

## Achievements of the Department of Plastic Technology

**No. of Research Publications: More than 200**

**No. of Book Published: 01**

**No. of Articles/ Chapters published in Books: 05**

**No. of Patents Published: 01**

**No. of Ph.D. Awarded: 77**

**No. of Research Papers Presented In National & International Conferences: 219**

**No. of FDP/Webinar Attended: 19**

**No. of FDP/Webinar Conducted: 05**

### Details of FDP Attended by Faculty in Last Five Years:

<b>Year</b>	<b>Name of teacher who attended</b>	<b>Title of the program</b>	<b>Duration (from – to) (DD-MM-YYYY)</b>
2017-2018	Prof. Reena Singhal	Problem based and Project based Learning	22 Feb 2020
2017-2018		Re-inventing fly ash into near-whitened material for generating white polymer Composites :Technological Advancements	26.2.18-03.03.18
2017-2018		Outcome based Accreditation for Undergraduate engineering programs	22.3.2018-23.3.1018
2018-2019		'Advancements in Materials Characterization Techniques' Prof. Indira Nigam, Organization Secretary (proof not available)	16-21 December, 2019
2019-2020		Professional Development Training(PDT) of one week	2-6 March, 2020
2018-2019	Prof. Indira Nigam		

2018-2019		FDP on Recent Development of Food Processing and Packaging	24th-29th September, 2018
2018-2019		Summer Training Program on Active Learning for Senior Faculty	June 11-15, 2018
2018-2019		'Advancements in Materials Characterization Techniques' Prof. Indira Nigam, Organization Secretary	16-21 December, 2019
2019-2020		Digital Transformation in Teaching Learning Process	April 06-22, 2020
2020-2021			
2020-2021		Challenges in development of Innovative products in India	July 04, 2020
2020-2021		Use of Nanomaterials in cancer therapy	July 06, 2020
2020-2021		Exposure & Rejuvenation of Technology in Changing era of the Word	July 06-10, 2020
2020-2021		Ancient Indian science and Technology	July 13, 2020
2020-2021		NEP 2020-Effective Governance for Higher Educational Institutions	Feb. 26, 2021
2020-2021		Enabling mechanism for continuance of Academic and Governance Reforms beyond TEQIP-III	March 25, 2021
2021-2022		Modern Innovations in Chemical Engineering & Technology	August 9-13, 2021
2021-2022			
2018-2019	Prof. Deepak Srivastava	Summer Training Program on Active Learning for Senior Faculty (Proof not available)	June 11-15, 2018
2018-2019		FDP on Recent Development of Food Processing and Packaging (Proof not available)	24th-29th September, 2018
2018-2019		'Advancements in Materials Characterization Techniques' Prof. Indira Nigam, Organization Secretary (Proof not available)	16-21 December, 2019

### Workshops/Seminars Conducted in Last Five Years

Year	Name of the workshop/seminar	Number of Participants	Date From-To	Link to the Activity report on the website
2019-20	Advancements in Materials Characterization Techniques	34	16-21 December, 2019	<a href="https://docs.google.com/document/d/1JB7i_1Zjy5I5Av3DDlv3yT1WBEO-pjn-/edit?usp=sharing&amp;oid=109626570982440655111&amp;rtpof=true&amp;sd=true">-https://docs.google.com/document/d/1JB7i_1Zjy5I5Av3DDlv3yT1WBEO-pjn-/edit?usp=sharing&amp;oid=109626570982440655111&amp;rtpof=true&amp;sd=true</a>
2021-22	National Education Policy NEP 2020	45	13.08.2021	<a href="https://drive.google.com/file/d/1zbRnmAa5gbs5OAa-lj20UEpmWtnvdx1/view?usp=sharing">https://drive.google.com/file/d/1zbRnmAa5gbs5OAa-lj20UEpmWtnvdx1/view?usp=sharing</a>
2021-22	High temperature Polymers for applications in Polymer concrete and Coatings	55	21.08.2021	<a href="https://drive.google.com/file/d/1upK7pkoOYLsmGhZ-fHU3qfBMfH4uxRW-/view?usp=sharing">https://drive.google.com/file/d/1upK7pkoOYLsmGhZ-fHU3qfBMfH4uxRW-/view?usp=sharing</a>
2021-22	Single Use Plastics: Challenges and Alternatives	50	28.08.2021	<a href="https://drive.google.com/file/d/1vO-Xws7X-DL5NcYaMx1-AWdQIDh15osp/view?usp=sharing">https://drive.google.com/file/d/1vO-Xws7X-DL5NcYaMx1-AWdQIDh15osp/view?usp=sharing</a>
2021-22	Advanced Polymer Materials for Defence Applications	35	11.09.2021	<a href="https://drive.google.com/file/d/1_Xsaoc3GB5Qiw8A-YL-koXo2f4Q2714T/view?usp=sharing">https://drive.google.com/file/d/1_Xsaoc3GB5Qiw8A-YL-koXo2f4Q2714T/view?usp=sharing</a>

### Authored Chapters in Encyclopaedia / Books :

S.N.	Authors	Title of the book	Name of the publisher	Place of publication	Year of publication	ISBN no.
1	Minakshi Sultania and Deepak Srivastava	Development of vinyl ester resins from renewable and non-renewable resources for advanced applications” in Advances in Polymeric Science, Shishir Sinha, Prakash Biswas & Vinay Kumar (Editors), , Chapter 3A, pp. 95-162	Studium Press LLC	USA	2011	ISBN 10: 9380012519/13: 9789380012513
2	Dr. Reena Singhal	Muticomponent Anionic Hydrogels; Effect of composition on swelling and controlled release behaviors; Encyclopedia of Biomedical Polymers and Polymeric Biomaterials;	Taylor and Francis	CRC Press Taylor and Francis Encyclopedia	2015	9781439898796
3	Dr. Reena Singhal	Hydrogels: Mathematical Approaches Encyclopedia of Biomedical Polymers and Polymeric Biomaterials;	Taylor and Francis	CRC Press Taylor and Francis Encyclopedia	2015	9781439898796
4	Manoj Kumar Shukla, Archana Mishra, Kavita Srivastava, A K Rathore and Deepak Srivastava	DGEBA Epoxy/CaCO <sub>3</sub> Nanocomposites for improved Chemical Resistance and Mechanical Properties for Coating Applications” in Trends and Applications in Advanced Polymeric Materials, Sanjay K. Nayak, Smita Mohanty, and Lakshmi Unnikrishnana (eds.), Chapter 2, pp. 23-44	John Wiley & Sons	USA	2017	ISBN (Cloth) : 9781119363637
5	Tripti Singh, Reena Singhal	Efficient and economical application of a spent waste adsorbent Cu <sup>2+</sup> ion loaded Poly(AAc-AM-SH) superabsorbent hydrogels by reusing it for the adsorption of phosphate ion	Water Quality Management; Part of the Water Science and Technology Library book series (WSTL, volume 79) 257-267	Springer nature Singapore, Pvt. Ltd.	2018	Online ISBN978-981-10-5795-3

**Book Authored:**

Sl. No.	Authors	Title of the Book	Name of the publisher	Year of publication	ISBN no.
1	Ranjana Yadav and Deepak Srivastava	Modification of cardanol - based epoxidized novolac resin with acrylonitrile liquid rubber	LAP Lambert Academic Publishing	2012	ISBN-10: 3659291749, ISBN-13: 978-3659291746

**Patent Published:**

Name of the Teacher	Patent Number	Nature of the patent		Title of the patent	Year of Award / publish of patent
		National	International		
Dr. DEEPAK SRIVASTAVA	Application No.202111011903 A	National		HIGH TOUGHNESS EPOXY/BAMBOO CHAR COMPOSITE REINFORCED WITH SILANIZED TIO2 NANOPARTICLES	Publication Date : 26/03/2021

### Research Papers Published in Last Five Years:

Title of paper	Name of the author/s	Department of the teacher	Name of journal	Year of publication	ISSN number	Link to the recognition in UGC enlistment of the Journal		
						Link to website of the Journal	Link to article/paper /abstract of the article	Is it listed in UGC Care list
<b>2017-18</b>								
Studies on the structural changes during curing of epoxy and its blend with CTBN	Kavita Srivastava , Ashwani Kumar Rathore, and Deepak Srivastava	Plastic Technology	Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy,	January 2018	ISSN No. 1386-1425	<a href="https://www.sciencedirect.com/journal/spectrochimica-acta-part-a-molecular-and-biomolecular-spectroscopy">https://www.sciencedirect.com/journal/spectrochimica-acta-part-a-molecular-and-biomolecular-spectroscopy</a>	<a href="https://doi.org/10.1016/j.saa.2017.06.066">https://doi.org/10.1016/j.saa.2017.06.066</a>	Yes
Synthesis and characterization of novel poly (Acrylic Acid/Sodium Alginate/Sodium Humate) Superabsorbent hydrogels. Part II:	Shipra Agnihotri, R. Singhal	Plastic Technology	Journal of Polymer and the Environment I.F. 1.971	2018	Electronic ISSN No. 1572-8919 Print ISSN No. 1566-2543	<a href="https://www.springer.com/journal/10924">https://www.springer.com/journal/10924</a>	<a href="https://link.springer.com/article/10.1007/s10924-017-0956-y">https://link.springer.com/article/10.1007/s10924-017-0956-y</a>	Yes

The Effect of SH Variation on Cu <sup>2+</sup> , Pb <sup>2+</sup> Fe <sup>2+</sup> metal ions, MB, CV dye adsorption study								
<b>2018-19</b>								
Efficient and economical application of a spent waste adsorbent Cu <sup>2+</sup> ion loaded Poly(AAc-AM-SH) superabsorbent hydrogels by reusing it for the adsorption of phosphate ion	Tripti Singh, Reena Singhal	Plastic Technology	Springer nature Singapore, Pvt. Ltd.	2019	Print ISBN 978-981-10-5794-6  Online ISBN 978-981-10-5795-3	<a href="https://link.springer.com/book/10.1007/978-981-10-5795-3">https://link.springer.com/book/10.1007/978-981-10-5795-3</a>	<a href="https://doi.org/10.1007/978-981-10-5795-3_22">https://doi.org/10.1007/978-981-10-5795-3_22</a>	<b>Yes</b>
<b>2019-20</b>								
Studies on mechanical and thermal properties of epoxy/flyash/nano filler nanocomposite: A	Shilpi Tiwari, Kavita Srivastava, C L Gehlot and	Plastic Technology	International Journal of Civil Engineering and Techno	Feb 2020	ISS N Print : 0976 - 6308  ISSN Online: 0976 - 6316	<a href="https://iaeme.com/Home/journal/IJCIET">https://iaeme.com/Home/journal/IJCIET</a>	-	-

review	Deepak Srivastava		logy					
Epoxy/ Fly ash from Indian soil Chulha/ nano CaCO <sub>3</sub> , nanocomposite: Studies on mechanical and thermal properties	Shipli Tiwari, Chhagan Lal, and Deepak Srivastava	Plastic Technology	Polymer Composites.	August 2020	Online ISSN:1548-0569	<a href="https://onlinelibrary.wiley.com/journal/15480569">https://onlinelibrary.wiley.com/journal/15480569</a>	<a href="https://onlinelibrary.wiley.com/doi/10.1002/pc.25615">https://onlinelibrary.wiley.com/doi/10.1002/pc.25615</a>	Yes
Carbitol as adulterant in menthol; analytical method for quantitative analysis of adulteration	Indrajit Sen, Deepak Srivastava, Manjeet Aggarwal and Rakesh Kumar Khandal	Plastic Technology	AIMS Agriculture and Food	May 2020	ISSN 2471-2086	<a href="https://www.aimspress.com/journal/aimsagri">https://www.aimspress.com/journal/aimsagri</a>	<a href="https://doi.org/10.3934/agrfood.2020.1.129">10.3934/agrfood.2020.1.129</a>	Yes
Effect of Sodium Alginate Content in Acrylic Acid/Sodium Humate/Sodium Alginate Superabsorbent Hydrogel on Removal Capacity of MB and CV Dye by Adsorption	Shipra Agnihotri, R. Singhal	Plastic Technology	Journal of Polymer and the Environment I.F. 1.971	2019	Electronic ISSN No. 1572-8919 Print ISSN 1566-2543	<a href="https://www.springer.com/journal/10924">https://www.springer.com/journal/10924</a>	<a href="https://doi.org/10.1007/s10924-018-1349-6">https://doi.org/10.1007/s10924-018-1349-6</a>	Yes



**2020-21**

Synergistic Influence of CaCO <sub>3</sub> Nanoparticle on the mechanical and thermal of fly ash reinforced epoxy polymer composites	Shilpi Tiwari, Chhagan Lal, and Deepak Srivastava	Plastic Technology	Materials Today: Proceedings	April 2021	ISSN No. 2214-7853	<a href="https://www.sciencedirect.com/journal/materials-today-proceedings">https://www.sciencedirect.com/journal/materials-today-proceedings</a>	<a href="https://doi.org/10.1016/j.matpr.2020.06.205">https://doi.org/10.1016/j.matpr.2020.06.205</a>	<b>Yes</b>
Effect of concentration of MMT nanoclay on the mechanical, thermal and electrical properties of NBR/PP Elastomeric nanocomposites	Harendra Kumar, Javed Ahmed Rizvi and Deepak Srivastava	Plastic Technology	Rasayan J Chem. (RJC)	March 2021	ISS N: 0974 - 1496   eISS N: 0976 - 0083	<a href="http://rasayanjournal.co.in/">http://rasayanjournal.co.in/</a>	<a href="https://doi.org/10.31788/RJC.2021.1415994">10.31788/RJC.2021.1415994</a>	<b>Yes</b>
Simulation of the thermal degradation and curing kinetics of fly ash reinforced diglycidyl ether bisphenol A composite	Shilpi Tiwari, Chhagan Lal Gehlot, Kavita Srivastava and Deepak Srivastava	Plastic Technology	Journal of the Indian Chemical Society	June 2021	ISSN: 0019-4522	<a href="https://www.journals.elsevier.com/journal-of-the-indian-chemical-society">https://www.journals.elsevier.com/journal-of-the-indian-chemical-society</a>	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0019452221000777">https://www.sciencedirect.com/science/article/abs/pii/S0019452221000777</a>	<b>Yes</b>

### List of Ph.D. Students of Plastic Technology Department

S.No.	Name of Student	Topic	Year	Guide
1.	Dr. G.P.Singh	Rheological Studies on Concentrated Polymer Solutions	1977	Dr. G.N Mathur
2.	Dr. T.P.Srivastava	Block Copolymerization of Styrene and Acrylamide	1978	Dr. B.C.Mitra
3.	Dr.A.K.Srivastava	Kinetics and Mechanism of Copolymerization	1979	Dr. G.N Mathur
4.	Dr. U.N.dwivedi	Copolymerization and their Studies	1980	Dr. B.C.Mitra
5.	Dr.Ajit B.Mathur	Studies of Mechanism of Degradation of Polyolefins	1980	Dr. G.N Mathur
6.	Dr.Vijay Kumar	Evaluation of various substituted Phenols on Antioxidants for Polyolefins	1980	Dr. G.N Mathur
7.	Dr.Pradeep Singh	Kinetic Study of vinyl monomer with complex agents	1982	Dr. G.N Mathur
8.	Dr. A.K.Nagpal	Effect of zinc and iron chloride on degradation of PVC	1983	Dr. G.N Mathur
9.	Dr. J.S.P.Rai	Synthesis and thermal behaviour Epoxy resin on Novolacs	1984	Dr. G.N Mathur
10.	Dr. R.N.Gupta	Studies on efficiency of Stabilization in Polyethylene	1984	Dr. G.N Mathur
11.	Dr. Prabhat Saxena	Study on reactions in Polymethane	1984	Dr. G.N Mathur
12.	Dr. Sunil Srivastava	Development of interpenetrating network	1984	Dr. G.N Mathur
13.	Dr. Anjali Babbar	Kinetics of Reaction of Epoxy Novolac Block Copolymer	1984	Dr. G.N Mathur
14.	Dr.Alkendu Srivastava	Synthesis & Characterization of PTFE	1985	Dr. G.N Mathur
15.	Dr.Madhurima Dubey	Studies on Polymerization of Vinyl monomer in presence of P-Yields	1985	Dr. G.N Mathur
16.	Dr.Rajiv Njgam	Development of Polyurethanes	1986	Dr. G.N Mathur
17.	Dr.Rajesh Tripathi	Studies on interaction of Polyurethane polymers on leather	1987	Dr. G.N Mathur
18.	Dr. K.D.Sinha	Studies on Epoxy Novolac Block copolymer	1987	Dr. G.N Mathur
19.	Dr. Sanjeev Gupta	Studies on synthesis of	1988	Dr. G.N Mathur

		Polurethane		
20.	Dr. Dinesh Narayan	Studies on thermal behaviour and degradation of epoxies	1989	Dr. G.N Mathur
21.	Dr. V.P.Malhotra	Evaluation of Organo Antimony compounds on flame retardancy of plasticized PVC	1990	Dr. G.N Mathur
22.	Dr. Neeta srivastava	Kinetics of Copolymerization of Vinyl monomers in presence of complexing agent	1990	Dr. J.S.P.Rai
23.	Dr. Dharendra Nigam	Synthesis and Characterization of Epoxy Novolac block copolymer	1991	Dr. G.N Mathur
24.	Dr. Anjali Mishra	Degradation kinetics of polypropylene	1991	Dr. G.N Mathur
25.	Dr. Ravi Saxena	Synthesis and characterization of IPNs	1991	Dr. G.N Mathur
26.	Dr. Atul Tewari	Synthesis and characterization Epoxy Resole blends	1992	Dr. G.N Mathur
27.	Dr. Vivekanand Badoni	Degradation kinetics of Nylon-6	1992	Dr. G.N Mathur
28.	Dr. Pradeep Agarwal	Synthesis and characterization of Epoxy Novolac block copolymer	1993	Dr. G.N Mathur
29.	Dr. Deepak Srivastava	Synthesis and Characterization Of thermoplastic liquid crystalline Polymers with Mesogenenic side groups	1993	Dr. G.N Mathur
30.	Dr. Neeraj Kumar Gupta	Studies on the property profiles Of crosslinkable PVC by $\gamma$ - radiation	1993	Dr. G.N Mathur
31.	Dr. Bharti Gaur	Synthesis and thermal behaviour of vinyl ester resins based on epoxy resin	1993	Dr. J.S.P.Rai
32.	Dr. Anju Singh	Studies and characterization of epoxy resin	1994	Dr. G.N Mathur
33.	Dr. Abha Shukla	Studies on conductive polypyrrol	1994	Dr. G.N Mathur
34.	Dr. Indira Nigam	Rheological Characterization of blends of polycarbonate with various polymers	1994	Dr. G.N Mathur
35.	Dr. Achla Jha	Synthesis and characterization acrylamide based copolymers	1994	Dr. J.S.P. Rai

36.	Dr.Suman Katiyar	Studies of Elastomer modified Bismaleimide resin	1994	Dr. A.K.nagpal
37.	Dr.Aradhana Sharma	Development of LCP polymers	1994	Dr. G.N Mathur
38.	Dr.Anita Agarwal	Development of LCP polymers	1994	Dr. G.N Mathur
39.	Dr.Snjay Mathur	Photo resist polymers	1994	Dr. G.N Mathur
40.	Dr.Alka Mehrotra	Development of LCP polymers	1994	Dr. G.N Mathur
41.	Dr.Madhumita Swaroop	Studies on mastication of polypropylene/ butadiene styrene block copolymers	1997	Dr. G.N Mathur
42.	Dr.Rajesh Garg	Studies on blends of LDPE, LLDPE and HDPE	1998	Dr. G.N Mathur
43.	Dr.Reena Singhal	Study on controlled release of drugs from polymer matrices	1998	Dr. G.N Mathur
44.	Dr. Anil Kumar Jain	Studies on the Modification of Polypropylene(PP) WITH Ethylene Propylene-Diene-Rubber(EPDM)	2002	Dr. A.K. Nagpal
45.	Dr.Shailesh K. Shukla	Studies on blends of epoxy, various resins and carboxyl-terminated polybutadiene (CTPB).	2002	Dr.Deepak Srivastava
46.	Dr. Tamanna Begum	Synthesis & Characterization of Modified polyacrylamide based copolymeric hydrogels	2003	Dr. Reena Singhal
47.	Dr . Neelam Pal	Curing and Thermal Properties of blends of Vinyl Ester Resins	2004	Dr. J S P Rai
48.	Dr .Alka Gupta	Synthesis and Characterization of Reactive Blends Based on Epoxy Resins and Polycaprolactam	2004	Dr. A.K. Nagpal
49.	Dr .Surendra Kr. Gupta	Studies on the Property Profiles of Rubber on wood polymer composites processed by gamma Radiation	2004	Dr. A.K. Nagpal
50.	Dr. Mudit Goel	Study of thermal and physico of polyether ether Ketone(PEEK) Liquid Crystalline polymer blends	2005	Dr. A.K. Nagpal
51.	Dr.Rajesh Tewari	Kinetics of Ru(III) Catalysed Polymerization of Vinyl Monomers by Charge Transfer Complex	2006	Dr. J S P Rai
52.	Dr.Indu Gupta	A study of Environment Responsive (Smart) Hydrogels based on Polyacrylamide and Acrylates	2008	Dr. Reena Singhal
53.	Dr. Rajiv Singh Tomar	Synthesis and Characterization of Super Absorbent polymers based on Acrylamide and Acrylic acid.	2008	Dr. A.K. Nagpal
54.	Dr. Archana Devi	Studies on the blends of cardanol-based epoxidised novolac	2008	Dr. Deepak Srivastava

		and CTPB.		
55.	Dr. Garima Tripathi	Studies on the blends of epoxy, cycloaliphatic epoxy and CTBN.	2008	Dr. Deepak Srivastava
56.	Dr. S K Singhal	Optimum Part Deposition Orientation and Adaptive Slicing in SL and SLS Prototyping	2008	Dr. A.K. Nagpal
57.	Dr. Bilson Shukla	Effect of Electrical Insulating. Mechanical and Thermal Properties of solventless Polyester Varnishes.	2010.	Dr. A.K. Nagpal
58.	Dr. Ranjana Yadav	Studies on the blends of cardanol-based epoxidized novolac resin and CTBN	2009	Dr. Deepak Srivastava
59.	Dr. Suman Kumari	'Studies on Synthesis of Modified Copolymer of Styrene and Maleic Anhydride	2010	Dr. Indira Nigam
60.	Dr. Arun Maithani	Studies on vinyl ester resins and their blends for use in surface coatings	2010	Dr. Deepak Srivastava
61.	Dr. Sweta Bajpai	Effect of Higher Acrylates on the Synthesis and Characterization of Crosslinkable Copolymers of MMA and Diacrylate/ Dimethacrylates'. Anhydride	2011	Dr. Indira Nigam
62.	Dr. Minakshi Sultania	Studies on the synthesis and characterization of vinyl ester resins from renewable resource material	2012	Dr. Deepak Srivastava
63.	Dr. Arundhati	“Studies on Thermomechanical properties of blends based on Polysulfide & Epoxy Resin”	2012	Dr. A.K. Nagpal
64.	Dr. Rashmi Katiyar	'Synthesis and Characterization of Copolymers of fullerene with vinyl monomers using Bismuthoniumylide as a novel initiator	2013	Dr. Indira Nigam
65.	Dr. Seema Awasthi	Synthesis and Characterization of Smart Hydrogels based on Acrylamide and Sodium Acrylate modified with Acrylic derivative”	2014	Dr. Reena Singhal
66.	Dr. Priti Shukla	Studies on Vinyl ester resins based on phenol cardanol novolacs	2014	Dr. Deepak Srivastava
67.	Dr. Ravindra Singh	Synthesis and Characterization of copolymers of vinyl monomers and fullerene	2014	Dr. Deepak Srivastava

68.	Dr. Tripti Singh	Synthesis and Characterization of Multifunctional copolymeric Hydrogels”	2016	Dr. Reena Singhal
69.	Dr. Jgarati Kandpal	Effect of Thermoplastics on Thermal and Mechanical Properties of Multifunctional Epoxies	2016	Dr. A.K. Nagpal
70.	Dr. Riya Srivastava	Development of modified epoxy matrix from furfural	2017	Dr. Deepak Srivastava
71.	Dr. Shrawan Kumar Shukla	Studies on cardanol based resin systems for application in protective coating	2018	Dr. Deepak Srivastava
73.	Dr. Manoj Kumar Shukla	Study of thermal and mechanical properties of nano CaCO <sub>3</sub> modified DGEBA Epoxy matrix/Glass fiber composites	2018	Dr. Deepak Srivastava
74.	Dr. Indrajeet Sen	Studies on method development for analysis of food and food products	2021	Dr. Deepak Srivastava
75.	Dr. Shipra Agnihotri	Synthesis and Characterization of Multicomponent Ionic Hydrogels based on Natural Carbohydrates for Water purification”	2022	Dr. Reena Singhal
76.	Harendra Kumar	Preparation and characterization of NBR-PP-MMT and NBR-PP-HNT elastomer nanocomposites	Under Progress	Dr. Deepak Srivastava
77.	Shilpi Tiwari	Studies on effect of nano filler on chemical, mechanical and thermal properties of epoxy/Fly ash nano composite	Under Progress	Dr. Deepak Srivastava

### **Research Projects Completed :**

<b>S.no.</b>	<b>Name of project</b>	<b>Sponsoring agency</b>	<b>Duration</b>	<b>Cost</b>
<b>Prof. Reena Singhal</b>				
1.	Polyether Ether Ketone (PEEK) Liquid Crystalline Polymer (LCP) Blends	DMSRDE (DRDO)	31.10.2001	3.71 Lacs
2.	Development Of Copolymeric Hydrogels Based Adsorbents For Removal Of Toxic Heavy Metal Ions & Dyes From Industrial Waste Waters	UGC New Delhi	2.2011 to 31.1.2014	7.20 Lacs
3.	Superabsorbent Hydrogels For Soil Modification For Reducing Water Requirements And Promoting Plant Growth	TEQUIP- II grant	March 2015	1.30 Lacs
4.	Centre Of Excellence On Lipids At HBTI, Kanpur	HBTI, Kanpur	March 2016	4.00 Lacs
5.	Development of high swelling Co-polymer based Superabsorbent Hydrogels for removal of dyes from Industrial waste water	TEQUIP- III ; Seed Money	March 2018	2.0 Lacs
<b>Prof, Deepak Srivastava</b>				
1.	Modified Epoxy Resins	M/s Ruchi Organics, Kanpur	2 years	20,000
2.	Development of high performance polymers from CNSL	AICTE, New Delhi	5 years	5.00 Lacs
3.	Development of Elastomer - toughened composite matrix for high energy absorbing applications	CST, UP	2 years	5.01 Lacs
4.	Development of modified epoxy matrix from renewable resource material.	UGC, New Delhi	3½ years	11.00 Lacs
5.	Development of environmentally preferred coating materials	CSIR, New Delhi	1 year	1.78 Lacs
6.	Development of vinyl ester resins from renewable resource material. for application on composite and coatings	CSIR, New Delhi	1 year	2.684 Lacs
7.	Studies on the modifications of thermosetting epoxy and vinyl ester resins from renewable resource material for multifarious application	CSIR, New Delhi	1 year	3.08 Lacs
8.	Studies on the modifications of thermosetting resins from renewable resource material for multifarious application	CSIR, New Delhi	1 year	3.36 Lacs

9.	Development of Fullerene containing polymer nano composites sanctioned under Research & Development grant	TEQIP II	1 year	2.50 Lacs
<b>Prof. Indira Nigam</b>				
1.	Synthesis & Characterization of copolymer of Styrene and Maleic Anhydride	Dhupar Chemicals Pvt. Ltd. Kanpur	1 year	0.50 Lacs
2.	Corrosion Resistant Coatings based on Polyacrylate /Nano-clay composites (PNC)	AICTE, New Delhi.	3 years	5.5 Lacs
3.	'Studies on miniemulsion polymerization of styrene-acrylic-based copolymer for pressure sensitive adhesives'	TEQIP-III, HBTU Kanpur	1 year	2.4 Lacs