



Nejib KASMI, PhD

Personal website: <https://nejibkasmi.com/>

Amsterdam, Netherlands | nejibkasmi@gmail.com | +31617357898

Polymer Scientist & R&D Project Leader

Sustainable Plastics, Biobased Polymers & Circular Materials

- **27** peer-reviewed publications | **> 1,330** citations | **h-index: 22** ([Google Scholar](#))
- **Sole inventor** of a filed patent application — developing an innovative strategy to enhance poly(ethylene furanoate) (PEF) performance (*Patent Pending; Avantium, The Netherlands*)
- **Selected Member** of the American Chemical Society (ACS) *Biomacromolecules* Early Career Board (2024) ([LINK 1](#), [LINK 2](#)) 

Research Profiles

 Google Scholar

 ORCID

 Scopus

 ResearchGate

 LinkedIn

Profile

Polymer Scientist and R&D Project Leader with 8+ years of academic and industrial experience in sustainable plastics, biobased polymers, and circular materials innovation. Specialized in the design, synthesis, characterization, and development of fully biobased polyesters with tailored performance for sustainable packaging and other end-use applications. Experienced in leading multidisciplinary R&D projects and addressing complex polymer development challenges through optimization of structure–property relationships to meet application requirements and enable industrial implementation. Skilled in building academic–industrial collaborations and translating polymer science into industrially relevant material solutions.

Core Competencies and Expertise

- Deep expertise in sustainable polymer development, with a strong focus on biobased polyester chemistry, including polyesters based on 2,5-furandicarboxylic acid (FDCA), such as poly(ethylene furanoate) (PEF), furan-derived copolyesters, polyester blends, and other renewable polymer materials.
- Applied R&D project leadership, including research concept generation, technical planning, coordination of research activities, and delivery of project outcomes addressing challenges in polymer technologies.
- Strong understanding of polymer structure–property relationships and material optimization strategies, including tailoring thermal, mechanical, barrier, crystallization, and processing-related properties for targeted applications.
- Extensive hands-on experience with polymer synthesis techniques, including melt polycondensation, solid-state polycondensation, polymer blending, ring-opening polymerization, in situ polymerization, and functional polymer development.
- Advanced expertise in polymer and material characterization, including spectroscopic techniques (FTIR, NMR, UV–Vis, Raman), chromatographic methods (HPLC, GC-MS, LC-MS, SEC), and thermal/mechanical analysis (DSC, TGA, DMA), supported by strong data interpretation and scientific reporting skills.
- Knowledge of circular polymer approaches, including chemical recycling of polyester waste, valorization of plastic waste into high-value polymer materials, and strategies for designing closed-loop polymer systems.
- Ability to translate fundamental polymer science into innovative, application-driven solutions addressing challenges in sustainable plastics.
- International academic and industrial R&D experience across seven European countries, resulting in a strong scientific network and multidisciplinary collaborations.

Professional and Work Experience

Dec 2023 to present **R&D Project Leader / Polymer Scientist**
 AVANTIUM – Amsterdam, The Netherlands
 Permanent position

Key Responsibilities

- Lead industrial R&D projects focused on developing innovative, high-performance polymer materials, guiding projects from concept generation and technical planning through coordination of multidisciplinary research activities, scientific decision-making, and successful project delivery.
- Develop next-generation sustainable polymers for advanced packaging applications, including renewable polyesters based on 2,5-furandicarboxylic acid (FDCA) (e.g., poly(ethylene furanoate) (PEF), furan-derived copolyesters, and circular polymer technologies.
- Drive industrial innovation by developing technically robust and patentable solutions to complex polymer and product development challenges, contributing to Avantium's intellectual property portfolio.
- Provide scientific leadership in sustainable polymer development, translating fundamental polymer science into innovative, industrially relevant material solutions and guiding technical strategies across R&D projects.

- Initiate and develop strategic R&D collaborations between Avantium, universities, and research and technology organisations (RTOs), leveraging an international scientific network to establish collaborative research projects and identify competitive funding opportunities.
- Support the development of European collaborative research initiatives, including Horizon Europe Innovation Action (IA) proposals, by leveraging an international scientific network, facilitating consortium building, and contributing to the definition of Avantium's technical contributions.
- Technical Coordinator for Avantium's WP2 activities (Thermoplastic Polyester Technologies) within the [Horizon Europe GREEN-X project](#) (2026–2030) – Advancing Sustainable Polymer Innovation through Circular Feedstocks, Greener Materials, and Industrial Collaboration – leading Avantium's technical contribution and scientific collaboration with Mines Paris PSL University (France) and Aristotle University of Thessaloniki (Greece).
- Supervise and mentor PhD researchers from these partner universities during their industrial research stays at Avantium, providing scientific guidance and facilitating knowledge exchange between academia and industry.
- Collaborate closely with cross-functional teams, including commercial, regulatory, IP, and application development teams, to ensure R&D activities are aligned with product strategy, customer needs, regulatory requirements, and business objectives.
- Act as Scientific Advisor for polymer development, providing scientific guidance and technical expertise to support innovation decisions across R&D activities.
- Represent Avantium at leading international scientific conferences through invited and contributed presentations, strengthening the company's scientific visibility, fostering international collaborations, and supporting the identification of new research and innovation opportunities.

Selected Achievements

- **Sole inventor of a filed patent application** — developing an innovative strategy to enhance the performance of poly(ethylene furanoate) (PEF) (Patent Pending, 2026; Avantium, The Netherlands).
- Invited speaker at Milan Polymer Days conference (MIPOL2026), representing Avantium and showcasing recent industrial R&D advances in biobased polymer innovation.

Apr 2023–
Nov 2023

Researcher

Institute Charles Gerhardt Montpellier (ICGM), French National Centre for Scientific Research, France

Research project (Horizon Europe – [REDONDO](#)): Developed reversibly crosslinked polymer materials based on dynamic covalent chemistry for recyclable-by-design polyethylene (rPEX) within a multidisciplinary consortium of academic and industrial partners.

Nov 2021–
Nov 2022

Researcher

Department of Fibre and Polymer Technology, KTH Royal Institute of Technology, Stockholm, Sweden

Research projects and contributions:

- [Chemical recycling and valorization of PET waste](#): Conversion of post-consumer PET bottles into high-performance polyimide materials with on-demand closed-loop chemical recyclability, demonstrating mechanical properties exceeding selected benchmark commodity plastics (Research output: [Publication](#))

- [Development of renewable polyurethane thermosets](#): Synthesis of highly transparent polyurethane thermosets from 100% biobased branched polyesters, achieving on-demand tunable mechanical and thermal properties combined with enzymatic degradability (Research output: [Publication](#)).

Jun 2021–
Oct 2021

Research Scientist

Helmholtz-Zentrum Hereon, Berlin, Germany

Research activities: Synthesis and characterization of multifunctional polyester-based biomaterials for adaptive and active polymer systems

Mar 2019–
Apr 2021

Junior Research & Technology Associate

Department of Materials Research and Technology, Luxembourg Institute of Science and Technology, Luxembourg.

Research project (CATBIOSE – New biopolymers based on renewable building blocks from catalytic deoxygenation of hemicelluloses):

- Development of fully biobased polyester materials from building blocks derived from hemicelluloses through catalytic deoxygenation strategies, investigating polymer architecture, structure–property relationships, thermal performance, and biodegradability. This research resulted in **four peer-reviewed publications**.

- Sep 2016– Oct 2018 **Postdoctoral Fellowship / Temporary Research Fellowship / Erasmus+ International Mobility Grant Researcher**
 Prof. Dimitrios BIKIARIS Research Group, Laboratory of Polymer Chemistry and Technology, Aristotle University of Thessaloniki, Greece
- Research focus: Furan-based Polyesters*
- Design, synthesis, and investigation of fully biobased furanoate polyesters, including homo- and copolyesters and polyester blends, based on 2,5-furandicarboxylic acid (FDCA) and other renewable monomers, through optimization of polymerization conditions and catalyst systems, with special emphasis on poly(ethylene furanoate) (PEF).
 - In-depth investigation of polymer crystallization behavior, thermal properties, structure-property relationships, biodegradability, and recyclability of FDCA-based polyester materials.
- Research outcomes:* This research period resulted in **20 peer-reviewed publications**, including **8 as first author**, establishing expertise in furan-based polyester chemistry and biobased polymer development.

PhD Research Internships / International Research Stays

- May 2015– June 2015 **Research Assistant / PhD Research Intern**
 Polymer Engineering Group, University of Padova, Italy
 Research focus: *Renewable isosorbide-based monomers and polymers*
- Feb 2016– July 2016
- Microwave-assisted synthesis of novel isosorbide-derived aromatic monomers and thermoplastic polyurethanes from renewable building blocks.
 - Awarded a Research Assistant position to extend research on isosorbide-derived monomers and polymers following two PhD research internships.
- May 2014– June 2014 **PhD Research Intern**
 Department of Civil, Chemical, Environmental, and Materials Engineering, University of Bologna, Italy
 Research focus: *Isosorbide-based polyesters*
- Design and synthesis of novel biobased isosorbide-based polyesters via melt polycondensation.
 - Characterization of polymer structure and physicochemical properties, developing expertise in polymer synthesis and characterization techniques.

Scientific Recognition and Achievements

Research impact: Author of **27 peer-reviewed publications** (13 as first author), with an **h-index** of **22** and over **1,320 citations** (Google Scholar), and **one filed patent application** (Patent Pending, 2026).

- Selected among **24 early-career scientists worldwide** to join the **Early Career Board of Biomacromolecules (American Chemical Society)**, in recognition of contributions to polymer science, with expertise in sustainable and biobased polymer materials. ([LINK1](#), [LINK2](#))

- **Invited Speaker** at Milan Polymer Days International Congress (MIPOL2026), representing Avantium and presenting recent advances from industrial R&D projects in polymer innovation.

Presentation: "Engineering crystallization kinetics in poly(ethylene furanoate) (PEF) through trace-level modulation"

- **Invited Guest Editor** of the [Special Issue](#) "Development of High-Performance Biobased Polyesters" in *Polymers* (Q1 journal).

- **Recipient of the Best Presentation Award** at the IUPAC Postgraduate Summer School on Green Chemistry (Venice, Italy, 2018), awarded by L'Oréal Paris and Eni. ([LINK](#))

Presentation: "Synthesis of New Eco-Friendly Copolyesters From Fully Renewable Resources: Poly(ε-caprolactone-co-pentylene 2,5-furandicarboxylate)"

Scientific Service & Professional Memberships

- **Peer Reviewer** for leading international Q1 journals in polymer chemistry and materials science, including *ACS Sustainable Chemistry & Engineering*, *Advanced Functional Materials*, *Polymer Degradation and Stability*, *Polymer Testing*, *Materials Today Chemistry*, *Reactive and Functional Polymers*, *International Journal of Biological Macromolecules*, *Polymers*, and *International Journal of Molecular Sciences*. ([LINK](#))

- Member, FUR4Sustain (COST Action CA18220 – European Network of FURan-Based Chemicals and Materials FOR a Sustainable Development) – European COST Action connecting academia and industry to foster collaborative research and innovation. ([LINK](#))

Teaching & Student Supervision

- **Teaching:** Delivered **104 hours** of Master's-level teaching in polymer science through the Polymer Physics course (KF2140) at KTH Royal Institute of Technology, Stockholm, Sweden (2022).
- **Student supervision:** Co-supervised **one PhD student** and **two Master's students** in polymer science and sustainable materials research, resulting in **seven peer-reviewed publications** (four with the PhD student and three with Master's students).

Educational Qualifications

- Jan 2014–
Mar 2018 **PhD in polymer chemistry** (Merit: Very Honorable)
University of Monastir, Tunisia
PhD dissertation: *Valorisation of Isosorbide: Synthesis of New Functional Polymers*
Doctoral research was conducted under the supervision of Professor Dimitrios Bikiaris, Aristotle University of Thessaloniki, Greece, through an extended international research mobility period
- Sep 2011–
Nov 2013 **Master's Degree in Synthesis and Reactivity in Organic Chemistry**
University of Monastir, Tunisia
Master Thesis: *Synthesis and characterization of new functional structures based on Isosorbide*
Graduated with Distinction (16.50 /20).
- Sep 2008–
June 2011 **Bachelor's Degree in Chemistry**
University of Monastir, Tunisia
Ranked among the top students throughout the program: 5/55 (first year), 7/59 (second year), and 6/67 (third year).

Presentations at International Conferences

- 1-3/07/2026 **Invited Speaker** at the **Milan Polymer Days International Congress (MIPOL2026)** – Milan, Italy ([Link](#))
• *Engineering crystallization kinetics in poly(ethylene furanoate) (PEF) through trace-level modulation*
- 1-4/06/2026 **Oral communication** at the **Bordeaux Polymer Conference (BPC 2026)** – Bordeaux, France
• *Effect of diethylene glycol (DEG) on the crystallization kinetics of poly(ethylene furanoate) (PEF)*
- 3-5/04/2024 **FUR4Sustain COST Action conference** – Nice, France (Representing Avantium)
COST Action CA18220: European network of FURan based chemicals and materials FOR a Sustainable development
- 1-3/06/2022 **1 communication** at **"Nordic Polymer Days 2022"** – Gothenburg, Sweden
• *Designed from Recycled PET packaging waste.* N. Kasmi, M. Hakkarainen
- 26-29/09/2021 **1 communication** at **"5th European Conference on Green and Sustainable Chemistry - 5th EuGSC"** –Thessaloniki, Greece
• *Tuning thermal properties and biodegradability of Isosorbide-based polyester by compositional control through copolymerization with 2,5-furandicarboxylic acid.* N. Kasmi, Z. Terzopoulou, Y. Habibi, D.N. Bikiaris
- 15-17/07/2020 **1 communication** at **"Milan Polymer Days Congress - MIPOL2020"** – Milan, Italy
• *Solvent-free synthesis of new fully biobased diol monomers through industrially viable approach: Toward new insights into the valorization of vanillic acid-based polyesters.* N. Kasmi, G.Z. Papageorgiou, D.N. Bikiaris
- 21-25/10/2019 **1 communication** at **"6th EPNOE International Polysaccharide Conference"** – Aveiro, Portugal
• *Novel Fully Biobased Non-Isocyanate Polyurethanes from Hemicelluloses.*
N. Kasmi, R. Dieden, D. da Silva-Perez, Y. Habibi
- 9-14/06/2019 **1 communication** at **"European Polymer Congress 2019 (EPF 2019)"** – Hersonissos Heraklion Crete, Greece
• *From 2,5-furandicarboxylic acid to vanillic acid novel biobased polyesters with promising properties.*
N. Kasmi, G.Z. Papageorgiou, D.N. Bikiaris
- 11-13/03/2019 **1 communication** at **"Milan Polymer Days Congress - MIPOL2019"** – Milan, Italy
• *Synthesis, structure, and properties of novel biobased polyesters obtained from furan dicarboxylic acid and new fully renewable diols based on vanillic acid.* N. Kasmi, G.Z. Papageorgiou, D.N. Bikiaris
- 30/09/2018-
03/10/2018 **1 communication** at **"12th Hellenic Polymer Society International Conference 2018"** – Ioannina, Greece
• *Synthesis of new eco-friendly copolyesters from fully renewable resources: poly(ε-caprolactone-co-hexamethylene 2,5-furandicarboxylate).* N. Kasmi, G.Z. Papageorgiou, D.N. Bikiaris
- 7-13/07/2018 **1 communication** at **"IUPAC Postgraduate Summer School on Green Chemistry"** – Venice, Italy
• *Synthesis of new eco-friendly copolyesters from fully renewable resources: poly(ε-caprolactone-co-pentylene 2,5-furandicarboxylate).* N. Kasmi, G.Z. Papageorgiou, D.N. Bikiaris

- 28-31/05/2018 1 communication at "Bordeaux Polymer Conference" - BPC 2018 - Bordeaux, France
 • *Synthesis of new fully biobased random copolyesters: poly(hexamethylene-co-isosorbide 2,5-furandicarboxylate)*. N. Kasmi, G.Z. Papageorgiou, D.N. Bikiaris
- 11-13/9/2017 3 communications at "6th International Conference on Biodegradable and Biobased Polymers" - BIOPOL 2017- Mons, Belgium
 • *Synthesis of new fully renewable resources-based copolyesters: poly(1,4-cyclohexanedimethanol-co-isosorbide 2,5-furandicarboxylate)*. N. Kasmi, M. Majdoub, G.Z. Papageorgiou, D.N. Bikiaris
 • *Solid-state polymerization of poly(ethylene furanoate) biobased polyester: effect of catalyst type on molecular weight increase*. N. Kasmi, M. Majdoub, G.Z. Papageorgiou, D.N. Bikiaris
 • *Crystallization and melting behavior of Poly(ethylene furanoate): Effects of molecular weight and nanofillers*. G.Z. Papageorgiou, N. Kasmi, V. Mandraki, S. Exarhopoulos, D.N. Bikiaris
- 2-7/07/2017 1 communication at "European Polymer Federation, EPF Lyon 2017" – Lyon, France
 • *Poly(ethylene-2,5-furanoate) (PEF); A promising polyester for food packaging applications: from research synthesis to reality*. D.N. Bikiaris, V. Tsanaktsis, Z. Terzopoulou, M. Nerantzaki, A. Chondroyiannis, E. Karakatsianopoulou, N. Kasmi, G.Z. Papageorgiou
- 15-16/2/2017 1 communication at "Milan Polymer Days, MIPOL2017" – Milan, Italy
 • *New thermally stable Isoidide-derived diols based on Isosorbide for the preparation of thermoplastic polyurethanes: Microwave-assisted synthesis and optimization*. N. Kasmi, M. Majdoub, M. Modesti, A. Lorenzetti
- 3-7/5/ 2015 1 communication at "International Symposium on Green Chemistry" - ISGC2015 - La Rochelle, France
 • *Synthesis and characterization of new polyurethanes based on isosorbide*. N. Kasmi, N. Hammami, M. Majdoub

Patent

- 2026 • **Sole Inventor of a filed patent application** — advancing poly(ethylene furanoate) (PEF) materials through an innovative strategy to enhance polymer performance (Patent Pending; Avantium, The Netherlands).

Refereed Journal Publications (LINK)

27 peer-reviewed publications | h-index ([Google Scholar](#)): 22 | + 1,330 citations |

Selected long-term research collaborators: Prof. [Dimitrios Bikiaris](#) (21 joint publications) | Prof. [George Z. Papageorgiou](#) (20 joint publications)

- In preparation (1) (28) N. Kasmi* et al. *Effect of diethylene glycol (DEG) on the crystallization kinetics of poly(ethylene furanoate) (PEF)*, *Manuscript in preparation; planned submission Fall 2026*.
- Published (27) (27) N. Kasmi*, Y. Chebbi, A. Lorenzetti, M. Hakkarainen*. *Highly transparent polyurethane thermosets with tunable properties and enzymatic degradability derived from polyols originating from hemicellulosic sugars*, *Green Chemistry* **2023**, 25, 9908-9925. [LINK](#)
- (26) N. Kasmi, E. Bäckström, M. Hakkarainen*. *Open-loop recycling of post-consumer PET to closed-loop chemically recyclable high-performance polyimides*, *Resources, Conservation and Recycling* **2023**, 193, 106974. [LINK](#)
- (25) M. Safari, N. Kasmi, C. Pisani, V. Berthé, A. J. Müller*, Y. Habibi. *Effect of the structural features of linear bio-based polyester plasticizers on the crystallization of polylactides*, *International Journal of Biological Macromolecules* **2022**, 214, 128-139. [LINK](#)
- (24) N. Kasmi*, Z. Terzopoulou, Y. Chebbi, R. Dieden, Y. Habibi, D.N. Bikiaris. *Tuning thermal properties and biodegradability of poly(isosorbide azelate) by compositional control through copolymerization with 2,5-furandicarboxylic acid*, *Polymer Degradation and Stability* **2022**, 195, 109804. [LINK](#)
- (23) D. G. Papageorgiou*, I. Tsetsou, R. O. Ioannidis, G. Nikolaidis, S. Exarhopoulos, N. Kasmi, D. N. Bikiaris, D. Achilias, G. Z. Papageorgiou*. *A new era in engineering plastics: compatibility and perspectives of sustainable aliphatic poly(ethylene terephthalate)/poly(ethylene 2,5-furandicarboxylate) blends*, *Polymers* **2021**, 13(7), 1070. [LINK](#)
- (22) L. Papadopoulos, A. Zamboulis, N. Kasmi, M. Wahbi, C. Nannou, D. A. Lambropoulou, M. Kostoglou, G. Z. Papageorgiou, D. N. Bikiaris*. *Investigation of the catalytic activity and reaction kinetic modeling of two antimony catalysts in the synthesis of poly(ethylene furanoate)*, *Green Chemistry* **2021**, 23, 2507-2524. [LINK](#)
- (21) N. Kasmi, C. Pinel, D. Da Silva Perez, R. Dieden, Y. Habibi. *Synthesis and characterization of fully biobased polyesters with tunable branched architectures*, *Polymer Chemistry* **2021**, 12, 991-1001. [LINK](#)
- (20) N. Kasmi, L. Papadopoulos, Y. Chebbi, G.Z. Papageorgiou, D.N. Bikiaris*. *Effective and facile solvent-free synthesis route to novel biobased monomers from vanillic acid: Structure-thermal property relationships of sustainable polyesters*, *Polymer Degradation and Stability* **2020**, 181, 109315. [LINK](#)
- (19) Z. Terzopoulou, M. Wahbi, N. Kasmi, G.Z. Papageorgiou, D.N. Bikiaris*. *Effect of additives on the thermal and thermo-oxidative stability of poly(ethylene furanoate) biobased polyester*, *Thermochimica Acta* **2020**, 686, 178549. [LINK](#)

- (18) B. Quienne, [N. Kasmi](#), R. Dieden, S. Caillol, Y. Habibi*. Isocyanate-free fully biobased star polyester-urethanes: synthesis and thermal properties, *Biomacromolecules* **2020**, 21, 5, 1943–1951. [LINK](#)
- (17) [N. Kasmi](#), N. Ainali, E. Agapiou, L. Papadopoulos, G.Z. Papageorgiou, D.N. Bikiaris*. Novel High T_g fully biobased poly(hexamethylene-co-isosorbide-2,5-furan dicarboxylate) Copolyesters: Synergistic Effect of Isosorbide Insertion on Thermal performance Enhancement, *Polymer Degradation and Stability* **2019**, 169, 108983. [LINK](#)
- (16) [N. Kasmi](#), M. Wahbi, L. Papadopoulos, Z. Terzopoulou, N. Guigo, N. Sbirrazzuoli, G.Z. Papageorgiou*, D.N. Bikiaris*. Synthesis and characterization of two new biobased poly(pentylene 2,5-furandicarboxylate-co-caprolactone) and poly(hexamethylene 2,5-furandicarboxylate-co-caprolactone) copolyesters with enhanced enzymatic hydrolysis properties, *Polymer Degradation and Stability* **2019**, 160, 242- 263. [LINK](#)
- (15) [N. Kasmi](#), N. Pouloupoulou, Z. Terzopoulou, D.G. Papageorgiou*, D.N. Bikiaris, G.Z. Papageorgiou*. Sustainable Thermoplastics from Renewable Resources: Thermal behavior of Poly(1,4-cyclohexane dimethylene 2,5-furandicarboxylate), *European Polymer Journal* **2019**, 112, 1-14. [LINK](#)
- (14) Y. Chebbi, [N. Kasmi](#), M. Majdoub, P. Cerruti, G. Scarinzi, M. Malinconico, G. Dal Poggetto, G.Z. Papageorgiou, D.N. Bikiaris*. Synthesis, Characterization, and Biodegradability of Novel Fully Biobased Poly(decamethylene-co-isosorbide 2,5-furandicarboxylate) Copolyesters with Enhanced Mechanical Properties, *ACS Sustainable Chemistry & Engineering* **2019**, 7, 5501-5514. [LINK](#)
- (13) Y. Chebbi, [N. Kasmi](#), M. Majdoub, G.Z. Papageorgiou*, D.N. Achilias, D.N. Bikiaris*. Solid-State Polymerization of Poly(Ethylene Furanoate) Biobased Polyester, III: Extended Study on Effect of Catalyst Type on Molecular Weight Increase, *Polymers* **2019**, 11, 438. [LINK](#)
- (12) N. Pouloupoulou, A. Pipertzis, [N. Kasmi](#), D.N. Bikiaris, D.G. Papageorgiou, G. Floudas, G.Z. Papageorgiou*. Green polymeric materials: On the dynamic homogeneity and miscibility of furan-based polyester blends, *Polymer* **2019**, 174, 187-199. [LINK](#)
- (11) N. Pouloupoulou, [N. Kasmi](#), M. Siampani, Z.N. Terzopoulou, D.N. Bikiaris, D.S. Achilias, D.G. Papageorgiou*, G.Z. Papageorgiou*. Exploring Next-Generation Engineering Bioplastics: Poly(alkylene furanoate)/Poly(alkylene terephthalate) (PAF/PAT) Blends, *Polymers* **2019**, 11, 556. [LINK](#)
- (10) Z. Terzopoulou, E. Tarani, [N. Kasmi](#), L. Papadopoulos, K. Chrissafis*, D.G. Papageorgiou, G.Z. Papageorgiou, D.N. Bikiaris*. Thermal Decomposition Kinetics and Mechanism of In-Situ Prepared Bio-Based Poly(propylene 2,5-furan dicarboxylate)/Graphene Nanocomposites, *Molecules* **2019**, 24, 1717. [LINK](#)
- (9) [N. Kasmi](#), M. Majdoub, G.Z. Papageorgiou*, D.N. Bikiaris*. Synthesis and crystallization of new fully renewable resources-based copolyesters: Poly(1,4-cyclohexanedimethanol-co-isosorbide 2,5-furandicarboxylate), *Polymer Degradation and Stability* **2018**, 152, 177-190. [LINK](#)
- (8) [N. Kasmi](#), G.Z. Papageorgiou*, D.S. Achilias, D.N. Bikiaris*. Solid-State Polymerization of Poly(Ethylene Furanoate) Biobased Polyester, II: An Efficient and Facile Method to Synthesize High Molecular Weight Polyester Appropriate for Food Packaging Applications, *Polymers* **2018**, 10, 471. [LINK](#)
- (7) [N. Kasmi](#), Z. Terzopoulou, G.Z. Papageorgiou, D.N. Bikiaris*. Poly(1,4-cyclohexanedimethylene 2,6-naphthalate) polyester with high melting point: effect of different synthesis methods on molecular weight and properties, *Express Polymer Letters* **2018**, 12, 227-237. [LINK](#)
- (6) N. Pouloupoulou, [N. Kasmi](#), D.N. Bikiaris, D.G. Papageorgiou, G. Floudas, G.Z. Papageorgiou*. Sustainable polymers from renewable resources: Polymer blends of furan-based polyesters, *Macromolecular Materials and Engineering* **2018**, 1800153. [LINK](#)
- (5) [N. Kasmi](#), M. Majdoub, G.Z. Papageorgiou*, D.S. Achilias, D.N. Bikiaris*. Solid-state polymerization of poly(ethylene furanoate) biobased polyester, I: Effect of catalyst type on molecular weight increase, *Polymers* **2017**, 9, 607. [LINK](#)
- (4) [N. Kasmi](#), M. Roso, N. Hammami, M. Majdoub, C. Boaretti, P. Sgarbossa, C. Vianello, G. Maschio, M. Modesti, A. Lorenzetti*. Microwave-assisted synthesis of isosorbide-derived diols for the preparation of thermally stable thermoplastic polyurethane, *Designed Monomers and Polymers* **2017**, 20, 547-563. [LINK](#)
- (3) Z. Terzopoulou, [N. Kasmi](#), V. Tsanaktis, N. Doullakas, D.N. Bikiaris*, D.S. Achilias, G.Z. Papageorgiou*. Synthesis and Characterization of Bio-Based Polyesters: Poly(2-methyl-1,3-propylene-2,5-furanoate), Poly(isosorbide-2,5-furanoate), Poly(1,4-cyclohexanedimethylene-2,5-furanoate), *Materials* **2017**, 10, 801. [LINK](#)
- (2) Z. Terzopoulou, E. Karakatsianopoulou, [N. Kasmi](#), V. Tsanaktis, N. Nikolaidis, M. Kostoglou, G.Z. Papageorgiou, D.A. Lambropoulou, D.N. Bikiaris*. Effect of catalyst type on molecular weight increase and coloration of poly(ethylene furanoate) biobased polyester during melt polycondensation, *Polymer Chemistry* **2017**, 8, 6895-6908. [LINK](#)
- (1) Z. Terzopoulou, E. Karakatsianopoulou, [N. Kasmi](#), M. Majdoub, G.Z. Papageorgiou, D.N. Bikiaris*. Effect of catalyst type on recyclability and decomposition mechanism of poly(ethylene furanoate) biobased polyester, *Journal of Analytical and Applied Pyrolysis* **2017**, 126, 357-370. [LINK](#)