



Name: Dr. Rana Ezzdine Lakys

Rank: Assistant Professor - Civil Engineering

Personal Information

Nationality:	French
AU Joining Date:	01 Sep 2015
E-Mail Address:	r.lakys@au.edu.kw

Professional Information

Education:	Qualification: Doctorate Major: Civil Engineering – Mechanics of Materials College/University: University of Bordeaux Year: 2008/2009
	Qualification: Masters Major: Civil Engineering College/University: Ecole de Nantes Year: 2003/2004
	Qualification: Bachelor Major: Civil Engineering College/University: University of Washington Year: 2002/2003
Specialization:	Rehabilitation techniques in civil engineering Construction Materials Construction Management
Current Academic Position:	Assistant Professor - Civil Engineering
Current Professional Positions:	NA

Previous Administrative Position Held:	NA
Previous Academic Positions Held:	- Adjunct Lecturer (part time) in AU (September 2015 – May 2017) - Instructor for mechanical engineering lab (University of Bordeaux, 2004-2007) - Teaching Assistant for the department of Sciences (University of Bordeaux, 2004-2007)
Fellowships And Honors:	Young Researcher Award by the scientific committee of MEDACHS, Feb. 2008 Teaching Excellence Award, AU, 2022
Teaching Experience:	- Steel structures, Construction Management (AU-Diploma) - Solid Mechanics, Structural Analysis, Design of Concrete Structures (AU -Bachelor) - Mechanical Lab (University of Bordeaux) - Materials (University of Bordeaux)
Industrial And Technical Experience:	- Project Engineer (GINGER Group, France, March to July 2010) - Technical Manager (Center of Thermal Engineering, Electricity of France EDF, September 2010 to August 2014)
Research Interest:	Materials behavior Non-Destructive techniques Rehabilitation of structures
Research Grants:	KFAS Grant Role: Co-I Project: Evaluation Of Compressed Earth Blocks As a Sustainable Alternative In Kuwait Construction KFAS Grant Role: Co-I Project: Development of Sustainable Thermal Resistant Concrete Using PTF (Palm Trees Fronds) AU Grant Role: PI Project: Advancing Non-Destructive Testing through AI: Development of an AI-based Model for Predicting Concrete strength based UPV Measurements in Concrete under Controlled Surface Temperature Variations
Research and Publications including Journal and Books:	• Saad, A.S., Ahmed, T.A., Lakys, R. et al. In-plane structural performance of Compressed Earth Block walls strengthened with carbon fiber reinforced polymer under quasistatic loading. Innov. Infrastruct. Solut. 10, 281 (2025). • Yassin M.H., Lakys R., Merouani Z.E., Jumah A "Performance Analysis of Palm Tree Microfibers in Concrete" Scientific Reports, 2024, DOI: 10.1038/s41598-024-84111-x • Yassin M.H., Al Hajaj Z., Lakys R., Merouani Z.E., Jumah A., Forthcoming. "The Influence of Palm Tree Fiber Addition on the Physical,

	Mechanical and Thermal Properties of High Strength Concrete", ASCE's Journal of Materials in Civil Engineering, 2024, DOI: 10.1061/JMCEE7/MTENG-19000 • R. Ezzdine Lakys, A. Saad, T. Ahmad, M.H. Yassin, "Investigating the drivers and acceptance of sustainable materials in Kuwait: A case study of CEB", Case Studies in Construction Materials 17 (No. 4), July 2022.
Paper Presentations at Professional Conferences:	1. Ahmad Saad, Taha Ahmed, Rana Lakys, Ali Radwan. "Improving the Structural Performance of Environmentally Friendly Block Walls." Proceedings of the 10th International Conference on Structural Engineering and Concrete Technology (ICSECT 2025), 10 - 12 April 2025, Barcelona, Spain. 2. Rana Ezzdine. Adel Jumaah, Bader Buqrais, Lina Jawad, Anfal Aljazzaf, Latifah Alhouli, Haya Almaghrebi, "Investigation on the effect of replacing cement and aggregates in the self-compacted concrete mix with various industrial waste materials", 64th Idaho Academy of Science and Engineering Symposium, 17th Intermountain Conference on the Environment, 5-6 April 2024 3. Lakys, R. Yassin M.H., Jumaah A., "Sustainable Alternatives for Concrete by Adding Different Types of Natural and Industrial Waste Materials", The 2nd International Conference on Civil Infrastructure and Construction (CIC 2023), February 2023, Qatar University, Doha, Qatar 4. R. Ezzdine Lakys, M.H. Yassin, Z. Merouani, "Preliminary Study on the Effect of Adding Palm Tree Fronds to Concrete", Proceedings of the 7th International Conference on Civil Structural and Transportation Engineering, Niagara Falls, Canada, 2022 5. M.H.Yassin, Z. Alhajaj, R. Ezzdine Lakys, "Experimental Study on the Thermal Characterization of PTF Concrete", Proceedings of the 7th International Conference on Civil Structural and Transportation Engineering, Niagara Falls, Canada, 2022 6. A. Saad, T. Ahmad, R. Lakys, A. Radwan, "Northern Kuwait Soil Evaluation in Producing Environmentally Friendly Blocks", Proceedings of 7th World Congress on Civil, Structural, and Environmental Engineering, Lisbon, Portugal, 2022. 7. R. Ezzdine Lakys, A. Saad, T. Ahmad, "CEB as Potential Alternative Sustainable Material in Construction Industry: Survey on the level of Acceptance in Kuwait", Proceedings of 7th World Congress on Civil, Structural, and Environmental Engineering, Lisbon, Portugal, 2022. 8. M.H. Yassin, R. Lakys, T. Ahmed, S. Al-Refaei, B. Al-Sayed and Rose Altaher, "Optimizing the Thermal Resistance of Concrete Using The Palm Tree Fronds Fibers", International Conference on Civil Infrastructure and Construction (CIC 2020). 9. R. Ezzdine, S. Yotte, D. Breyse, P. Malaurent, "Limestone degradation with salt, application to Blaye stone", International Conference on Construction Heritage in Coastal and Marine Environments (Medachs'10), Proceedings, La Rochelle, France, 28-30 April 2010. 10. S. Yotte, R. Ezzdine, P. Malaurent, "Essais de vieillissement accéléré sur la pierre de Blaye", Revue de l'Association Française de Génie Civil, Saint Malo, France, 03-05 June 2009 (in French). 11. R. Ezzdine, S. Yotte, P. Malaurant, D. Breyse, "Etude de l'évolution des propriétés physiques de la pierre de Blaye à l'aide des essais au

	laboratoire”, Revue de l’Association Française de Génie Civil, Nancy, France, 04-06 June 2008 (in French). 12. R. Ezzdine, S. Yotte, D. Breysse, P. Malaurent, “Identification de l’évolution des propriétés thermiques de la Pierre monumentale à l’aide des mesures in-situ”, Colloque GEODIM’08, Saint Nazaire, France, 03-04 April 2008 (in French). 13. R. Ezzdine, J.A. Ibanez, S. Yotte, D. Breysse, “Analysis of salt crystallisation test applied on two types of rocks: Galdacano sandstone and Blaye limestone”, International Conference on Construction Heritage in Coastal and Marine Environments (Medachs 08), Proceedings, Lisbon, Portugal, 28-30 Jan. 2008. 14. R. Ezzdine, S. Yotte, P. Malaurant, D. Breysse, “Apport des propriétés de transfert thermique sur la connaissance de l’état de dégradation de la pierre”, Revue de l’Association Française de Génie Civil, Bordeaux, France, 23-25 May 2007 (in French). 15. R. Ezzdine, S. Yotte, P. Malaurant, D. Breysse, P. Sin, “Endommagement des structures historiques en maçonnerie”, Revue de l’Association Française de Génie Civil, La Grande Motte, France, 2006 (in French).
College Service including committee Membership:	Civil Engineering PBL Committee (Chair from Fall 2018 to Spring 2020) Credit Transfer Committee (Chair for Fall 2022) Member in other civil engineering committees (Appeals and Complaints Committee (2018-2022), Lab and Workshops Committee (2018-2022), Validation and Moderation Committee (2022), Accreditation Committee (2022), Faculty Development Committee (2022)
National Service:	NA
College Committees:	College of Engineering PBL Committee