

## Brief Bio-data

1. **Name:** Virendra Kumar

2. **Date of Birth:** 13 February 1985

3. **Current Position and Address (Include Email ID and Contact Number):**

Assistant Executive Engineer (Electrical)  
CSIR-Central Institute of Mining & Fuel Research,  
Barwa Road, Dhanbad (Jharkhand)-826015  
Email: virendraelectrical@cimfr.nic.in  
Contact No.: +91-9570299111

4. **Educational qualifications: (Graduation and above)**

Sl. No.	Degree	Year of Passing	University/Institute	Subject
1	B. Tech	2006	U.P.T.U., Lucknow	Electrical Engineering
2	M.B.A.	2010	Algappa University, Karaikudi	Project Management
3	Advance Certificate in Power Distribution Management	2016	IGNOU, New Delhi	Power Distribution Sector, Energy Management, and Its Applications, Management of Power Distribution

5. **Work experience:**

Designation	Institute/company	From	To	Nature of Work
Site Engineer (Electrical)	F.F.E. & C. (P) Ltd., Lucknow	20.07.2006	15.02.2007	*Electrical Supply, Installation, Testing & Commissioning of multi-storeyed residential buildings, street lighting, etc.
Engineer (Electrical)	RITES LTD., Gurgaon	19.02.2007	21.09.2012	*Third-Party Inspection and Monitoring of Projects under RGGVY, * Building and Campus Electrification, *I/T/C Substation, *Drawing Preparation, Estimation, Tendering and Billing.
Assistant Executive Engineer (Electrical)	CSIR-Central Institute of Mining & Fuel Research, Dhanbad	27.09.2012	Till Date	*Official and residential estate electrical maintenance and renovation works, *R&D works.

6. **Work Area(s)/ Specialization:**

Design, Erection & Commissioning of HT/LT Switchgears, Transformers, Motors, Lighting, and Automatic Power factor correction equipment, Cable Engineering. The design activities include preparation of design documentation/calculations, schematic layout drawings, cable schedule, and cable layouts, lighting equipment, Tel Network, CCTV, HVAC, PA, Fire Alarm system, BMS/Automaton System, etc. Preparation of technical specifications, Estimation of the bill of quantity of building, industrial structures, and basic cost estimation based on CPWD rates including market-rate analysis. Calling of

tenders, its technical review, vendor document's review, and dealing of contract clauses. Preparation of Quality Assurance Plan (QAP). Measurement and billing work.

**7. Major contributions: (Max. 100 words):**

A Safety Testing Laboratory has been established at the institute and I regularly contribute from initiation and which becomes NABL accredited as well as BIS recognized lab in India, under the "Electronics and Information Technology Goods (Compulsory Registration) Order, 2012 of MeitY. The lab performs safety-related testing and certification of electronics & IT products, which will cater to the need of all stakeholders in India covering domestic industries, exporters, importers, and electronics & IT products manufacturers & standard-setting bodies.

**8. No. of Research Publications:**

- Papers in Journals: 02
- In conference proceedings: 01
- Invited lectures delivered: NIL
- List of best 05 publications: NIL
- Books/Chapters authored/edited: NIL

**9. List of 5 Major Contract R&D Projects:**

- i. Development of Vision Enhancement System for Foggy Weather
- ii. Development of Digital Mines using the Internet of Things
- iii. Setting-up of Information and Facilitation center for empowering living of Schedule caste in Jharkhand state by CIMFR Dhanbad
- iv. Setting up of Safety Testing Laboratory

**10. (a) Name of Patents/Copyrights applied /granted/commercialized:**

**Patents:**

- i. Vision Improvement Device For Harsh Atmosphere Caused By Temperature Attenuation-: **commercialized**
- ii. Intelligent Dust Suppression System for Mining Applications-: **commercialized**
- iii. Biometric –Based Exploder-: **commercialized**
- iv. Biometric –Based Theft Control Device for two Wheelers
- v. Automatic headlamp Dimming Device
- vi. Blocks and sand manufacturing process using mine wastes
- vii. Intrinsically Safe Digital Fuel Meter
- viii. Digital Mine Using Internet of Things-: **commercialized**
- ix. Retractable Bed Cover and Dust Collector for Transport Vehicles
- x. Solar-based Multipurpose Utility System

**Copyrights applied**

Three(03), Granted:Two(02), **Licenced/ commercialized:One(01)**

**(b) Technologies/Products /knowhow/Services developed: NIL**

**11. Honors/Awards/Recognitions/Fellowships/Scholarships/Professional Memberships received:**

**Awards:** First Prize in Poster Presentation at India International Science Festival 2016, New Delhi

**Professional Memberships:** Chartered Engineer (India) membership of "The Institution of Engineers (India)

**12. Societal Contributions:** An IT and IoT based online training course successfully conducted under the "Jigyasa" from 27<sup>th</sup> January to 23<sup>rd</sup> February 2021. In which 230 students from standard six to under graduation participated.