



#### **Talal Salem**

Associate Professor of Civil Engineering & Chair, DCEE

**O:** E30.13

T: 09-208402, 09.218950, Ext. 2030

E: tsalem@ndu.edu.lb

# **Biography**

Dr. Talal Salem is Associate Professor and chairperson of the Civil and Environmental Engineering Department. He joined the teaching staff of at Notre Dame University-Louaize in October 2008. His research interests include sustainable building materials, integration of renewable energy in building design, energy efficiency, and indoor environmental quality. Dr. Salem is working on the setting of a real-scale experimental tool for the characterization of building envelope, and testing new materials for sustainable construction. He is also a visiting scholar to University of Lyon - ENTPE in France since 2011, where he is involved in teaching graduate courses at the Department of Civil Engineering and Buildings.

#### **Peer-reviewed Journals**

- Galatioto, A. Ricciu, R. Salem, T. Kinab, E. (2019) Energy and economic analysis on retrofit actions for Italian public historic buildings, Energy, Vol. 176, 2019, pp. 58-66, ISSN 0360-5442, https://doi.org/10.1016/j.energy.2019.03.167
- Richieri, F., Moujalled, B., Salem, T. and Carrie F. R. (2016) Airtightness impact on energy needs and airflow pattern: a numerical evaluation for mechanically ventilated dwellings in France. International Journal of Ventilation, Vol. 15 (2), pp. 134-150 DOI: 10.1080/14733315.2016.1203608
- Salem, T., Kinab, E. (2015), Analysis of Building-integrated Photovoltaic Systems: A Case Study of Commercial Buildings under Mediterranean Climate. Procedia Engineering, Vol. 118, pp. 538-554 DOI: 10.1016/j.proeng.2015.08.473.
- Salem, T. and Harb, J. (2012) ESD: Assessment of the Current Situation at the Faculty of Engineering of Notre Dame University-Louaize. Discourse and Communication for Sustainable Education, Vol. 3, 2012, pp. 100-108 DOI: 10.2478/v10230-012-0007-9
- Richieri, F., Salem, T., Blanc-Gonnet J., Michel, P. and Guarracino, G. (2009) An Experimental Tool for Research and Educational Applications on HVAC Systems. International Journal of Sustainable Energy, Vol. 28(1), Pages 101-112. DOI: 10.1080/14786450802453181

### **Peer-reviewed Conference Proceedings**

- Salem, T., Kazma, M., and Metni, N. (2020) "Impact on Thermal Comfort from the Integration of Solar Panels under Stagnation in Buildings: A Numerical Investigation," Proceedings of ASHRAE 4th International Conference on Efficient Building Design, November 5-6, 2020, Beirut, Lebanon.
- Salem, T., Kazma, M., Metni, N., and Hanna, H. (2020) "Numerical Investigation of the Impact of Integrating Solar Collectors under Stagnation", Proceedings of the 5th IEEE International Conference of renewable Energy in Developing Countries, June 29-30, 2020, Marrakech, Morocco.

- Saad, C., Salem, T., Korban, K. (2018) "The Effect of Transport on Urban Heat Island: A Computational Model to Assess Its Impact", 3rd City Street Conference, Beirut, Lebanon.
- Kinab, E., Salem, T., Abi Zeid, N. (2018) "The first BIPV plant in Lebanon: performance analysis of hybrid configuration with diesel generator," IEEE REDEC 2018, Beirut, Lebanon.
- Salem, T. (2018) "Challenges of Developing Lebanese Industry and the Sustainable Development Goals", UNIDO Arab International Industrial Conference, Cairo, Egypt, May 6-8.
- Salem, T. (2017) "Fostering University-Industry R&D Collaborations in Arab Countries: The Case of Lebanese Universities", AIDMO conference on the role of science and technology in industrial development, University of Jordan, Amman, Jordan, December 18-20.
- Salem, T., Kinab, E., (2015) Analysis of Building-Integrated Photovoltaic Systems: A Case Study of Commercial Buildings under Mediterranean Climate. International Conference on Sustainable Design, Engineering and Construction – ASCE ICSDEC 2015, Chicago, USA.
- Kinab, E., Salem, T., Merhi, G. (2014) BIPV Building Integrated Photovoltaic Systems in Mediterranean Climate. IEEE REDEC 2014, Beirut, Lebanon.
- Khoury, W., Salem, T., Zgheib, T. (2014) Hotel Green Renovation Guide A Case Study for a Lebanese Hotel. IEEE REDEC 2014, Beirut, Lebanon
- Salem, T. (2014) Fostering Solar Technology in the Mediterranean Area. Energy Efficiency in Mediterranean Buildings Conference, Malta, March.
- Salem, T. (2012) Colored Absorbers for Solar Thermal Collectors: A Numerical Study for Lebanese Buildings. IEEE REDEC 2012, Beirut, Lebanon.
- Salem, T., Harb, J. (2012) ESD: Assessment of the Current Situation at the Faculty of Engineering of Notre Dame University Louaize. ICTESDCP 2012, Crete, Greece, June.
- Salem, T., Saad, C., Dabbak, B. (2012) Green Airport Sustainable Site Selection Study. LAAS 18th International Science Meeting: New Discoveries in Science, Beirut, March.
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- Richieri, F., Salem, T. and Michel, P. (2009) Control of Outdoor Ventilation Airflow Rate: Evaluation of Setting Methods. AIVC BUILDAIR 09, Berlin, Germany, October.
- Cantin, R., Michel, P, Belmont, Y., Bonnard, F., Constant, J., Cryonnet, J.C, El-Mankibi, M., Guarracino, G., Labor, G., Moujalled, B, Paulin, M., and Salem, T. (2008) Experience of a French Working Group about Systemic Approach of Buildings. Proceedings of the 7th European Systems Science Congress, Lisbon, Portugal.
- Salem, T. and Michel, P. (2007) Experimental Study of Active Thermal Solar Collectors Integrated in Building Façade. SWC 2007, Beijing, China.
- Salem, T. and Michel, P. (2007) Development of a Prospective Method for the Conception and Evaluation of Integration of Active Thermal Solar Components in Buildings. CISBAT 2007, Lausanne, Switzerland.
- Salem, T., Michel P. & al. (2005) Integration of Active Thermal Solar Components in Façade Elements. CISBAT 2005. Lausanne. Switzerland.
- Cantin, R., Adra, N., Guarracino G. and Salem, T. (2002) A Dynamic Model for Managing the Energy Use in Buildings. The 3rd International Conference on Decision Making in Urban and Civil Engineering, London, UK.

## **Chapters in Books**

• Salem, T. (2010) Intégration des Composants Solaires Thermiques dans la Structure Bâtie: Etat de l'Art et Propositions Innovantes d'Intégration. Editions Universitaires Européennes, Germany, ISBN: 978-613-1-51388-6.