

Syed Nasimul Alam

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Qualification

Ph.D. (August, 2010) Metallurgical and Materials Engineering, Indian Institute of Technology, Kharagpur, India.

MS (August 2001)

Materials Engineering (Electronic and Photonic Materials) University of Massachusetts, Lowell, USA.

B.Tech (May 1997) Metallurgical and Materials Engineering, Indian Institute of Technology, Kharagpur, India.

Work Experience

- * Assistant Professor, National Institute of Technology Rourkela, Metallurgical and Materials Engineering. October 2009- Present.
- * Lecturer, National Institute of Technology Rourkela, Metallurgical and Materials Engineering. July 2008- October 2009.
- * Lecturer, Birla Institute of Technology and Science-Pilani, Mechanical Engineering. December 2006-May 2008.
- * Teaching Assistant at University of Massachusetts, Lowell for the Fall Semester of 1999.
- * Joined Tata Iron and Steel Company on 1st July 1997, as Graduate Trainee. Worked as a Senior Officer (Graduate Trainee) for 10 months.
- * Undergone eight weeks training with Steel Authority of India Limited at its Durgapur Steel Plant, India.

Publications

1. S.N.Alam, Synthesis and Characterization of W-Cu Nanocomposites by Mechanical Alloying, Materials Science and Engineering: A, 433(1-2) (2006) 161-168.
2. S. N. Alam, L. Kumar, Mechanical Properties of Aluminium Based Metal Matrix Composites Reinforced with Graphite Nanoplatelets, Materials Science and Engineering: A, 667 (2016) 16-32.
3. S.N.Alam, S.K.Pabi, B.S.Murty, Development of W-Cu Nanocomposites by Mechanical Alloying, Microscopy and Analysis, 18 (6) (2004).
4. S.N.Alam, Characterization of Tungsten Based Nanoparticles Prepared by Mechanical Alloying, Microscopy and Analysis, 21(3) (2007).
5. S.N.Alam, Scanning Electron Microscopical Analysis of Tungsten Incandescent Lamp Filaments, Microscopy and Analysis, 23(5) (2009).

6. S. N. Alam, P. K. Panda, A. K. Singh, Heat, light and change in fine tungsten wire, Metal Powder Report, 64(7) (2009) 16-23.
7. S.N.Alam, M. Poloju, Zinc Oxide Nanostructures in the Zinc Electrode of a Zinc- Carbon Dry Cell, Microscopy and Analysis, 24(6) (2010) 9-12.
8. S. N. Alam, M. Poloju, S. S. Sahu, M. K., A. K. Singh, SEM, EDX and XRD of Zinc Oxide Nanostructures Synthesized by Zinc Oxidation, Microscopy and Analysis, 26(4) (2012) 11-14.
9. S. N. Alam, M. K.Mishra, SEM And EDX Study of Intermetallics in a Copper-Tin System and the Oxidation Behaviour of Tin, Microscopy and Analysis, 27(1) (2013).
10. S. N. Alam, H. Singh, Development of copper-based metal matrix composites: An analysis by SEM, EDS and XRD, Microscopy and Analysis, 28(4) (2014) S8-S13.
11. S. S. Alam, S. N. Alam, Mathematics for All and Forever IISRR- International Journal of Research, 1(1) 6-35. ISSN-23946873
12. H. Singh, L. Kumar, S. N. Alam, Development of Cu Reinforced SiC Particulate Composites, 4th National Conference on Processing and Characterization of Materials IOP Publishing IOP Conf. Series: Materials Science and Engineering 75 (2015) 012007 doi:10.1088/1757-899X/75/1/012007
13. S. N. Alam, P. Mishra, R. Kumar, Effect of Ag on Sn-Cu and Sn-Zn Lead Free Solders, Springer, Materials Science-Poland, 33(2) (2015) 317-330.
14. S. N. Alam, M. K. Mishra, M. Padhy, A. N. S. S. Swain, Purna Mishra, Ayan Saha, Development and Characterization of Sn-Zn-Bi Lead Free Solder, Transactions of Indian Institute of Metals, 68(5) (2015) 881-896.
15. D. Panda, L. Kumar, S. N. Alam, Development of Al-Fe₃Al Nanocomposite by Powder Metallurgy Route, 4th International Conference on Materials Processing and Characterization, Materials Today: Proceedings 2 (2015) 3565-3574.
16. L. Kumar, S. N. Alam, S. K. Sahoo, Mechanical properties, wear behavior and crystallographic texture of Al-multiwalled carbon nanotube composites developed by powder metallurgy route, Journal of Composite Materials, 51(8) (2017) 1099-1117.
17. P. Bhuyan, S. N. Alam, D. Panda, L. Kumar, H. Singh, Synthesis and Characterization of Cu-Fe₃Al Composites using Powder Metallurgy Route, Materials Today: Proceedings 4 (2017) 213-223, 5th International Conference of Materials Processing and Characterization (ICMPC 2016).
18. D. Panda, P. Bhuyan, L. Kumar, S. N. Alam, Synthesis of Fe₃Al Intermetallic Compound by Mechanical Alloying, Arab J. Sci. Eng., DOI 10.1007/s13369-017-2526-y
19. Effect of graphite nanoplatelets on the mechanical properties of alumina-based composites Ceramics International, 43(14) 2017, 11376-11389 S. N. Alam, N. Sharma, B. C. Ray, S. Yadav, K. Biswas.

Awards and Achievements

1. Placed among top 20% of reviews received in Metallurgical and Materials Transactions.
2. Most Downloaded Materials Science and Engineering: A Articles in the last 90 days (14 June 2016). “Mechanical Properties of Aluminium Based Metal Matrix Composites Reinforced with Graphite Nanoplatelets” by Syed Nasimul Alam and Lailesh Kumar.

3. 2nd Prize in Metallography contest of NCPCM 2014, 4th National Conference of Processing & Characterization of Materials, Organized by Department of Metallurgical and Materials Engineering and Indian Institute of Metals, Rourkela Chapter. December 5-6, 2014. Harshpreet Singh*, Lailesh Kumar, Deepnagar Panda, Syed Nasimul Alam, Metallurgical and Materials Engineering, National Institute of Technology Rourkela.
4. Vijay Rattan Award, India International Friendship Society, 2005.
5. 3rd prize for poster presented at NESM Fall Symposium 2000 at Marriott, Newton, MA. "Microstructural Characterization of ARAS/Al-mirror and ITO thin films using TEM", Syed N Alam, Tam Yau Chan, Changmo Sung.
6. Secured 4th position in district level symposium on 'Atomic Energy and its Hazards', (Midnapur district, West Bengal, India). It was organized by the Ministry of Science and Technology (West Bengal, India) and the Birla Foundation for Science and Technology.
7. Placed among the top 5% in Indian Association of Physics Teachers (IAPT) at the state level (West Bengal, India, 1993).

Books Published

1. Name: Understanding MATLAB: A Textbook for Beginners
Authors: S.N. Alam and S.S. Alam
ISBN: 9789382332336
Publisher: I.K. International Publishing House Pvt. Ltd, Year: August 2013
2. Name: Advanced Guide to MATLAB: Practical Examples in Science and Engineering
Authors: S. N. Alam, S. Islam and S. K. Patel
ISBN-10: 9382332332
Publisher: I.K. International Publishing House Pvt.Ltd. Year: November 2015

Book Chapter

1. Chapter title: "Sample Preparation Techniques for Electron Microscopy 50 Years of SEM and Beyond!" Pages: 723-730, 2017
Book title: "Microscopy and imaging science: practical approaches to applied research and education", Editor: A. Méndez-Vilas

Reviewer

1. Carbon (Elsevier)
2. Journal of Alloys and Compounds (Elsevier)
3. Metallurgical Transactions (Springer)
4. Material Science and Engineering A (Elsevier)
5. Journal of Basic and Applied Research international (International Knowledge Press, UK)
6. Transactions of the Indian Institute of Metals (Springer)
7. Water Research, A Journal of the International Water Association (IWA) (Elsevier)
8. Silicon (Springer)

Member of Editorial Board

1. Editor in the Journal of Advanced Research in Manufacturing, Material Science & Metallurgical Engineering. ADR Publications, A division of AS Research & Learning Solutions Pvt. Ltd.
2. Editor of International Journal on Current Research in Mining, Material & Metallurgical Engineering, Eureka Publications

Students Guided

Category	Number of Students and Status
Ph.D.	1-Awarded 2-Ongoing
M.Tech.	8 Completed
M.Tech.(Research)	2-Completed as supervisor 2-Completed as co-supervisor
B.Tech.	14 Completed
Summer Interns	6 Completed

Conferences/Workshops Organized

1. Convener of National Conference on Processing and Characterization of Materials (NCPCM) 2015 held during 12-13 December 2015 at Metallurgical and Materials Engineering, National Institute of Technology Rourkela, Orissa, Pin-769008, India.
2. Co-Convener of National Conference on Processing and Characterization of Materials (NCPCM) 2015 held during 5-6 December 2014 at Metallurgical and Materials Engineering, National Institute of Technology Rourkela, Orissa, Pin-769008, India
3. Organizer of 3 Day Workshop on Computational Techniques and Mathematical Modelling (CTMM-17) for Academia and Industry during 1-3 November, 2017 at National Institute of Technology Rourkela, Orissa, Pin-769008, India.

Oral Presentations/ Invited Talks/ Contributory Talks

1. Invited talk delivered on Metallographic Sample Preparation at OP Jindal University, Punjipathra, Raigarh, (C.G.), on 21st October 2016.
2. Talk delivered at KIIT University, Bhubaneswar, Odisha, during MNMC 2016 on 29th January 2016 on Comparison of α -Al₂O₃ Synthesized by Sol-Gel Process using AlCl₃ and Al(NO₃)₃ as Precursors. S. N. Alam, L. Kumar, A. R. Sahoo
3. Contributory talk delivered during the Prof. S.K. Pabi Symposium on Nano-Materials for Structural, Functional and Energy Applications, 4th International Conference on Advances in Materials and Materials Processing iCAMMP-iv during 5-7 November 2016 at IIT Khargapur, West Bengal, India.

Administrative Responsibilities

1. Member of the Negotiation Committee a Sub-Committee of BPCLAC (Biju Patnaik Central Library Advisory Committee), BPCL, NIT Rourkela.
2. Chairman, STB (Student Textbook) Section, BPCL, NIT Rourkela.
3. Vice President of Art and Cultural Society, Student Activity Center, NIT Rourkela (August, 2017-)

Seminars, Posters and Metallographs

* Presented on 'Study of Particle Redistribution during Remelting of Al/SiC (particulate) Composites' in the Composite materials section of the 42nd Congress of Indian Society of Theoretical and Applied Mathematics held at South Gujarat University, India, during December 28-31,1997.

* Presented poster at the MRS Fall 2000 meeting at Hynes Convention Center, Boston. "Microstructural Characterization of ARAS/Al-mirror and ITO thin films using TEM", Syed N Alam, Tam Yau Chan, Changmo Sung.

* Presented poster at NESM Fall Symposium 2000 at Marriott, Newton, MA. "Microstructural Characterization of ARAS/Al-mirror and ITO thin films using TEM", Syed N Alam, Tam Yau Chan, Changmo Sung

* Paper presented at The American Ceramic Society Meeting April 22-25, 2001 held at Indiana Convention Center. (A2C-01-2001) Interfacial Delamination Study of ITO and ARAS Thin Films by TEM. A.Syed, Rui Liu, C.Sung, Center of Advanced Materials, University of Massachusetts, Lowell, D.Lee, K.Woo, G.Yang Samsung Corning Korea

* Metallograph presented at 57th Annual Technical Meeting of The Indian Institute of Metals held at Science City, Kolkata on 14-16th November, and 2003. Title: Copper Flowers in Tungsten Garden. S.N.Alam, S.K.Pabi, B.S.Murty.

* Poster presented at International Conference on Nano Science and Technology, ICONSAT 2003, December 17-20, 2003 at Kolkata, India organised by Department of Science and Technology, Govt. of India. Title: Sintering Behaviour of W-based nanocomposites prepared by mechanical Alloying. S.N.Alam, S.K.Pabi, B.S.Murty.

* Poster presented at the 56th Annual Technical Meeting of The Indian Institute of Metals held at the M.S. University of Baroda on 14-17th November, 2002. Title: Development of W based Nanocomposites by Mechanical Alloying. S.N.Alam, B.S.Murty and S.K.Pabi.

* Poster presented at the Nano-2004, Kolkata, India. Title: Development of W based Nanocomposites by Mechanical Alloying. S.N.Alam, B.S.Murty and S.K.Pabi.

* Poster presented at the MRS 2004 Fall Meeting at Hynes Convention Center, Boston. Title: Development of W based Nanocomposites and Intermetallics by Mechanical Alloying. S.N.Alam, B.S.Murty and S.K.Pabi.

* Poster presented at the MRS 2010 Fall Meeting at Hynes Convention Center, Boston. Title: Zinc Oxide Nanostructures Synthesized by Oxidization of Zinc. Nasimul Alam Syed, Shakti Swarup Sahu, Manish Kumar, Animesh Kumar Singh and Madhukar Poloju; Metallurgical and Materials Engineering, NIT Rourkela, Rourkela, Orissa, India.

* Poster presented at the Nation Symposium for Materials Research Scholars, MR – 13 at Indian Institute of Technology Bombay, Title: Synthesis of E-glass fibre reinforced Cu matrix composite, H. Singh, S. N. Alam.

* Poster presented 2013 MRS Fall Meeting & Exhibit December 1-6, 2013, Hynes Convention Center, Boston, Massachusetts. Title: Synthesis and Characterization of Exfoliated Graphite (EG) and to Use it as Reinforcement in Zn-based Metal Matrix Composites, Syed Nasimul Alam, Lailesh Kumar, Metallurgical and Materials Engineering, NIT Rourkela, Rourkela, Orissa, India.

* Poster presentation at 8th India-Singapore symposium to be held at IIT Kanpur from 25-27 February 2015 on "8th India-Singapore Symposium in Condensed Matter Physics", L. Kumar, S. N. Alam, N. Sharma.

References

1. Prof. S.C.Mishra
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2. Dr. S K.Patel
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