

CELIA IDRES

SENIOR RESEARCHER, CLASS B

CONTACT

+213 (0) 662 15 86 37

idres.celia@gmail.com

Centre de Recherche en Technologies Agro-Alimentaires
Route de Targa Ouzemmour,
Campus Universitaire, 06000
Béjaia, Algérie.

www.linkedin.com/in/idres-celia-3988a9200

<https://www.researchgate.net/profile/Celia-Idres>

PROFESSIONAL SKILLS

- Composites & Biocomposite design
- Extraction and Characterization of Natural Fibers
- Programming with Matlab and R
- Softwares: SigmaPlot, Origin, HighScore, Microsoft office pack and TA Analysis.

LANGUAGES

- English: Fluent
- French: Fluent
- Arabic: Fluent
- Spanish: Basics
- Kabyle: Native Language

PERSONAL SKILLS

- Dynamic and proactive
- Strong sense of responsibility
- Critical thinking and problem-solving skills
- Team-oriented with excellent collaboration abilities

EDUCATION

- PhD - Process Engineering, Specialization: Polymer Engineering | University of A. MIRA-BEJAIA in partnership with the University of South Brittany (France)**

DEC. 2019 - MARCH 2024

Distinction: Highest Honors

Thesis Title: Development and Characterization of Biocomposites Based on Bacterial Polyesters and Agave Americana Fibers.

- Master's - Process Engineering, Specialization: Polymer Engineering | University of A. MIRA-BEJAIA**

SEPT. 2017 - JULY 2019

Distinction: High Honors

Thesis: Development and Characterization of Biocomposites Based on Bacterial Polyesters Reinforced with Aloe Vera Fibers.

- Bachelor's - Process Engineering | University of A. MIRA-BEJAIA**

SEPT. 2014 - JULY 2017

Distinction: Good

Thesis: Corrosion and Protection Methods for Metallic Biomaterials in Biological Environments: The Case of Magnesium Alloys.

- Baccalaureate - Experimental Sciences | EL HAMMADIA High School**

JUNE 2014

Distinction: Good

SCIENTIFIC PRODUCTION

National and international communications

- October 14-15, 2024, The 3rd International Conference "Study Days on Polymer Materials (JEMP2024)"** | Poster presentation entitled: Investigation of the Impact of Eco-Friendly Treatments on Morphology, Aspect Ratio, Crystallinity and Tensile Properties of Agave Americana Fibers.
- June 11-15, 2023, 11th International Conference on Times of Polymers (TOP) and Composites** | Oral presentation entitled: Influence of green chemical treatments on morphology and mechanical properties of poly(3-hydroxybutyrate-Co-3-hydroxyhexanoate)-Agave Americana fibers biocomposites.
- March 15-16, 2023, 10th Symposium on Chemistry and Chemical Engineering (10th SCCE)** | Oral presentation entitled: Eco-friendly treatments for enhancing Poly(3-hydroxybutyrate-co-hydroxyhexanoate) Agave Americana fibers biocomposites properties.

- **July 20-23, 2022, 3rd International Conference on Applied Engineering and Natural Sciences**| Oral presentation entitled: Effect of Agave fiber content on properties of poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) biocomposites.
- **July 3-4, 2022, International Conference on Polymer Materials**| Oral presentation entitled: Effect of fiber content on properties of poly(3- hydroxybutyrate-co-3-hydroxyhexanoate) (PHBHHx)/Agave fibers (AF) biocomposites.
- **December 15, 2021, First Doctoral Day of the Faculty of Technology**| Poster presentation entitled: Reinforcing effect of a natural fiber from Agavaceae plants on biocomposites based on bacterial polyesters.
- **November 5-25, 2020, The 1st International Electronic Conference on "Green" Polymer Materials**| Oral presentation entitled: A characterization study of morphology and properties of Poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) (PHBHHx)/Aloe Vera fibers biocomposites: effect of fiber surface treatments.

International Publications

- **Idres, C.,** Kaci, M., Dehouche, N., & Bruzaud, S. (2024, August). Influence of Green Chemical Treatments on Morphology and Mechanical Properties of Poly (3-Hydroxybutyrate-co-3-Hydroxyhexanoate)-Agave Americana Fibers Biocomposites. In Macromolecular Symposia (Vol. 413, No. 4, p. 2400009).
- **Idres, C.,** Kaci, M., Dehouche, N., & Bruzaud, S. (2024, August). Eco-Friendly Chemical Modification of Agave Americana Fibers for Biocomposite Properties Enhancement. In Macromolecular Symposia (Vol. 413, No. 4, p. 2300250).
- **Idres, C.,** Dehouche, N., Kaci, M., Lainé, C., & Bruzaud, S. (2022, October). Effect of Agave Leaves Fibers (ALF) Content on Thermal, Mechanical, and Surface Properties of Poly (3-Hydroxybutyrate-co-3-Hydroxyhexanoate)(PHBHHx) Biocomposites. In Macromolecular Symposia (Vol. 405, No. 1, p. 2100272).
- **Idres, C.,** Kaci, M., Dehouche, N., Lainé, C., & Bruzaud, S. (2022, September). Effect of Agave Americana fibers content on morphology and mechanical, rheological, and thermal properties of poly (3-hydroxybutyrate-co-3-hydroxyhexanoate) biocomposites. Polymers from Renewable Resources, 13(4), 191-205.
- Dehouche, N., Kaci, M., **Idres, C.** and Bruzaud, S. (2021, April). Filler Content Effect on Water Uptake and Thermal Stability of Poly (3-Hydroxybutyrate-Co-3-Hydroxyhexanoate)/Microcrystalline Cellulose Biocomposites. In Macromolecular Symposia (Vol. 396, No. 1, p. 2000233).
- Dehouche, N., **Idres, C.,** Kaci, M., Zembouai, I. and Bruzaud, S. (2020, March). Effects of various surface treatments on Aloe Vera fibers used as reinforcement in poly (3-hydroxybutyrate-co-3-hydroxyhexanoate) (PHBHHx) biocomposites. Polymer Degradation and Stability, 175, p.109131.

WORK EXPERIENCE

Lab Instructor

Practical Sessions in Surface Phenomena of Matter (Physical Chemistry 2 and Chemical Engineering 2) – Bachelor’s Level, Year 3. 2023-2024

Practical Sessions in Chemistry (Structure of Matter)- Bachelor’s level in Science and Technology, Year 1. 2024-2025

Lecturer

Tutorials in Chemistry (Structure of Matter)- Level 1 in Engineering in Science and Technology. 2024-2025

Master’s Final Project Supervisor

Topics:

- Study of the Effect of Agave Americana Fiber on the Accelerated Photooxidation of Poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) 2023-2024
- A Characterization Study of Thermo-Oxidation of Lubricant Oil of an Automotive Engine