



Curriculum Vitae Europass

Personal information

First name / Surname

Address

Telephone

E-mail

Nationality

Work experience

Dates 01/02/2024-until now

Occupation or position held Post-Doc

Main activities and responsibilities Production and characterization of bio-composites aimed at carrying out the Project – “Coating based on polysaccharides.

Name and address of employer Department of Material Science and Technology, National Interuniversity Consortium of Materials Science and Technology (INSTM) Via G. Giusti, 9 50121 Florence

Type of business or sector Research

Dates 15/01/2023- 14/01/2024

Occupation or position held Post-doc

Main activities and responsibilities Production and characterization of biocomposites aimed at carrying out the Project – PROLIFIC, GA n. GA887848. – “Development of chitin and chitosan-based coatings from apply on plastic and cellulosic substrates. Plastic analysis”. the investigation of enzymes and insects, worms for degradation of conventional plastics such as polyethylene and polystyrene and valorize the biomass such as the insect exoskeleton for chitin extraction and use in coatings.

Name and address of employer Department of Civil and Industrial Engineering, University of Pisa, Largo Lucio Lazzarino, 1 Pisa, 56122

Type of business or sector Research

Dates 30/11/2022

Occupation or position held Technical head

Main activities and responsibilities The conduct analyzes material as per customer requirements. To train the team in the said sphere and conduct regular R& D

Name and address of employer Department Polymers Division, Krishna Metallurgical Laboratories Pvt. Ltd. Plot No. 353, Phase 6, Sector-37, Gurugram, Haryana, 122002.

Type of business or sector	Business development activities.
Dates	15/03/2015-31/07/2017
Occupation or position held	Collaboration contract
Main activities and responsibilities	Production and characterization of biomaterials for bio foam application, aimed at carrying out the project. Transformation of thermoplastic polymers, production and mechanical characterization of biocomposites, semi-industrial compounding of composites based on biobased polyurethane polymers and polyol and their fabrication or solution casting process
Name and address of employer	Manipal University Jaipur, Dehmi Kalan, Off Jaipur-Ajmer Expressway, Jaipur, (Raj.) Rajasthan 303007.
Type of business or sector	Research
Dates	01/09/2007
Occupation or position held	Executive
Main activities and responsibilities	Testing of samples
Name and address of employer	" Indus Pharma Pvt. Ltd.", Alwar, Rajasthan-301705
Type of business or sector	Research

Education and training

Dates	05/08/2020
Title of qualification awarded	PhD in Mechanical Engineering Centre for Materials Science and technology (CMST), Thesis title: Development of Engineered Bio-nanocomposites and Correlation of Structure-Properties
Name and type of organisation providing education and training	Birla Institute of Technology and Science, Pilani (BITS Pilani). 333031, (IN).
Principal subjects/occupational skills covered	Development of Engineered Bio-nanocomposites and Correlation of Structure-Properties (PLA-PHAs-PCL) adding natural fibers, obtained from plant fibers and clay. Morphological (scanning electron microscopy), thermal (scanning thermogravimetry and calorimetry), mechanical characterization (tensile tests, impact tests) and thermal characterization. Production of composite materials by extrusion, semi-industrial extruder. The biodegradation test in on a laboratory scale was also conducted of antimicrobial test.
Dates	15/05/2013
Title of qualification awarded	JRF Position: Recycling of PET and its subsequent application
Name and type of organisation providing education and training	Department of Polymer Science and Chemical Engineering in University of Calcutta 87/1, College Street, Kolkata-700073, (IN)
Principal subjects/occupational skills covered	Inorganic Materials, Industrial Polymers, Industrial Biotechnologies, Materials for Special Uses, Bioindustry Polymer, Industrial Chemistry, Nanomaterials Chemistry, Industrial Fine Chemicals, Environmental Chemistry.
Dates	18/04/2012

Title of qualification awarded	Master degree in Engineering (Plastic Engineering)
Name and type of organisation providing education and training	CIPET, Department of Polymer Engineering, University of Uttar Pradesh, Lucknow India/ 06 months internship in Centre for Fire Explosive and Environment Safety (CFEES), DRDO, 110054, Delhi (IN)
Principal subjects/occupational skills covered	Characterization about a polymer with Tear Tester, Adhesion Tester, with Flammability Tester Inorganic Materials, Industrial Polymers, Materials for Special Uses, Bioindustry Polymer, Industrial Chemistry and Industrial Fine Chemicals
Dates	30/09/2009
Title of qualification awarded	Master of Science Polymer Science and Chemical Technology
Name and type of organization providing education and training	Department of Chemistry University of C.C.S.M: Chaudhary Charan Singh University, Meerut 250001,IN
Principal subjects/occupational skills covered	General Chemistry and Analytical Chemistry and Laboratory of Analytical Chemistry, Industrial Chemistry Organic Materials, Polymers Science, Polymer Testing, Mathematics, Materials for Special Uses, Fiber Technology, Rubber Technology, Industrial Fine Chemicals.
Dates	13/11/2006
Title of qualification awarded	Bachelor degree in Industrial Chemistry
Name and type of organization providing education and training	Department of Chemistry University of C.C.S.M: Chaudhary Charan Singh University, Meerut 250001,IN
Principal subjects/occupational skills covered	Industrial Chemistry, Organic Chemistry and Analytical Chemistry and Laboratory of Analytical Chemistry, Industrial Chemistry Organic Materials, Polymers Science, Polymer Testing, Mathematics, Materials for Special Uses, Fiber Technology, Rubber Technology.
Mother tongue	Hindi
Other languages	
Self-assessment	

Autovalutazione <i>European level (*)</i>	Understanding		Speaking		Writing
	Listening	Reading	Spoken interaction	Spoken production	
English	Good	Good	Good	Good	Good
Italian	Scholastic	Scholastic	Scholastic	Scholastic	Scholastic

(*) Common European Framework of Reference for Languages

Publications

1. T. Sathish, Karthikeyan SK., Sathyamurthy R., Kumar A., K. Rajaram, Kumar S, Abdullah A. A., Pandit B., Gupta M, Kumar SN, **Malik, N.**, Ubaidullah M, (2024). Waste Coconut oil meal to Hydrogen production through combined steam/water gasification with varying operating parameters and NaCl additions, International Journal of Hydrogen Energy, <https://doi.org/10.1016/j.ijhydene>.
2. Kumar, S., **Malik, N** Cinelli, P., & Sharma, V. (2023). High Strain Rate Behavior of Stir Cast Hybrid Al-Si Matrix Composites Using Split Hopkinson Pressure Bar. Silicon, 1-10.
3. **Malik, N.**, (2022). Thermally exfoliated graphene oxide reinforced polycaprolactone-based bactericidal nanocomposites for food packaging applications. Materials Technology, 37(5), 345-354.
4. **Malik, N.**, & Shrivastava, S. (2019). Synthesis and characterization of fire resistance polymeric coating solution for carbon-blended aluminized (E-glass-based) and non-aluminized fabric. The Journal of The Textile Institute, 110(12), 1710-1715.
5. Kadam, H., Bandyopadhyay-Ghosh, S., **Malik, N.**, & Ghosh, S. B. (2019). Bio-based engineered nanocomposite foam with enhanced mechanical and thermal barrier properties. Journal of Applied Polymer Science, 136(7), 47063.
6. **Malik, N.**, Kumar, P., Ghosh, S. B., & Shrivastava, S. (2018). Organically modified nanoclay and aluminum hydroxide incorporated bionanocomposites towards enhancement of physico-mechanical and thermal properties of lignocellulosic structural reinforcement. Journal of Polymers and the Environment, 26, 3243-3249.
7. **Malik, N.**, Shrivastava, S., & Ghosh, S. B. (2018). Moisture absorption behaviour of biopolymer polycaprolactone (PCL)/organo modified montmorillonite clay (OMMT) biocomposite films. In IOP Conference Series: Materials Science and Engineering. p. 012027.
8. **Malik, N.**, Kumar, P., Shrivastava, S., & Ghosh, S. B. (2017). An overview on PET waste recycling for application in packaging. International Journal of Plastics Technology, 21, 1-24

Book Chapters

1. **N. Malik (2023)** and P. Cinalli. Flammability of fiber-based composites, Elsevier

Conference Contributions

2. **N. Malik**, Barbani, C. Cristallini, N. Mallegni, M. Musetti and P. Cinelli, "Chitosan and Curcumin films as active packaging with antioxidant-activity" 2nd Conference on Green Chemistry and Sustainable Coatings, 2023. Pisa, Italy,
3. **N. Malik**, Ghosh, S. B., and Shrivastava, "Preparation of flame resistant and Poly (lactic acid) or Organomontmorillonite Nanocomposites film" in APM at Ahmadabad IN
4. Participated in Workshop on Additive Manufacturing: Application and Recent Trends at Birla Institute of Technology and Science (BITS)-2017 IN
5. Participated in Faculty Development Program (FDP) on Frontiers in Advanced Materials, Manufacturing and Sustainability at Manipal University Jaipur on- 2016 IN
6. Participated in INUP Familiarization Workshop on Nanofabrication Technologies in Malaviya National Institute of Technology (MNIT) at Jaipur -2016 IN.
7. Participated in International Conference on Advancements in Polymeric Materials (APM- 2016) Ahmedabad India at Central Institute of Plastics Engineering and Technology (CIPET).
8. Participated in INUP Familiarization Workshop on Nanofabrication Technologies in IIT Bombay, at Mumbai-2015 IN.
9. Participated in 2nd Indo-German Workshop on Green Manufacturing in Birla Institute of Technology and Science (BITS)-2013 at Pilani IN.
10. Participated in International Conference on Advancements in Polymeric Materials APM- 2012 Ahmedabad India at Central Institute of Plastics Engineering and Technology (CIPET).
11. Participated in National Conference on Advanced Fibres and Fabrics in APF2 2011 at DRDO Kanpur IN.
12. Participated in International Conference on Advancements in Polymeric Materials APM- 2011 Chennai India at Central Institute of Plastics Engineering and Technology (CIPET) IN
13. Participated in The Short-Term Course on Polymer Blends and Alloys-2010 Lucknow at Central Institute of Plastics Engineering and Technology (CIPET) IN
14. Participated in National Symposium on Recent trends in plastic recycling and value addition-2010 Lucknow India at Central Institute of Plastics Engineering and Technology (CIPET) IN

Trainings

1. Training course: "Polymer Composites Material it's Processing, Testing and Application "held on CIPET Aurangabad 2021.
2. Training course: "Entrepreneurship Development Program on Labelling Display and Packaging Material." At Ministry of

Another Activity

MEMS, **2022** Govt. of India.

3. Training course: "Laboratory quality management system and internal audit as per IS/ISO/IEC17025:2017" at Bureau of Indian Standards (BIS); **2022**.
 4. Training course: "Training course for workers pursuant to art. 37 D.Lgs. 81/08 and Agreements of the State-Regions Conference 221/2011 e128/2016" **2023**.
1. 1 experimental article for Journal of Food Engineering **2022**.
 2. 3 review articles (Materials Today: Proceedings) for the international conference AMMT **2023**.

Pisa,10/03/2024

Neetu Malik

