CURRICULUM VITAE

1 Personal Data

First name: Noureddine Name: Zemmouri Title: Dr. Academic Rank: Professor

Date of birth: April 22nd 1960 City: Oued Taga Country: Algeria

Marital status: Married Number of children: Three

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2 Universities and schools attended and degrees received

First University Degree: (Architect)

Name of degree: State Degree in Architecture. Date degree awarded: 1984 School (Department): Institute of Architecture Urban Design and Construction

Name and location of University: University of Constantine (Algeria)

Specialisation: Architecture

Second University Degree: (Master of philosophy)

Name of degree: Mphil in Building Engineering. Date degree awarded: 1987

School (or Faculty): School of Architecture and Building Engineering **Name and location of University**: University of Bath (United Kingdom)

Specialisation: Building Engineering

Third University Degree: (State Doctorate)

Name of degree: State doctorate. Date degree awarded: 2005

School (or Faculty): School of Architecture/Department of Architecture

Name and location of University: University of Southern California (USA)/University of Setif

(Algeria)

Specialisation: Architecture

3 Other certificates obtained and advanced courses attended

- **Colchester English Certificate**: English for Research and Technology, Colchester English study centre (England) June 1985.
- Northern Universities Joint Matriculation Board (J.M.B.): Manchester (England) June 1985.
- Teaching techniques Architecture studio: University of Bath (England) 1986.
- **Computer Aided Design**: University of Bath (England) 1986.
- Photogrammetry, architecture and Environmental Design: Jena (Germany) 1996.
- Strategies for Developing Effective Presentation Skills: American Management Association Los Angeles (USA) December 2002.

4 <u>Language Proficiency</u>

- Arabic
- English
- French

5 Employment history

Department of Architecture University of Biskra Algeria 1990/Present

- Executive Director Architecture & Environmental Design Laboratory
- Professor
- Head of Department
- President of the Scientific Board
- Research Group Leader

School of Architecture University of Southern California Los Angeles USA 2002/2003

• Visiting Professor Fulbright Program

<u>Department of Renewable Energy</u>, , <u>Environmental Sciences PhD Program</u>, <u>University of Québec at Rimouski</u>, <u>Canada 2007/2008</u>

• Visiting Professor University of Québec International Exchange Program

<u>Department of Architecture, Graduate School of Human Environment Studies, Kyushu University Japan 2010/2011</u>

• Visiting Professor University of Kyushu Exchange Program

<u>College of Architecture and Design, Jordan University of Science and Technology,</u> <u>Jordan 2014/2015</u>

Visiting Professor TWAS -The World Academy of Science- Program

Consultancy

- UN-Habitat
- Arab League Educational, Cultural and Scientific Organization (ALECSO)
- Algerian Ministry of Justice
- Architecture Studio Inc.

6 Extracurricular activities and accomplishments

a) Software development

- Code '**Nour**': evaluation of interior illuminances under different sky conditions. Using Microsoft Fortran.
- Code '*Chemss*': evaluation of irradiances on horizontal and vertical surfaces with different orientations and under different sky conditions. Using Microsoft Fortran.
- Code 'Mat-Light': Interior Daylight evaluation under Matlab.
- Code 'Fuzzy-Light': Daylighting evaluation using Fuzzy sets under Matlab.

b) Membership in professional organizations

- The Society of Building Science Educators (SBSE), USA
- Arab Society for Computer Aided Architectural Design (ASCAAD), UAE
- Soft Computing in Image Processing (SCIP Group), Belgium
- Aga Khan Award for Architecture, Switzerland
- Société Algérienne de l'énergie solaire, Algeria
- Commission internationale de l'éclairage (CIE), France
- Arab Science and Technology Foundation (ASTF), UAE
- World Federation on Soft Computing (WFSC), USA

c) Honours

- Scholarship granted by the **US State Department** (**Fulbright Scholar Program**) to follow six months of additional graduate research studies and engage in professional activities in the **USA** (2002-2003).
- Scholarship granted by the European Commission Tempus III Program (2006), for outstanding performance and to follow a one month research program on Cyber Education at the Catholic University of Louvain la Neuve (UCL) Belgium.
- Mobility Scholarship granted by the *Nato Science Program (2007)*, for participation at the Advanced Research Workshop(ARW) on Enhancing Security in the Middle East through Regional Cooperation on Renewable Energy, London U.K. January 2008.

- Mobility Scholarship granted by the *Nato Science Program (2009)*, for participation at the Advanced Research Workshop(ARW) on Achieving Environmental Security Ecosystem Services and Human Welfare, Newport USA July 6-10, 2009.
- Jeffrey Cook Memorial Award in Building Science Education. Las Vegas USA May 2010.
- Scholarship granted by the *UN-Habitat (2011)*, for participation at 2nd World Congress on Cities and Adaptation to Climate Change, Bonn Germany 3-5 June 2011.
- Fellowship granted by the **US Department of State**, Open Book Project (2014). OER (Online Education Resources) as an integral method of communication of curriculum in educational courses. USA February-March 2014.

7 Other experiences

- Computer aided design: Autocad, Archicad, Surfer, Rhino
- Software Development under: Visual Fortran, Matlab, Python, Grasshopper
- Photogrametry and Architecture: Geographic Information Systems (GIS)
- Virtual reality and architecture: Lighscape, Daysim, Radiance 3d Studio.
- Web Site Construction: Macromedia Fireworks, Dreamweaver and Flash
- Building Information Modelling: Rhino, Diva, Grasshopper, Energy+, Fluent,

Phoenics, TrnSys, Dial+,

8 Academic References

• Professor André De Herde, Faculty of applied sciences Université Catholique de Louvain Belgium.

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 Professor Douglas Noble, USC, School of Architecture Watt Hall 204 Los Angeles CA 90089-0291 USA.

Tel. +1 (213) 740 2723 Fax +1 213 740 8884 Email: <u>dnoble@usc.edu</u>

• Professor Marc E. Schiler, USC, School of Architecture Watt Hall 204 Los Angeles CA 90089-0291 USA.

Tel. +1 (213) 740 2723 Fax +1 213 740 8884 Email: marcs@usc.edu

• Professor Yasunori Akashi Department of Architecture, Graduate School of Engineering, 7-3-1 Hongo, Bunkyo-ku, Tokyo 113-8656 Japan.

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E-mail: akashi@arch.t.u-tokyo.ac.jp

Major communications and publications

Daylight availibility under specific sky conditions.

Cisbat 99 EPLF Lausanne Switzerland, September 1999.

Simulation et optimisation des systèmes d'éclairage naturel (in French).

Journées nationales sur les systèmes thermiques appliqués USTHB, Algiers (Algeria), May 1999.

Simulation d'architecture en synthèse d'image (in French).

Journées Technologiques de Ouargla (Algeria), November 1999.

Les espaces verts et la pollution visuelle (in French).

Urbanisme à Bejaia traces et perspectives. Bejaia (Algeria), October 1999.

La perception de l'environnement urbain effet sur le comportement humain (in Arabic).

Séminaire International d'Urbanisme Msila (Algeria), December 1999.

L'environnement urbain entre planification et réalité (in Arabic).

Séminaire International d'Architecture. Biskra (Algeria), December 1999.

Islam, politics and the urban built environment transformation in Algeria

First Mediterranean Social and Political Research Meeting, Florence (Italy), 22-26 March 2000.

The Islamic urban environment: between transformation and Imitation

International conference Megacities 2000, Hong Kong, 08-10 February 2000.

Windows design for energy conservation in hot arid zones

International Solar Energy Conference Sharjah, UAE, 19-22 February 2001.

Specific architectural design: the energy option

International Solar Energy Conference Sharjah, UAE, 19-22 February 2001.

Fuzzy logic for interior Daylight optimization.

Second Symposium on Scientific Research and Technology Development in the Arab World. Sharjah, UAE, March 2002.

Effects of sun controls on buildings interior lighting and thermal environment in hot arid regions. Second Symposium on Scientific Research and Technology Development in the Arab World Sharjah, UAE, March 2002.

Effects of sun controls on buildings interior lighting and thermal environment in hot arid regions, UNESCO Programme Solaire Mondial, Revue des Energies Renouvelables, Volume 7, Numéro 1, pp.45-52, June 2004. CDER.

Micro-Light: Simulation et optimisation des systèmes d'éclairage naturel dans le bâtiment. Final report of the research projet n° 0701/01/2002. December 2004.

www.arch.potofolio.edu: A virtual Student Portfolio

Séminaire National sur Les Nouvelles technologies de communications. Oran , January 2005.

MatLight Version 1.0: An integrated daylight estimation tool

Cisbat 2005 EPLf Lausanne Switzerland.

MatLight Version 1.0: A tool for Interior Daylight Estimation under Matlab

PLEA 2005 Beirut Lebanon November 2005.

Application of Fuzzy Logic in Interior Daylight Estimation, UNESCO Programme Solaire Mondial, Revue des Energies Renouvelables, Volume 8, Numéro 1, pp.55-62, June 2005. CDER.

Virtual Design Studio: new ways of practicing architecture and teaching design in collaboration.

XXII UIA World Congress of Architecture UIA 2005 Istanbul Turkey 2005.

Modeling energy efficient windows in hot arid zones.

The 2005 World Sustainable Building Conference Tokyo Japan 2005.

Application of Fuzzy Logic in Interior Daylight Estimation, UNESCO Programme Solaire Mondial, Revue des Energies Renouvelables, Volume 8, Numéro 1, pp.55-62, Juin 2004. CDER.

E-learning in Architecture education: Challenges, strategies and approaches.

4th Scientific Research Outlook in the Arab word. Damascus December 2006.

Cognitive computing in Architecture for daylighting optimization.

First Conference on Sources of Architectural Forms: Theory and Practice. Kuwait University, Kuwait, March 2007.

Local Climatic Data Capture Using the NASA SSE Program, Journal of the Association of Arab Universities for Basic and Applied Sciences, Volume 4, pp.202-207, August 2007.

Urban built environment perception: effects on human behaviour (in Arabic).

Biskra international conference on Architecture and sustainability Biskra (Algeria), April 2008.

Cyberspace, education, equity and architecture

5th Scientific Research Outlook in the Arab word Fez Morocco October 2008.

Human behaviour assessment in religious spaces: Case study of Mozabite Mosques.

5th Scientific Research Outlook in the Arab word Fez Morocco October 2008.

Housing developments in Algiers: Between culture, identity and political acts. Séminaire International sur la Gestion Immobilière Algiers June 2008.

Vision sémiologique de l'espace public : cas de la rue du 8 mai 1945, Notes de Recherche Territoires et Développements Durables, Published by the Université Catholique de Louvain la Neuve Belgium, Volume 1, 2009.

Delivering the Architecture of Ecosystem Services: Daylight Modelling for Sustainable Building Design, Nato ARW Workshop Achieving Environmental Security Ecosystem Services and Human Welfare, Newport USA July 6-10, 2009.

Islam, Water and Architecture: A bibliographic review, Society of Building Science Educators 2010 Retreat. Las Vegas USA May 2010.

Modelling the wind flow in complex vernacular urban morphology: A computational fluid dynamics simulation of the central Ghardaia Area. UNESCO Programme Solaire Mondial, Revue des Energies Renouvelables, Volume 14, Numéro 1, pp.85-94, Mars 2011. CDER.

Effet de la morphologie urbaine sur l'environnement lumineux extérieur: Cas des zones arides et chaudes (in French). ISUF 2011 : Urban Mophology and the Post-carbon City. Concordia University, Montréal Canada August 2011.

A study of optimization of the light shelf system in hot and arid zones. ASES Solar 2013, Baltimore, Maryland, USA, April 2013.

Cyberspace for sustainable and liveable cities. Intercampus Project for Strengthening Climate Change in Urban Education, Annual Conference on Education Innovation (ACEI 213), Okinawa Japan, November 213.

Solar and daylight availability evaluation and estimation in urban fabric under specific sky conditions. The International Conference for Enhanced Building Operations (ICEBO 2014), Tsinghua University, Beijing, China, May 2014.

A mobility study of visually impaired people in a specific urban space, International Mobility Conference (IMC15), Montréal Canada, July 2015.

A Bio Problem-Solver for Supporting the Design, Towards the Optimization of the Energy Efficiency, 6th International Conference on Modeling, Simulation, and Applied Optimization, Istanbul, Turkey, May 215, Publisher IEEE.

SPUCAL_mrt as a New Model for Estimating the Mean Radiant Temperature in Arid Lands, Energy Procedia, Volume 74, pp. 273-280, August 2015.

Books Contribution

1- Renewable Energy in the Middle East: Enhancing Security Through Regional Cooperation.

Published by Springer 2009.

2- Mimarliklarin Pazaryeri (Turkish): Virtual Studio: New ways for teaching architecture.

Translated to Turkish and published by the Chamber of Architects of Turkey 2009.

3-Strengthening Urban Climate Change Education: Module Development for the Cities and Climate Change Academy.

Published by UN-Habitat 2011.

4-Achieving Environmental Security: Ecosystem Services and Human Welfare.

Published by IOS Press 2012.

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