# Curriculum Vitae

# Prof.(Dr.) SANJAY KUMAR Director in Charge, NIFFT, Ranchi Dean (Faculty of Engineering), Ranchi University

1. Name (in full in block letters):

Prof. (Dr.) SANJAY KUMAR

2. Father's Name:

Dr. RAM KUMAR SAHU

3. Postal Address (in block letters):

With Tel. and Mob. numbers

(Official):

DIRECTOR IN-CHARGE,

NIFFT, HATIA, RANCHI -834003.

Ph. No.: 0651-2290859 Fax: 0651-2290860

(Residential):

QTR. No. - P3, NIFFT, Colony, NIFFT,

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4. Email ID:

sknifft@yahoo.com, sanjayindrani@yahoo.com

5. Nationality:

Indian

6. Category (ST/SC/OBC/General):

General

7. Date of Birth:

15/09/1961

Age: 52 Yrs.

8. Educational Qualification (from Matriculation onwards) with percentage of marks, year of passing and the Board/University from where passed in tabular form along with attested copies of testimonials:

SI. No.	Examination	Year of passing	Division/ Grade	Percentage marks	School/College /University
1.	Bihar State Examination Board	1976	First Class	71%	D.A.V. High School, Gopalganj, Bihar
2.	I. Sc.	1978	First Class	73%	Science College, Patna, University
3.	B. Tech. in Metallurgical Engineering,	1984		C.P.I. 6.6 out of 10 No Division is awarded here	Indian Institute of Technology, Kanpur
4.	M. E. in Mechanical Engineering,	1986	First Class	C.G.P.A 5.7Outof 8.0	Indian Institute of Science, Bangalore
5.	Ph.D. in Engineering	1999			Ranchi University, Ranchi

B.Tech.:

Electives

:Electron Microscopy, Particulate Materials and Refractories.

Project Title

:Texture of Permalloys.

M.E.:

Electives

:Energy Conservation Devices, Probability and Statistics.

Project Topic

:Computer Aided Determination of Mould Joints.

#### Ph.D.:

Research Topic: Analytical study of Metal Flow during Forging and Development of Expert System for the Manufacture of Forgings.

## 9. Field of specialization:

Computer Aided Design of Castings and Forgings, Manufacturing Processes and Techno-economic study of such processes, Total Quality Management, Mechanical Metallurgy.

10. Details of previous employment in chronological order (starting with the most recent first) together with details of duties & salary drawn and Experience:

## Academic/Research/Industrial Experience

1. April 1986 - July 1991:

Lecturer,

Department of Forge Technology,

NIFFT, Hatia, Ranchi.

2. July 1991 – July 2005:

Assistant Professor,

Department of Manufacturing Engg.,

NIFFT, Hatia, Ranchi.

3. July2005 -

Professor, (Basic- 59,330 + AGP- 10,000)

Department of Manufacturing Engg.,

NIFFT, Hatia, Ranchi.

#### 11. Details of administrative experience:

- 1. Director-in-Charge
- 2. Dean (Faculty of Engineering), Ranchi University, Ranchi.
- 3. Member, Academic Senate, Ranchi University, Ranchi.
- 4. Member, Affiliation Committee, Ranchi University, Ranchi.
- 5. Dean (Planning and Development)
- 6. Co-ordinator, TEQIP and Chairman, TEQIP Committee
- 7. Ex-Head, Department of Manufacturing Engineering
- 8. Ex-Chairman, Campus Maintenance Committee
- 9. Ex-Chairman, Security Engagement Committee
- 10. Ex- First Appellate Authority, RTI
- 11. Ex-Public Information Officer, RTI
- 12. Ex-Chairman, Anti-Ragging Committee
- 13. Course Co-ordinator, M.Tech Course
- 14. Course Co-ordinator, Advanced Diploma Course
- 15. Vice-Chairman, Entrance Examination
- 16. Hostel Warden
- 17. Chairman, NIFFT NIWAS (Institute Guest House)
- 18. Joint secretary, National Seminar on" Total Quality Management in foundry and forge industries" held at NIFFT, Ranchi on 05-06<sup>th</sup> Jan91.
- 19. Co-ordination of special courses on "Inspection and quality control of
- 20. castings, forgings and fabricated plant and equipment during manufacturing"
  -02 weeks- 10 participants- May 1990 and "Quality control and inspection of castings, forgings and fabricated plant and equipment during manufacturing" for MECON, Ranchi.
- 21. Life Member of Indian Institute of Metals.
- 22. Chairman, Indian Institute of Foundrymen, Ranchi Chapter.

#### 12. Details of publication:

- Recent advances in Material Development for Thermal Power Projects All India Seminar on Metallurgical Problems in Power Projects, Lucknow, October 1987.
- Representation schemes for Engineering Components All India Seminar on Near Net Shape processes, Ranchi, April 1989.
- 3. CAD of Axisymmetric Forgings International Forging Conference, New Delhi, January 1990.
- Use of computers for statistical quality control in foundry, forge and manufacturing industries – National Conference on Quality and Reliability, S.J.C.E., Mysore, June 1997.
- Presented a technical paper on " use of computers for statistical quality control in foundry, forge and manufacturing industries" in the national conference of quality and reliability at s.j.c.e., mysore june 1997.
- Computer-aided design of an axi-symmetric forging Dr. S.N.. Prasad, Mr. S.K.Singh and Dr. Sanjay Kumar presented and published I proceedings of xiii international forging congress, 23-27 jan, 1990, New Delhi.
- K.Nandkeolyar, Sanjay Kumar & Dr. V.K. Sinha: Recent Advances in Materials Development for Thermal Power Projects; All India Seminar on Metallurgical Problems in Power Projects, Lucknow.30-31, Oct.1987.
- 8. One paper in Indian Foundry Journal
- 9. One paper in FOUNDRY

## 13. Name and Address of two referees (not related to the candidate):

#### 1. Prof. P. L. Jain

44, Sardar Club, Scheme, Air Force Area, Jodhpur- 342001. (Rajasthan) Ph. No.- 0291 645384 Mob. No. - 09829130527

#### 2. Prof. K. S. Iyar

15, Sangair Garden, Kovaipudur, Coimbatore – 641042, (Tamilnadhu) Ph. No. – 0422-26052304 Mob. No. - 09442842861 14. Any other relevant information, if any:

# Scholarship / Academic Achievement

- 1. National Merit Scholarship
- 2. Graduate Aptitude Test in Engineering 95.86 percentile

# Subjects taught at Undergraduate level

- 1. Principles of Metal Working
- 2. Die Forging Technology
- 3. Modern Forging Processes
- 4. Engineering Physics
- 5. Design and Technology of Free Forging
- 6. Forging Die Design
- 7. Forging Machine, Furnace and Handling Equipment
- 8. Heat and Mass Transfer
- 9. Engineering Thermodynamics
- 10. Metallurgical Thermodynamics and Kinetics
- 11. Physical Metallurgy and Metallography
- 12. Welding and Salvaging Processes
- 13. Metal Shaping Processes
- 14. Quality Assurance and Inspection Methods
- 15. Total Quality Management

# Subjects taught at Postgraduate level

- 1. Heat Treatment of Castings, Forgings and Weldments
- 2. Quality Assurance and Reliability
- 3. Plant Design and Industrial Automation
- 4. Total Quality Management
- 5. Near Net-Shape Processes

Selected Titles of Postgraduate Projects Supervised (M.Tech. thesis)

- Computer Aided Design of Risering of Steel Castings (August 1986 to January 1987) carried out in a Heavy Industry.
- 2. Simulation of Combustion Reactions in a Cupola (August 1987 to January 1988).
- 3. Computer Aided Design of Typical Forgings (August 1987 to January 1988).
- 4. Computer Aided Design of Forging Dies (August 1988 to January 1989).
- Rejection Control of Connecting Rod produced on 1600-Ton Press (August 1989 to January 1990) carried out at TELCO, Jamshedpur
- Development of CAD package for axi-symmetric forgings and dies (August 1990 to January 1991).
- 7. Computer aide design of Steel and Ductile Iron Castings (August 1992 to January 1993).
- Statistical Process Control of Crankshaft and Front Axle Beam at an automated Forge Shop (August 1994 to January 1995) carried out in an Automobile Industry.
- 9. Die Design of Rear Back Plate (August 1994 to January 1995) carried out at Hindustan Motors, Kolkata
- 10. Rejection control of cylinder block casting using statistical analysis(August 1995 to January 1996) carried out at TELCO, Jamshedpur
- 11. Computer Aided Design of Forging Preforms(August 1995 to January 1996)
- 12. Development of an expert system for casting defects of cylinder-head parts(August 1996 to January 1997) carried out at TELCO, Jamshedpur
- Development of simulation technique for study of die-workpiece interface behaviour, load and energy estimation and die-design ((August 1996 to January 1997)
- 14. Study of cylinder block defects with special reference to melting and pouring practices(August 1997 to January 1998) carried out at TELCO, Jamshedpur
- 15. Computer-aided Engineering of forging dies (August 1997 to January 1998) carried out in an Automobile Industry
- 16. Assessment of metallurgical properties of cast and forged products using experimental and finite element method techniques (August 1998 to January 1999)

- 17. Computer simulation of forging process using finite element method (August 1998 to January 1999)
- 18. Modelling of the Forging Process using F.E.M. Package N.I.S.A. (August 1999 to January 2000)
- 19. Solidification simulation of Metals and Alloys using F.E.M. Technique (August 1999 to January 2000)
- 20. Hot workability of particulate reinforced cast aluminium alloy metal matrix composite (August 2000 to January 2001)
- 21. Simulation of metal flow during forging using FEM (August 2001 to January 2002)
- 22. Development of an expert system for foundry (August 2001 to January 2002)

#### Conferences / Seminars / Workshop attended

- A two-day workshop held at Research & Design Centre of Iron and Steel, SAIL, Ranchi
- 2. Workshop on TQM at Birla Institute of Technology, Mesra
- 3. Workshop on Metal Forming, Birla Institute of Technology, Mesra
- 4. Attended International Conference on "Challenges before Manufacturing Sector in 2000" from 03/02/2000 to 04/02/2000 at MECON, Ranchi
- Attended workshop on Material Characterization METCIMM'99 at Jamsedpur on 19/01/99 and 20/01/99
- 6. Attended annual convention of IIF from 7<sup>th</sup>-10<sup>th</sup> feb,1996 at Chennai
- Attended the National Seminar on" Total Quality Management in Foundry and Forge industries" held at NIFFT, Ranchi on 05-06<sup>th</sup> Jan91
- 8. Attended the National Seminar on" Near Net Shape Processes" held at NIFFT, Ranchi on 08-09<sup>th</sup> April, 1989

### Coordinator of the following short-term courses for Industry personnel

- "Technology of Steel Forging Practices, Heat Treatment and Quality Control" during 1986, 1987, 1988 and 1990.
- 2. "Heat Treatment of Castings and Forgings" during 1989.

- 3. "Inspection and Quality Control of Castings, Forgings and Fabricated Plants and Equipment during Manufacturing" from May 1990 to December 1990.
- 4. "Maintenance Management" during 1991.
- 5. "Implications and Implementation of ISO 9000" 06 participants- 01 weekdec 95
- 6. "Implications and Implementation of ISO 9000" 05 participants- 01 weekdec 94
- 7. Design and manufacturing of plastic patterns for foundries 01 week- 05 participants- aug 1992
- 8. Technology of forging practice and control- 02 weeks- 09 participants- July 1991
- 9. Recent trends in forging technology- 01 week-05 participants- Dec 87
- 10. Heat treatment of casting and forgings 02 weeks- 05 participants- July 87
- 11. Technology of forging practice and heat treatment- 02 weeks- 11 participants - June 90
- 12. Heat treatment of castings and forgings- 02 weeks- 26 participants- Nov 89
- 13. Technology of steel forging practice and quality control 2 weeks-12 participants -June 89
- 14. Forging die-design and practice-01 week-08 participants-Dec 88
- 15. Technology of forging practice control and heat treatment- 02 weeks-11participants- July 88
- 16. Technology of steel forging practices, heat treatment and quality control 2 weeks-17 participants Sept 86
- 17. Technology of steel forging practices, heat treatment and quality control 2 weeks-06participants Feb 87

Declaration: I hereby certify that the foregoing information is correct and complete to the best of my knowledge and belief and nothing has been concealed/distorted.

Date: 19/10/2013
Place: [Archi

(Signature of the Candidate)