

Curriculum Vitae



Suhrit Mula, PhD

Associate Professor,
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Permanent Address

Vill-Beraberia, P.O.-
Baradongal, P.S.-Arambagh,
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Personal Data:

- Sex: Male
- Date of birth: 16.01.1975
- Marital status: Married
- Caste: General

Education:

- **Ph.D.**, Department of Metallurgical and Materials Engineering, Indian Institute of Technology, Kharagpur, India.
PhD Thesis: Aluminium based nanocomposites developed by mechanical alloying and non-contact ultrasonic casting.
- **M. Tech.** (Metallurgy), Department of Metallurgical and Materials Engineering, National Institute of Technology, Durgapur, India.
M. Tech. Thesis: Study on synthesis of Al / (ZrSiO₄)_p composites through investment casting process and p/m route.
- **B.E.** (Metallurgy), Regional Engineering College, Durgapur, India
B.E Thesis: Study on the aging behavior of vanadium micro-alloyed dual phase heat-treated steel.

S.No.	Degree	University	Year	Subjects	Percentage
1.	Matriculation	W.B.B.S.E.	1991	General	83.9
2.	H.S.(10+2)	W.B.C.H.S.E.	1993	Science	78.1
3.	B.E.	R.E. College, Durgapur,	1997	Metallurgical Engineering	78.3
4.	M.Tech.	NIT, Durgapur	2003-2004	Metallurgical & Materials Engineering	83.1
5.	Ph.D.	IIT, Kharagpur	2009	Metallurgical & Materials Engineering	-

Current Research:

- Synthesis and mechanical properties of mechanically alloyed copper-based nanocomposites for high strength and electrical applications.
- Stabilization of nanostructured Aluminium alloys developed by mechanical alloying
- Mechanical properties of ultrafine-grained bulk-size copper based alloys prepared by cryorolling.
- Stabilization of ultrafine grained steel developed by mechanical alloying for nuclear applications.

Research Interest:

- Superalloys
- High entropy alloys
- Advanced steels
- Nanostructured metallic materials, amorphous materials and nanocomposites
- Mechanical properties of advanced metallic materials
- Mechanical alloying
- Cryo-deformation, rolling, forging. Severe plastic deformation
- Thermomechanical simulation

Work Experience:

- **Associate Professor at Indian Institute of Technology Roorkee, 22nd December, 2018 – Continue.**
- **Assistant Professor at Indian Institute of Technology Roorkee, 10th December, 2012 – 21st December, 2018.**
- **Post-Doctoral Research** from 22nd July, 2010 – for 12 months;
At NC State University with Eminent Prof. Carl C. Koch, (ON BOYSCAST FELLOWSHIP, DST, GOVT. OF INDIA), Department of Materials Science & Engineering, North Carolina State University, Raleigh 27606, USA.
- **Assistant Professor** at National Institute of Technology, Rourkela -**28th March’ 2007 – 07th December, 2012.**
- **Teaching Assistant** at National Institute of Technology, Rourkela 21st Nov’2003 – 31st December’ 2004
- **Research Scholar**-31st July 98-30th July’2003; at CMERI, Durgapur: Nature of work: Project Execution.
- **Management Trainee**-July 1997 – July-98; at India Foils Ltd., Kolkata: Nature of work: Production.

Sponsored Research Projects:

Under Consideration:

1. ‘Development of cast components in high entropy alloys’. VSSC, ISRO. **24.10 lacs.**

Ongoing:

1. ‘Hot deformation simulation study of cast Inconel 625 alloy and its high temperature fatigue behavior’. Approved by **SERB, New Delhi, 59.79 lacs. PI: Dr. SUHRIT MULA**
2. ‘Fatigue and corrosion properties of ultrafine grained Al5083-SiCp nanocomposites developed by stir-casting + SPD processing for naval applications’. Ongoing. **CSIR, New Delhi, 28.42 lacs. PI: Dr. SUHRIT MULA**
3. LCF of cast 625 superalloy for turbine casing and forged 617 superalloy for rotor applications. Sponsored by **IGCAR, Kalpakam, 194 lacs.** Ongoing. PI: Dr. Ujjwal Prakash, **Co-PI: Dr. SUHRIT MULA**

Completed:

1. Mechanical and thermoelectrical properties of copper-based nanocomposites developed by mechanical milling. **CSIR, New Delhi, 22.0 lacs.** (approx.). Completed, 30th Sep, 2014. Project No. CSR-701-MMD. **PI: Dr. SUHRIT MULA**
2. Nanostructured grains stabilization of Al-alloys for ultra-light weight applications prepared by mechanical alloying. **IIT Roorkee, 10.0 lacs.** Completed, July, 2016. Project No. IITR/SRIC/218/FIG, Dated: May 27, 2013. **PI: Dr. SUHRIT MULA**

Sponsored Consultancy Projects

1. Improvement in production of cast EN36C(S) alloy steel free from porosity and banded microstructure. Sponsored by M/S Mahindra Sanyo Special Steel Pvt. Ltd. Khopoli, Maharashtra. Consultancy Project Cost: Rs.1256250/-, Duration: 09-01-2014 to 31/08/2015. Project No. MMD-6003/2014-2015. With Dr. PK Ghosh (PI), Dr. Devendra Singh (Co-PI) & Dr. Suhrit Mula (Co-PI).
2. Testing of JB-RE-BAR COUPLERS, sponsored by JB Engineering & RE-Bar Couplers India P Limited, Siliguri - West Bengal - 734010-INDIA, HO:10 A & B, 23,Industrial Area, Nangal Jarialan, Distt. Una , Himachal Pradesh-177212 INDIA. Approx. cost: 15 lacs. **In principle approved and waiting for final approval from SRIC, IITR.**

Organized Short-term course:

1. **AICTE sponsored Short Term Course on ‘Excellence in marine materials: advanced processing, characterization & applications’ from 21st May-25th May, 2018.**
2. **AICTE sponsored Short Term Course on ‘Advanced Aerospace Materials: Processing, Characterization and Applications’ from 1st June-5th June, 2015.**

Invited Talks delivered:

- Delivered an invited talk on ‘Advanced processing techniques to obtain high strength materials’ at Shivalik College of Engineering (SCE), Dehradun on 30th March, 2018.
- Delivered an invited talk on ‘Fracture mechanism, fracture toughness and fatigue properties of low SFE copper alloys processed by severe plastic deformation’ at MSME, IIT Hyderabad on 12.10.2017.
- Delivered an invited talk on ‘XRD and its Broad applications in Materials Characterization’ in a TEQIP sponsored Workshop ‘Materials Characterization by SEM, TEM, XRD & EBSD’, 27-28 October, 2017, at Department of Mechanical Engineering Govind Ballabh Pant Institute of Engineering & Technology, Ghurdauri, Pauri-Garhwal-246194, UK.

Awards and Achievement:

- **BOYSCAST FELLOWSHIP** (Dept. of Science & Technology, Govt. of India), North Carolina State University, Raleigh, USA (Supervisor: Prof. Carl C. Koch), (July 22, 2010-19th July, 2011) [One Year] (Selected as BOYSCAST Fellow (2009-2010))
- **Evaluated 3 PhD theses from NIT Rourkela and NIFFT, Ranchi.**
- **National Scholarship Award** by Dept. of Higher Education, Govt. of West Bengal, from 1991-1993 and 1993-1997.
- **56th** rank in Madhyamik (Secondary Exam.), W.B.B.S.E.
- **5th** rank in B.E. out of 38 students.

Post Graduate Thesis Supervision

(a) Doctoral Theses Supervision:

Sl. No.	Name of Student	Title of Dissertation	Status (Completed/ Ongoing)
1	Dasharath Mabrukar	Mechanical properties of UFG low SFE Cu-Zn & Cu-Al alloys processed by cryo-rolling/forging	Completed (March 10, 2017)

2	Sumit Ghosh	Thermomechanical simulation kinetics to develop high strength IF and microalloyed steels	Completed (18 th May,18)
3	VMS Muthaiah	Thermal stability and mechanical properties of nanocrystalline Fe-Cr-X(Nb,Zr,Y) alloys prepared by mechanical alloying + spark plasma sintering	Completed (March,19)
4	Atul Kumar with Dr. K. Pal	Effect of cryo-FSP on microstructural evolution and mechanical properties of stir cast Al7075-SiC _p nanocomposites	Completed (August,19)
5	Godasu Aswin Kumar with Dr. U. Prakash	Thermomechanical processing of cast IN625 alloy and its fatigue behavior	Ongoing (3 rd year)
6	Lekhray Verma with Dr. V. Dhabhade	Fe-based alloys by powder forging	Ongoing (2 nd year)
7	Pravendra Pratap Singh with Dr. S. Ghosh	Thermomechanical processing of micro-alloyed steels	Ongoing (2 nd year)
8	Arpan Arora	Ferritic ODS steel: Thermal stability and mechanical properties	Ongoing (1st year)
9	Kishore S with Dr. S. Das	Hot deformation study of bainitic steel	Ongoing (1st year)

(b) Masters Theses Supervision:

Sl. No.	Name of Student	Title of the Dissertation	Completion year
1	Sangita Pattanaik	Synthesis of Al-Zn and Al-Zn-Si nanostructures by mechanical alloying	2008
2	PS Mohakud	Structures and properties of Al-based Al-Si-Ni nanostructures developed by mechanical alloying	2009
3	Pankajini Sahani	Synthesis and characterization of copper-based nanostructures developed by mechanical milling	2010
4	Ravi Kumar	Mechanical properties of ultrafine grains bulk copper alloy developed by cryorolling	2014
5	B. Chauhan	Mechanically alloyed copper based nanostructures for high strength and electrical contact applications	2014
6	Sooraj S	Stabilization of ultrafine grain steels developed by mechanical alloying for nuclear application	2014
7	Amit K Singh	Microstructure and mechanical properties of age hardenable Al-alloy processed by cryodeformation	2015
8	Ajay K. Singh	Enhancement of mechanical properties of ultra low carbon microalloyed steel by thermomechanical processing	2015
9	Hari Bau L	Thermal stabilization of nanocrystalline Fe-Cr alloys developed by mechanical alloying	2015
10	Prem Kumar Asok Kumar	Aluminum based nanostructured materials prepared by mechanical alloying	2016
11	Kumar Saurabh	Preparation and characterization of Al-SiC _p nanocomposites developed by stir casting	2016
12	Chayan Sengar	Mechanical properties of Al-based nanocomposites developed by stir casting followed by cryoforging	2017
13	Lekhray Verma	Mechanical properties and corrosion resistance of friction stir processed LFE Cu-based alloys	2017
14	Arpan Arora	Mechanical properties and corrosion resistance of mechanically alloyed Fe-based nanostructures consolidated by spark plasma sintering	2017
15	Moses JP	Microstructures and mechanical properties of spark plasma sintered ferritic steels	2018
16	Swetank Dubey	Effect of cyclic heat treatment on microstructure and mechanical properties of microalloyed steel	2019
17	Prashant Agarwal	Hot deformation study of 13Cr steel	Ongoing

Students' feedback (last 5 semesters)

Sl. No.	Couse Name	Feedback for Teacher (out of 5)	No. of students
1	Phase Transformation	4.812	15
2	Materials Characterization	3.905	101
3	Phase Transformation	4.39	35
4	Characterization of Materials	4.337	40
5	Heat Treatment Practices	4.174	94

Publications:

(a) Book Chapter/Book published

1. S. M. Dasharath, **Suhrit Mula**. Microstructures, Mechanical Properties and Strengthening Mechanisms of cast Cu–Al Alloys Processed by Cryorolling in Recent Trends in Materials and Devices pp. 479-482, volume 178 (2016). Part of the **Springer Proceedings in Physics book series (SPPHY)**.
2. **Suhrit Mula**, S. K. Pabi, Sudipto Ghosh. Aluminium based nanocomposites: Metal Matrix Nanocomposites, pp.1-184, LAP LAMBERT Academic Publishing (11 November 2011). **ISBN-10:** 3846542172, **ISBN-13:** 978-3846542170.

(b) Details of Research Publications in Journals (48)

Sl No	Authors	Title	Name of Journal	Page	Vol	Year
48	S. Ghosh, S. Mula	Improvement of fracture toughness of Ti+Nb stabilized microalloyed and interstitial free steels processed through single phase regime control multiaxial forging	Materials Science and Engineering: A	138817	772	2020
47	A. K. Godasu, A. Kumar, S. Mula	Influence of cryocooling on friction stir processing of Al-5083 alloy	Materials & Manufacturing Processes	10.1080/10426914.2019.1697442	2019	
46	S. Ghosh, Jukka Kömi, S. Mula	Flow stress characteristics and design of innovative 3-steps multiphase control thermomechanical processing to produce ultrafine grained bulk steels.	Materials & Design,	108297	186	2020
45	S. Ghosh, S. Mula	Fracture toughness characteristics of ultrafine grained Nb-Ti stabilized microalloyed and interstitial free steels processed by advanced multiphase control rolling.	Materials Characterization, Available online 9 November 2019, 110003	https://doi.org/10.1016/j.matchar.2019.110003	2019	
44	V.M.S. Muthaiah, S. Mula	Evolution of microstructures and mechanical properties of spark plasma sintered Fe-Cr-Nb alloys	Materials Science and Engineering: A	367-376	739	2019

43	A. Kumar, A. K. Godasu, K. Pal, S. Mula	Effects of in-process cryocooling on metallurgical and mechanical properties of friction stir processed Al7075 alloy	Materials Characterization	440-447	144	2018
42	V.M.S. Muthaiah, C.C. Koch, S. Mula	Effect of Nb addition on Fe-7Cr-Nb and Fe-15Cr-Nb metastable alloy formation and their thermal stability	Mater. Res. Express (2018)	056534	5	2018
41	S. Ghosh, SM Dasharath, S. Mula	Simulation kinetics of austenitic Phase transformation in Ti+Nb stabilized IF and microalloyed steels	Journal of materials engineering & performance, ASM International	2595–2608	27	2018
40	V.M.S. Muthaiah, S. Mula.	Influence of Cr and Y addition on microstructure, mechanical properties and corrosion resistance of SPSe Fe-based alloys	Metallurgical and Materials Transactions A	990–1005	49	2018
39	A. Kumar, K. Pal, S. Mula	Simultaneous improvement of mechanical strength, ductility and corrosion resistance of stir cast Al7075-2%SiC micro- and nanocomposites by friction stir processing	Journal of Manufacturing Processes	1-13	30	Dec, 2017
38	A. Prem Kumar, V.M.S. Muthaiah, S. Mula	Effect of Nb, Y and Zr on thermal stability of nanocrystalline Al-4.5wt.% Cu alloy prepared by mechanical alloying.	Journal of Alloys and Compounds	617-627	722	Oct, 2017
37	S. Ghosh, S. Mula , D.K. Mondal	Development of ultrahigh strength cast-grade microalloyed steel by simple innovative heat treatment techniques for industrial applications.	Materials Science and Engineering: A	667-680	700	July, 2017
36	Debasis Nayak, Shiba Narayan Sahu, S. Mula.	Metallurgical approach towards explaining optimized EDM process parameters for better surface integrity of AISI D2 tool steel.	Transactions of the Indian Institute of Metals	1183-1191	70	July 2017
35	SM Dasharath, S. Ghosh, S. Mula	Effect of SFE on tensile and fatigue behavior of ultrafine grained Cu-Zn and Cu-Al alloys developed by cryo-rolling/forging.	Materials Science and Engineering: A,	73-83	693	May, 2017
34	SM Dasharath, S. Mula	Improvement of mechanical properties and fracture toughness of low SFE Cu-Al alloy through microstructural modification by multiaxial cryoforging.	Materials Science and Engineering: A	393-404	690	2017
33	A. Kumar, S.K. Sharma, K. Pal, S. Mula	Effect of Process Parameters on Microstructural Evolution, Mechanical Properties and Corrosion Behavior of Friction Stir Processed Al 7075 Alloy.	Journal of Materials Engineering and Performance	1122–1134	26	2017
32	S. Ghosh, A.K. Singh, S. Mula , P. Chanda, V.V. Mahashabde, T.K. Roy	Mechanical properties, formability and corrosion resistance of thermomechanically controlled processed Ti-Nb stabilized IF steel.	Materials Science and Engineering: A	22–36	684	2017

Sl. No.	Authors	Title	Name of Journal	Page	Vol	Year
31	SM Dasharath, S. Mula	Mechanical properties and fracture mechanisms of ultrafine grained Cu-9.6% Zn alloy processed by multiaxial cryoforging.	Materials Science and Engineering: A	403-414	675	2016
30	Sooraj S, V.M. Suntharavel Muthaiah, P.C. Kang, C.C. Koch, S. Mula .	Microstructural evolution and thermal stability of Fe-Zr metastable alloys developed by mechanical alloying followed by annealing.	Philosophical Magazine	2649-2670	96	2016
29	V.M.S. Muthaiah, S. Mula .	Effect of zirconium on thermal stability of nanocrystalline aluminium alloy prepared by mechanical alloying.	Journal of Alloys and Compounds	571-580	688	2016
28	Sumit Ghosh, Ajay Kumar Singh, S. Mula .	Effect of critical temperatures on microstructures and mechanical properties of Nb-Ti stabilized IF steel processed by multiaxial forging.	Materials & Design	47-57	100	2016
27	SM Dasharath, S. Mula .	Microstructural evolution and mechanical properties of low SFE Cu-Al alloys processed by cryorolling followed by short-annealing.	Materials & Design	552-564	99	2016
26	V.M.S. Muthaiah, Hari Babu L, Carl C Koch, S. Mula .	Feasibility of formation of nanocrystalline Fe-Cr-Y alloys: Mechanical properties and thermal stability.	Materials Characterization	43-53	114	2016
25	A.K. Singh, S. Ghosh, S. Mula .	Simultaneous improvement of strength, ductility and corrosion resistance of Al2024 alloy processed by cryoforging followed by ageing.	Materials Science and Engineering: A	774-785	651	2016
24	SM Dasharath, C.C. Koch, S. Mula .	Effect of stacking fault energy on mechanical properties and strengthening mechanisms of brasses processed by cryorolling.	Materials Characterization	14-24	110	2015
23	S. Ghosh, S. Mula .	Thermomechanical processing of low carbon Nb-Ti stabilized microalloyed steel: Microstructure and mechanical properties.	Materials Science and Engineering: A	218-233	646	2015
22	S. Mula , Daria Setman, K.M. Youssef, R.O. Scattergood, CC Koch.	Structural evolution of Cu _(1-x) Y _x alloys prepared by mechanical alloying: Their thermal stability and mechanical properties.	Journal of Alloys and Compounds	108-116	627	2015
21	Ravi Kumar, S.M. Dasharath, P.C. Kang, C.C. Koch, S. Mula .	Enhancement of mechanical properties of low stacking fault energy brass processed by cryorolling followed by short-annealing.	Materials & Design	637-643	67	2015
20	Bingqing Li, Pengchao Kang, Huasong Gou, Gaohui Wu, S. Mula .	Surface morphology evolution and ablation mechanism of SiC-Si multiphase ceramic coating on graphite under oxy-acetylene flame.	Corrosion Science	473-480	88	2014

Sl No	Authors	Title	Name of Journal	Page	Vol	Year
19	Kang Pengchao, Zhang Bin, Wu Gaohui, Gou Huasong, Chen Guoqin, Jiang Longtao, S. Mula .	Synthesis of β -SiC Nanowires by ball milled nanoparticles of Si and C.	Journal of Alloys and Compounds	304-308	604	2014
18	S. Mula , J. Panigrahi, P.C. Kang, Carl C. Koch.	Effect of microwave sintering over vacuum and conventional sintering of Cu based nanocomposites.	Journal of Alloys and Compounds	710-715	588	2014
17	Mark A. Atwater, S. Mula , R.O. Scattergood, C.C. Koch.	Thermal stability of nanocrystalline copper alloyed with antimony.	Metallurgical and Materials Transactions A	5611-5616	44	2013
16	S. Mula , S.K. Pabi, C.C. Koch, P. Padhi, S. Ghosh.	Workability and mechanical properties of ultrasonically cast Al-Al ₂ O ₃ nanocomposites.	Materials Science and Engineering: A	485-491	558	2012
15	S. Mal, S. Nori, S. Mula , J. Narayan, J. T. Prater.	Defect mediated reversible ferromagnetism in Co and Mn doped zinc oxide epitaxial films.	Journal of Applied Physics		112	2012
14	S. Mula , S. Ghosh, S. K. Pabi.	Microstructural development and room-temperature thermal stability of mechanically alloyed Al ₈₇ Y ₁₀ Ni ₃ nanostructure.	Advanced Science Letters	362-367	16	2012
13	S. Mula , H. Bahmanpour, S. Mal, P C Kang, M. Atwater, W. Jian, R.O. Scattergood, C.C. Koch.	Thermodynamic feasibility of solid solubility extension of Nb in Cu and their thermal stability.	Materials Science and Engineering: A	330-336	539	2012
12	S. Mula , P. Sahani, S.K. Pratihar, S. Mal, C.C. Koch.	Mechanical properties and electrical conductivity of Cu–Cr and Cu–Cr–4% SiC nanocomposites for thermo-electric applications.	Materials Science and Engineering: A	4348-4356	528	2011
11	P. Sahani, S. Mula , P.K. Roy, P.C. Kang, C.C. Koch.	Structural investigation of vacuum sintered Cu–Cr and Cu–Cr–4% SiC nanocomposites prepared by mechanical alloying.	Materials Science and Engineering: A	7781-7789	528	2011
10	H. Bahmanpour, A. Kauffmann, M.S. Khoshkhoo, K.M. Youssef, S. Mula , J. Freudenberger, J. Eckert, R.O. Scattergood, C.C. Koch.	Effect of stacking fault energy on deformation behavior of cryo-rolled copper and copper alloys.	Materials Science and Engineering: A	230-236	529	2011

Sl No	Authors	Title	Name of Journal	Page	Vol	Year
9	P.C. Kang, G.Q. Chen, B. Zhang, G.H. Wu, S. Mula , C.C. Koch.	Oxidation protection of carbon fibers by a reaction sintered nanostructured SiC coating.	Surface Coatings and Technology	305-311	206	2011
8	S. Mula , K. Mondal, S. Ghosh and S. K. Pabi.	Structure and mechanical properties of Al-Ni-Ti amorphous powder consolidated by pressure-less, pressure-assisted and spark plasma sintering.	Materials Science and Engineering: A	3757-3763	527	2010
7	S. Mula , S. Ghosh and S. K. Pabi.	On the formation of phases by mechanical alloying and their thermal stability in Al-Mn-Ce system.	Powder Technology	176-181	191	2009
6	S. Mula , P. Padhi, S. C. Panigrahi, S. K. Pabi and S. Ghosh.	On Structure and Mechanical Properties of Ultrasonically Cast Al-2% Al ₂ O ₃ Nanocomposite.	Materials Research Bulletin,	1154-1160	44	2009
5	S. Mula , S. Ghosh, S. K. Pabi.	Synthesis of Al-based Al-Cr-Co-Ce alloy by mechanical alloying.	Materials Science and Engineering A	208-213	472	2008
4	P.K. Ray, S. Mula , U.K. Mohanty, B. C. Ray.	Effect of hygrothermal shock waves on interlaminar shear strength of hybrid composites.	Journal of Reinforced Plastics and Composites	519-524	26	2007
3	T. Bera, S. Mula , P. K. Ray, B. C. Ray.	Effects of Thermal Shocks and Thermal Spikes on Hygrothermal Behavior of Glass–Polyester Composites.	Journal of Reinforced Plastics and Composites	725-738	26	2007
2	S. Mula , T. Bera, P. K. Ray, B. C. Ray	Effect of Hydrothermal ageing on mechanical behaviour of sub-zero weathered GFRP composites.	Journal of Reinforced Plastics and Composites	673 - 680	25	2006
1	B.C. Ray, S. Mula , T. Bera, P. K. Ray	Prior Thermal Spikes and Thermal Shocks on Mechanical Behavior of Glass Fiber-Epoxy Composites.	Journal of Reinforced Plastics and Composites	197-213	25	2006

Communicated In Journals:

5 more papers communicated to Journals

Details of Research Publications presented in Conferences (43)

1. **Suhrit Mula**, Sumit Ghosh. Innovative design of new thermomechanical processing routes to obtain ultrafine grained steels. **MS & IA 2018, Warsaw, Poland. 26-29th June, 2018.**
2. Sumit Ghosh, **Suhrit Mula**. Superior mechanical properties of nano-grained Nb–Ti stabilized IF and low C microalloyed steels processed by critical phase control multiaxial forging at Large equivalent Strain. International conference on Nanotechnology: Ideas, Innovations & Initiatives (ICN:3I-2017), Organized by Centre of Nanotechnology and Department of Mechanical & Industrial Engineering, Indian Institute of Technology Roorkee, India, on **6-8th Dec, 2017.**
3. Atul kumar, Kaushik Pal, **Suhrit Mula**. Characterization of microstructural evolution and mechanical properties of cryorolled Al7075-SiC nanocomposites. Presented at International Conference on Nanotechnology: Ideas, Innovations and Initiatives (ICN:3I-2017), Indian Institute of Technology Roorkee, Uttarakhand, India, 06-08 December 2017.
4. Arpan Arora, B.V. Manoj Kumar, **Suhrit Mula**. Characterization of Spark plasma sintered Fe-Ni-Y₂O₃ based alloys. International Conference on Advances in Materials & Processing: Challenges

- & Opportunities (AMPCO 2017), Organized by Department of Metallurgical and Materials Engineering, Indian Institute of Technology Roorkee, India, on 30th Nov-2nd Dec, 2017.
5. Moses JP, VM Suntharavel Muthaiah, **Suhrit Mula**. Influence of Zr, Nb and V on mechanical properties of MA957 ferritic steel consolidated by spark plasma sintering. International Conference on Advances in Materials & Processing: Challenges & Opportunities (AMPCO 2017), Organized by Department of Metallurgical and Materials Engineering, Indian Institute of Technology Roorkee, India, on 30th Nov-2nd Dec, 2017.
 6. Atul Kumar, Ashwin Kumar, Kaushik Pal, **Suhrit Mula**. Effects of active-cooling on metallurgical and mechanical properties during friction stir processing of Al 7075 alloy. International Conference on Advances in Materials & Processing: Challenges & Opportunities (AMPCO 2017), Organized by Department of Metallurgical and Materials Engineering, Indian Institute of Technology Roorkee, India, on 30th Nov-2nd Dec, 2017.
 7. Sumit Ghosh, **Suhrit Mula**. Improvement of fracture toughness and fatigue strength of Nb–Ti stabilized low C microalloyed steel through microstructural modification by innovative thermo-mechanical control processing. International Conference on Advances in Materials & Processing: Challenges & Opportunities (AMPCO 2017), Organized by Department of Metallurgical and Materials Engineering, Indian Institute of Technology Roorkee, India, on 30th Nov-2nd Dec, 2017.
 8. Dasharath Mabrukar, **Suhrit Mula**. Fracture mechanisms of ultrafine grained low SFE Cu-9.6% Zn alloy processed by multiaxial cryoforging. NMD ATM 2017, BITS Pilani, KK Birla Goa Campus, 55th National Metallurgist day & 71st Annual technical meeting, 11-14 Nov, 2017.
 9. V.M. Suntharavel Muthaiah, **Suhrit Mula**. Spark plasma sintered Fe-Cr-Nb alloys for nuclear applications. NMD ATM 2017, BITS Pilani, KK Birla Goa Campus, 55th National Metallurgist day & 71st Annual technical meeting, 11-14 Nov, 2017.
 10. Moses JP, Arpan Arora, V.M. Suntharavel Muthaiah, **Suhrit Mula**, B.V. Manoj Kumar. Microstructure and mechanical properties of nano-Y₂O₃ dispersed Fe-Ni alloys synthesized by mechanical alloying followed by spark plasma sintering. NMD ATM 2017, BITS Pilani, KK Birla Goa Campus, 55th National Metallurgist day & 71st Annual technical meeting, 11-14 Nov, 2017.
 11. Atul Kumar, K. Pal, **Suhrit Mula**. Development of ultrafine-grained Al7075-SiC nanocomposite by stir casting followed by cryorolling. NMD ATM 2017, BITS Pilani, KK Birla Goa Campus, 55th National Metallurgist day & 71st Annual technical meeting, 11-14 Nov, 2017.
 12. V.M. Suntharavel Muthaiah, **Suhrit Mula**. Thermal stability and mechanical properties of spark plasma sintered Fe-Cr-Y alloys prepared by mechanical alloying. ICAMMP-iv, Indian Institute of Technology Kharagpur, India, November 5-7, 2016.
 13. V.M. Suntharavel Muthaiah, **Suhrit Mula**. Effect of Nb addition on structure and thermal stability of nanocrystalline Fe-Cr alloys developed by mechanical alloying. ICAMMP-iv, Indian Institute of Technology Kharagpur, India, November 5-7, 2016.
 14. Atul Kumar, Kaushik Pal, **Suhrit Mula**. Effect of friction stir processing on microstructure and mechanical properties of a stir cast Al 7075-2 wt.% SiC micro and nanocomposite. ICAMMP-iv, Indian Institute of Technology Kharagpur, India, November 5-7, 2016
 15. Sumit Ghosh, **Suhrit Mula**. “Effect of microstructure and mechanical properties of IF steel processed by thermomechanical controlled rolling”. NMD ATM 2015, Le Meridian, Coimbatore. 53rd National Metallurgist day & 69th Annual technical meeting, 13-16 Nov, 2015.
 16. Amit Kumar Singh, **Suhrit Mula**. Enhancement of mechanical properties and corrosion resistance of Al 2024 alloy processed by cryoforging followed by ageing. NMD ATM 2015, Le Meridian, Coimbatore. 53rd National Metallurgist day & 69th Annual technical meeting, 13-16 Nov, 2015.

17. Atul Kumar, K. Pal, **Suhrit Mula**. Effect of process parameters on microstructure and mechanical properties of friction stir processed Al 7075 alloy. NMD ATM 2015, Le Meridian, Coimbatore. 53rd National Metallurgist day & 69th Annual technical meeting, 13-16 Nov, 2015.
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Teaching Experience, New Courses or Laboratories

Title of course taught/teaching	Postgraduate / undergraduate	Sole instructor or with others	Year
At IIT Roorkee			
MTN-504:Phase Transformation	PG (Spring)	Sole instructor	2018

MTN-307, Materials Characterization	UG (Autumn)	Sole instructor	2017
MTN-504:Phase Transformation	PG (Spring)	Sole instructor	2017
MTN-503, Characterization of Materials	PG (Autumn)	Sole instructor	2016
MT-412, Heat Treatment Practices	UG (Spring)	Sole instructor	2016
MTN-307:Materials Characterization	UG (Autumn)	Sole instructor	2015
MT-504: Phase Transformation	PG (Spring)	Sole instructor	2015
MT-409: Characterization Techniques	UG (Autumn)	Sole instructor	2014
MT201B, Materials Science	UG (Spring)	Sole instructor	2014
MT409, Characterization Techniques	UG (Autumn)	Sole instructor	2013
MT201B, Materials Science	UG (Spring)	Sole instructor	2013
At NIT Rourkela			
MM-448; Advanced Engineering Materials	UG, Open elective	Theory taken by me	2011-12
MM-435; Testing of materials	UG	Do	2007, 2008
MM-212; Casting and solidification of materials	UG	Do	2008
MM-455; Corrosion and degradation of materials	UG	Do	2009
MM-646; Composite materials	PG	Do	2007
MM-636; Advanced processing of materials	PG	Do	2008
MM-635; Mechanical testing of materials	PG	Do	2007, 2008
MM-611; Phase transformations of metals	PG	Do	2009
MM-638; Mechanical working of materials	PG	Do	2010
Advanced materials	UG	Do	2011
Computer lab	UG	Laboratory class	2008, 2009
Mechanical testing lab	UG	Do	2009
Composite lab	UG	Do	2008
Heat treatment lab	UG	Do	2007

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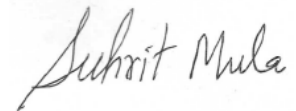
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