

Rim Zgueb- PhD-Physics

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Nationality: Tunisian

Academic qualifications

- **PHD in Physics / 2019**

“Contribution to study the thermal properties of soral cement by the photothermal deflection technique”.

Preparatory Institute for Engineering Study in Nabeul (IPEIN), university of Carthage, Tunisia.

Keywords: Photothermal technique, Soral cement, thermal property, polymers, Maple.

- **Master’s degree in Fluid Physics and Transfers / 2013**

“Numerical Study of the Thermoacoustic Engine Performance”

Faculty of Sciences of Tunis, University of Tunis El Manar, Tunisia.

Keywords: Thermoacoustic effect, engine, regenerator, standing wave, traveling wave, Fortran.

- **Bachelor’s degree in Physics and Chemistry / 2011**

Faculty of Sciences of Tunis.

Professional experience

- **Researcher / 2025**

Nova Gorica University, Nova Gorica, Slovenia.

Keywords: Photothermal.

- **Researcher / 2022**

Abdullah Gül University, kayseri, Turkey.

Keywords: MEMS, varactor (variable capacitors), Comb driver, Matlab, Comsol.

- **Lecturer / 2020-2021**

Faculty of Sciences of Tunis, University of Tunis El Manar, Tunisia.

- **Researcher / 2020**

Preparatory Institute for Engineering Study in Nabeul, Tunisia.

Keywords: Photothermal technique, thermal property, optical property, Maple.

- **Lecturer / 2015-2020**

Higher Institute of Technological Studies of Nabeul, university of Carthage, Tunisia.

International Journal Papers

- “Improvement of the thermal properties of Soral cements by polyvinyl acetate: Consequences on physical and mechanical properties”,
Rim Zgueb, Amal Brichni, Noureddine Yacoubi, Energy & Buildings (2018).

- “Improvement of the Thermal Properties of Sorel Cements”, Rim Zgueb, Amal Brichni, Nouredine Yacoubi, chapter, Book Zero-energy Buildings (2020).
- “Application of Photothermal Techniques in Magnesium Oxysulfate Cement”, Rim Zgueb, Nouredine Yacoubi, Materials Science and Metallurgy (2024).

Internship/Conferences/scientific trainings

- Trainee at University of Minho Department of Civil Engineering (GUIMARAES 2018, Portugal) under the supervision of Pr. José Luis Barroso Aguiar.
- Trainee at High School of Engineering Studies HEI of Lille (LILLE 2017, France) under the supervision of Pr. Zohir Younsi.
- «Photothermal Investigation of Magnesium Oxysulfate Cement», R. Zgueb, N. Yacoubi, 3rd International Conference on Applied Engineering and Natural Sciences (KONYA 2022, Turkey).
- Webinar presented by David Armstrong Publications of the American Chemical Society, (United States of America, 2022).
- «Photothermal Investigation of MOC Cement», R. Zgueb, N. Yacoubi, 7th edition of conference MATERIALS 2018 (HAMMAMET 2018, Tunisia).
- Workshop of the PhD Students in Civil Engineering (VARZIM and GUIMARAES 2018, Portugal).
- «Investigation of Thermal Properties of Cement Sorel by Photothermal Deflection Technique», R. Zgueb, N. Yacoubi, 3rd frame Conference on Photoacoustic and Photothermal Theory and Application (WARSAW 2016, Poland).
- «The Effect of the Incorporation of Poly(Vinyl Acetate) Polymer Into Magnesium Oxysulfate Cement : Thermal Property», R. Zgueb, N. Yacoubi, First International Conference on Multifunctional Materials and Their Applications 2MAP (SOUSSE 2016, Tunisia).
- «Influence of Poly(vinyl acetate) polymer on thermal property of Magnesium Oxychloride cement», R. Zgueb, N. Yacoubi, 1st International Conference on Materials and Spectroscopy (HAMMAMET 2016, Tunisia).
- Labview training, Scientific organization committee of training on sensors and applications and labview software (NABEUL 2016, Tunisia).
- Participation in the training "How to write an article" by the center in collaboration with the publisher SPRINGER (BOREJ-CEDRIA 2015, Tunisia).

Language proficiency

- Arabic: Mother tongue
- French: Working proficiency
- English: Working proficiency

IT skills

- Maple, LaTeX, Origin Pro, Matlab, Comsol.
- Microsoft Excel, Word, PowerPoint.

Interests and leisure

- Computer science, travel, reading books, sport.

