandrum (Since 2004)(LM)
  - Society for Conservation Biology, USA (2004-05)
  - National Institute of Small Scale mines (Since 2000) (M)
  - Herbal Information Centre, New Delhi (Since 2000)(LM)
  - Ecology, Environment and Conservation, India, (Since 1998) (LM)
  - World Wide Fund for Nature (Since 1998) (LM)
  - Indian Network for Soil Contamination Research, India (Since 1995) (LM)
  - International Society for Environmental Botanist, India (Since 1995) (LM)

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- National Institute of Ecology, (Since 1992) (LM)
- International Association of Wildland Fire, USA (Since 1992)
- Journal of Environment and Pollution, India (Since 1999)
- International Society for Tropical Ecology, (LM since 1991)

#### 14 . Major contributions: ( Max. 150 words).

R&D contributions in the field of restoration ecology, particularly in the area of reclamation/rehabilitation of mine wasteland and spoils are par excellence. I have more than 100 publications in different peer-reviewed national and international journals, chapters in the book and seminars including in most prestigious journal **Nature (London)**. It has been cited on several occasions by the researchers globally. The total impact factor of the **SCI journal is 155 and citations more than 1,350**. My pioneering work on a major global issue of reclamation with carbon sequestration in mine wastelands is the thrust area of DST's National Program of Carbon Capture. I have created an excellent database on the quantitative and qualitative aspects of mine wastelands reclamation, carbon sequestration and generation of energy from organic waste materials. The research team in this project has developed **three patents** and **one copyright**. I have made commendable contributions towards publication of a book on **Reclamation Technology and Ecosystem Recovery** by Wiley International UK.

Have opportunity to be the Indian Co-ordinator of prestigious Indo-UK Seminar sponsored by DST and Royal Society on Accelerated Carbonation Technology for valorization of mine and industrial wastes. Dr Singh is responsible for establishing a MoU with the University of Greenwich, UK with CSIR-CIMFR, Dhanbad.

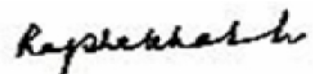
I am also associated with District Administration and forest department for environmental management and for ecological reclamation. I am also an Editor, editorial board member and reviewer of number of peer reviewed national and international journals and possess a strong leadership quality along with several awards to his credit including UK Commonwealth Award 2012, Delegation Scientist to Germany 2013 and Indo-UK Seminar (Royal Society London and DST, New Delhi).

#### 15. Technologies and Products/ Services

- (i) Developed: 3 Patents (Indian) and One copyright.
- (ii) Licensed:
- (iii) Commercialized:

16. Designs and Prototype Developed: Contributed for Road Dust collecting system and transformation into briquettes in the project of MoEF, Govt of India.

17. Honours and awards won for technological contributions or sociological impact of R&D:



Signature