

CURRICULAM VITTE

Dr.S.K. Srivastava

Professor

Inorganic Materials and Nanocomposite Laboratory

Department of Chemistry

Indian Institute of Technology, Kharagpur-721302, India

E-mails: suneel@chem.iitkgp.ac.in sunil111954@yahoo.co.uk suneelchemkqp@gmail.com



Date of Birth: 11.11. 1954 **Family:** Poonam (wife), Mili (daughter), Indrajit (son)

Education

- B. Sc.(1974), Lucknow University, Lucknow
- M.Sc. (1976), Lucknow University, Lucknow
- D.I.I.T (1979), Indian Institute of Technology, Kharagpur
- Ph.D (1985), Indian Institute of Technology, Kharagpur

Professional Affiliations

- Visiting Professor (December 1, 2020 to November 31, 2021)
- Professor (2007 -Till date, Indian Institute of Technology, Kharagpur)
- Associate Professor (2002–07), Indian Institute of Technology, Kharagpur)
- Assistant Professor (1994–02), Indian Institute of Technology, Kharagpur
- Lecturer (1990-94), Indian Institute of Technology, Kharagpur
- Senior Research Assistant (1985-90), Indian Institute of Technology, Kharagpur

Awards and Recognitions

- DAAD Fellow
- Featured in a recent Stanford University report that has ranked the top 2 per cent scientists globally in 2020 and 2021.
- American Chemical Society awarded three year membership in recognition of the engagements with the Society's mission of service to the global community of Chemists
- Editorial Board Member, Scientific Reports (Nature Publications)
- Editor, Journal of Nano Energy and Power Research, Amer. Sci.Publ., USA.
- Associate Editor, Nanoscience and Nanotechnology Letter, Amer. Sci.Publ., USA.
- Associate Editor, Journal of Nanoscience and Nanotechnology, Amer. Sci. Publ., USA
- Editorial Advisory Board Member, Recent Patents on Nanotechnology, Bentham Science Publishers Ltd. USA

Visits Abroad

- Visited IPF Dresden, Germany as DAAD Fellow from 14.05.2013-16.07.2013.
- Visited Walther-Meissner-Institut der Bayerischen Akademie der Wissenschaften, Technische Universität München, Germany as DAAD fellow from 04.05.09 - 31.06.2009.
- Visited Department of Physics, University of Nantes, France as Visiting Scientist fellow from 15.5.2007- 15.07.2007.
- Visited Institute of Polymer Chemistry and Chemical Technology University of Karlsruhe, Germany as DAAD Fellow from 01.05.2006 -16.07.2006.
- Visited Department of Physics, University of Nantes, France as Visiting Scientist fellow from 06.06.2003 -16.07.2003.
- Visited Institute of Polymer Chemistry and Chemical Technology University of Karlsruhe, Germany as DAAD Fellow from 02.05.2002 - 30.07.2002.
- Visited University of Siegen, Department of Inorganic Chemistry, University of Siegen Germany as DAAD Fellow from 02.05.1999 - 22.7.1999.
- Visited University of Siegen, Department of Inorganic Chemistry, University of Siegen Germany as DAAD Fellow from 02.05.1994 - 30.07.1994.
- Visited Institute of Physical Chemistry and Electrochemistry, University of Karlsruhe, Germany as DAAD Fellow from 02.05.1988 - 11.07.1989.

Spécialisation: Physical Chemistry

Teaching

- Physical Chemistry at the B.Tech First year level, B.Sc and M.Sc levels
- High Pressure Science and Technology
- Adsorption and Catalysis
- Instrumental Methods of Analysis

Teaching Recognition

- Best Teacher Awards in B.Tech First year Chemistry Laboratory in 2014-15.
- Best Teacher Awards in B.Tech First year Chemistry Laboratory in 2018-19.

Administrative Experience

- Head, School of Energy Science: 2016-2019
- Professor In charge, Central Library, 2016-2019.
- Training and Placement, IIT Kharagpur, 2009-2012.

Memberships

- Life member of 'Materials Research Society of India',
- Life member of 'Society of Polymer Science, India'
- Member, American Chemical Society

Research Interest

The research work deals mainly with the synthesis of 1 D nanostructure and thin films of II-VI and V-VI semiconductors and evaluation of their thermoelectric and optoelectronic properties. His research field also includes work on clay, layered double hydroxide, carbon nanotubes, graphene and their uses as nanofiller in elastomers and plastics polymer nanocomposites. The other research interests are in the field of Zero, One and Two Dimensional Semiconducting and Magnetic Nanomaterials for their applications in Lithium Ion Battery, Supercapacitor, Hydrogen/Oxygen Evolution Reactions, and Environments.

Research Papers Published **188** (Journals) **24** (Book Chapters)

Highlighted Article (*Recognized as HOT ARTICLE by ACS among top 25 articles in 2015*):

Poulomi Roy and Suneel Kumar Srivastava, Nanostructured anode materials for lithium ion batteries, *J. Mater. Chem. A*, 3, 2454-2484 (2015)

Highlighted Article: Poulomi Roy and Suneel Kumar Srivastava, Nanostructured Copper Sulfides: Synthesis, Properties and Applications, *Cryst. Eng. Comm*, 17, 7801-7815 (2015)

Invited contribute from the CGD's Virtual Special Issue - Structural Chemistry in India:

Emerging Themes: A.K. Sahoo and S.K. Srivastava, Morpholine-4-Carbodithioate Se and Te Complex as Single Source Precursor for Synthesis of Se and Te with diverse morphologies, *Crystal Growth and Design*, 11, 1597-1606 (2011).

Citation and other Details: <https://scholar.google.com/citations?user=cWzcKJoAAAAJ>

Total number of Citation: 7041 (Up to 30.11.2021)

h-index: 46 *i-10 Index:* 127

ORCID ID: <https://orcid.org/0000-0002-9297-2282>

Ph.D Thesis Supervised

1. Soumi Dutta, Fabrication of sustainable nano adsorbents in removal of toxic pollutants from contaminated water, (2021)
2. Anurupa Maiti, Heteroatom Doped Metal Chalcogenide as a Superior Electrocatalyst in Acidic and Basic medium, (2021)
3. Kalyan Ghosh, Fabrication of Carbonaceous Nanocomposites of Transition Metal Sulfides/Oxides and their Applications in Energy and Preventing Environmental Pollution, (2021)
4. Rakesh Manna, Functionalized graphene based nanocomposites as flexible dielectric materials and microwave absorber, (2021).
5. Jayant Mondal, Synthesis of Nanostructured Materials for Optical Sensing and Electromagnetic Interference Shielding Applications, (2021)
6. Ayon Karmakar, Electrocatalytic Performance of Mixed Transition Metal based Nanostructured Materials in Alkaline Water Splitting (2020).

7. Kunal Manna, Role of Magnetic and Conducting Carbonaceous Nanomaterials in Fabrication of Polymer Nanocomposites in Electromagnetic Interference Shielding Application (2020).
8. Bhagabat Bhuyan, Fabrication of hybrid filler reinforced elastomer and elastomeric blend nanocomposites (2018).
9. Saheli Roy, 3D Hybrid filler reinforced thermoplastic polyurethane and thermoplastic polyurethane acrylonitrile butadiene blend rubber nanocomposites (2016).
10. B. Kartick, Fabrication and applications of nanomaterials in energy devices (2015).
11. R..Pannigrahi, Fabrication of core@shell structure of conducting polymer microspheres and their applications in environmental remediation (2015).
12. P.K. Sahoo, Nanostructured tungsten and its composites/alloys: Synthesis, characterization and densification (2014).
13. S. Senapati, Development and applications of ferromagnetic nanomaterials in environmental remediation (2014).
14. P.K. Sahu, Elemental and binary semiconducting nanomaterials of diverse morphology: Synthesis and applications (2014).
15. M. Kotal, Preparation, characterization and properties of polyurethane nanocomposites and nanoblends (2012).
16. B.Pradhan, 2D and 3D nanofiller reinforced silicone rubber nanocomposites: Preparation, characterization and properties (2013).
17. Tapas Kuila, Preparation, characterization, and properties of ethylene vinyl acetate Nanocomposites (2009).
18. H. Acharya, Synthesis, characterization and properties of polyolefinic elastomer nanocomposites (2008).
19. J. Ota, One dimensional nanostructure of some group V-VI semiconductors: Synthesis, characterization and coating with conducting polymer (2008).
20. Poulomi Roy, Development and characterization of some nanodimensional Semiconducting metal chalcogenides (2007).
21. M. Pramanik, Studies on some layer type materials and their polymer Nanocomposites (2005).
22. T. Mandal, Synthesis and characterization of some layer type transition metal dichalcogenides and their intercalation compounds (2000).
23. D. Palit, Synthesis and Characterization of some layer type ternary and quaternary chalcogenides (1998).

Sponsored Projects undertaken a Principal Investigator

- CSIR: Development and applications of polyolefin and polyolefinic rubber hybrid filler nanocomposites (2011-2014) of 17.92 Lakhs
- DRDO: Development of polypyrrole/disinfectant nanocomposites for effective purification of water (2012-13) of Rs 5.15 Lakhs.
- DRDO: Development of silicon carbide supported graphene polymer nanocomposites for EMI shielding applications (2011-14) of Rs, 49.7 Lakhs.

- CSIR: Investigations on development and properties of poly-olefinic elastomer nanocomposites (2009-12) of Rs.13.5 Lakhs.
- DST: Development and characterization of semiconducting nanotubes/nanorods for thermoelectric applications (2007-10) of Rs. 17.9 Lakh.
- Epoxy reinforced inorganic material filled organic polymer composites in tribological applications (2007-10) of Rs.24.5 Lakh.
- CSIR: Development and characterization of semiconducting thin films (2005-08) of Rs.11.3 Lakh.
- MHRD: Development and characterization of nanomaterial as filler in polymer composites (2003-06) of Rs 20 Lakh.
- CSIR: Organic polymer-inorganic materials composites (2000-03) of Rs. 13.7 Lakh.

Books Published

- Poulomi Roy and Suneel Kumar Srivastava, Nanomaterials for Electrochemical Energy Storage Devices, Scrivener-Wiley Publishing, USA, 2019.
- Suneel Kumar Srivastava and Vikas Mittal, Hybrid Nanomaterials: Developments in Energy, Environments and Polymer Nanocomposites, Scrivener-Wiley Publishing, USA, (2017).

Book Chapters

1. Subhasis Shit, Suneel Kumar Srivastava, and Tapas Kuila, Noble metal-free bifunctional electrocatalysts for overall water splitting in alkaline medium in *Advances in Material Research and Technology*, Springer, 2021 (Accepted).
2. S.K. Srivastava, Intrinsically Conducting Polymer Nanocomposites in Shielding of Electromagnetic Pollution, in *Nanostructured Materials for Environmental Applications*, Editors: Balakumar, Subramanian, Keller, Valérie, Shankar, M.V. (Eds.) Springer Nature 2021 page 172-222.
3. Suneel Kumar Srivastava, Rubber/Conducting Polymer Blends: A Review, *Conducting Polymer Composites*, edited by Vikas Mittal Central West Publishing, Australia, 2019 page 157-194.
4. Poulomi Roy, Shipra Raj, Suneel Kumar Srivastava, Nanostructured Metal Oxide, Hydroxide, and Chalcogenide for Supercapacitor Applications, *Nanomaterials for Electrochemical Energy Storage Devices*, Scrivener Publishing, 2019, page: 521-571.
5. Suneel Kumar Srivastava, Thermal properties of Rubber Nanocomposites Based on Carbon Nanofiller in *Carbon-Based Nanofillers and Their Rubber Nanocomposites, Fundamentals and Applications*, Srinivasarao Yaragalla Raghvendra Kumar Mishra Sabu Thomas Nandakumar Kalarikkal Hanna Maria (**Editors**), Elsevier, page 287-324, 2019.
6. Suneel Kumar Srivastava, Mechanical and dynamical mechanical properties of layered double hydroxide filled elastomer and elastomeric blend nanocomposites in *Layered Double Hydroxide Polymer Nanocomposites*, Sabu Thomas Saju Daniel (Editors), Elsevier, Page 111-137, 2019.
7. Suneel Kumar Srivastava, Barnali Ghosh (Pal), Metallic biomaterials for dental implant systems, in *Fundamental Biomaterials: Metals*, Woodhead Publishing Series in *Biomaterials*, Preetha Balakrishnan, Sreekala M S, Sabu Thomas (Editors), Elsevier, Pages 111-137, 2018,

8. Suneel Kumar Srivastava and Bhagabat Bhuyan, Rubber nanocomposites for tire tread application, in *Rubber Nanocomposites and nanotextiles in automobiles*, Bireswar Banerjee (Ed.), Rapra Publication, (2018).
9. Suneel Kumar Srivastava and Vikas Mittal, Advanced nanostructured materials in electromagnetic shielding, in *Hybrid Nanomaterials: Developments in Energy, Environments and Polymer Nanocomposites*, S.K.Srivastava and V. Mittal (Eds), Scrivener-Wiley, page 241-320(2017).
10. Suneel Kumar Srivastava and Vikas Mittal, Recent developments on elastomer/hybridfillernanocomposites, in *Hybrid Nanomaterials, in Developments in Energy, Environments and Polymer Nanocomposites*, S.K.Srivastava and V. Mittal (Eds), Scrivener-Wiley Publishing, USA, page 199-240, (2017).
11. Suman Chhetri, Tapas Kuila, Suneel Kumar Srivastava, High performance hybrid filler reinforced epoxy nanocomposites, in *Hybrid Nanomaterials: Developments in Energy, Environments and Polymer Nanocomposites*, S.K.Srivastava and V. Mittal (Eds), Scrivener-Wiley Publishing, USA, page 371-422, (2017).
12. Suneel Kumar Srivastava, Metal oxide filled micro and nano natural rubber composites, in *Natural rubber materials, Volume 2: Composites and nanocomposites*, Sabu Thomas, Hanna J. Maria, Jithin P. Joy, Chin Han Chan and Laly A. Pothen (Eds.), *RSC Polymer Chemistry Series* No. 8 (2014).
13. B. Pradhan, S.K. Srivastava, Novel silicone rubber/layered double hydroxide nanocomposite: preparation and characterization, in *Advanced Nanomaterials and Nanotechnology*, *Springer Proceeding in Physics*, 2013, 367-375.
14. S.K. Srivastava, and M. Kotal, Recent Advances on Preparation, Properties and Applications of Polyurethane Nanocomposites, in *Nanocomposites Series: Advanced Composites – Materials, Manufacturing and Engineering*, J. Paulo Davim and Constantinos A. Charitdis (Eds.), DE Gruyter, Germany, 33-93 (2013).
15. Suneel Kumar Srivastava and Tapas Kuila, Fire retardancy of elastomers and elastomernanocomposites, in *Polymer Green Flame Retardants: A Comprehensive Guide Additives and Their Applications*, edited by C.D Papaspyrides and Professor P. Kiliari (Eds.), Elsevier, 597-651 (2013).

Publications in Journals

2021

1. A Maiti, S. K Srivastava, Ru-Doped CuO/MoS₂ Nanostructures as Bifunctional Water-Splitting Electrocatalysts in Alkaline Media *ACS Applied Nano Materials* 2021, 4 (8), 7675-7685.
2. S Dutta, SK Srivastava, B Gupta, AK Gupta, Hollow Polyaniline Microsphere/MnO₂/Fe₃O₄ Nanocomposites in Adsorptive Removal of Toxic Dyes from Contaminated Water, *ACS Applied Materials & Interfaces*, 2021 13, 45, 54324–54338

3. K Ghosh, SK Srivastava, Fabrication of N-Doped Reduced Graphite oxide/MnCo₂O₄ Nanocomposites for Enhanced Microwave Absorption Performance, *Langmuir*, 2021, 37, 6, 2213–2226.
4. Manna, R.; Ghosh, k.; Srivastava, S. K. Functionalized Graphene/Nickel/Polyaniline Ternary Nanocomposites: Fabrication and Application as Electromagnetic Wave Absorber, *Langmuir* 2021, 37, 24, 7430–7441.
5. J Mondal, SK Srivastava, δ-MnO₂ Nanoflowers and Their Reduced Graphene Oxide Nanocomposites for Electromagnetic Interference Shielding, *ACS Applied Nano Materials* 2021, 3, 11048-11059.
6. J Mondal, SK Srivastava, Room-Temperature One-Step Synthesis of Silver/Reduced Graphene Oxide Nanocomposites as an Excellent Microwave Absorber, *Langmuir* 2021, 37, 45, 13409–13419
7. R. Manna, S.K. Srivastava, Reduced Graphene Oxide/Fe₃O₄/Polyaniline Ternary Composites as a Superior Microwave Absorber in the Shielding of Electromagnetic Pollution. *ACS Omega* 2021, 6, 9164-9175.
8. R. Manna, K. Ghosh, S.K. Srivastava. Fabrication of High Dielectric Materials Through Selective Insertion of Functionalized Reduced Graphene Oxide on Hard Segment of Thermoplastic Polyurethane. *Journal of Nanoscience and Nanotechnology*, 2021, 21, 5569-05582.
9. K Ghosh, SK Srivastava, Enhanced Supercapacitor Performance and Electromagnetic Interference Shielding Effectiveness of CuS Quantum Dots Grown on Reduced Graphene Oxide Sheets, *ACS Omega*, 2021, 6, 7, 4582–4596.
10. Soumi Dutta, Bramha Gupta, Suneel Kumar Srivastava, Ashok Kumar Gupta, Recent advances on the removal of dyes from wastewater using various adsorbents: A critical review, *Materials Advances*, 2021, 2, 4497– 4531,
11. Parida, S.; Parida, R.; Parida, B.; Srivastava, S. K.; Nayak, N. C. Exfoliated Graphite Nanoplatelet (xGnP) Filled EVA/EOC Blends Nanocomposites for Efficient Microwave Absorption in the S-band (2-4GHz), *Compos. Sci. and Technol.* 2021, 207, 108716.
12. S Dutta, SK Srivastava, AK Gupta, Polypyrrole–polyaniline copolymer coated green rice husk ash as an effective adsorbent for the removal of hexavalent chromium from contaminated water, *Materials Advances* 2021, 2 (7), 2431-2443.

2020

1. K. Ghosh, S.K. Srivastava, Superior Supercapacitor Performance of Bi₂S₃ Nanorod/Reduced Graphene Oxide Composites, *Dalton Trans.* 2020, 49, 16993-17004.
2. J. Mondal, S.K. Srivastava, δ-MnO₂ Nanoflowers and Their Reduced Graphene Oxide Nanocomposites for Electromagnetic Interference Shielding, *ACS Appl. Nano Mater.* 2020, 3, 11048-11059.

3. A Karmakar, SK Srivastava, Transition-Metal-Substituted Cobalt Carbonate Hydroxide Nanostructures as Electrocatalysts in Alkaline Oxygen Evolution Reaction, *ACS Applied Energy Materials* 2020, 3, 7335-7344
4. S Dutta, K Manna, SK Srivastava, AK Gupta, MK Yadav, Hollow Polyaniline Microsphere/Fe₃O₄ Nanocomposite as an Effective Adsorbent for Removal of Arsenic from Water, *Scientific reports* 2020, 10, 1-14
5. A Maiti, SK Srivastava, N, Ru Codoped Pellet Drum Bundle-Like Sb₂S₃: An Efficient Hydrogen Evolution Reaction and Hydrogen Oxidation Reaction Electrocatalyst in Alkaline Medium, *ACS Applied Materials & interfaces* 2020, 12), 7057-7070.
6. K Manna, SK Srivastava, Tuning of Shells in Trilaminar Core@ Shell Nanocomposites in Controlling Electromagnetic Interference through Switching of the Shielding Mechanism, *Langmuir* 2020, 36, 4519-4531.
7. A Roy, SK Srivastava, SL Shrivastava, AK Mandal, Hierarchical Assembly of Nanodimensional Silver–Silver Oxide Physical Gels Controlling Nosocomial Infections, *ACS Omega* 2020, 5, 50, 32617–32631.

2019

1. P Murugaiyan, A Mitra, AK Panda, AS Kumar, RK Roy, K Manna, Electromagnetic interference shielding effectiveness of amorphous and nanocomposite soft magnetic ribbons, *Physica B: Condensed Matter* **2019**.568, 13-17,
2. K. Ghosh, SK Srivastava, S Puravankara, Nanostructured ZrO₂/MWCNT Hybrid Materials: Fabrication, Characterization and Applications in Shielding of Electromagnetic Pollution *Journal of nanoscience and nanotechnology* 2019, 19 (6), 3367-3375.
3. S Chhetri, NC Adak, P Samanta, NC Murmu, SK Srivastava, T Kuila, Synergistic effect of Fe₃O₄ anchored N-doped rGO hybrid on mechanical, thermal and electromagnetic shielding properties of epoxy composites, *Composites Part B: Engineering* **2019**,166, 371-3813,
4. S Raj, SK Srivastava, P Kar, P Roy, In situ growth of Co₃O₄ nanoflakes on reduced graphene oxide-wrapped Ni-foam as high performance asymmetric supercapacitor, *ElectrochimicaActa* 2019,302, 327-337,
5. B Bhuyan, SK Srivastava, J Pionteck, Multiwalled carbon nanotubes/Hectorite hybrid reinforced styrene butadiene rubber nanocomposite: Preparation and properties, *Polymer-Plastics Technology and Materials* 2019 58 (5), 537-546..
6. SK Srivastava, YK Mishra, Nanocarbon reinforced rubber nanocomposites: detailed insights about mechanical, dynamical mechanical properties, Payne, and Mullin effects, *Nanomaterials* 2018 8 (11), 945,

2018

1. S.K. Srivastava, Y.K. Mishra, Nanocarbon reinforced rubber nanocomposites: Detailed insights about mechanical, dynamical mechanical properties, Payne, and Mullin effects, *Nanomaterials* 2018, 8, 945/1-945/56.

2. V. Sharma, K. Manna, S.K. Srivastava, A. Chandra, Hollow nanostructures of metal oxides as efficient absorbers for electromagnetic interference shielding, *Journal of Physics D: Applied Physics* 52 (1), 015301
3. AnurupaMaiti, Suneel Kumar Srivastava, Sulphur edge and vacancy assisted nitrogen-phosphorus co-doped exfoliated tungsten disulfide: a superior electrocatalyst in hydrogen evolution reaction, *J. Mater. Chem. A* 2018.DOI: 10.1039/c8ta06918b
4. K Manna, SK Srivastava, Contrasting Role of Defect-Induced Carbon Nanotubes in Electromagnetic Interference Shielding, *The Journal of Physical Chemistry C*, 2018, 122,19913-19920.
5. B Bhuyan, SK Srivastava, S Puravankara, V Mittal, Magnesium Aluminium Layered Double Hydroxide Assisted Dispersion of Multiwalled Carbon Nanotubes for Enhanced Reinforcement of Ethylene-co-Vinyl Acetate Matrix, *Macromolecular Research*, 2018, 26, 868-871.
6. J Mondal, SK Srivastava, Green Synthesis of Carbon Dot Weak Gel from Pear Juice: Optical Properties and Sensing Application, *ChemistrySelect*, 2018, 3, 8444-8457.
7. B Bhuyan, SK Srivastava, J Pionteck, Multiwalled Carbon Nanotubes/Hectorite Hybrid Reinforced Styrene Butadiene Rubber Nanocomposite: Preparation and Properties, *Polymer-Plastics Technology and Engineering*, 2018, <https://doi.org/10.1080/03602559.2018.1493117>.
8. B Bhuyan, A Roy, SK Srivastava, V Mittal, Multiwalled carbon nanotube/montmorillonite hybrid filled ethylene-co-vinyl acetate nanocomposites with enhanced mechanical properties, thermal stability, and dielectric response, *Polymer Engineering & Science*, 2018, 58, 1155-1165.
9. B Bhuyan, SK Srivastava, V Mittal, Ethylene-co-Vinyl Acetate/MWCNTs/Hectorite Elastomeric Nanocomposites: Characterization and Electrical Properties,*Journal of Nanoscience and Nanotechnology*, 2018, 18, 4057-4064.
10. S Raj, S Kumar, SK Srivastava, P Kar, P Roy, Deposition of Tin Oxide Thin Films by Successive Ionic Layer Adsorption Reaction Method and Its Characterization, *Journal of Nanoscience and Nanotechnology*, 2018, 18, 2569-2575.
11. RitwikPanigrahi, Suneel Kumar Srivastava, Jürgen Pionteck, Fabrication of Elastomer Blends Involving Core (Polystyrene)@Shell (Polyaniline) Approach, their Characterization and Applications in Electromagnetic Shielding, *Rubber Chemistry and Technology*, 2018), 91 (1), 97–119.
12. K Ghosh, S K Srivastava, S. Puravankara, Nanostructured ZrO₂/MWCNT Hybrid Materials: Fabrication, Characterization and Applications in Shielding of Electromagnetic Pollution, *J Nanosci. Nanotechnol.* 2019 Jun 1;19(6):3367-3375.

2017

1. R Manna, SK Srivastava, Fabrication of functionalized graphene filled carboxylated nitrile rubber nanocomposites as flexible dielectric materials, *Materials Chemistry Frontiers*, **2017**, 1, 780-788

2. B. Bhuyan¹ and S. K. Srivastava, J. Pionteck²MWCNT/Hectorite hybrid filled acrylonitrile butadiene rubber/ethylene-co-vinyl acetate blend nanocomposites preparation and properties, *J Polym Res* (2017) 24: 150.

2016

1. S. K Srivastava, B Kartick, S Choudhury, M Stamm, Thermally fabricated MoS₂-graphene hybrids as high performance anode in lithium ion battery, *Materials Chemistry and Physics* 183, 383-391.
2. R. Pannigrahi, S.K. Srivastava and J. Pionteck, Polarity directed expulsion of polystyrene from polystyrene@polyaniline in fabrication of conducting blends of diverse rubbers, *Rubber Chemistry and Technology*, (Under consideration), 2016.
3. K Manna, S.K Srivastava, V Mittal, Role of enhanced hydrogen bonding of selectively reduced graphite oxide in fabrication of poly (vinyl alcohol) nanocomposites in water as EMI shielding material, *J. Phys. Chem. C* 120, 2016, 17011-17023,
4. S Roy, SK Srivastava, V Mittal, Noncovalent assembly of carbon nanofiber-layered double hydroxide as a reinforcing hybrid filler in thermoplastic polyurethane–nitrile butadiene rubber blends, *J. Appl. Polym. Sci.* 133, 2016, DOI: 10.1002/app.43470.
5. S. Chhetri, P. Samanta, NC Murmu, S.K. Srivastava, T. Kuila, Effect of dodecyl amine functionalized graphene on the mechanical and thermal properties of epoxy based composites, *Polym. Engg Sci.*, 2016, DOI:10.1002/pen.24355.
6. Roy, S.K. Srivastava, V. Mittal, Facile noncovalent assembly of MWCNT-LDH and CNF-LDH as reinforcing hybrid fillers in thermoplastic polyurethane/nitrile butadiene rubber blends, *J. Poly. Res.* 23, 2016, 1-11.
7. S Roy, S.K. Srivastava, J. Pionteck, V. Mittal, Assembly of layered double hydroxide on multi-walled carbon nanotubes as reinforcing hybrid nanofiller in thermoplastic polyurethane/nitrile butadiene rubber blends, *Polym. Internat.* 65, 2016, 93-101.
8. H Acharya, S.K. Srivastava, Mechanical, thermo-mechanical, thermal, and swelling properties of EPDM-organically modified mesoporous silica nanocomposites, *Polym Compos.* DOI:10.1002/pen.24355.
9. S.K. Srivastava, B. Kartick, S. Choudhury, M. Stamm, Thermally fabricated MoS₂-graphene hybrids as high performance anode in lithium ion battery, *Mater. Chem. Phys*, 2016. <http://www.sciencedirect.com/science/article/pii/S0254058416306447>.
10. B Kartick, S.K. Srivastava, A Chandra, Graphene/Nickel Nanofiber Hybrids for Catalytic and Microbial Fuel Cell Applications, *J. Nanosci. Nanotechnol.*, 16, 2016, 303-311.
11. Shipra Raj, Suneel Kumar Srivastava, Pradip Kar and Poulomi Roy, Three-dimensional NiCo₂O₄/NiCo₂S₄ hybrid on Ni-foam as high-performance supercapacitor electrode, *RSC Adv* (Accepted for publication), 2016.
12. Divya, R Pongilat, T Kuila, K Nallathamby, S.K. Srivastava, P Roy, Spinel-Structured NiCo₂O₄ Nanorods as energy efficient electrode for supercapacitor and lithium ion battery applications, *J. Nanosci. Nanotechnol.* 16, 2016, 9761-9770.

13. AK Gupta, PS Ghosal, SK Srivastava, Modeling and Optimization of Defluoridation by Calcined Ca-Al-(NO₃)-LDH Using Response Surface Methodology and Artificial Neural Network Combined with Experimental Design, *Journal of Hazardous, Toxic, and Radioactive Waste*, 2016.

2015

1. Ritwik Panigrahi and Suneel K. Srivastava, Trapping of microwave radiation in hollow polypyrrole microsphere through enhanced internal reflection: A novel approach, *Scientific Reports (Nature Publication)* 5, 7638, (2015), doi:10.1038/srep07638.
2. Poulomi Roy and Suneel Kumar Srivastava, Nanostructured anode materials for lithium ion batteries, *J. Mater. Chem. A*, 3, 2454-2484 (2015).
3. P. Swain, Suneel K. Srivastava and Sanjeev K. Srivastava, Quantum phase transition and Fermi liquid behavior in Pd_{1-x}Ni_x nanoalloys, *Phys. Rev. B*, 91, 045401 (2015).
4. R. Panigrahi, S. K. Srivastava, Hollow polyaniline microsphere/Ag nanocomposite in sugar sensing and electromagnetic shielding, *Materials Research Bulletin*, 64, 33-41 (2015).
5. S.K. Srivastava and J. Pionteck, Recent advances on preparation, structure, properties and application of graphite oxide, *J. Nanosci. Nanotechnol.* 15, 1984-2000 (2015).
6. Poulomi Roy and Suneel Kumar Srivastava, Nanostructured Copper Sulfides: Synthesis, Properties and Applications, *Cryst. Eng. Comm*, 17, 7801-7815 (2015).
7. Saheli Roy, Suneel Kumar Srivastava, Jürgen Pionteck and Vikas Mittal, Mechanically and thermally enhanced multiwalled carbon nanotube-graphene hybrid filled thermoplastic polyurethane nanocomposites, *Macromole. Mater. Engg.* 300, 346-35 (2015).
8. B. Kartick, S. Roy, S.K. Srivastava et al., Synthesis and characterization of Poly(N-vinylcarbazole)/Graphene Nanocomposites, *J. Nanosci. Nanotechnol.* 15, 3733-3742 (2015).
9. Prasanta Kumar Sahoo, Suneel Kumar Srivastava, Sarika Srinivas Kalyan Kamal and Loganathan Durai, Consolidation behavior of W-20-40 wt.% Mo nanoalloys synthesized by thermal decomposition method, *Int. Journal of Refractory Metals and Hard Materials* 51, 124-129 (2015).
10. Prasanta Kumar Sahoo, Suneel Kumar Srivastava, Sarika Srinivas Kalyan Kamal and Loganathan Durai, Microstructure and sintering behavior of nanostructured W-10-20 wt.% Ti alloys synthesized by a soft chemical approach, *International Journal of Refractory Metals and Hard Materials*, 51(282-288 (2015).
11. Saheli Roy, Suneel Kumar Srivastava, Jürgen Pionteck and Vikas Mittal, Assembly of LDH on MWCNT as reinforcing hybrid nanofiller in thermoplastic polyurethane/nitrile butadiene rubber blends, *Polymer International*, (2015) DOI: 10.1007/s10965-016-0926-4.
12. Himadri Acharya and Suneel K Srivastava, Mechanical, thermo-mechanical, thermal and swelling properties of EPDM-organically modified mesoporous silica nanocomposites, *Polymer Composites* (2015) DOI: 10.1002/pc.23858.

2014

1. B. Pradhan, S. Roy, S. K. Srivastava, and A. Saxena, Synergistic effect of carbon nanotubes and clay platelets in reinforcing properties of silicone rubbernanocomposites. *J. Appl. Polym. Sci.* 132,42,(2014),DOI: 10.1002/app.41818.
2. Saheli Roy, Suneel Kumar Srivastava, Jürgen Pionteck and Vikas Mittal, MMT-MWCNT nanoarchitecture reinforced thermoplastic polyurethane, *Polymer Composites*,24Dec 2014, DOI: 10.1002/pc.23350.
3. Suneel Kumar Srivastava and J. Pionteck, Recent advances on preparation, structure,properties and application of graphite oxide, *J. Nanosci. Nanotechnol.*15, 1984-2000(2014).
4. RitwikPanigrahi, Suneel Kumar Srivastava, Selective reduction of graphite oxide: Anovelapproach, *RSC Advances*,4, 53055-53059 (2014)
5. Sahoo, Ashish Kumar; Suneel Kumar Srivastava, Raul, Prasanta Kumar; Gupta, Ashok Kumar; Shrivastava, Rajnish, Graphene nanocomposites of CdS and ZnS in effectivewaterpurification, *Journal of Nanoparticle Research*16, 1-17 (2014),
6. Jana, Milan; Saha, Sanjit; Khanra, Partha; Murmu, Naresh Chandra; Suneel Kumar Srivastava; Kula, Tapas; Lee, JoongHee, Bio-reduction of graphene oxide usingdrained water from soaked mung beans (*Phaseolus aureus* L.) and its application as energy storage electrode material, *Materials Science & Engineering, B: AdvancedFunctional Solid-State Materials* 186, 33-40 (2014).
7. Bratati Pradhan, Suneel Kumar Srivastava, Synergistic effect of three-dimensional multi-walled carbon nanotube-graphene nanofiller in enhancing the mechanical and thermal properties of high-performance silicone rubber, *Polymer International*63(7),1219-1228 (2014).
8. SamarpitaSenapati,Shiv B Singh Ajit R Kulkarni, SERS active Ag encapsulated Fe@SiO₂nanorods in electromagnetic wave absorption and crystal violet detection,*Environmental Research*,135, 95-104(2014).
9. B. Kartick, S.K. Srivastava, and S. Mahanty, Tungsten disulfide-multiwalledcarbonnanotube hybrid anode for lithium-ion battery. *J. Nanosci. Nanotechnol.* 14, 3758-3764(2014).
10. B. Pradhan and S.K. Srivastava,Layered double hydroxide/Multiwalledcarbonnanotube hybrids as reinforcing filler in silicone rubber, *Composite Part A*, 56, 290-299 (2014).
11. Suneel Kumar Srivastava and B. Pradhan, Development and properties of reinforcedsilicone rubber nanocomposites in *Concise Encyclopedia of High Performance Silicones*, Atul Tiwari and Mark D (Eds), Soucek, Scrivener/Wiley, 85-109 (2014).
12. Suneel Kumar Srivastava, Metal oxide filled micro and nano natural rubber composites,in *Natural rubber materials, Volume 2: Composites and nanocomposites*, Sabu Thomas, Hanna J. Maria, Jithin P. Joy, Chin Han Chan and Laly A. Pothen (Eds.),, *RSC Polymer Chemistry Series*No. 8 (2014).

2013

1. B. Kartick, S. K. Srivastava and S. Mahanty, MoS₂-MWCNT hybrids as a superior anode in lithium-ion batteries, *Chemical Communication*, 49, 1823-1825 (2013).
2. B. Kartick, S. K. Srivastava and S. Mahanty, TiS₂-MWCNT hybrid as high performance anode in lithium-ion Battery, *J. Nanopart.Res.* 15, 1950-1955 (2013).
3. B. Kartick, S. K. Srivastava and I. Srivastava, Green Synthesis of Graphene, *J. Nanosci. Nanotechnol.* 13, 4320-4324 (2013).
4. Ritwik Panigrahi and Suneel Kumar Srivastava, Ultrasound assisted synthesis of polyaniline hollow microsphere/Ag core/shell structure for sensing and catalytic application, *RSC Advances*, 3, 7808-7815 (2013).
5. Ashish K. Sahoo and Suneel K. Srivastava, Controllable architecture of CdS and CuS by single-source precursor-mediated approach and their photocatalytic activity, *Journal of Nanoparticle Research*, 15, 1591-1606 (2013).
5. Bratati Pradhan and Suneel Kumar Srivastava, Synergistic effect of three dimensional multi-walled carbon nanotube/graphene nanofiller in enhancing the mechanical and thermal properties of high performance silicone rubber, *Polymer International*, DOI: 10.1002/pi.4627 (2013).
6. Pradhan, B. Srivastava, S. K. Novel silicone rubber/layered double hydroxide nanocomposite: preparation and characterization, *Advanced Nanomaterials and Nanotechnology, Springer Proceeding in Physics*, 143, 367-375 (2013).
7. S.K. Srivastava, and M. Kotal, Recent Advances on Preparation, Properties and Applications of Polyurethane Nanocomposites, in *Nanocomposites Series: Advanced Composites – Materials, Manufacturing and Engineering*, J. Paulo Davim and Constantinos A. Charitidis (Eds.), DE Gruyter, Germany, 33-93 (2013).
8. Suneel Kumar Srivastava and Tapas Kula, Fire retardancy of elastomers and elastomer nanocomposites, in *Polymer Green Flame Retardants: A Comprehensive Guide Additives and Their Applications*, edited by C.D Papaspyrides and Professor P. Kiliari (Eds.), Elsevier, 597-651 (2013).

2012

1. Samarpita Senapati, Suneel K. Srivastava and Shiv B. Singh, Synthesis, characterization and photocatalytic activity of magnetically separable hexagonal Ni/ZnO nanostructure, *Nanoscale*, 4, 6604-6612 (2012).
2. Samarpita Senapati, Suneel K. Srivastava, Shiv B. Singh and Hari N. Mishra, Magnetic Ni/Ag core-shell nanostructure from prickly Ni nanowire precursor and its catalytic and antibacterial activity, *Journal of Materials Chemistry*, 22, 6899-6906 (2012).
3. S. Senapati, S.K. Srivastava, S.B. Singh, Synthesis, magnetic properties and catalytic activity of hierarchical cobalt microflowers, *J. Nanosci. Nanotechnol.* 12, 3048-3058 (2012).

4. Pradhan, B. S.K. Srivastava and A. Saxena, Mechanical and thermal properties of silane grafted organomodified montmorillonite reinforced silicone rubber nanocomposites, *J. Nanosci. Nanotechnol.* 12, 8975-84 (2012).
5. B. Pradhan, S. K. Srivastava, A.K. Bhowmick and A. Saxena, Effect of bilayered stearate ion modified Mg-Al layered double hydroxide on thermal and mechanical properties of silicone rubber nanocomposites. *Polymer International*, 61, 458-465 (2012).
6. Bratati Pradhan, Suneel Kumar Srivastava and AnubhavSaxena, Mechanical and thermal properties of silane grafted organomodified montmorillonite reinforced silicone rubber nanocomposites, *J. NanosciNanotechnology*, 12, 8975-8984 (2012).
7. M. Kotal, S.K. Srivastava, S.K. Manu, A.K. Saxena and K.N. Pandey, Preparation and properties of in-situ polymerized polyurethane/stearate intercalated layer double hydroxide nanocomposites, *Polymer International*, 62, 728-735(2012).

2011

1. A.K. Sahoo and S.K. Srivastava, Morpholine-4-Carbodithioate Se and Te Complex asSingle Source Precursor for Synthesis of Se and Te with diverse morphologies, *Crystal Growth and Design*, 11, 1597-1606 (2011).
2. M. Kotal, S.K. Srivastava and B. Pramanik, Enhancements in Conductivity and ThermalStabilities of Polypyrrole Polyurethane Nanoblends, *J. Physical ChemistryC*, 115,1496-1505 (2011).
3. M. Bouaziz, J. Ouerfelli, S.K. Srivastava, J.C. Bernède, M. Amlouk, Growth ofCu₂SnS₃ thin films by solid reaction under sulphuratmosphere, *Vacuum*, 85, 783-786 (2011).
4. M. Kotal, S. K. Srivastava and T. K. Maiti, Fabrication of gold nanoparticle assembledpolyurethane microsphere template in trypsin immobilization, *J. Nanosci.Nanotechnol.* 11, 10149-10157 (2011).
5. Prasant Kumar Sahoo, Sarika Srinivas Kalyan Kamal, Ashok Kumar Singh, BojjaSreedhar, LoganathanDurai, and Suneel Kumar Srivastava, Facile Chemical Synthesisof W–Ag and W–Cu, *J. Nanosci. Nanotechnol.*9, 2518-2524(2011).
6. B. Kartick and S. K. Srivastava, Simple Facile Route to Synthesis of Graphite oxide andGraphene, *J. Nanosci. Nanotechnol.*11, 8586-8592 (2011).
7. M. Kotal, S.K. Srivastava, A.K. Bhowmick, Morphology and properties of stearateintercalated layered double hydroxide nanoplatelets reinforced thermoplastic polyurethane, *Polymer International* 60, 772-780, 2011.
8. B. Pradhan, S.K. Srivastava, A. Rajakumar and A. Saxena, Preparation andcharacterization of exfoliated layered double hydroxide/silicone rubber nanocomposites, *Journal of Applied Polymer Science*, 119, 343-351 (2011).
9. M. Kotal and S.K. Srivastava, Synergistic effect of organomodification and isocyanate grafting of layered double hydroxide in reinforcing properties of polyurethane nanocomposite, *Journal of Materials Chemistry*, 21, 18540-18551 (2011).

2010

1. S. Senapati, S.K. Srivastava, S.B. Singh and K. Biswas, Capping Agent Assisted and Ag-Catalyzed Growth of Ni Nanoflowers, *Crystal Growth and Design*, 10, 4068-75(2010).
2. Kamallesh Mondal and Suneel Kumar Srivastava, A New Hydrothermal Route to Nano- and Microstructures of Trigonal Selenium Exhibiting Diverse Morphologies, *Materials Chemistry and Physics*, 124, 535-540(2010).
3. A.K. Sahoo and S.K. Srivastava, Hydrothermal synthesis of PbTe nanorods using different templates, *J. Nanosci. Nanotechnol.* 10, 4921-4928 (2010).
4. Jyotiranjan Ota and Suneel Kumar Srivastava, Synthesis and optical properties of Sb_2Se_3 nanorods, *Optical Materials*, 32, 1488-1492 (2010).
5. M. Kotal, S.K. Srivastava and S. K. Manu, Layered double hydroxide as nanofiller in the development of polyurethane nanocomposites, *J. Nanosci. Nanotechnol.* 10, 5730-40(2010).
6. M.Kotal, S.K. Srivastava and A.K. Bhowmick, Thermoplastic polyurethane and nitrilebutadiene rubber blends with layered double hydroxide nanocomposites by solution blending, *Polymer International* 59, 2-10 (2010).
7. N.L. Heda, Alpa Dashora, Ambica Marwal, Yamini Sharma, S.K. Srivastava, Gulzar Ahmed, Rajesh Jain and B.L. Ahuja, Electronic properties and Compton profiles of molybdenum dichalcogenides, *J. Phys. Chem. Solids*, 71, 187-193 (2010).
8. K. Mandal and S.K. Srivastava, A new chemical approach to the low-temperature growth of single crystalline trigonal selenium scrolled nanotubes and nanowires, *J. Nanosci. Nanotechnol.* 10, 555-560 (2010).
9. Suneel Kumar Srivastava, Ashish Kumar Sahoo, Kartick Bindumadhavan, Saraswathi Kesavapillai Manu, Bijan Bihari Nayak, Koushik Biswas, Arvind Kumar Saxena and Rajendra Singh, Reinforcement of ball shaped MoS_2 nanoparticles in epoxy resin, *J. Nanosci. Nanotech.* 10, 8171-79 (2010).
10. S.K. Srivastava and H. Himadari, Aging and degradation behavior of rubber nanocomposites, in *Rubber nanocomposites: Preparation, properties and applications*, Sabu Thomas and Ranimol Stephen (Eds), Wiley, 551-588 (2010).
11. Suneel Kumar Srivastava and Monoj Pramanik, Nanocomposites of Ethylene Vinyl Acetate Copolymers, in *Encyclopaedia of Nanoscience and Nanotechnology*, American Scientific Publishers, USA, 2010.

2009

1. Prasanta Kumar Sahoo, S.S. Kalyan Kamal, M. Premkumar, T. Jagadeesh Kumar, B. Sreedhar, A.K. Singh, S.K. Srivastava and K. Chandra Sekhar, Synthesis of tungsten nanoparticles by solvothermal decomposition of tungsten hexacarbonyl, *International Journal of Refractory Metals Hard Mater.* 27, 784-791 (2009).
2. P. K. Sahoo, S.S. Kamal, K. Kalyan, T. Jagadeesh, B. Sreedhar, A. K. Singh, S. K. Srivastava, Synthesis of silver nanoparticles using facile wet chemical route, *Defence Science Journal*, 59, 447-455 (2009).

3. T. Kuila, S.K. Srivastava, and A. K. Bhowmick, Ethylene vinyl acetate/Ethylene propylenedieneterpolymer-blend-Layered double hydroxide nanocomposites, *PolymerEngineering and Science*, 49, 585-591 (2009).
4. T. Kuila, S.K. Srivastava, and A. K. Bhowmick, Ethylene vinyl acetate/Mg-Al LDHnanocomposites by solution blending, *Polymer Composites* 30, 497-502 (2009),
5. T. Kuila, S.K. Srivastava, and A. K. Bhowmick, Rubber/LDH nanocomposites bysolution blending, *Journal of Applied Polymer Science* 111, 635-641 (2009), .
6. M.Kotal, T. Kuila, S.K. Srivastava and A.K. Bhowmick, Synthesis and characterization of polyurethane/Mg-Al layered double hydroxide nanocomposites, *Journal of AppliedPolymer Science*,114, 2691-2699 (2009)

2008

1. KamaleshMondal, Poulomi Roy and Suneel Kumar Srivastava, Facile Biomolecule-assisted hydrothermal synthesis of Trigonal Selenium Microrods, *Crystal Growth and Design*, 8, 1580-84 (2008).
2. Poulomi Roy, KamaleshMondal and Suneel Kumar Srivastava, Synthesis of twinned CuS nanorods by simple wet chemical method, *Crystal Growth and Design*, 8, 1530-1534 (2008).
3. Gunjan Arora, Yamini Sharma, Vinit Sharma, Gulzar Ahmed, S. K. Srivastava, B. L. Ahuja, Electronic structure of layer type tungsten metal dichalcogenides WX_2 ($X = S, Se$) using Compton spectroscopy: Theory and experiment, *J. Alloys and Compounds*, 470, 452-460 (2008).
4. J. Ouerfelli, S.K. Srivastava, J..C. Bernede, S.Belgacem, Effect of microwaves on synthesis of MoS_2 and WS_2 , *Vacuum*, 83, 308-312 (2008).
5. T. Kuila, S. K. Srivastava, Anil K Bhowmick and A. K. Saxena. Thermoplastic Polyolefin Based polymer-blend-layered double hydroxide nanocomposites *Composite Scienceand Technology*, 68, 3234-3239 (2008).
6. T. Kuila, H. Acharya, S. K. Srivastava and Anil K Bhowmick, Ethylene vinyl acetate/Mg-AlLDH nanocomposites by solution blending, *Polymer Composites*, 30, 497-402 (2008).
7. T. Kuila, H. Acharya, S. K. Srivastava and A. K. Bhowmick, Effect of vinyl acetate contenton the mechanical and thermal properties of ethylene vinyl acetate/MgAl layered double hydroxide nanocomposites, *Journal of Applied Polymer Science*, Vol. 108, 1329–1335,(2008).
8. H. Acharya, T. Kuila, S. K. Srivastava and Anil K Bhowmick. Effect of layered silicate on EPDM/EVA blend nanocomposite: Dynamic mechanical, thermal, and swelling properties, *Polymer Composites*, 29, 443-450 (2008).
9. J. Ota, P. Roy, S.K. Srivastava, B. Nayak, A. K. Saxena. Morphology evolution of Sb_2S_3 under hydrothermal conditions: Flower like structure to nanorods, *Crystal Growth and Design*, 8, 2019-202 (2008).

2007

1. J. Ota and S.K. Srivastava, Polypyrrole coating of tartaric acid assisted synthesized Bi_2S_3 nanorods, *J. Physical Chemistry Part C*,111, 12260-64 (2007).

2. P. Roy and S. K. Srivastava, Solvothermal growth of flower-like morphology from nanorods of copper sulfides, *J. Nanoscience and Nanotechnology*, 8, 1-5, 2007.
3. P. Roy and S. K. Srivastava, Low temperature synthesis of CuS nanorods by simple wet chemical methods, *Materials Letters*, 61, 1993-1997 (2007).
4. Tapas Kuila, Himadri Acharya, Suneel K. Srivastava and S. Kureti, Plasticizer effect on the ionic conductivity of new PEO/LaMnO₃ composite polymer Electrolyte, *Materials Science and Engineering B*, 137, 217-224 (2007).
5. Tapas Kuila, Himadri Acharya, Suneel K. Srivastava, Anil K. Bhowmick, Synthesis and characterization of Ethylene vinyl acetate/Mg-Al layered double hydroxide Nanocomposite, *Journal of Applied Polymer Science*, 104, 1845-1851 (2007).
6. H. Acharya, T. Kuila, S. K. Srivastava and A. K. Bhowmick, A solution blending route to ethylene propylene diene terpolymer/layered double hydroxide nanocomposites, *Nanoscale Research Letters*, 2, 1-5 (2007).
7. H. Acharya, S. K. Srivastava and A. K. Bhowmick, Synthesis of exfoliated EPDM/LDH nanocomposites by solution intercalation: structural characterization and properties, *Composites Science and Technology*, 67, 2807-2816 (2007).

2006

1. Jyoti R. Ota and S. K. Srivastava, Tartaric acid assisted Growth of Sb₂S_n nanorods by a simple wet chemical method, *Crystal Growth and Design*, 7, 343-347 (2006).
2. J. R. Ota, P. Roy, S.K. Srivastava, R. Popovitz-Biro and Reshef Tenne, Simple hydrothermal method for the growth of Bi₂Se₃ nanorods, *Nanotechnology*, 17, 1700-1705 (2006).
3. Jyoti R. Ota and S.K. Srivastava, A new hydrothermal route for the synthesis of MoS₂ nanorods and related structures, *J. Nanoscience and Nanotechnology*, 6, 168-174 (2006).
4. P. Roy and S. K. Srivastava, Hydrothermal growth of CuS wires from Cu-dithiooxamide, a novel single source precursor, *Crystal Growth and Design*, 6, 1921-1926 (2006).
5. P. Roy and S. K. Srivastava, In situ Sn-doped CdS thin films by chemical bath deposition method, *Journal of Physics D: Applied Physics*, 39, 4771-4776 (2006).
6. P. Roy and S.K. Srivastava, A new approach towards the growth of cadmium sulphide thin films by CBD method and its characterization, *Materials Chemistry and Physics*, 95, 235-241 (2006).
7. P. Roy and S. K. Srivastava, Chemical bath deposition of MoS₂ thin film using ammonium tetrathiomolybdate as a single source for molybdenum and sulphur, *Thin Solid Film*, 496, 293-298 (2006).
8. P. Roy, Jyoti R Ota and S. K. Srivastava, A new route for preparing crystalline ZnS thin films by chemical bath deposition method and its characterization, *Thin Solid Films*, 515, 1912-1917 (2006).
9. H. Acharya, S. K. Srivastava and A. K. Bhowmick, Ethylene propylene diene terpolymer/Ethylene vinyl acetate/Layered silicate ternary nanocomposite by solution method, *Polymer Engineering and Science*, 46, 837-843 (2006).

10. H. Acharya and S. K. Srivastava, Influence of nanodispersed organoclay on rheological and swelling properties of ethylene propylene diene terpolymer, *Macromolecular Research*, 14, 132-139 (2006).

2005

1. Jyoti R. Ota and S.K Srivastava, Low temperature micelle-template assisted growth of Bi_2S_3 nanotubes, *Nanotechnology*, 16, 2415-2419 (2005).
2. S. K Srivastava and D. Palit, Defect studies by X-ray diffraction, electrical and optical properties of layer type tungsten mixed molybdenum sulphoselenide, *Solid State of Ionics*, 176, 513-521 (2005).

2004

1. S. K. Srivastava, M. Pramanik, D. Palit, H. Haeuseler and M. Ochel, X-ray diffraction, topographical studies and thermal behavior of layer-Type $\text{CdIn}_2\text{S}_4-x\text{Se}_x$ ($1.75 < x < 2.75$) and its lithium intercalation compounds, *Chemistry of Materials*, 16, 4168-4173 (2004).
2. S. K. Srivastava, and J. C. Bernede, Textured growth of molybdenum disulphide using MoS_2 as precursor, *Solid State Communication*, 132, 601-606 (2004).
3. M. Pramanik, H. Acharya, and S. K. Srivastava, Exertion of inhibiting effect by aluminosilicate layers on swelling of solution blended EVA/clay nanocomposite, *Macromolecular Materials and Engineering*, 289, 562-567 (2004).
4. H. Acharya, M. Pramanik, S.K. Srivastava and A.K. Bhowmick, Synthesis and evaluation of high performance EPDM/organoclay nanoscale composites, *J. Applied Polymer Science*, 93, 2429-2436 (2004).
5. P. Bala, S. K. Srivastava, B. K. Samantaray and G. B. Nanda, Organomodified montmorillonite as filler in natural and synthetic rubber, *J. Applied Polymer Science*, 92, 3583-3592 (2004).

2003

1. D. Ratna, S. K. Srivastava and A. K. Banthia, High pressure epoxidation of soyabean oil, *Indian J. Chemical Technology*, 10, 501-504 (2003).
2. M. Pramanik, S. K. Srivastava, B. K. Samantaray and A. K. Bhowmick, EVA clay nanocomposites by solution blending: Effect of aluminosilicate layers on mechanical and thermal properties, *Macromolecular Research*, 11, 260-266 (2003).
3. M. Pramanik, S.K. Srivastava, B.K. Samantaray and A.K. Bhowmick, Rubber-clay nanocomposite by solution blending, *J. Applied Polymer Science*, 87, 2216-2225 (2003).

2002

1. M. Pramanik, S.K. Srivastava, B.K. Samantaray and A.K. Bhowmick, Synthesis and characterization of organosoluble, thermoplastic elastomer/clay nanocomposites, *J. Polym. Sci. Part B: Polym. Phys.*, 40, 2065-2072 (2002)

2001

1. M. Pramanik, S. K. Srivastava, B. K. Samantaray and A. K. Bhowmick, Preparation and characterization of ethylene vinyl acetate – clay hybrids, *J. Mat. Sci. Lett.*, 20, 1377-1380, (2001).

2. S. K. Srivastava, M. Pramanik, D. Palit, B. K. Mathur, A. Kar, B. K. Samantaray, H. Haeuseler and W. Codres, Electrical, optical and scanning tunneling microscopic studies of layer type $CdIn_2S_{4-x}Se_x$ ($1.75 \leq x \leq 2.75$), *Chemistry of Materials*, 13, 4342-4347 (2001).
3. P. Bala, B. K. Samantaray, S. K. Srivastava and G. B. Nando, Effect of alkylammonium intercalated montmorillonite as filler on natural rubber, *J. Mat. Sci. Lett.*, 20, 563-564 (2001).

2000

1. H. Haeuseler and S. K. Srivastava, Phase equilibria and layered phases in the systems $A_2X_3-M_2X_3-M'X$ ($A=Ga, In, ; M=$ trivalent metal; M' =divalent metal; $X=S, Se$), *Zeitschrift fur Kristallography*, 215, 205-221 (2000)..
2. P. Bala, B. K. Samantaray, S. K. Srivastava and H. Haeuseler, Layer disorders accompanying dehydration of sodium montmorillonite, *Zeitschrift fur Kristallography*, 215, 235-239 (2000).
3. P. Bala, B. K. Samantaray and S. K. Srivastava, Synthesis and characterization of Na-Montmorillonite-alkylammonium intercalation compounds, *Materials Research Bulletin*, 35, 1717-1724 (2000).
4. P. Bala, B. K. Samantaray and S. K. Srivastava, Dehydration transformation in Ca-montmorillonite, *Bulletin of Materials Science*, 23, 61-67 (2000).
5. P. Bala, B. K. Samantaray and S. K. Srivastava, Investigations on variations of interlayer spacing and other microstructural parameters in dehydration transformation in vermiculite, *Ind. J. Phy.*, 74, 1-5 (2000).
6. S. K. Srivastava, T. K. Mandal, P. Bala, B. K. Samantaray and B. K. Mathur, On structural defects from X-ray diffraction for indium intercalation compounds of tantalum disulphide and diselenide, *Ind. J. Phy.*, 75A, 453-459 (2000).

1999

1. T. K. Mandal, S. K. Srivastava, B. K. Samantaray and B. K. Mathur, X-ray diffraction and electron microscopic studies of indium intercalation compounds of tungsten sulphoselenide, *Materials Science and Engineering .B*, 64, 143-148 (1999).
2. T. K. Mandal, S. K. Srivastava, B. K. Samantaray and B. K. Mathur, Structural characterization of indium intercalation compounds of molybdenum sulphoselenide by X-ray diffraction and electron microscopy, *J. Mat. Sci. Lett.*, 18, 859-864 (1999).
3. D. Palit, S.K. Srivastava and B. K. Samantaray, X-ray studies on microstructure characterization and radial distribution analysis of tantalum substituted tungsten mixed molybdenum diselenide, $W_{0.65}Mo_{0.35}Ta_xSe_{2x}$ ($0 \leq x \leq 0.35$), *Bulletin of Materials Science*, 22, 93-108 (1999).

1997

1. D. Palit, S.K. Srivastava, M.C. Chakravorty and B. K. Samantaray, Studies on layer disorder, microstructure parameters and other properties of tantalum substituted tungsten-mixed molybdenum diselenide, *Materials Chemistry and Physics*, 49, 22-28, 1997.

2. S. K. Srivastava T. K. Mandal and B. K. Samantaray, Studies on microstructure parameters, surface morphology and other properties of tungsten substituted molybdenum disulphide, *Synthetic Metals*, 90, 135-142 (1997).

1996

1. T. K. Mandal and S. K. Srivastava, Synthesis and characterization of indium intercalated molybdenum sulpho-selenide, *J. Materials Science*, 31, 3191- 3196 (1996).
2. T. K. Mandal and S. K. Srivastava, Indium intercalated compounds of tungsten sulpho-selenide, *Materials Chemistry and Physics*, 47, 283-289 (1996).
3. D. Palit, S. K. Srivastava and M. C. Chakravorty, Synthesis and characterization of molybdenum-tungsten mixed sulpho-selenide $Mo_{0.5}W_{0.5}S_xSe_{2-x}$ ($0 \leq x \leq 2$), *J. Materials Science Letters*, 15, 1115-1118 (1996).
4. D. Palit and S. K. Srivastava, M. C. Chakravorty and B. K. Samantaray, Study of layer disorder and microstructural parameters of molybdenum-tungsten mixed sulpho-selenide $Mo_{0.5}W_{0.5}S_xSe_{2-x}$ ($0 \leq x \leq 2$) by x-ray line profile analysis, *J. Materials Science Letters*, 15, 1636-1638 (1996).

1994

1. S. Kole, S. K. Srivastava, D. K. Tripathi and A. K. Bhowmick, Accelerated hydro-thermal weathering of silicone rubber EPDM and their blend, *J. Applied Polymer Science*, 54, 1329-1337 (1994).
2. S. K. Srivastava, Thin film growth of indium incorporated hexagonal tungsten bronzes, $In_{0.4}WO_3$. *J. Materials Science Letters*, 13, 832-834 (1994).

1993

1. S. K. Srivastava, P. Roas and K. Juttner, Electrochemical and photoelectro-chemical behaviour of excimer laser deposited Y-Ba-Cu-O high temperature superconducting thin film electrode, *Bulletin of Electrochemistry*, 9, 280-283 (1993).

1992

1. S. K. Srivastava and B. N. Avasthi, Synthesis, structure and properties of transition metal trichalcogenides, *J. Materials Science*, 27, 3693-3705 (1992).
2. S. K. Srivastava and B. N. Avasthi, Preparation and characterization of molybdenum disulphide catalysts, *J. Materials Science*, 28, 5032-5035 (1992).

1991

1. S. K. Srivastava, Structure and morphological studies of indium intercalation compounds of molybdenum disulphide, *Materials Research Bulletin*, 26, 631-639 (1991).

1990

1. S. K. Srivastava, P. Roas and K. Juttner, Electrochemical investigations on excimer laser deposited Y-Ba-Cu-O high temperature superconducting thin film electrodes, *Electrochimica Acta*, 35, 219-225 (1990).

1989

1. S. K. Srivastava, Preparation, structure and properties of indium intercalation compounds of tungsten diselenide, In_xWSe_2 ($0 \leq x \leq 2$), *Materials Research Bulletin*, 24, 1031-1041 (1989).

2. S. K. Srivastava and B. N. Avasthi, Synthesis and characterization of indium intercalation compounds of molybdenum diselenide, In_xMoSe_2 ($0 \leq x \leq 2$), J. Materials Science, 24, 1919-1924 (1989).

1988

1. S. K. Srivastava, Structure properties and morphological studies of indium intercalation compounds of tungsten disulphide, In_xWS_2 ($0 \leq x \leq 2$), J. Materials Science, 23, 388-394 (1988).

1985

1. S. K. Srivastava and B. N. Avasthi, Synthesis and characterization of indium intercalation compounds of tungsten disulphide, In_xWS_2 ($0 \leq x \leq 2$), Synthetic Metals, 10, 213-221 (1985).
2. S. K. Srivastava and B. N. Avasthi, Indium intercalation compounds of molybdenum disulphide, In_xMoS_2 ($0 \leq x \leq 2$), Synthetic Metals, 11, 193-205 (1985).
3. S. K. Srivastava and B. N. Avasthi, Layer type tungsten dichalcogenides-their preparation, structure, properties and uses, J. Materials Science, 23, 3801-3813 (1985).
4. S. K. Srivastava and B. N. Avasthi, High pressure growth and characterization of molybdenum disulphide, J. Less Common Metals, 124, 85-92 (1985).

1984

1. S. K. Srivastava, B. N. Avasthi and S. Basu, Preparation of molybdenum trisulphide by solid state chemical reaction, J. Materials Science Letters, 3, 313-314 (1984).
2. S. K. Srivastava, B. N. Avasthi and B. K. Mathur, Synthesis and characterization of indium intercalation compounds of Molybdenum disulphide: In_xMoS_2 ($0 \leq x \leq 2$), J. Materials Science Letters, 3, 671-673 (1984).

1983

1. S. K. Srivastava, B. N. Avasthi, B. Das and S. Basu, High pressure growth of polycrystalline molybdenum disulphide, Materials Letters, 1, 178-180 (1983).

1982

1. S. K. Srivastava, B. N. Avasthi and S. Basu, Molybdenum dichalcogenides important layered chalcogenides for modern uses, J. Sci. Ind. Res. 41, 656-664 (1982).

Patent: 1

Student Activities at the Institute Level

- Warden, R.P. Hall of Residence, 2009-2012
- Warden, R.P. Hall of Residence, 2006- 2009
- Warden, Patel Hall of Residence, 2002-05
- Assistant Warden, R.P. Hall of Residence, 1997-2000
- Assistant Warden, Azad Hall of Residence, 1992-95
- Treasurer, Technology Alumni Association, 1992-1995