Curriculum Vitae et studiorum

PERSONAL INFORMATION

Name/Surname **FEDERICA RECUPIDO**

Andress [redacted]

WORK EXPERIENCE

POSITION: Temporary researcher (Ricercatore III livello, tempo determinato)

Orcid: 0000-0002-0991-5333

Google Scholar:
HTTPS://SCHOLAR.GOOGLE.COM/CITATIONS?USER=GTLW3UWAAAAJ&HL=IT

SCOPUS:
SCOPUS: HTTPS://WWW.SCOPUS.COM/AUTHID/DETAIL.URI?AUTHORID=57207834941

3 rd July 2023-to date

National Council of Italy-Institute for Polymers, Composites and Biomaterials (CNR-IPCB)

Temporary researcher (Ricercatore III livello, tempo determinato)

BIOMAT: AN OPEN INNOVATION TEST BED FOR NANO-ENABLED BIO-BASED PUR FOAMS AND COMPOSITES - H2020-NMBP-TO-IND-2018-2020 GA n.953270.

Synthesis and characterization of bio-based **composite Polyurethane foams** from **lab to pilot scale**. Identification of the optimal process conditions for the upscaling of formulations from lab to pilot scale.

Characterization techniques: thermogravimetric, mechanical, rheological (creaming time, gel time, curing time), morphological (SEM) and chemical (FTIR) analyses.

1 st April 2023-14 th June 2023

CRDC Tecnologie Scarl, Agnano Nuova 11, Naples (Italy)

Associate Researcher

Study, development and thermo-mechanical characterization of graphene-based nanocomposites based on sustainable thermoplastic polyurethanes (TPU) for packaging applications.

Characterization techniques: Morphological (SEM), thermal, chemical (FTIR) chemical-physical analyses.

[redacted]

1 st-July 2021-14 th March 2023
National Council of Italy-Institute for Polymers, Composites and Biomaterials (CNR-IPCB)

Research Fellow
Materiali NANOstrutturati per la prevenzione del rischio BIOlogico: dalla progettazione alla verifica di applicabilità ed efficacia in ambito SANitario – NANOBIOSAN" – Bando BRiC 2019 INAIL - CUP: B64I20000010005
Design and characterization of multifunctional nanostructured polymer materials based on biopolymers (zein) for healthcare applications, imparting antiviral and antimicrobial characteristics.

- SEM analysis, thermogravimetric analysis,
- chemical-physical analysis (FTIR analysis, wetting).

1 st February 2020- 1 st May 2020
University of Naples, Federico II, Naples (Italy)
ARS01-00985, BIOFEEDSTOCK PON 2014-2020", entitled "Development of technological platforms for residual biomass valorization" (CUP E26C800220005**).**
PhD student
Development and chemical/physical/morphological characterization of microbial-based films.

1 st May 2019 to 2 nd September 2019
PhD student
University of Naples, Federico II with the partnership of the Italian Society of Rheology (SIR).
Rheological and morphological characterization of bacterial biofilms.

1 st December 2018-31 st January 2019
Research scholarship with partnership of Heinz Spa (Protocol number 26/2018/BS).
PhD student
University of Naples, Federico II, Naples (Italy)
Study of chemical-physical and morphological properties of biofilms in the food sector (strategies to prevent/mitigate biofouling in food industries and cross-contamination of food products).

1 st February 2017-23 rd September 2017
Marie Curie for Initial Training (ITN) for developing the project "Complex Wetting Phenomena (CoWet), Grant agreement number 607861 (PINT-GA-2013-607861).
PhD student
Aristotle University of Thessaloniki, Thessaloniki (Greece) – activity performed at University of Naples - DICMAPI
Formation and characterization of bacterial biofilms under different flow conditions.

- Design of in-flow reactors to develop biofilms under controlled conditions.
- Confocal microscopy, image analysis, chemical-physical analysis (wetting), Cell cultures.

[redacted]

1 st February 2017-30 th June 2022

Aristotle University of Thessaloniki, School of Chemistry, Department of Chemical Technology, Thessaloniki (Greece)

PhD in Industrial Chemistry (Joined Ph.D. project with Department of Chemical, Materials and Industrial Production Engineering (DICMaPI), University of Naples, "Federico II", Naples (Italy) and sponsored by Marie Curie ITN "Complex wetting phenomena".

Thesis title: **Effect of wetting phenomena on biofilm formation and removal**.

Vote: *Excellent*.

Chemical-physical and morphological analysis of bacterial biofilms.

10 th February 2014-20 th September 2016

University of Salerno, Department of Industrial Engineering, Fisciano (SA), Italy.

Master Degree in Chemical Engineering (Food Engineering) *110/110 cum laude*

Nanoliposomes production for nutraceutical purposes, based on a simil-microfluidic approach

Design and fabrication of a simil-microfluidic experimental set-up for producing nanometric liposomal carriers releasing ferrous sulfate for nutraceutical purposes. Optimization of the set-up operative conditions (flow rates, concentration). Characterization of the obtained nanometric systems utilizing morphological analysis (optical microscopy) spectrophotometric techniques (release/stability investigation) and Dynamic Light Scattering (DLS).

27 th September 2010-18 th December 2013

University of Salerno, Department of Industrial Engineering Fisciano (SA), Italy

Bachelor Degree in Chemical Engineering, *107/110*

Thermo-physical characterization of high moisture-content-food matrices

Thermal characterization of food matrices with high moisture content.

- Thermal conductivity, thermal diffusivity, humidity measurements, chemical-physical analysis, thermogravimetric analysis, Differential Scanning Calorimetry (DSC), Dielectric properties (ε', ε'')

RESEARCH ACTIVITIES

Research topics

Dr. Recupido's research concerns the study and characterization of composite polymeric materials including thermosetting ones i.e. polyurethane (PUR) foams for different applications such as automotive, building construction, cultural heritage, biomedical fields, and packaging. Among these, attention is dedicated to sustainable polyurethane foams, obtained by replacing conventional precursors (i.e. polyols from vegetable or biomass sources) and/or by selecting fillers from natural or waste resources (cellulose, lignin, and silica nano and microparticles, zeolites, diatomite, fly ashes and so forth). Emerging trends in recycling/reprocessability of PUR foams as well as the synthesis of isocyanate-free foamed materials (NIPU) are also of interest.

The acquired knowledge has been used to design and optimize the multiscale structure of composite materials starting from a suitable composition and to study the fundamental correlation of the material with the achieved functional thermal, morphological/rheological, and mechanical characteristics.

Abroad experience

3 rd August 2022-5 th September 2022

Visiting Researcher at NanoTech Lab, Research and Development of Nanomaterials and Nanotechnologies, Sofia, Bulgaria: Secondment in the framework of Marie Curie Graphene (3DH2020-MDCA-RISE-2016-734164 contract. Supervisor Dr. Evgeni Ivanov

Main activities: Characterization of polyvinyl-alcohol-based composites containing various contents of graphene nanoplatelets (GNPs).

- Thermal characterization, Thermomechanical characterization (DMA), Morphological analysis (SEM).

21 st February 2019-30 th June 2020

Visiting PhD student at Aristotle University of Thessaloniki, Thessaloniki (Greece) under Marie Curie Program: "Complex Wetting Phenomena" Supervisor Prof. Thodoris D. Karapantsios.

Main activities: Chemical-physical and morphological analysis of biobased films (static wetting, forced wetting, confocal microscopy, cell cultures).

Publications/Review/ Patents/Chapter

H-INDEX=9 (Scopus, Google Scholar, year 2024). Citations:209

Following selected papers are reported (P), proceedings contribution (PR) and book chapter (C), review (R), I.F. (Impact factor).
Legend: * These authors equally contributed to the selected articles.

R1. A. Campanile, B. Liguori, G.C. Lama, F. Recupido, S. Donatiello, M. Gagliardi, A. Morone and L. Verdolotti, The Role of Superabsorbent Polymers and Polymer Composites in Water Resource Treatment and Management, *Polymers* (MDPI), 16(16), 2024, 2337, https://doi.org/10.3390/polym16162337, IF=4.7.

P1. S. Silvano, P. Moimare, L. Gryshchuk, E. Barak-Kulbak, F.Recupido, G.C. Lama, L. Boggioni, L. Verdolotti, Synthesis of bio-polyol-functionalized nanocrystalline celluloses as reactive/reinforcing components in bio-based polyurethane foams by homogeneous environment modification, *International Journal of Biological Macromolecules* 2024, 278, 135282, https://doi.org/10.1016/j.ijbiomac.2024.135282, IF=7.7.

P2. C. Rubino, G.C. Lama, S. Liuzzi, B. Liguori, F. Recupido, F. Martellotta, L. Verdolotti, L. Sorrentino, Tailoring Porosity and Acoustic Properties in Diatomite-Based Foams Through Multiscale Structural Approach, *Construction and Building Materials* 430 (2024)136480, https://doi.org/10.1016/j.conbuildmat.2024.136480 (Elsevier), IF=8.4.

P3. A. Pascarella*, F. Recupido*, G.C. Lama, L. Sorrentino, A. Campanile, B. Liguori, M. Berthet, G. Rollo, M. Lavorgna and L. Verdolotti, Design and development of sustainable polyurethane foam: a proof-of-concept as customizable packaging for cultural heritage applications *Advanced Engineering Materials* 26 (3) 2024, (Wiley, IF=4.6), DOI: 10.1002/adem.202301888.

P4. G.C. Lama, C. Santillo, F. Recupido, J. Liu, L. Verdolotti, R. Marzella, T. Polichetti, S. Kaulicius, M. Lavorgna, Autoclave-Mediated Reduction of Graphene Oxide for Enhanced Conductive Films, *Applied Surface Science* 657(2024)159741, https://doi.org/10.1016/j.apsusc.2024.159741 (Elsevier), IF=6.3.

P5. F. Recupido*, G.C. Lama*, S. Steffen, C. Dreyer, H. Seidlitz, V. Russo, M. Lavorgna, F. De Luca Bossa, S. Silvano, L. Boggioni, L. Verdolotti, Efficient Recycling Pathway of Bio-Based Composite Polyurethane Foams via Sustainable Diamine, *Ecotoxicology and Environmental Safety*, 269 (2023) 115758, https://doi.org/10.1016/j.ecoenv.2023.115758 (Elsevier), IF=6.2.

P6 F. Recupido, G.C. Lama, M. Lavorgna, G.G. Buonocore R. Marzella, L. Verdolotti, Post-consumer recycling of Tetra Pak®: starting a "new life" as filler in sustainable polyurethane foams, *Food Packaging and Shelf Life*, 40 (2023) 101175, https://doi.org/10.1016/j.fpsl.2023.101175, (Elsevier), IF=8.

R2. J. Liu*, J, F. Recupido*, G.C. Lama, M. Oliviero, L. Verdolotti, L. M, Lavorgna, Recent advances concerning polyurethane in leather industry: conventional and greener solutions, *Journal of Collage and Leather*, 5(2023),8, DOI 10.1186/S42825-023-00116-8. 10., Springer.
This review was chosen as cover art for the issue 5 (2023).

P7. J. Liu, G.C. Lama, F. Recupido, C. Santillo, G. Gentile, G.G. Buonocore, L. Verdolotti, X. Zhang, M. Lavorgna, M. A multifunctional composite material with piezoresistivity and mechanoluminescence properties for a wearable sensor, o *Composites Science and Technology* 263 (2023)10993 (https://doi.org/10.1016/j.compscitech.2023.109993), (Elsevier), I.F. 9.8.

[redacted]

P8. F. Recupido, M. Petala, S. Caserta, D. Marra, M. Kostoglou, T.D. Karapantsios Forced wetting properties of bacteria-laden droplets experiencing initial evaporation, *Langmuir* 39 (25) 8589–8602 10.1021/acs.langmuir.3c00179, (ACS Publications), I.F. 4.3.

This article was chosen as cover art for the issue 39 of June 27 th 2023.

P9. D. Fontana*, F. Recupido*, G.C. Lama, S. Silvano, J. Liu, M. Lavorgna, L. Boggioni, L. Verdolotti, Effect of different methods to synthesize polyol-grafted-cellulose nanocrystals as inter-active filler in bio-based polyurethane foams, *Polymers* 15(4) (2023) 923. (https://doi.org/10.3390/polym15040923), **I.F. 4.9,** MDPI.

P10. F. Recupido*, G.C. Lama*, M. Ammendola, F. De Luca Bossa, A. Gala Morena, T. Tzanov et al., Rigid composite-bio-based polyurethane foams: from synthesis to LCA investigation, *Polymer*267(2023) 125674, (https://doi.org/10.1016/j.polymer.2023.125674), (Elsevier), I.F. 4.4

PR1. D. Marra, F. Recupido, A. Di Somma, C. Canè, A. Acquesta, G. Toscano, T. Monetta, S. Caserta, Design of nanostructured coating to prevent biofilm formation on surface, *IOP Conf. Series*: *Materials Science and Engineering* 265 (2022) 012003. (DOI https://iopscience.iop.org/article/10.1088/1757-899X/1265/1/012003)

P11. D. Marra, F. Recupido, G. Toscano, S. Caserta Bacterial Motility in Biofilm under Shear Flow, *Chemical Engineering Transactions* 93 (2022)325-330. (DOI: 10.3303/CET2293055), AIChE Journal.

P12. F. Recupido, M. Petala, S. Caserta, M. Kostoglou, S. Guido, T.D. Karapantsios Wetting properties of dehydrated biofilms under different growth conditions, *Colloids and Surface B: Biointerfaces*, 210 (2022)11245, https://doi.org/10.1016/j.colsurfb.2021.112245), (Elsevier), IF =5.26.

P13. M. Castigliano*, F. Recupido,* M. Petala, M. Kostoglou, S. Caserta, T.D. Karapantsios, Wetting of Dehydrated Hydrophilic *Pseudomonas fluorescens* Biofilms under the Action of External Body Forces, *Langmuir* 37 (2021)10890-10901, https://doi.org/10.1021/acs.langmuir.1c00528), (ACS Publications) I.F. 4.3.

(**This article was chosen as cover art for the issue 37 of Sep 21 st 2021**).

P14. A. Di Somma*, F. Recupido*, A. Cirillo, A. Romano, A. Romanelli, S, Caserta, S. Guido, A. Duilio, Antibiofilm Properties of Temporin-L on *Pseudomonas fluorescens* in Static and In-Flow Conditions, International *Journal of Molecular Sciences* 21(2020) 8526, doi.org/10.3390/ijms21228526), IF =4.5 , MDPI.

P14. F. Recupido, G. Toscano, R. Tatè, M. Petala, S. Caserta, T.D. Karapantsios, S. Guido, The role of flow on biofilm morphology and wetting properties, *Colloids and Surfaces B: Biointerfaces* 192 (2020)111047, (doi10.1016/j.colsurfb.2020.111047), (Elsevier), IF =5.26.

C1. S. Bochicchio, A. Dalmoro, F. Recupido, G. Lamberti, A.A. Barba, Nanoliposomes production based on a simil-microfluidic approach, *Advances in Bionanomaterials, Lectures Notes in Bioengineering,* (2017, pages-3-10), DOI 10.1007/978-3-319-62027-5_1), Springer.

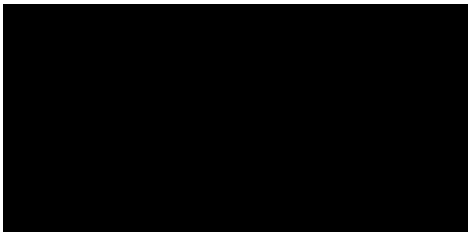
Papers under review or submitted:

- Y. Wang*, R. Veropalumbo*, F.Recupido*, C. Oreto, Q. Sun, L. Verdolotti, A. Campanile, B. Liguori, N. Viscione, G. Dell'Acqua, F. Russo, G.C.Lama, "Investigating the feasibility of marine microplastics as fillers in bituminous mastics", Under review in *Fuel* (Elsevier, I.F.=6.7).
- F. Recupido, F. Ricchi, G.C. Lama, A. Soriente, M.G. Raucci, G.G. Buonocore, C. Cermelli, I. Marchesi, S. Paduano, A. Bargellini, A. Mansi, L. Verdolotti, Zein-based nanostructured coatings: A Green Approach to Enhance Virucidal Efficacy of Protective Face Masks, Under review in *International Journal of Biological Macromolecules* (IF=7.7).

- F. Orabona, F. Recupido*, F. Taddeo, G.C. Lama. K. Polaczek, T. Salmi, M. Di Serio, L. Verdolotti, V. Russo, Cutting-Edge Development of Non-Isocyanate Polyurethane (NIPU) Foams: From Sustainable Precursors to Environmental Impact Evaluation, Submitted to *Green Chemistry*, Royal Chemical Society (IF=8).

Training courses

- Marie Curie ITN, Last Cowet Meeting, 21st-24 th November 2017, Darmastadt (Germany), Oral presentation.
- Marie Curie ITN, Cowet Summer School, Nanomaterials: formation and applications, 15th -18 th May 2017, Jerusalem (Israel), Oral presentation.
- Marie Curie ITN, Cowet Winter School, Dynamics of forced wetting and innovative functional surfaces, 21 st-24 th February 2017, Thessaloniki/Metsovo (Greece), Attendance.



Participation in Conferences (* when she was the presenter)

- M. D'Auria, C. Amara, M. Oliviero, F. Recupido, G.C. Lama, L. Verdolotti ,K. Khwaldia. "Effect of *Silybum Marianum*-derived nanocellulose as a sustainable filler on supramolecular structure of thermoplastic zein" – AIM 2024, Naples 12th-14th September 2024, Poster.
- M. Di Serio, F. Orabona, F. Recupido, F. Taddeo, G.C. Lama, L. Verdolotti, V. Russo. "MICS: Green and sustainable products & materials from non-critical and secondary raw sources" – CAMURE12 & ISMR11, 8th-11th September, Luven (Belgium), Oral presentation.

- F. Recupido*, G.C. Lama, K. Polaczek, R. Marzella, L. Verdolotti, Building the future: Innovations in sustainable porous materials for smart and energy-efficient construction, Sustainable Polymers Conference, Prague (Czech Republic) 24th-28 th June 2024, Oral presentation.
- K. Polaczek, M. Morra, F. Orabona, F. Recupido, G.C. Lama, T. Taddeo, T. Salmi, M. Di Serio, V. Russo, M. Lavorgna and L. Verdolotti, Self-blowing non-isocyanate polyurethane foams (NIPUs) starting from soybean oil cyclic carbonate, Sustainable Polymers Conference, Prague (Czech Republic) 24 th-28 th June 2024 , Oral presentation.
- A. Mezzi, S. Kaciulis, M. Lavorgna, F. Recupido, G.C. Lama. "Surface analysis of graphene oxide films reduced by thermal treatments" – ECASIA 2024, 9th-14th June Gothenburg (Sweden), Oral presentation.
- C. Amara, M. Oliviero, F. Recupido, G.C. Lama, G.G. Buonocore, R. Marzella, L. Verdolotti, K. Khwaldia. "Exploring *Silybum Marianum* Nanocellulose as a Sustainable filler in Thermoplastic Zein Nanocomposites for Food Packaging" – SLIM 2024, Reggio Emilia 20 th May-23 rd May 2024, Poster.
- N. Russo, M. Oliviero, G.C. Lama, F. Recupido, B. Liguori, L. Verdolotti "Effect of zeolite X and Clinoptilolite on new bio-based TPU composite" – SLIM 2024, Reggio Emilia 20 th May-23 rd May 2024, Poster.

- G.C. Lama, S. Silvano, F. Recupido, L. Gryshchuk, E. Barak-Kulbak, L. Boggioni, G.G. Buonocore, M. Lavorgna, L. Verdolotti, Functionalized CNCs in homogeneous media as greener reactive filler in bio-based polyurethane foams: a journey towards sustainability, XXI B MRS Symposia, Maceió (Brasil) October 1 st-5 th 2023, Poster.
- A. Pascarella, G.C. Lama, F. Recupido, B. Liguori and L. Verdolotti, Effect of Zeolite A in bio-based polyurethane foams for applications in cultural heritage, AIZ 2023 IV Italian Congress of Zeolite Science and Technology, September 21 st-23 rd 2023, Poster.
- A. Doldi, L.Verdolotti, G.C.Lama, F. Recupido, P. Mantecca, R. Bengalli, M. Gualtieri, N. Losi, A.M.Cefali', I. Gini, L. Ferrero, Evaluating the performance of low-cost Alphasense OPC-N3 in an indoor environment, EAC2023 (European Aerosol Conference), 2nd September - 8th September 2023, Malaga (Spain), Poster.
- G.C.Lama, F.Recupido, Y. Wang, L. Verdolotti, Sustainable thermal insulation foams for greener construction buildings, INFRAMEET conference, Paris (France), 5 th-7 th June 2023, Keynote.
- F. Recupido, G.C.Lama, Fontana, D., Silvano, S., Boggioni, L., Lavorgna, M. and L. Verdolotti, Functionalized cellulose nanocrystals as reactive filler in bio-based rigid polyurethane foams, RRB Conference, 31 st May-2 nd June 2023, Riga (Latvia), Poster.
- F.Recupido*, L.Verdolotti, G.C. Lama, M. Stanzione, C. Cermelli, F. Ricchi, I. Marchesi, S. Paduano, A. Bargellini, A. Mansi, G.G. Buonocore,. Functional characterization and *in vitro* evaluation of the virucide activity of nanostructured antimicrobial coatings for personal protective equipment, 30 th Anniversary of INSTM consortium, 22 nd-25 th January 2023, Bressanone (Italy). Oral presentation.
- F. Recupido, D. Marra, M. Petala, G. Toscano, T.D. Karapantsios, S. Caserta, Wetting properties of de-hydrated biofilm coated surfaces, Break Biofilms Conference, 16th-18 th January 2023 Wien (Austria). Oral presentation.
- R. Marzella, G.C. Lama, F. Recupido, M. Lavorgna, G.G Buonocore G.G. L. Verdolotti, A technology transfer model to produce graphene-based materials from waste coffee by means autoclave process, a proof of concept, 10 th Shelf Life International Meeting, 28 th November-1 st December 2022, Bogotà (Colombia), Poster.
- F. Recupido, G.C. Lama, M. Lavorgna, G.G. Buonocore, L. Verdolotti, designing for recycling Tetra Pak end of life to start new life in sustainable polyurethane foam, 10 th Shelf Life International Meeting, 28 th November-1 st December 2022, Bogotà (Colombia), Oral presentation.
- G.C. Lama, F. Recupido, S. Steffen, C. Dreyer, L. Hartmann, G.G Buonocore, L. Boggioni, M. Lavorgna, L. Verdolotti, L., From synthesis to the recycling of composite bio-based polyurethane foams, Polymers Health and Sustainability 11 th-13 th September 2022, Salina (Italy), Oral presentation.
- I. Marchesi, S. Paduano, C. Cermelli, F. Ricchi, G. Frezza, L. Verdolotti, F. Recupido, G.C. Lama, G. G. Buonocore, M. Stanzione, A. Mansi, A. Bargellini, Valutazione *in vitro* dell'efficacia antivirale di coating antimicrobici nanostrutturati per dispositivi di protezione individuale, 55 Congresso Prevenzione di Igiene, Medicina Preventiva e Sanità Pubblica, 28 th Semptember -1 st October 2022, Padova (Italy), Poster.(Volume 63, Issue

2 Supplement 1 June 2022), Poster.

- J. Liu, G.C. Lama, F. Recupido, A. Aldi, L. Verdolotti, G.G. Buonocore M. Lavorgna M., X. Zhang, Commercial fabrics coated with foamed composites for wearable multifunction sensors, 4th International Symposium on Dynamic Response and Failure of Composite Materials, 21 st-24 th June 2022 (Ischia, Italy), Poster.
- G.C. Lama, F. Recupido, M. Ammendola, G.G. Buonocore, M. Lavorgna L. Verdolotti, Polyurethane Composite Foams from Bio-Renewable Feedstock: A Roadmap Towards a Sustainable Circular Bio-Economy IPCB institute workshop, 15 th-16 th December 2021, ISBN 978-88-8080-298-3, Oral presentation.
- L. Verdolotti, F. Recupido M. Ammendola, G.C. Lama, G.G. Buonocore M. Lavorgna, Sustainable Multifunctional Foams: Towards The Actions Of Green Deal, IPCB institute workshop, 15 th-16 th December 2021, ISBN 978-88-8080-298-3, Oral presentation.
- M. Castigliano, F. Recupido*, M. Petala, M. Kostoglou, G. Toscano G., T.D. Karapantsios, S. Guido, S. Caserta, The role of shear flow on biofilm morphology, Annual European Rheology Conference (AERC) 13 th-15 th April 2021, Oral presentation.
- A. Cirillo, A. Di Somma, A. Romano, F. Recupido, S. Caserta, S. Guido, A. Romanelli, A. Duilio Antibiofilm effect of Temporin-L on *Pseudomonas fluorescens*, in static and dynamic conditions, Biofilm9 conference, 29 th September-1 st October 2020, Karlsruhe Institute of Technology (KIT), Germany, Poster.
- F. Recupido*, M. Petala, M. Kostoglou, S. Caserta, S. Guido T.D. Karapantsios Wetting properties of biofilms produced under well controlled shear flow conditions, Biofilm9 conference, 29 th September-1 st October 2020, Karlsruhe Institute of Technology (KIT), Germany, Oral presentation.

- F. Recupido*, G. Toscano, R. Tate', M. Petala, S. Caserta, S. Guido, T.D. Karapantsios, Effect of Flow on Bacterial Biofilm Formation, Morphology and Wetting Properties, EUSMI/SoftComp Annual Meeting, 28 th May 2018-31 st May 2018, Primošten (Croatia), Oral presentation.

- F. Recupido*, G. Toscano, R. Tate', M. Petala, S. Caserta, S. Guido S. T.D. Karapantsios, Flow Induced Morphology in Bacterial Biofilms, Annual European Rheology Conference (AERC), 17 th-20 th April 2018, Sorrento (Italy), Poster.
- F. Recupido*, D. Villano, G. Toscano, R. Tate', M. Petala, S. Caserta, S. Guido T.D. Karapantsios, Effect of Flow on Biofilm Formation and Morphology, Cost Flowing Matter (Cost Action MP1305), 5 th-9 th February 2018, Lisbon (Portugal)Oral presentation.
- S. Bochicchio, A. Dalmoro, F. Recupido, G. Lamberti, A.A. Barba, Nanoliposomes production by a protocol based on a simil-microfluidic approach, 2nd Workshop in Bionanomaterials, BIONAM 2016, October 4th-7th, 2016, Salerno, Italy, Oral presentation.

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Seminars "Online extended DOE course", BIOMAT EU project (Prof. R. Klesser) September 28 th 2021.

Active research Local organizer of BIOMAT project workshop: "Working with SMEs to create a more sustainable Europe", June 22 nd 2022-Portici (Naples, Italy).

ADDITIONAL INFORMATION

Language Certificates English: B.2. (B.2.1., 7 Grade Spoken English, Trinity College, London).

Software skills Image J, Image Pro Plus, AutoCad, Microsoft Package, Origin Lab, ChemDraw

Certification **Training about safety aspects of di-isocyanates products according to the EU legislation REACH (August 2020)**: INDACO 9 th October 2023 (expiring October 2028).

[redacted]

Technical reports:

2024

Recupido F./Verdolotti, L., Sviluppo di materiali espansi poliuretanici nanocompositi bio-based attraverso l'uso di nano-filler funzionali, sia su scala laboratorio che su scala pilota e nuove tecnologie di processo di trasformazione, e la creazione di un banco di prova per l'innovazione a beneficio delle industrie e delle PMI BIOMAT: AN OPEN INNOVATION TEST BED FOR NANO-ENABLED BIO-BASED PUR FOAMS AND COMPOSITES - H2020-NMBP-TO-IND-2018-2020 GA n.953270 (2024-CNR0A00-0199747).

Letizia Verdolotti, Giuseppe Cesare Lama, Federica Recupido, Roberta Marzella, Alessandra Aldi, Fabio Docimo**.** D5.2 – Scaled-up production and characterization of bio-based rigid and semi-rigid PUR foams, Deliverable BIOMAT project M36, N. 6436 del 20240111 (2024-CNR0A00-0006436).

2023

Recupido, F./Buonocore, G.G., Progetto di ricerca: "Materiali nanostrutturati per la prevenzione del rischio biologico: dalla progettazione alla verifica di applicabilità ed efficacia in ambito sanitario (NANOBIOSAN)" – BRIC 2019 – INAIL, 2023-CNR0A00-0071554.

2022

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PERSONAL DATA, INFORMATION AND CONSENT

According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV

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