

List of PhD Thesis: Supervised, Due for Submission and Ongoing (11)

List of Supervised PhD Thesis Awarded/Submitted						
S. No.	Degree	Title of Thesis	Name of the	Year	Status	
1	PhD IIT Roorkee	Bamboo Fiber and Bagasse Fiber Reinforced Functionalized Thermoplastic Elastomeric Composites	Dinesh	July 2020	Submitted	
2		Bamboo Fiber and Bagasse Fiber Reinforced Functionalized Self Compatibilizing Polyolefin Composites	Kishor Biswas	2018	Awarded	
3		Natural Fiber/Polyolefin Composites with In-Situ Fiber/matrix Interfacial Adhesion	Anshu Anjali Singh	2015	Awarded	
4		Eco-Friendly Composites of Banana and Hardwood Fiber Reinforced Modified Polypropylene	Priyanka	2014	Awarded	
					Status	Co-Supervisor
5	Ph.D Bundelkhand University	Chemical Investigation and Grafting of Polysaccharides and Other Constituent From Plants	Pratibha Singh	2012	Awarded	Prof H P Bhartiya
6		Synthesis, Structure and Properties of Cationized,Hydrolyzed and Unhydrolyzed Polyacrylamide Grafted Chitosan	Sk. Akbar Ali	2006	Awarded	Prof. Ram Prakash Singh
List of PhD Thesis Under Supervision						
7	PhD IIT Roorkee	Natural Fiber Reinforced Functionalized Acrylonitrile Butadiene Styrene Composites	Piyush Kumar		Ongoing	
8		Natural Fiber Reinforced Functionalized Styrenic Polymer Composites	Harsha Verma		Ongoing	
9		Natural Fiber Reinforced Functionalized Styrene Acrylonitrile Polymer Composites	Nisha Tamta		Ongoing	
10		Natural Fiber Reinforced Functionalized Polymer Composites and Hybrid Composites	Hariome Sharan Gupta		Ongoing	
11		Natural Fiber Reinforced Functionalized Polymer Hybrid Composites	Mridul Pant		Ongoing	

List of Masters Thesis (Intg. M Tech through IIT JEE) Supervised As Individual/Co- Supervisor (18+5=23)

S.No.	Degree	Title of Thesis	Year Awarded	Name of Scholar	Co-Supervisor (if any)
1.	M Tech IIT Roorkee	Bagasse Fiber Reinforced Functionalized Low Density Polyethylene Composites	2016	Akshay Khevaria	NIL
2.	M Tech IIT Roorkee	Pine Fiber Reinforced Functionalized Low Density Polyethylene Composites	2016	Anuj Mittal	NIL
3.	M Tech IIT Roorkee	Banana Fiber Reinforced Functionalized Low Density Polyethylene Composites	2016	Kanishk Bhani	NIL
4.	M Tech IIT Roorkee	Coconut Fiber Reinforced Functionalized Low Density Polyethylene Composites	2016	Rahul Kumar	NIL
5.	M Tech IIT Roorkee	Banana & Recycled Hardwood Fibers / Polypropylene Hybrid Composites	2015	N Krishnan	NIL
6.	M Tech IIT Roorkee	Hardwood & Recycled Banana Fibers / Polypropylene Hybrid Composites	2015	PSVG Bharadwaj	NIL
7.	M Tech IIT Roorkee	Hardwood / Functionalized Self Compatibilizing High Density Polyethylene Composites	2015	Ankit Jha	NIL
8.	M.Tech IIT Roorkee	Structure and properties of Molecular Composites of Poly-p-Phenylene-terephthalamide / Polyamide-6	2014	Shyopat Ram	NIL
9.	M.Tech IIT Roorkee	Structure and properties of Molecular Composites of Poly-p-Phenylene-terephthalamide / Polyether-ether-ketone	2014	Himanshu Shekhar	NIL
10.	M.Tech IIT Roorkee	Structure and properties of Molecular Composites of Poly-p-Phenylene-terephthalamide / Polyamide-6,6	2014	Kuldeep Nagar	NIL
11.	M.Tech IIT Roorkee	Structure and Properties of Ternary Blends of Polyetheretherketone, Polyamide 6,and Polyamide 6,6	2013	Nethagani Pramod	NIL
12.	M.Tech IIT Roorkee	Structure and Properties of Super Molecular Composite of [PPTA/ (PEEK/PA-6, 6)] of Poly-Para-Phenylene-Terephthalamide (Flexible Blend of Polyether-ether-ketone and Polyamide 6,6)	2013	Nilawar Sagar Ram	NIL
13.	M.Tech IIT Roorkee	Processing Structure & properties of Super Molecular Composite of PPTA/ PA6/PA-6, 6	2013	Sampat Singh Bhati	NIL
14.	M.Tech IIT Roorkee	Processing, Structure and Properties of Polymeric Super Molecular Composite of Poly-P-Phenylene-Terephthalamide Reinforced Flexible Blend of Polyamide 6/ Poly-ether-ether-ketone [PPTA/(PEEK/PA-6)]	2013	Vaibhav Singh	NIL
15.	M Tech IIT Roorkee	Molecular Composites & Super Molecular Composites	2013	Anuja Baijal	NIL
16.	M.Tech IIT Roorkee	Effect of Compatibilizer on Mechanical properties of Bamboo Fiber Reinforced Low Density Polyethylene Composites	2011	Kavish Sethi	NIL
17.	M.Tech IIT Roorkee	Effect of Compatibilizer on Mechanical Properties of Coconut Fiber Reinforced Low Density Polyethylene Composites	2011	Dibyaranjan Mekap	NIL
18.	M.Tech IIT Roorkee	Effect of Compatibilizer on Mechanical properties of Jute Fiber Reinforced Low Density Polyethylene Composites	2011	Ankit Jhanwar	NIL

List of Masters Thesis (Intg. M Tech through IIT JEE) Supervised As Co-Supervisor (5)

S.No.	Degree	Title of Thesis	Year Awarded	Name of Scholar	Co-Supervisor (if any)
19.	M.Tech IIT Roorkee	Development of Novel Hybrid Elastomeric Composites	2012	Dingse Esther Ch Momin	Dr. M. Maiti
20.	M.Tech IIT Roorkee	Study of Phase Inversion Process Parameters in Polyetheretherketone membranes	2012	Rajeev Rakesh Tamhankar	Dr Ivo Vankelecom
21.	M.Tech IIT Roorkee	Graphene Reinforced Cross Linkable Polyethylene (XLPE) Composites	2011	Md.Farhan Ansari	Dr. Ahmed Abdala
22.	M.Tech IIT Roorkee	Optimization of Properties of Bagasse Fiber Reinforced Polypropylene Composite by Alkali Treatment	2011	Harish Kumar	Dr. Praful Toke
23.	M.Tech IIT Roorkee	Effect of Chemical modification of Flax Fiber on Mechanical, Morphological, Thermal and Rheological Properties of Flax Reinforced Polypropylene Composites	2011	Anshul Bansal	Dr. Ajay K.Taraiya

LIST OF PATENTS [6]

4 Patents on Siloxane Molecular Composites in Europe, USA, Canada, Japan

Inventor Dr Sanjay Palsule (as the Sole Inventor)

Patent Owner: European Space Agency

1. French Patent Application No 93 07 888 dtd 29 June 1993
2. European Patent Application No 94 401457.0 dtd 28 June 1994
3. US Patent Application No 08/267,583 dtd 29 June 1994
4. Japanese Patent Application No 146 793/1994 dtd 28 June 1994

2 Patents on Anoxic Polymers in India.

Dr Sanjay Palsule as the Inventor and Owner

5. Anoxic Molecular Composite Indian Patent No 188 292
(2002) With Sanjay Palsule as the sole inventor and
Owner
6. Anoxic Fibre Reinforced Composite Indian Patent No 187466
(2002) With Sanjay Palsule as the sole inventor and Owner

List of Publications in Peer Reviewed Journals

Palsule Process for Natural Fiber / Polymer Composites

1. Dinesh, **Sanjay Palsule**, Bagasse Fiber Reinforced Functionalized Styrene Ethylene Butylene Styrene Composites by Palsule Process;
Journal of Natural Fibers, Accepted, 28 Sep (2020)
2. Dinesh, **Sanjay Palsule**, Structure and Properties of Recycled Bamboo Fiber Reinforced Chemically Functionalized Ethylene Propylene Rubber Composites
Polymers & Polymer Composites, **28**(8-9), 609-622 (2020)
3. Dinesh, **Sanjay Palsule**, Bagasse Fiber Reinforced Functionalized Ethylene Propylene Rubber Composites by Palsule Process;
Journal of Natural Fibers, DOI: [10.1080/15440478.2019.1697984](https://doi.org/10.1080/15440478.2019.1697984) (2019)
4. Kishor Biswas, **Sanjay Palsule**, Bamboo Fibre-Reinforced Self-Compatibilizing Functionalized Polypropylene Composites by Palsule Process.
Polymers & Polymer Composites, 663 – 673, 24(8), (2016)
5. Anshu Anjali Singh, Sanjay Palsule, Jute Fiber Reinforced Chemically Functionalized Polypropylene Self-compatibilizing Composites by Palsule process.
Journal of Composite Materials, 1199 – 1212, 50(9), (2016)
6. Kishor Biswas, **Sanjay Palsule**, Structure and Properties of Bamboo Fiber/Self Compatibilizing Polypropylene Composites by Palsule Process.
INROADS : An International Journal, 172-177, 5(1), (2016)
7. Anshu Anjali Singh, **Sanjay Palsule**, Coconut Fiber Reinforced Chemically Functionalized High-Density Polyethylene (CNF/CF-HDPE) Composites by Palsule Process.
Journal of Composite Materials, 3673-3684, 48(29), (2014)
8. Anshu Anjali Singh, **Sanjay Palsule**. "Jute Fiber Reinforced Chemically Functionalized High Density Polyethylene (JF/CF-HDPE) Composites with *in-situ* Fiber/Matrix Interfacial Adhesion by Palsule Process.
Composite Interfaces, 553-573, 20(8), (2013)
9. Priyanka, **Sanjay Palsule**, Banana fibre/chemically functionalized polypropylene composites with by *in-situ* fibre/matrix interfacial adhesion by Palsule process.
Composite Interfaces, 309-329, 20(5), (2013)
10. **Sanjay Palsule**, B O Ogunsile, Priyanka, Anshu Anjali Singh, Natural Hardwood Fiber Reinforced Chemically Functionalized Polyethylene Composites with *in-situ* Fiber/Matrix Interfacial Adhesion.
Applied Polymer Composites, 57-74, 1 (1), (2013)

Palsule Equation

10. **Sanjay Palsule**, Palsule Equation for Tensile Modulus of Short Fiber Reinforced Polymer Composites and its Validation,
Applied Polymer Composites, 1(1), 1-7 (2013)
11. **Sanjay Palsule**, Constants in Palsule Equation for Tensile Modulus of Short Fiber Reinforced Polymer Composites,
Applied Polymer Composites, 1(4), 267-274 (2013)

Natural Fiber / Polymer Composites

12. Anshu Anjali Singh, **Sanjay Palsule**, Effect of Water Absorption on Coconut Fibre Reinforced Functionalized Polyethylene Composites Developed by Palsule Process.
Applied Polymer Composites, 229 – 237, **2(4)**, (2014)
13. Ogunsile B O, **Sanjay Palsule**, Coconut fiber reinforced high density polyethylene composites by compatibilizer process.
Applied Polymer Composites, 167-176, **2(3)** (2014)

14. Anshu Anjali Singh, **Sanjay Palsule**, Thermal Properties of Jute Fibre Reinforced Chemically Functionalized High Density Polyethylene (JF/CF-HDPE) composites Developed by Palsule Process. *Applied Polymer Composites*, 97-108, **2(2)**, (2014)
15. Ogunsile B O, **Sanjay Palsule** Influence of amount of MAPE compatibilizer on tensile properties of hardwood fiber reinforced high density polyethylene composites. *Applied Polymer Composites*, 225-228, **1(4)**, (2013)
16. Priyanka, **Sanjay Palsule**, Effect of Water Absorption on Interface and Tensile Properties of Banana Fibre Reinforced Functionalized Polypropylene (BF/CFPP) Composites Developed by Palsule Process. *Applied Polymer Composites*, 103-112, **1(2)**, (2013)
17. Dibyaranjan Mekap, **Sanjay Palsule**, Secondary Fiber / Recycled Polypropylene Composites. *Journal of Research in Chemistry*, 655-659, **5(5)** (2012)
18. Pratibha Singh, Vishal Verma, KN Pandey, RM Mishra, Vijai Kumar, **Sanjay Palsule**, Studies on Ipomea batata fiber reinforced compatibilized PP composites. *International Journal of Science & Technology*, 65 – 75, **1(2)**, (2011)
19. Anshu Anjali Singh, Priyanka, **Sanjay Palsule**, Processing and Thermal Characterization of 5% Coconut Fibre Reinforced Compatibilized Polypropylene Composites *International Journal of Applied Engineering Research*, 2861 – 2864, **6(18)**, (2011)

Tercet Molecular Nano Composites, Molecular Composites & Polymer Blends

20. **Sanjay Palsule**, Anuja Baijal, Sampat Singh Bhati, Concept of Tercet Molecular Nano Composites and Preliminary Studies on [PPTA/(PA-6/PA-66)] System of Miscible Blend of Polyamide-6/Polyamide-6,6 Molecularly Reinforced at Nano Level By Poly-p-phenylene-terephthalamide. *Polymers & Polymer Composites*, 359 – 366, 23(6), (2015)
21. **Sanjay Palsule**, Kuldeep Nagar, Shyopat Ram, Himanshu Shekhar, Macromolecular Micro Composites – Fundamentals and a System of a Blend of Polyamide-imide / Polyetherimide. *Applied Polymer Composites* 1-16, **2(1)**, (2014)
22. **Sanjay Palsule**, Molecular Nano Composites and Super Molecular Nano Composites based on Flexible Polymers & Flexible Polymer Blends Reinforced by Rigid Rod poly-p-phenylene-terephthalamide (PPTA) *Journal of Materials Science & Engineering*, 202-205 1(3) (2012)
23. **Sanjay Palsule** and J M G Cowie, Miscibility in Molecular Composites of Polyamide-imide/ Polyetherimide. *Polymer Bulletin*, 241-247, **33**, (1994)
24. **Sanjay Palsule**, Molecular Composites: Potential Third Generation Polymers for Aerospace Applications. *European Space Agency Journal, ESA Journal*, 133-145, **17**, (1993)

Polymer Synthesis

25. **Sanjay Palsule** and S K Nema, Synthesis, Characterisation and Applications of Soyabean Oil Derived Polyurethanes : A Techno-Economic Study. *Research & Industry*, **36** 208-213 (1990)

INVITED ENCYCLOPEDIA ARTICLES [2]

- 1. Sanjay Palsule**, Anoxic Polymer Materials
The Polymeric Materials Encyclopedia, Editor, Prof. J C Salamone Volume No.1, Page Nos 252-264, CRC Press, Boca Raton, FL, USA (1996)
- 2. Sanjay Palsule**, Molecular Composites : The Third Generation Polymers,
The Polymeric Materials Encyclopedia, Editor, Prof. J C Salamone Volume No. 6, Page Nos 4448 – 4457, CRC Press, Boca Raton, FL, USA (1996)

Papers in International Conference Proceedings (From the next page)

Papers in International and National Seminars / Conference Proceedings [20]

IUPAC Conferences

1. **Sanjay Palsule**, Macromolecular Nano Composites
IUPAC Conference on Polymers for Advanced Tech SPS 2004 (India)
2. **Sanjay Palsule**, Molecular Composites
IUPAC Macro Akron USA IUPAC (1994)

Indo-German and Indo-Japanese Conferences

3. **Sanjay Palsule**, Anoxic Fiber Reinforced Composites
DST BMBF Indo-German W/S on Polym Sci & Tech DST (India) 2002
4. Priyanka, Anshu Anjali Singh, **Sanjay Palsule** and JS Upadhyay
Study of thermal properties of 5% and 10% coconut Fiber/Polypropylene Composites; Proceeding of Indo-Japan Conference on Frontier Nanomaterials for Energy (FNE-2012) Sharda University, Noida, 9-11 January 2012 page-71
5. Anshu Anjali Singh, Priyanka, and **Sanjay Palsule**
Effect of different fiber load on tensile properties of coconut fiber reinforced compatibilized polypropylene composites
Proceeding of Indo-Japan Conference on Frontier Nanomaterials for Energy (FNE2012) Sharda University, Noida, 9-11 January 2012 page-72

International Seminars & Conferences

6. **Sanjay Palsule**, Anoxic Polymer Materials
International Seminar On Polymer Materials, CIPET, (2000)
7. Anshu Anjali Singh and **Sanjay Palsule**
Mechanical Properties of 5% Coconut Fiber Reinforced Compatibilized Polypropylene Composites; Proceedings of the International Conference on Advances in Materials and Manufacturing Technology-2011, (AMMT-2011), Chitkara University, Rajpur India, Page-34
8. Dibyanjan Mekap and **Sanjay Palsule**
Maleic Anhydride Modified Polyethylene Compatibilizer for 15% coconut Fiber Reinforced Polyethylene Composites with Improved Tensile & Flexural Modulus; Proceedings of the International Conference on Advances in Materials and Manufacturing Technology-2011, (AMMT-2011), Chitkara University, Rajpur India, Page-79
9. Kavish Sethi and **Sanjay Palsule**
10% Bamboo Fibre Reinforced Polyethylene Composites Compatibilized by Maleic Anhydride Modified Polyethylene for Improved Flexural Properties; Proceedings of the International Conference on Advances in Materials and Manufacturing Technology-2011, (AMMT-2011), Chitkara University, Rajpur India, Page-97
10. Mohd Farhan Ansari, Ahmed Abdala and **Sanjay Palsule**
Nano Composites of Cross Linked Polyethylene Reinforced by 3% Graphene; Proceedings of the International Conference on Advances in Materials and Manufacturing Technology-2011, (AMMT-2011), Chitkara University, Rajpur India, Page-120
11. Priyanka and **Sanjay Palsule**
Thermal Properties of 10% Coconut fibre / Polypropylene Composites; Proceedings of the International Conference on Advances in Materials and Manufacturing Technology-2011, (AMMT-2011), Chitkara University, Rajpura India, Page-144
12. Anshu Anjali Singh, **Sanjay Palsule**
Jute Fiber Reinforced Modified Polyolefin Matrix Composites by a new method for *in-situ* Fiber/Matrix Interfacial Adhesion; International Conference on Advancements in Polymeric Materials. APM-2013. (Lucknow, India)
13. Priyanka and **Sanjay Palsule**.
Green Composites with in-situ fiber/matrix interfacial adhesion: hardwood fiber reinforced modified polyolefin matrix composites; International Conference on Advancements in Polymeric Materials (APM); 2013; Mar 01-03, CIPET-Lucknow.

National Seminars / Conference Proceedings

14. **Sanjay Palsule,**
Molecularly Reinforced Polymer Blends
Proceeding of 5th National Conference on Plastics & Rubber Technology (POLYCON-11) DPST, SJCE Mysore, 25-26
April 2011 page-40
15. Pratibha Singh, RM Mishra, Vijai Kumar **Sanjay Palsule,**
Ipomea batata fiber reinforced compatibilized polypropylene Composites: Studies on Tensile Modulus
Proceeding of 5th National Conference on Plastics & Rubber Technology (POLYCON-11) DPST, SJCE Mysore, 25-26
April 2011 page-76
16. Anshu Anjali Singh, Priyanka and **Sanjay Palsule,**
Coconut fiber reinforced compatibilized polypropylene Composites: Effect of Compatibilizer Content on
tensile Properties,
Proceeding of 5th National Conference on Plastics & Rubber Technology (POLYCON-11) DPST, SJCE Mysore, 25-26
April 2011 page-112
17. **Sanjay Palsule,** Anshu Anjali Singh, Priyanka, Ankit Jhanwar, Dibyaranjan Mekap and Kavish Sethi, Compatibilization
of Polyethylene for Bamboo, Coconut and Jute Fiber Reinforced Polyethylene Composites,
Proceeding of 5th National Conference on Plastics & Rubber Technology (POLYCON-11), DPST, SJCE Mysore, 25-26
April 2011 page-128
18. Ankit Jhanwar and **Sanjay Palsule,**
Evaluation of Amount of Compatibilizer for Jute Fiber Reinforced Compatibilized Polyethylene Composites,
Proceeding of 5th National Conference on Plastics & Rubber Technology (POLYCON-11), DPST, SJCE Mysore, 25-26
April 2011 page-144
19. Dibyaranjan Mekap and **Sanjay Palsule,**
Optimization of Compatibilizer Content for Coconut Fiber Reinforced Compatibilized Polyethylene Composites,
Proceeding of 5th National Conference on Plastics & Rubber Technology (POLYCON-11) DPST, SJCE Mysore, 25-26
April 2011 page-160
20. Kavish Sethi and **Sanjay Palsule,**
Compatibilization of Bamboo Fiber Reinforced Polyethylene Composites,
Proceeding of 5th National Conference on Plastics & Rubber Technology (POLYCON-11), DPST, SJCE Mysore, 25-26
April 2011 page-162

**Organizer, Convener, Coordinator
of Seminars & Workshops**

- Convener, International Seminar on Polymer Materials, New Delhi, (2000)
Presented Papers Published After Peer Review in *Advances in Polymer Technology*
- Coordinator, DST-BMBF Indo-German Workshop on Polymer Science & Technology, Rajkot

**Invited Lectures and Chaired Sessions
in Conferences, Seminars & Workshops**

- Several Invited Lectures including those in Seminars and Conferences
Organized by American Chemical Society, Institutes and Universities in India & Abroad
- Chaired Sessions in Several International and National Seminars & Conferences

Courses Taught and Ongoing Courses

- Engineering Polymer Composites Pre-PhD
- Polymer Blends and Composites M Tech (2 Years)
- Advanced Polymer Blends M Tech (Vth Year of 5 Year M Tech)
- Polymer Structure B Tech
- Polymer Properties B Tech
- High Performance Polymers B Tech
- Polymer Production Engineering B Tech
- Polymer Blends B Tech
- Polymer Composites B Tech

Personal Details

- Formerly, The Rotary Foundation's Indian Ambassador in London (UK) [1990-91]
- Former Secretary, Rotary Club Saharanpur Continental
- Former Vice President, Bharat Vikas Parishad – Siddhartha, Saharanpur
- Founder & General Secretary, Ramakrishna Vivekananda Ashrama, Saharanpur
- Citizen of Republic of India
- Unmarried / Single
- Date of Birth 07 February 1967

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