

CURRICULUM VITAE



Andrea Dorigato is Associate Professor at the Department of Industrial Engineering (DII) of the University of Trento (UNITN, Italy) from 2019. His most significant research topics are related to the investigation of the viscoelastic and fracture behaviour of polymer nanocomposites and of electro-active multiscale polymer composites with self-sensing and self-healing properties. His research is also focused on the development of innovative polymeric materials obtained from renewable resources and recycled materials with low environmental impact, of multifunctional foams for the thermal insulation, and of Phase Change Materials for the thermal energy storage/release. Also the Life Cycle Assessment (LCA) of engineering materials is comprised in his research interests.

• PERSONAL INFORMATION

Family name, First name: DORIGATO, ANDREA

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Date of birth: July 31st 1981

Nationality: Italian

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Scientific sector: ING-IND/22 (Materials Science and Technology).

• EDUCATION

- 2009 PhD Title
International School of Doctoral Studies in Materials Engineering (XXI cycle)
University of Trento, Department of Materials Engineering and Industrial
Technologies (DIMTI), Italy
Supervisor: prof. Alessandro Pegoretti
- 2005 Master Degree in Materials Engineering
Faculty of Engineering, Department of Materials Engineering and Industrial
Technologies (DIMTI), University of Trento, Italy.

• CURRENT POSITION

From 2019 Associate Professor
Department of Industrial Engineering, University of Trento, Italy.

• PREVIOUS POSITIONS

- 2016 – 2019 Assistant Professor (RTDB)
Department of Industrial Engineering, University of Trento, Italy
- 2009 – 2016 Post-Doc
Department of Industrial Engineering, University of Trento, Italy.

- **AWARDS**

- 2014 ESCM Award 2014 as the Best European Under 35 Researcher in the Field of Composites Materials, Seville (Spain)
- 2012 “Lauro Ferrarini” Award for the research in the agri-foodstuff field entitled “Application of the Supercritical Carbon Dioxide Treatment for the hum conservation”, Lesignago de’ Bagni (Italy)
- 2010 AIMAT National Prize for the best PhD Thesis in Materials Engineering 2009-2010, Capo Vaticano (Italy)
- 2009 Best PhD Student of the University of Trento Award (A.Y. 2009-2010), Trento (Italy).
- 2006 Undergraduate Thesis Award “Produzione e caratterizzazione di nanocompositi a matrice poliuretana”, Vicenza (Italy).

- **SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS**

- 2017 – 2023 Scientific Responsible of 5 Post-Docs
Department of Industrial Engineering, University of Trento, Italy
- 2018 – 2023 Tutor of 6 PhD Students
Department of Industrial Engineering, University of Trento, Italy
- 2016 – 2023 Tutor of 49 Master Students
Department of Industrial Engineering, University of Trento, Italy
- 2016 – 2023 Tutor of 32 Bachelor Students
Department of Industrial Engineering, University of Trento, Italy
- 2007 – 2023 Co-Tutor of 34 Master Students
Department of Industrial Engineering, University of Trento, Italy.

- **TEACHING ACTIVITIES**

- 2007 – 2016 Teaching assistant in the undergraduate courses
Department of Industrial Engineering, University of Trento, Italy
- 2016 – 2023 Teacher in the undergraduate and PhD courses
Department of Industrial Engineering, University of Trento, Italy
- From A.Y. 2016/2017 up to A.Y. 2018/2019
Properties and Characterization of Materials mod.1
Master Degree in Materials and Production Engineering
- From A.Y. 2016/2017
Recycling and Sustainable Materials
Master Degree in Materials and Production Engineering
- From A.Y. 2017/2018
Laboratorio di Tecnologie delle Materie Plastiche
Bachelor Degree in Industrial Engineering
- From A.Y. 2017/2018
Environmental Sustainability of the Materials
Doctoral School in Materials, Mechatronics and Systems Engineering
- From A.Y. 2018/2019
Circular Economy for Materials Processing
Master Degree in Materials and Production Engineering
- A.Y. 2016/2017 and A.Y. 2017/2018
Scienza e Tecnologia dei Materiali 2

- Bachelor Degree in Industrial Engineering
A.Y. 2017/2018
Polymeric Materials Engineering
Master Degree in Materials and Production Engineering
- From A.Y. 2020/2021
Engineering Properties of Materials
Master Degree in Materials and Production Engineering.

- **ORGANISATION OF SCIENTIFIC MEETINGS**

- 2023 Scientific Committee of the Milan Polymer Days 2023 (MIPOL 2023), Milan (Italy)
- 2023 Organizing Committee of INSTM National Conference, Bressanone (Italy)
- 2022 Scientific Committee of the Milan Polymer Days 2022 (MIPOL 2022), Milan (Italy)
- 2022 Scientific Committee of XXIV National Conference AIM, Trento (Italy)
- 2022 Organizing Committee of XXIV National Conference AIM, Trento (Italy)
- 2020 Scientific Committee of the Milan Polymer Days 2020 (MIPOL 2020), Milan (Italy)
- 2017 Organizing Committee of Macrogiovani 2017, Trento (Italy).

- **INSTITUTIONAL RESPONSIBILITIES**

- 2023 – 2023 Member of the Council of the Doctoral School in Industrial Innovation, University of Trento (Italy)
- 2022 – 2023 Member of the board of directors of the Order of Engineers of the Province of Trento (Italy)
- 2020 – 2023 Member of the board of directors of the National Interuniversity Consortium of Materials Science and Technology (INSTM), Italy
- 2017 – 2023 Member of the Council of the Doctoral School in Materials, Mechatronics and Systems Engineering, University of Trento (Italy)
- 2016 – 2023 Member of the Department of Industrial Engineering (DII), University of Trento (Italy).

- **EDITORIAL BOARD MEMBERSHIP**

- 2022 – 2023 Editorial Board, Journal of Advanced Biotechnology and Bioengineering (ISSN 2311-1755)
- 2022 – 2023 Editorial Board, Carbon Footprints (ISSN 2831-932X)
- 2021 – 2023 Editorial Board, Journal of Composites Science (ISSN 2504-477X)
- 2021 – 2023 Editorial Board, Applied Sciences (ISSN 2076-3417, IF = 2.7)
- 2020 – 2023 Editorial Board, Macromol (ISSN 2673-6209)
- 2020 – 2023 Editorial Board, Molecules (ISSN 1420-3049, IF = 4.6)
- 2019 – 2023 Editorial Board, Reviews on Advanced Materials Science (ISSN 1606-5131, IF = 3.6)
- 2018 – 2023 Editorial Board, Frontiers in Materials, section Polymeric and Composite Materials (ISSN 2296-8016, IF = 3.2).

- **MEMBERSHIPS OF SCIENTIFIC SOCIETIES**

- 2021 – 2023 Associazione Italiana Compositi e Affini (Assocompositi)
- 2011 – 2013 Society of Plastics Engineers (SPE)
- 2007 – 2023 Italian Association of Materials Engineering (AIMAT)
- 2007 – 2023 Italian Association of Macromolecules (AIM)

2005 – 2023 National Interuniversity Consortium for the Materials Science and Technology (INSTM).

- **MAJOR COLLABORATIONS**

- Miroslav Slouf, TEM analysis of polymer nanocomposites, Academy of Sciences of the Czech Republic, Prague (Czech Republic)
- Dr. Seraphin Unterberger, thermal conductivity of polymer composites with thermal energy storage capability, University of Innsbruck (Austria)
- Prof. Maria Conceicao Paiva, development of electro-active nanocomposites, University of Minho (Portugal)
- Prof. Jose Marie Lopez Cuesta, fire behaviour of polymer nanocomposites, Ecole des Mines d'Alès (France)
- Prof. Massimo Messori, characterization of polyamide based nanocomposites, University of Modena and Reggio Emilia (Italy)
- Prof. Luana Perioli, development of nanocomposite films for wound dressing, University of Perugia (Italy)
- Prof. Vincenzo Fiore, development of fully biodegradable composites, University of Palermo (Italy)
- Prof. Nadia Lotti, development of furanoate based blends, University of Bologna (Italy)
- Prof. Dimitrios Bikiaris, development of furanoate based blends and nanocomposites, Aristotle University of Thessaloniki (Greece).

- **PROJECTS PARTICIPATION**

- 2007 - 2008 "NanoCompStrut", financed by MIUR
- 2008 - 2011 "Miscibilità, applicazioni processabilità di polimeri" (MAPP), co-financed by INSTM
- 2012 - 2014 "Realizzazione e caratterizzazione di laminati compositi biodegradabili a base legno", Caritro Post-doc Call 2011
- 2014 - 2015 "Sviluppo di fibre polimeriche elettricamente conduttive per filtri multifunzionali", co-financed by UFI Innovation Center Srl of Ala (Trento)
- 2015 - 2016 "Sviluppo e caratterizzazione di filtri nanocompositi multifunzionali per il settore automobilistico", Caritro Call 2014
- 2017 - 2019 Scientific Responsible of the project "Development of multifunctional self-sensing/healing structural composites using graphene-treated fibers", Caritro Post-doc Call 2017
- 2018 - 2020 "Eliminating Copper from brake Pads and Recycling (ECOPADS)", KIC Raw Material Upscaling project 2017. Responsible of WP5 (Recycling)
- 2019 - 2021 Scientific Responsible of the project "Sviluppo di un processo di riciclo chiuso della gomma per componenti del settore automobilistico (RE-RUBBER)", Caritro Call 2019
- 2021 - 2023 "On demand BIODEgradable STARrch-derived composites for PACKaging (BIOSTAR-PACK)", Cariplo Call 2020
- 2021 - 2023 Scientific Responsible of the project "Studio di una nuova generazione di bioplastiche a base di poliesteri furanoati per packaging e fibre tessili sostenibili (BioPackTex)". Caritro Post-doc Call 2020
- 2021 - 2023 Responsible of the Research Unit within the project "ONEFOREST: a multicriteria decision support system for a common forest management to

strengthen forest resilience, harmonize stakeholder interests and ensure sustainable wood flows”, call LC-RUR-11-2019-2020 (RIA)

- 2022 - 2023 Scientific Responsible of the project “Sviluppo di materiali compositi a matrice termoplastica a basso impatto ambientale”, call PON “Ricerca e Innovazione” 2014-2020
- 2022 - 2023 “Circular economy practical training materials for plastic manufacturing industries (CIRCVET)”, call ERASMUS-EDU-2021-PI-ALL-INNO
- 2023 - 2023 PI of the PRIN 2022 project “Towards a new generation of eco-sustainable multifunctional textiles (GENTEXT)”
- 2023 - 2023 Scientific Responsible of the project “Sviluppo di componenti per elettrodomestici eco-sostenibili tramite materiali plastici innovativi (ELETTOPLAST)”. Caritro Call 2022/2023.

• INVITED LECTURES IN INTERNATIONAL CONFERENCES

- Plenary Lecture "The challenging world of composites: my steps from micro to nanocomposites". In ECCM16 Seville (Spain), 2014
- Invited Lecture "Materiali compositi multifunzionali per lo sviluppo sostenibile". In Macrogiovani 2017. Trento (Italy)
- Invited Lecture “Novel electrically conductive polymer nanocomposites for industrial applications”. In Milan Polymer Days 2017 (MIPOL 2017). Milan (Italy)
- Invited Lecture “Investigation of the physical behaviour of multifunctional polymer composites with thermal energy storage/release capability”. In Milan Polymer Days 2019 (MIPOL 2019). Milan (Italy)
- Invited Lecture “Physical properties of novel furan based polyester blends”. In Milan Polymer Days 2021 (MIPOL 2021). Virtual edition
- Invited Lecture “Novel biobased poly(lactic acid)/poly(ethylene furanoate) blends for packaging applications”. In Milan Polymer Days 2022 (MIPOL 2022). Milan (Italy).

• SCIENTIFIC PRODUCTION

- Scopus statistics (updated at 07/09/2023): 167 documents, 3393 citations, h-index 35. The complete list of the publications can be found at this link: <https://webapps.unitn.it/du/it/Persona/PER0009668/Pubblicazioni>
- 2 Book Chapters and 190 national/international congress contributions
- Editor of the Special Issue "Investigation of Polymer Nanocomposites' Performance". Molecules (ISSN 1420-3049, IF = 4.6), section "Macromolecular Chemistry".

• NOTES

- 2021 Scientific National Qualification (ASN), sector 09/D1 - Materials Science and Technology - I Fascia
- 2014 Scientific National Qualification (ASN), sector 09/D1 - Materials Science and Technology - II Fascia.

Signature


