

Name of Faculty Dr. Ashutosh Sahu
 Designation Assistant Professor
 Nature of Job/Appointment Regular
 Date of Joining 07-03-2022
 E-mail ashutosh_mech@cbit.ac.in



Education Qualifications	Name of the Degree	Class
Ph. D	Doctor of Philosophy (Metallurgical and materials engineering), IIT Kharagpur.	Awarded
PG	M. Tech (Metallurgical Engineering) IIT-BHU Varanasi.	First
UG	B. Tech (Mechanical Engineering) GIET Gunupur under BPUT Odisha.	First

Work Experience

Teaching	2 years and 4 months	
Research	2 years and 6 months	
Industry	1 year and 10 months	
Others	--	
Area of Specialization	Powder metallurgy, physical metallurgy, metal forming, foundry	
Professional Memberships	--	
Responsibilities held at Institution Level	--	
Responsibilities held at Department Level	--	
Research Guidance	--	
Awards Received	--	
Courses Handled at Under Graduate / Post Graduate Level.	--	
No. of Papers Published	National Journals – 00	International Journals – 12
	National Conference – 00	International Conference – 02
Projects Carried out	--	
Patents	--	
Technology Transfer	--	
Invited Speaker	--	
No. of Books/Chapter Published with details	--	

Details of Short-Term Training Programs
/ Faculty Development Programs /
Seminars / Workshops. Other Trainings
(Attended and/or Organized)

4 Attended

Details of Journal Publications/
Conferences (National and
International)

International Journal

1. A. Sahu, R.S. Maurya, L.K. Singh, T. Laha, Analyzing the effects of milling and sintering parameters on crystalline phase evolution and mechanical properties of Al₈₆Ni₈Y₆ and Al₈₆Ni₆Y_{4.5}Co₂La_{1.5} amorphous ribbons, <https://doi.org/10.1007/s40195-021-01341-y>.
2. A. Sahu, R.S. Maurya, S. Dinda, T. Laha, Phase evolution-dependent nanomechanical properties of Al₈₆Ni₈Y₆ and Al₈₆Ni₆Y_{4.5}Co₂La_{1.5} spark plasma-sintered bulk amorphous composites, *Metallurgical and Materials Transactions A* 51A (2020) 5110-5119.
3. R.S. Maurya, A. Sahu, T. Laha, Nanoindentation study on Al₈₆Ni₈Y₆ glassy alloy synthesized via mechanical alloying and spark plasma sintering, *International Journal of Materials Research* 111 (2020) 1-8.
4. A. Sahu, R.S. Maurya, T. Laha, Non-isothermal crystallization behavior of Al₈₆Ni₈Y₆ and Al₈₆Ni₆Y_{4.5}Co₂La_{1.5} melt-spun ribbons, milled ribbon particles and bulk samples consolidated by spark plasma sintering, *Thermochimica Acta* 684 (2020) 1-11.
5. A. Sahu, R.S. Maurya, T. Laha, Comparative study on sintering behavior of Al₈₆Ni₆Y_{4.5}Co₂La_{1.5} mechanically alloyed amorphous powder and melt-spun ribbon, *Advanced Powder Technology* 30 (2019) 691-699.
6. A. Sahu, R.S. Maurya, T. Laha, Effect of sintering temperature on phase evolution of Al₈₆Ni₆Y_{4.5}Co₂La_{1.5} bulk amorphous composites synthesized via mechanical alloying and spark plasma sintering, *Progress in Natural Science: Materials International* 29 (2019) 32-40.
7. T. Thomas, C. Zhang, A. Sahu, P. Nautiyal, A. Loganathana, T. Laha, B. Boesl, A. Agarwal, Effect of graphene reinforcement on the mechanical properties of Ti₂AlC ceramic fabricated by spark plasma sintering, *Materials Science and Engineering A* 728 (2018) 45-53.
8. A. Loganathan, A. Sahu, C. Rudolf, C. Zhang, S. Rengifo, T. Laha, B. Boesla, A. Agarwal, Multi-scale tribological and nanomechanical behavior of cold sprayed Ti₂AlC MAX phase coating, *Surface and Coatings Technology* 334 (2018) 384-393.
9. R.S. Maurya, A. Sahu, T. Laha, Effect of sintering temperature on phase transformation during consolidation of mechanically alloyed Al₈₆Ni₆Y₆Co₂ amorphous powders by spark plasma sintering, *Journal of Non-Crystalline Solids* 453 (2016) 1-7.
10. R.S. Maurya, A. Sahu, T. Laha, Microstructural and phase analysis of Al based bulk metallic glass synthesized by mechanical alloying and consecutive spark plasma sintering with varying consolidation pressure, *Advanced Materials Letters* 7 (2016) 187-191.
11. R.S. Maurya, A. Sahu, T. Laha, Quantitative phase analysis in Al₈₆Ni₈Y₆ bulk glassy alloy synthesized by consolidating mechanically alloyed amorphous powder via spark plasma sintering, *Materials and Design* 93 (2016) 96-103.
12. R.S. Maurya, A. Sahu, T. Laha, Effect of consolidation pressure on phase evolution during sintering of mechanically alloyed Al₈₆Ni₈Y₆ amorphous powders via spark plasma sintering, *Materials Science and Engineering A* 649 (2016) 48-56.

International Conferences

1. A. Sahu, A. Behera, Semi-solid processing and tribological characteristics of Al-Cu Alloy, *Materials Today: Proceedings* 2 (2015) 1175-1182.
2. A. Behera, S. Aich, a. Behera, A. Sahu, processing and characterization of magnetron sputtered Ni/Ti thin film and their annealing behaviour to induce shape memory effect, *Materials today: proceedings* 2 (2015) 1183-1192.