

**CSIR-Central Institute of Mining and Fuel Research
Barwa Road, Dhanbad, Jharkhand**

Notice

Sub; **Baseline information about the department and all departmental colleagues for a new /redesigned website.**

As per the decision of a committee, D' CIMFR has approved redesigning of the CSIR-CIMFR website. Accordingly, all Head of the departments of this institute are requested to submit baseline information about the department and all departmental colleagues in the following format to the undersigned at rlolarak@yahoo.com within 15 days:

1. Name: DR. KUMAR NIKHIL
2. Date of Birth: 10TH JANUARY, 1963
3. Current Position and Address:
(with E-mail & Phone no.)



PRINCIPAL SCIENTIST, ROOM NO.47, MAIN BUILDING
NATURAL RESOURCE & MODELLING,
NATURAL RESOURCE & ENVIRONMENTAL MANAGEMENT
QT.NO. TYPE-IV/41, CSIR-CIMFR COLONY,
CSIR-CENTRAL INSTITUTE OF MINING AND FUEL RESEARCH (CIMFR),
BARWA ROAD, DHANBAD-826015,
JHARKHAND.
Email: nikhilkn@yahoo.com
9835568089 (M)

4. Educational qualifications: (Graduation and above)

S.N	Degree/Certificate	Year of Passing	University/Institute	Subject
1.	M.A in Sociology	2014	School of Distance Education, Shobhit University, NH-58, Modipuram, Meerut-250110 (U.P)	Advanced Sociology, Sociological Theories, Research Methods & Statistics, Indian Social Institutions, Organizational Behavior, Human Resource Management, Rural and Urban Sociology, Indian Sociology and Labour Problems, Social Demography, Social Pathology
2.	Ph.D in Environmental Science & Engineering	1998.	Indian School of Mines (ISM), Dhanbad-826004	Environmental Science & Engineering
3.	M.Sc (Ag) in Plant Physiology	1984.	Chandra Sekhar Azad University of Agriculture & Technology, Kanpur- 208002 (UP)	Soil Science, Chemistry & Conservation Botany, Biochemistry, Statistics
4.	B.Sc (Ag & A.H)	1982.	Chandra Sekhar Azad University of Agriculture & Technology, Kanpur- 208002 (UP)	All subjects under Agriculture & Animal Husbandary including Rural Sociology

5. Work experience

S.N	Designation	Institution/company	Period		Nature of work
			From	To	
1.	Agriculture Extension Officer	Department of Agriculture, Ministry Of Agriculture & Forest, Thimphu, ROYAL GOVERNMENT OF BHUTAN	21/5/85	1/7/89	Waste Land Development (Colombo Plan) , Soil & Water Conservation (River Valley Project), Development of Agriculture & Horticulture on Slopes (International Fund for Agriculture Development)
2.	Research Scholar	Reclamation & Ecosystem Division Central Mining Research Station, Barwa Road, Dhanbad (Bihar) 826001	7/12/90	15/7/93	To study Environmental Pollution Parameters, Survey & Analysis, and Project & Plan Formulation in Agriculture & Forestry for the reclamation & rehabilitation of waste land and mining affected area. Preparation of EIA/EMP of Mining Projects.
4.	Project Fellow	---Do---	16/7/93	20/4/97	Working for the Coal S & T Project “ Environmental Management of OB Dump” and Environmental Monitoring and Preparation of EIA/EMP of Mining Projects.
5.	Scientist ‘B’ (Jr. Scientist)	Watershed & Land Mng. Env Mng. Group Central Mining Research Institute, Barwa Road, Dhanbad (Bihar) 826001	21/4/97	01/1/01	Wasteland Development, Soil & Water Conservation, Land Resource Management in Mining affected Areas and Soil Testing & Analysis. Environmental Monitoring and Preparation of EIA/EMP of Mining Projects.
6.	Scientist ‘C’ (Scientist)	Bio-environment Div. Env. Mng. Group Central Mining Research Institute, Barwa Road, Dhanbad (Bihar) 826001	01/1/01	01/1/05	Land Reclamation Watershed Management and Wasteland development in and around Mining affected areas. Environmental Monitoring and Preparation of EIA/EMP of Mining Projects.
7.	Scientist ‘E-I’ (Sr. Scientist)	Bio-environment Div. Env. Mng. Group Central Institute of Mining & Fuel Research, Barwa Road, Dhanbad (Bihar) 826015	01/1/05	1/1/10	Planning, Execution & Env. Monitoring, Land Reclamation, Watershed Management and Wasteland development Projects in and around Mining affected areas. Preparation of EIA/EMP of Mining Projects.
8.	Scientist ‘E-II’ (Principal Scientist)	Env. Mng. Group (EMG) CSIR-Central Institute of Mining & Fuel Research, Barwa Road, Dhanbad (Bihar) 826015	1/1/10	Cont. till date	Planning, Execution & Env. Monitoring, Land Reclamation, Watershed Management and Wasteland development Projects in and around Mining affected areas. Preparation of EIA/EMP of Mining Projects.

6. Area of specialization: Mining Environment, Land Reclamation, Wasteland and Watershed Management

7. Honors/Awards received:

- I. He has been nominated as the editorial Board member or Advisory Board Member of many international and national journals.

- II. He has been appointed as Advisor (Hony.) of more than ten NGO's. He has membership in several scientific societies.

8. Fellowships/Scholarships: NIL

9. No. of Research Publications:

Papers in journals:	61; citation 60
In conference proceedings:	78
Invited/key-note addresses:	03
List of best 05 publications:	
<p>1. Ashutosh Kumar Agrawal and Kumar Nikhil (2015), "Algal Distribution Pattern and Quality of Water in Different Aquatic Environment of District Dhanbad", <i>International Journal of Science & Research (IJSR)</i>, Vol.4, No.2 pp.358-363, February, 2015 (Online).</p>	
<p>2. Kumar Nikhil (2014) "Development of algae based technology to mitigate energy crisis in coal mining areas", <i>International Journal of Environmental Technology & Management</i>, Vol.17, No.2/3/4 May, 2014, pp.334-363. (Online)</p>	
<p>3. Kumar Nikhil (2007) "Soil Quality Standards (SQS) for Bio-reclamation of Coal Overburden Dumps: ISO-14000 Requirements", <i>International Journal of Industrial Pollution Control</i>, Vol.23 (1):2007:19-23.</p>	
<p>4. Kumar Nikhil (2005) "Accumulating Factor of Heavy Metals in Planted Species over coal overburden dump", <i>Asian Journal of Microbiology, Biotechnology and Environmental Sciences</i>, Vol.7 (1):2005:1-5.</p>	
<p>5. Kumar Nikhil (2004) "Importance of Tillage Practices in the Re-vegetation of overburden dump", <i>International Journal of Ecology, Environment and Conservation</i>, Vol.10(3)2004: 283-286.</p>	

10. Number of Books authored/edited: CHAPTER/ARTICLES IN BOOKS: **07(Seven)**

11. (a) No. of Patents granted/applied for: **UNDER APPLICATION PREPARATION STAGE**

(b) Technologies developed, Licensed and/or commercialized:**NIL**

12. Foreign visits: **NIL**

13. Details of Professional memberships:

S.No.	NAME OF THE SOCIETY
1.	International Society of Forestry & Environment
2.	Computer Society of India (Bombay)
3.	Indian Council of Agricultural Research
4.	International Society of Environmental Botanist
5.	Vigyan Bharati
6.	International Society of Ecology

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

Dr. Nikhil's contribution in the field of agriculture is well known. His dedicated service to lift up the agricultural activities in the mining affected areas by motivating and developing the agro-technical skill and skill required for opening small scale industries or cottage industries for the development of farmers through Watershed Development Program is well known in the district Dhanbad, Jharkhand and appreciated by the District Rural Development Authorities. Beside this his valuable studies and findings for the agricultural sectorial planning in the Carrying Capacity of Damodar river basin is also to be stressed on his credit.

Moreover, Dr. Nikhil has carried out a pioneer research work on reclamation of coal spoil dumps through advanced biophysical and bio-chemical modeling. His pioneering work in bio-reclamation is high standard and appreciated by experts concerned in his field. His work has been well recognized among the coal industries and many such problems have been successfully tackled using his noble approach. His way of approach in bio-reclamation has changed conventional methods to reutilize and re-vegetated massive waste dump around Jharia Coalfield. It is worthy to mention here that his innovative contributions to understand the concepts of nutrient dynamics in the spoil and their interaction with biomass growth are well known among the experts in international level. Dr. Nikhil presently engaged in the development of Smart & Green Village & City in mining affected areas. He is also contributing in skill development for the ecologically disturbed area for more employment generation and sustainable ecological development. Recently he had completed one innovative idea project in which he successfully demonstrated the conversion of legnocellulosic bio-convertable waste into methane gas to produce bio-electricity through gas genset resultant zero waste. In the same the green algae with jatropha, karanj, maize, etc can be crushed to result lipid and through esterification converted into biodiesel used to run as 5% blended with 95% pure disel. This resultant again the biofertilizer as waste which is successfully recycled and at last with no discharge of zer-waste management.

15. Technologies and Products/ Services

- (i) Developed: NIL
- (ii) Licensed: NIL
- (iii) Commercialized: NIL

16. Designs and Prototype Developed: NIL

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

Signature