Layla FARHAT

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in Layla Farhat

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Ph.D Candidate In Materials Science

PROFESSIONAL EXPERIENCE

02/2020-Present (Dunkirk-France)

UDSMM-ULCO, Ph.D Candidate

A systematic study of the thermal properties of nanoscale ferroelectric-electrocaloric layers is conducted, via ThermoReflectance, as a function of the thickness of the material. In addition, a heat transfer model in electrocaloric thin films was developed to describe the temperature distribution and the confinement phenomena inside the layers.

03/2021-07/2021 (Dunkirk)

03/2019-07/2019 (Brest-France)

Lab-STICC-UBO, Intern

ULCO, Academic Tutor

The growth of biofilm on surfaces in contact with a liquid medium or placed in a humid environment causes major problems that economically impact many areas of activity. In this context, monitoring this growth is essential. The objective of this internship was to implement a sensor, a stub resonator, sensitive to bacterial adhesion for an isolated strain.

02/2019-03/2019 (Brest-France)

Lab-STICC-UBO, Student

Project in "Characterization of dielectric materials by a coaxial probe", The objective of the project was to determine the real and imaginary parts of the permittivity of dielectric liquids, using an open coaxial probe type measurement cell.

02/2018-02/2019 (Beirut-Lebanon)

Hospital Hotel Dieu de

France, Intern

This study examines the cumulative radiation dose levels received by a group of children who underwent multiple cardiac catheterization procedures during the investigation and management of congenital heart disease. Effective doses were simulated using PCXMC 2.0 software taking into consideration age, size, and organ dimensions.

Education

2019- Present	Joint Ph.D in Materials Science <i>Lebanese University</i> (Lebanon)- Université du Littoral Côte d'Opale (France)
2019 Brest-France	Master in Sensor Physics University of WestBrittany (Université de Bretagne Occidentale: UBO)
2017-2019 Beirut-Lebanon	Mater in physics of sensors and instrumentation Saint- Joseph University/ (Valedictorian)
2014-2017 Beirut-Lebanon	Bachelor of Science- Physics degree Saint-Joseph University/ (Valedictorian)
2013-2014 Saida-Lebanon	Lebanese Baccalaureate, Life Sciences Saint Joseph of The Apparition School (Valedictorian)

COMPUTER SKILLS

- Microsoft Office: (Word, Excel, PowerPoint)
- Programming language: LabVIEW, Matlab, Scilab, Visual Studio (C language), C++, Maple, Root.
- MEPHYSTO
- PCXMC.02
- MCNPX

LANGUAGES

- Arabic: Native language
- English: Full professional proficiency
- French: Full professional proficiency
- Spanish: Elementary proficiency

INTERESTS

- Photography
- Reading
- Hiking

Conferences Participation

- 2021 MRS Virtual Spring Meeting
- THERMAG IX 2021: 9th IIR International Conference on Caloric Cooling and Applications of Caloric Materials
- Eurotherm seminar on Caloric Heating and Cooling
- The 5th International Conference on Materials Sciences and Nanomaterials (ICMSN 2021)