

Short Curriculum Vitae
Dr. Sushanta Kumar Panigrahi

Educational Profile

PhD (Engg.)
Year: 2009
University: IIT Roorkee, India



Professional Background (From PhD Onwards)

- Post Doctoral Fellow, **Missouri University of Science & Technology, Rolla, MO, USA** from 2009 to Jan 2012
- Assistant Professor, Department of Mechanical Engineering, **IIT Madras**, Chennai, India from Jan 2012 to 20th July 2017.
- Visiting Professor at **Ecole Centrale Nantes, France** during May-June 2016.
- Associate Professor, Department of Mechanical Engineering, **IIT Madras**, Chennai, India from 21st July 2017 to On-going.

Research Interest

- **Development of advanced materials; their fundamentals and manufacturability**
(Bulk ultrafine/nano grained materials, Metal matrix/Nano composites, In-situ composites, Ultrafine grained in-situ/ex-situ composites, High strength light weight Al, Mg and Ti based metallic materials, Structure-Property-Manufacturability (Machining/Forming/Joining) correlation of such developed materials)
- **Materials processing (MP) for property enhancement**
(MP based on severe plastic deformation, Thermo-mechanical treatment, Heat-treatment, Surface engineering based MP like friction stir processing, microwave cladding etc.)
- **Advanced metal forming**
(Bulk and sheet metal forming, Severe plastic deformation, Micro-Macro-Incremental and Superplastic forming, Microstructure-Crystallography texture-Property- Formability correlation)
- **Plasticity and deformation behavior of materials**
(Deformation behavior under Quasistatic, Dynamic and Cyclic testing domain at sub-zero to high temperature range, Processing map development)
- **Solid state processing and joining of similar/dissimilar materials**
(Friction stir welding, Friction welding, Roll bonding etc.)

Overview of Sponsored/Funded Project Details

- Sanctioned Sponsored Projects of on-going and completed projects as Investigator:
Details of Funding Agencies (Principal Investigator in all projects except No-11 and 12):
 - (1) DST-AMT, (2) DSIR +MHRD + Shivallic Bimetals,
 - (3) ARDB, DRDO, (4) LPSC, ISRO,
 - (5) IITM-NFSG (6) IITM-Exploratory Project,
 - (7) Hindalco, Aditya Birla Group, (8) Renault Nissan,
 - (9) Rane NSK Steering System (10)Titan Company Limited
 - (11) Mahindra & Mahindra + DHI (12) DST-SERB
- Sanctioned projects as coordinator: DST-FIST

Research Publication Details

Overview of Research Publications (Upto July 2020)

- Books and book chapters: **04**
- International journal papers published: **63** (Corresponding Author: 40 papers)
 - Average Impact Factor among all publications: **4.4**
 - Citation Index (Scopus h index): **26**
 - No of citations (Scopus): **2001**
- International conference papers (peer reviewed) presented/published: **40**
- Patents: **01**

Overall Research Publication Details

SL No	Name of the journal (International)	Publication	SJR	No of papers	Impact Factor
1	Materials Research Letters	Taylor & Francis	Q1	1	7.5
2	Journal of Magnesium Alloys	Elsevier-Sci. Direct	Q1	1	7.2
3	International Journal of Plasticity	Elsevier-Sci. Direct	Q1	2	6.5
4	Corrosion Science	Elsevier-Sci. Direct	Q1	2	6.5
5	Materials & Design	Elsevier-Sci. Direct	Q1	5	6.3
6	Scripta Materialia	Elsevier-Sci. Direct	Q1	1	5.1
7	Journal of Materials Processing & Techn	Elsevier-Sci. Direct	Q1	2	4.7
8	Journal of Alloys and Compounds	Elsevier-Sci. Direct	Q1	9	4.7
9	Material Science & Engineering A	Elsevier-Sci. Direct	Q1	14	4.7
10	Scientific Report	Nature	Q1	1	4.6
11	Tribology International	Elsevier-Sci. Direct	Q1	1	4.3
12	Journal of Manufacturing Processes	Elsevier-Sci. Direct	Q1	1	4.1
13	Ceramic International	Elsevier-Sci. Direct	Q1	1	3.8
14	Surface and Coating Technology	Elsevier-Sci. Direct	Q1	1	3.8
15	Materials Characterization	Elsevier-Sci. Direct	Q1	4	3.6
16	Journal of Materials Science	Springer	Q1	3	3.6
17	Intermetallics	Elsevier-Sci. Direct	Q1	1	3.4
18	Materials Chemistry and Physics	Elsevier-Sci. Direct	Q1	2	3.4
19	Materials letter	Elsevier-Sci. Direct	Q1	1	3.2
20	Materials	MDPI	Q1	1	3.1
21	Inter. Journal of Adhesion and Adhesives	Elsevier-Sci. Direct	Q1	1	2.7
22	Metallurgical & Materials Transactions A	Springer	Q1	6	2.1
23	Materials Science and Technology	Maney Publication	Q1	1	1.8
24	Journal of Tribology	ASME	Q2	1	1.7
Average Impact Factor: 4.4					

Research Guidance

Overview of Graduated Research Scholars and Master Students **(Upto July 2020)**

- Number of graduated PhD Scholars: **06**
 - Dr. Jose Immanuel R (Presently at **IIT Bhilai** as Assistant Professor in Department of Mechanical Engineering)
 - Dr. Biranchi Narayan Sahoo (Presently at **NIT Surat** as Assistant Professor in Department of Mechanical Engineering)
 - Dr. Faseulla Khan (Presently at **VIT, Vellore** as Assistant Professor, in Department of Mechanical Engineering)
 - Dr. S. Babu ((Presently at **VIT, Vellore** as Assistant Professor, in Department of Mechanical Engineering)
 - Dr. Abhijeet Dhal (Presently at IMPCRG*, **IIT Madras** as Post Doctoral Researcher)
 - Dr. Omkar Bembalge (Presently at IMPCRG*, **IIT Madras** as Post Doctoral Researcher)

- Number of graduated MS Scholars: **02**
- Number of graduated M.Tech/DD Scholars: **20**

IMPCRG: Innovative Materials Processing and Characterization Research Group (Research group of Dr. S.K. Panigrahi)