

**1. PERSONAL DATA**

**Surname :** Chemrouk  
**Name :** Mohamed  
**Place and date of birth :** Chlef, Algeria, 29<sup>th</sup> January 1955  
**Sex :** Male  
**Nationality:** Algerian  
**Religion:** Muslim  
**Marital Status :** Married, two (02) children  
**Home Address :** Cité des 1200 logements, Résidence des Cyprés C6,  
Bab-Ezzouar, Alger, Algeria.  
**Title :** Professor in Materials and structural Engineering.  
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**E.mail :** [mchemrouk@yahoo.fr](mailto:mchemrouk@yahoo.fr) ; mchemrouk@gmail.com  
**Languages:** Fluent in Arabic, French and English (written and spoken)

**2. EDUCATION AND QUALIFICATIONS**

**PhD (1985-1988) :** Doctorate Research leading to a PhD degree, Department of Civil Engineering, Newcastle upon Tyne University, UK, 1988. Title of PhD Thesis: 'Slender Concrete Deep Beams - Behaviour, Serviceability and Strength'.

**MSc (1983-1984) :** Undertaken research leading to a Master of Sciences (MSc) degree, Department of Civil Engineering, Newcastle upon Tyne University, UK, 1984: Title of MSc Thesis : 'The Design of Reinforced Concrete Deep Beams'.

**Diploma (Sept 1982-June 1983) :** One year Diploma course in Structural Engineering, Department of Civil Engineering, Newcastle upon Tyne University, UK, 1982; Title of dissertation 'The Design of Reinforced Concrete Multi-storey Office Buildings'.

**JMB (English Language)** One full year English Language in bell college, Saffron Walden, UK, from September 1981 to June 1982.

**BEng. 1975-1980:** University of Science and Technology of Algiers, School of Engineering; five year course degree in civil engineering.

### **3. ADMINISTRATIVE EXPERIENCE**

- 1998 - 2005 :**
- **General Director** of the School of Architecture (EPAU), Algiers.  
The School of Architecture has about 2000 students, both at undergraduate level and postgraduate level, lectured by 125 full time staff Lecturers. The teaching and research activities are supported by 120 technical and administrative staff. An average of 250 graduate in Architecture and Urbanism from the school each year. During that period, I developed and supervised a varied exchanging program with European universities (Berlin university, School of Architecture of Paris-Val-de-seine, Lusiada university in Portugal, School of Architecture in Geneva). The program consisted of Lecturers and students exchanges, exchanges of taught programs and pedagogic documentations, common projects for students, joint conferences and seminars.

### **4. ACADEMIC EXPERIENCE**

- 1985-1988 :**
- Student's Demonstrator / Assistant Lecturer, Department of Civil Engineering, Newcastle upon-Tyne University, UK.
- Dec. 1988 – Dec. 1996 :**
- Senior Lecturer at 'University of Sciences and Technology, Houari Boumediene' (USTHB), Algiers, Algeria, at both undergraduate level and postgraduate level.
- Jan. 1998 – June 1998**
- Visiting staff lecturer at Newcastle upon Tyne University, UK.
- July 1998 – Dec. 2004**
- While General Director of the School of Architecture, I still carried on lecturing at the University of Science and Technology (USTHB) and at the School of Architecture of Algiers (EPAU) at the postgraduate level.
- December 2002 :**
- Promotion as a **Professor** in Civil Engineering at the Faculty of Civil Engineering, University of Science and Technology Houari Boumediene (USTHB), Algiers, Algeria and at the School of Architecture (EPAU), Algiers, Algeria.

**Since January 2005, Professor** of Structural Engineering at the University of Science and Technology of Algiers, devoted entirely to teaching and research, lecturing Reinforced Concrete Design at undergraduate level; Advanced Concrete Design and Concrete Structures – Materials,

Deterioration Pathologies and Structural Repair/Strengthening at the Postgraduate level and supervising postgraduate students and research projects as detailed below.

## **5. TEACHING ACTIVITIES**

### ***5.1- Undergraduate:***

Concrete Technology, Structural Concrete Design, Building Materials, Building Construction and Detailing, Structural Analysis, Strength of Materials, Steel Design.

Supervision of final year undergraduate Projects (dissertation and design projects) on Building Design of different Types of Structures, Building Materials, Rehabilitation of Structures etc...

### ***5.2- Postgraduate***

Advanced Concrete Design, Advanced Concrete Materials, Durability of Concrete and Repair/Strengthening of Concrete Structures.

### ***5.3- Supervision:***

- a) Supervised 04 Doctorate research work on the following topics:
  - 1- Soil-Structure and Masonry-Structure Interaction Effects on the Dynamic (Seismic) non-linear Behaviour concrete Structures; submitted in 2006 (Doctorat d'Etat)
  - 2- Analysis of Steel Frames with semi-rigid connections; submitted in 2008. (Doctorat d'Etat)Two doctorates are under examination by a designated jury:
  - 3- Steel Fibre reinforced concrete with reference to the rheological properties and to the ductility (examination in March 2010).
  - 4- Structural Behaviour of High Performance Concrete with reference to Flexure and Shear (examination in March 2010).
- b) Supervised 10 Master research works (MSc) on the following topics:
  - 1- Behaviour of Steel Structures under Seismic Forces
  - 2- Shear in Reinforced Concrete and Comparison of Universal Codes Regarding this Loading force.
  - 3- Non-linear analysis of steel structures with semi-rigid connections
  - 4- Formulation and Properties of High Performance Concrete made of Local Materials.
  - 5- Slenderness effect on columns and the Additional Moment Concept as a Design Tool.
  - 6- Properties of High Performance Concrete.
  - 7- Behaviour and Design of Reinforced Concrete Deep Beams.
  - 8- Creep and Shrinkage of High Performance Concrete.
  - 9- Cracking in Reinforced Concrete and its Effect on the Durability of Concrete Structures
  - 10- Repair and Strengthening of Earthquake Damaged Beam-Column Concrete Framed Structures.
- c) Supervise at present 07 Doctorate's research work (PhD's), on the following topics:
  - Repair and strengthening of concrete structures using FRP of different types
  - Sand Concrete with reference to Dune Sand Concrete
  - Fibre Reinforced Concrete

- Concrete made from Recycled Concrete as Aggregate
  - Reinforced Concrete Deep Beams.
  - Slender Concrete Structures with particular Reference to Concrete columns
  - Shear behaviour of Fibre reinforced concrete
- d) Supervise at present 05 Master's research work (MSc) on the following topics:
- Durability of Concrete Material
  - Sand Concrete with particular Reference to Dune Sand Concrete as a Building Material.
  - Comparison of Universal Design Codes Regarding Flexure, Shear & Bearing
  - The importance on Non-Destructive testing in high performances concrete
  - Solutions for repair and strengthening of beam-column concrete structures with particular reference the use of Carbon Fibre Tissues (CFRP).

**5.4- Teaching Languages** : French, English, Arabic

## **6. OTHER WORKING EXPERIENCE**

**1980:** Training Engineer, Design Office.

**1980-1981 :** Site Engineer, Dam Construction Project

## **7. RESEARCH ACTIVITIES:**

### ***7.1- Research Interests***

#### CONSTRUCTION MATERIALS

- High Performance Concrete
- Fibre Reinforced Concrete
- Sand Concrete
- Concrete made of Recycled Concrete Aggregates
- Durability of Construction Materials

#### STRUCTURAL BEHAVIOUR

- Reinforced Concrete Deep Beams
- Repair and Strengthening of Concrete Structures using FRP
- Slender Reinforced Concrete Structures
- Shear in Reinforced Concrete
- Ductility in Structures/Seismic Behaviour of Concrete Structures

### ***7.2- Funded Research Projects***

#### **a) National Projects**

BETON A HAUTES PERFORMANCES : du Matériau à la Structure : National Research Project domiciled at the Faculty of Civil Engineering (USTHB) and financed by the Ministry of Higher Education and Scientific Research (Project Started in January 2010).

CRACKING IN REINFORCED CONCRETE AND ITS EFFECTS ON THE STRENGTH CAPACITY, THE SERVICIBILITY AND THE DURABILITY OF CONSTRUCTIONS– EFFECTS OF FIBRES IN CONCRETE TO IMPROVE ITS BEHAVIOUR TOWARDS CRACKING: National Research Project domiciled at the Faculty of Civil Engineering(USTHB) and financed by the Ministry of Higher Education and Scientific Research (Project ended in December 2009).

DURABILITY OF CONCRETE MATERIAL AND ITS EFFECT ON CONCRETE CONSTRUCTIONS: National Research Project domiciled at the School of Architecture (EPAU) and financed by the Ministry of Higher Education and Scientific Research. (Project ended December 2006).

MASONRY-STRUCTURE INTERACTIONS ON THE SEISMIC NON-LINEAR BEHAVIOUR OF CONCRETE STRUCTURES :National Research Project domiciled at the Faculty of Civil Engineering and financed by the Ministry of Higher Education and Scientific Research.(Project ended December 2006).

#### **b) International Multi-Partnership Projects**

PROTECTION OF HISTORICAL BUILDINGS AGAINST SEISMIC RISKS (PROHITECH): Partner No15 in this 2.4 Millions Euros STREP European Project from the FP6 Programme (a total of 16 Partners from 12 Mediterranean Countries ) financed by the European Commission and coordinated by the Department of Structural Analysis and Design (Professor Mazzolani) of Naples University, Italy. (Project ended in June 2009).

Expert in NAPRIMED (Natural Risk Prevention in the Mediterranean Countries), a European Funded project from the programme 'Civil Protection Financial Instrument – Cooperation Projects on Preparedness and Prevention', Starting in October 2008 and running for 24 Months with five Partners from Italy (Coordinator), Spain and Greece and Experts from Algeria and Morocco.

Has been Local Technical Manager of 2 Euromed-Heritage Projects on Management, Preservation and Restoration of Cultural Heritage : UNIMED AUDIT (14 partners) from 1998 to 2001 and UNIMED CULTURAL HERITAGE II (22 Partners) from 2002 to 2005, as Partner No1 representing EPAU (School of Architecture of Algiers). Both projects were financed by the European Commission and coordinated by UNIMED (Union of the Mediterranean Universities).

### **7.3- Other Scientific activities**

- Chairman of the National Pedagogic Committee of Architecture from 1998 to 2004. This body works for the Ministry of Higher Education in updating and supervising the teaching of Architecture at the different universities of Algeria. While Director of the school of architecture and chairman of this committee, a new curricula in architecture and construction in accordance with the Bologna Process was initiated, helped in this by a strong exchange network that was established with some European universities and schools.
- Supervised the organisation of two international conferences on 'The Teaching and Practice of Architecture' in April 2001 and on 'Cultural Lighting about Algiers' in May 2002, at the School of Architecture of Algiers while Director of the school.
- Has been responsible of a Scientific Exchange Programme with the University of Stuttgart (Germany) financed by GTZ in Germany from 1998 to 2001 while Director of the School of Architecture (EPAU), Algiers. This Exchange programme has been concluded by the organisation of two seminars on 'Algerian Architecture through the Centuries' at the School of Architecture, Algiers, in March 2000 and on 'the Metropolisation of Algiers' in Stuttgart in May 2000. Publications have been produced for both seminars.
- Attended with success an intensive training course on 'Project Design' in Mohammadia (Morocco) and an intensive training course on 'Project Management' in Alexandria (Egypt) both organised by the European Commission for EuroMed-Heritage projects' Partners in March and April 2005 respectively.

## **8. PUBLICATIONS**

### **8.1- Journals and Edited Books**

- 1) KONG, F. K., GARCIA, R. C., PAINE, J. M., WONG, H. H. A, TANG, C. W. J. and **CHEMROUK, M.** "Strength and Stability of Slender Concrete Deep Beams". The Structural Engineer, Vol.64B, N°. 3, September 1986. (This Paper has won the Henry Adams Awards of 1986).
- 2) **CHEMROUK, M.** and RIBBECK, E. "University Cooperation Between SIAA (Stuttgart) and EPAU (Algeria)"; Trialog, a Journal for Teaching and Research on Housing and Building in the third world; Stuttgart University, Germany, 1999; pp.42-47; (in Dutch), ISSN:0724-6234.
- 3) **CHEMROUK, M.** and KONG, K.K.; "Diagonal Cracking and Ultimate Shear Strength of Slender High-Strength Concrete Deep Beams"; Journal : 'Advances in Structural Engineering', Vol. 7, N° 3, pp. 217-228, Hong Kong, 2004.
- 4) **CHEMROUK, M.** and KONG, F. K.; "High-Strength Concrete Continuous Deep Beams - With Web Reinforcement and Shear-Span Variations"; Journal : 'Advances in Structural Engineering', Vol. 7, N° 3, pp. 229-243, Hong Kong, 2004.
- 5) ZERZOUR, A., **CHEMROUK, M.**, CHABAAT, M. and BENOUAR, D.; "Soil-Structure Interaction and Filling-Structure Effects on the non-Linear Dynamic Behaviour of Reinforced Concrete Structures : a new Method"; European Earthquake Engineering (EEE) Journal (International Journal of Earthquake Engineering and Engineering Seismology) ; Volume XIX, No.1-2005; Milano (Italy), 2005; pp.27-34.
- 6) KONG, F. K and **CHEMROUK, M.** : "Reinforced Concrete Deep Beams"; Chapter 1 of a book edited par F.K.Kong and published by **Blackie**, Glasgow and London and by **Van Nostrand Reinhold** in New York ; 1990; pp. 1 -29; ISBN 0-216-92695-5.
- 7) **CHEMROUK, M.** and HAMRAT, M. "High Performance Concrete – Experimental Studies of the Material" ; pp. 869-877 ; a paper published in a book edited by R.K. Dhir, P.C.Hewlett and L.J.Csetenyi entitled : 'Innovation and Developments in Concrete Materials and Construction' and published by ThomasTelford Publishing, London, 2002, pp. 991 ; ISBN : 07277 3179 3 .
- 8) KEHILA, Y., **CHEMROUK, M.**, MEZOUARI, F., CHELGHOUM, D.E. AND MEDELICI, A. "The landfills in Algiers and the Use of Geosynthetics Materials to Protect the Environment"; Paper presented in the 7th Conference about Géosynthetics in September 2002, Nice, France, and published by Balkema Publishers, Lisse, the Netherlands ; September 2002 ; pp. 1481-1485; ISBN : 90 5809 523 1.
- 9) **CHEMROUK, M.** and ATTARI, N. " Durability of Concrete with Particular Reference to High Performance Concrete " ; pp.245-254 ; A Paper published in a book edited by R.K. Dhir, M.D. Newlands and K.A. Paine 'Role of Concrete in Sustainable Development' and Published by Thomas Telford Publishing, London, 2003; pp.723; ISBN: 0-7277-3247-1.
- 10) **CHEMROUK M.** and KONG F. K. "Instability of Slender Concrete Deep Beams - Comparison of Test Results with Existing Design Aids"; Proceedings of the 28<sup>th</sup> Conference : "Our World in Concrete and Structures", 28-29 August 2003, Published under the theme 'Concrete for the Future', Singapore; pp 253-264; ISBN: 981-04-8557-3.
- 11) **CHEMROUK, M.**, ATTARI, N. and Si YUCEF Y. ; "Lessons from the Boumerdes-Algiers Earthquake"; A Paper Published in a book edited by R.K. Dhir, M.D. Newlands and A. whyte : "Application of Codes, Design and Regulations" and published by Thomas Telford, London, 2005; pp.787; ISBN: 0 7277 3403 2.

**12) CHEMROUK M.** : Selection of the mix Constituents to Produce a Highly Performing and Durable Concrete Material; Paper published in 'Durability of Building Materials and Components : Globality and Locality in Durability ', volume 1, edited by A. Nil Turkey and Ozkan Zengul, Istanbul, Mai 2008; ISBN: 978-975-561-326-0

**13) CHEMROUK M.** " Influence of Poor Workmanship and Construction Defects on the Durability and Strength of Concrete Constructions"; A Paper Published in a book edited by R.K. Dhir, T.Harrison, L.Zheng and S.Kandasami : "Concrete Durability - achievement and enhancement" and published by IHS BRE Press, Bracknell, UK, 2008; pp970.; ISBN: 978-1-84806-039-5; Paper pp. 153-164.

**14) IHADDOUDEN ANT, SAIDANI M and CHEMROUK M.** : "Modelling of Steel Frames with Semi-Rigid Joints"; International Journal of Applied Engineering Research, Volume 3, No.7, July 2008.

**15) IHADDOUDEN ANT, SAIDANI M and CHEMROUK M.** : "Mechanical Model for the Analysis of Steel Frames with Semi-Rigid Joints"; Journal of Constructional Steel Research (Elsevier) ; Volume 65, No.3, March 2009.

**16) HAMRAT, M., BOULEKBECHE, B., CHEMROUK, M. and AMZIANE, S.** : 'Shear Behaviour of RC Beams Without Stirrups Made of Normal Strength and High Strength Concretes'; Paper accepted in February 2009 for publication in April 2010 in *Advances in Structural Engineering – An International Journal, vol.13, No2*, Hong Kong.

**17) BOULEKBECHE, B., HAMRAT, M., CHEMROUK, M. and AMZIANE, S.** : 'Influence of the Rheology of Steel Fibres' Reinforced Concretes on their Mechanical Properties'; *European Journal of Environmental and Civil Engineering (EJCE), Vol.13, No.4/2009, Paris, France.*

**18) CHEMROUK M.** DERRADJ Z. and BOUZID F.: "Damage Assessment of the Historical Houses of the Old Medina of Algiers"; Paper published in a book titled "Protection of Historical buildings", Volume I, edited by Federico M. Mazzolani and published by Balkema, the Netherlands, 2009; pp.1000; ISBN: 978-0-415-55804-4; Paper Page 777-785.

**19) SI YOUCEF Y, AMZIANE S and CHEMROUK M:** "Geometrical Effect on the Behaviour of CFRP Confined and Unconfined Concrete Columns"; Paper accepted in November 2009 for publication in the international 'Journal of Reinforced Plastics and Composites'.

**20) BOULEKBECHE B, HAMRAT M, CHEMROUK, M and AMZIANE S.:** " Flowability of fibre reinforced concrete and its Effect on the Mechanical Properties"; paper accepted in January 2010 for publication with Elsevier, 'Construction and Building Materials' Journal.

## **8.2- Refereed Proceedings:**

**21) KONG, F. K., TANG, C. W. J., WONG, H. H. A, and CHEMROUK, M.** "Diagonal Cracking of Slender Reinforced Concrete Deep Beams". Proceedings of the Research Seminar on the Behaviour of Concrete Structures. Organised by Cement and Concrete Association, June – July 1986, pp. 213-217.

**22) CHEMROUK, M.** "Béton à Haute Performance – Choix des Constituants du Mélange pour Produire un Matériau Hautement Performant"; 1st National Seminar on Géotechnic and Civil Engineering ; USTHB, 08 et 09 February 1999 ; pp.90-100 ; (with review committee and proceedings).

- 23) CHEMROUK, M.** " Béton de Sable - Identification et Utilisation du Matériau"; International Conference of Géoengineering 2000-, IGC/USTHB, 11-13 June 2000, Algiers; (with review committee and proceedings) .
- 24) CHEMROUK, M.** ; "Durabilité du Matériau Béton"; International Conference of Géoengineering 2000; IGC/USTHB, 11-13 June 2000, Alger; (avec comité de lecture et Proceedings).
- 25) IHADDOUDEN, A.N.** and **CHEMROUK, M.** "Etude de la Semi-Rigidité des Assemblages"; International Conference of Geoengineering 2000, IGC/USTHB, 11-13 June 2000, Algiers; (with review committee and proceedings).
- 26) IHADDOUDEN, A.N.** and **CHEMROUK, M.** "Importance de la Semi-Rigidité des Nœuds Poutres-Poteaux"; International Symposia of seismic engineering, Chlef, 9 et 10 October 2000; (with review committee and proceedings).
- 27) LAMDANI, N., CHEMROUK, M.** and **TAR, H.** " Etude du Comportement Post-Fissuration et Modes de Ruptures des Poutres-Cloisons en Béton Armé" ; Euro-Mediterranean Seminar on Natural, Environmental and Technological Catastrophes, Algiers, 8,9 et 10 October 2001 ; pp.246-254 ; (with review committee and proceedings).
- 28) IHADDOUDEN, A.N.** and **CHEMROUK, M.** " Contribution au Calcul des Structures en tenant compte de la Flexibilité des Nœuds " ; Euro-Mediterranean Seminar on Natural, Environmental and Technological Catastrophes, Algiers, 8,9 et 10 October 2001 ; pp.267-274 ; (with review committee and proceedings).
- 29) ZERZOUR, A., CHEMROUK, M.** and **BENOUAR, D.** " Effets Interaction Sol-Structure et Ossature-Remplissage sur le Comportement Dynamique non Linéaire de la Structure" ; Euro-Mediterranean Seminar on Natural, Environmental and Technological Catastrophes, Algiers, 8, 9 et 10 October 2001 ; pp. 380-389; (with review committee and proceedings).
- 30) IKHLEF, A., BENOUAR, D., CHEMROUK, M., FOUFA, A., FARSI, M., MIMI, A., BENOUAR, M., KOUDACHE, F.** et **HADJ ARAB, N.** "Résistance aux Séismes des Constructions Traditionnelles en Algérie"; 2<sup>nd</sup> National Symposia on Seismic Engineering, 8,9 et 10 October 2000; pp. 267-271 ; (with review committee and proceedings).
- 31) HAMRAT, M.** and **CHEMROUK, M.** "Formulation du Béton à hautes Performances" ; National Seminar of Civil Engineering, Oran, 28 – 29 January 2003, (with review committee and proceedings).
- 32) CHEMROUK, M.** "Coopération Algéro-Italienne : du Passé au Futur" ; Communication présentée à la conférence sur l'Architecture Méditerranéenne à l'occasion de l'exposition sur l'Architecture Algérienne ; Bari, Italie ; 11-13 Décembre 2001.
- 33) CHEMROUK, M.** and **BOULMELH, M.** ; " Béton à Haute Performance : Granulométrie Continue et Granulométrie Discontinue " ; Paper Presented in 1<sup>er</sup> Congrès international sur la technologie et la durabilité du béton, Algiers 24-25-26 Mai 2004 (with review committee and proceedings).
- 34) HAMRAT, M** and **CHEMROUK, M.** ; " Béton à Haute Performance : - Caractérisation mécanique"; Paper presented in '1<sup>er</sup> Congrès international sur la technologie et la durabilité du béton', Algiers 24-25-26 Mai 2004 (with review committee and proceedings).
- 35) BOULEKBACHE, B., CHEMROUK, M** and **HAMRAT, M.** ; " Etude Expérimentale du Cisaillement des Poutres en Béton Armé " ; Paper presented in '1<sup>er</sup> Congrès international sur la technologie et la durabilité du béton', Algiers 24-25-26 Mai 2004 (with review committee and proceedings).



- 36) BOULEKBACHE, B. and CHEMROUK, M.** ; " Contribution à l'Amélioration de la Ductilité des Bétons à Hautes Performances par l'ajout de Fibres Métalliques " ; Paper presented in 1<sup>er</sup> Congrès international sur la technologie et la durabilité du béton, Algiers 24-25-26 Mai 2004 (with review committee and proceedings).
- 37) CHEMROUK, M.** ; "High Performance Concrete : Selection of the Mix Constituents to Produce a Highly Performing and Durable Building Material"; Proceedings of "the 3<sup>rd</sup> Symposium on Scientific Research and Technology Development in the Arab World"; 11-14 April 2004, Riyadh, Saudi-Arabia.
- 38) CHEMROUK, M.** and KAROUCH, A. ; "Shrinkage and Creep of High Performance Concrete – Experimental Studies"; paper presented and published in the proceedings of the 11<sup>th</sup> International Conference for Building and Construction; 17-21 June 2004, Cairo, Egypt.
- 39) IHADOUDENE, A. and CHEMROUK, M.** ; "La Flexibilité des Nœuds Poteaux- Poutres" ; Proceedings of the International Conference on Computational & Experimental Engineering & Sciences; 26-29 July 2004, Madera, Portugal.
- 40) SI YOUCEF, Y. et CHEMROUK, M.** ; "Facteur de Ductilité de Courbure des Poutres de Section Rectangulaire en Béton Armé" ; Communication présentée et publiée dans les actes du 1<sup>er</sup> Congrès sur la Technologie et la Durabilité du Béton ; 24, 25, 26 Mai 2004, Alger.
- 41) CHEMROUK, M.** ; "Etude des ingrédients pour formuler un béton hautement performant et durable" ; 1<sup>er</sup> séminaire sur les technologies du béton : Le béton, perfection et incertitudes ; 18-19 Septembre 2004, Alger.
- 42) CHEMROUK, M.** ; "Sand Concrete with Particular Reference to Dune Sand Concrete as a Possible Building Material for Housing and Dwellings" ; Proceedings of the International Conference 'Towards a Safe and Clean Environment', 15-17 April 2005, El-Minia, Egypt.
- 43) CHEMROUK,M., ATTARI,N., DERRADJ,Z. and BOUZID,F.** ; 'Seismic Damage Assessment in Algeria' ; Contribution to Workpackage 2 of PROHITECH (Protection of Historical Building against Seismic Risks by the Reversed Mixed Technology); 2005, Heraklion, Greece.
- 44) CHEMROUK,M., ATTARI,N., DERRADJ,Z. and BOUZID,F.** ; 'Seismic Risk Analysis in Algeria' ; Contribution to Workpackage 3 of PROHITECH (Protection of Historical Building against Seismic Risks by the Reversed Mixed Technology); 2005, Heraklion, Greece.
- 45) CHEMROUK,M., ATTARI,N., DERRADJ,Z. and BOUZID,F.** ; 'Intervention Strategies in Seismic risk Zones – The case of Algeria' ; Contribution to Workpackage 4 of PROHITECH (Protection of Historical Building against Seismic Risks by the Reversed Mixed Technology); 2005, Heraklion, Greece.
- 46) CHEMROUK,M., ATTARI,N., DERRADJ,Z. and BOUZID,F.** ; 'Restoration Techniques in Algeria' ; Contribution to Workpackage 1 of PROHITECH (Protection of Historical Building against Seismic Risks by the Reversed Mixed Technology); 2005, Heraklion, Greece.
- 47) CHEMROUK,M., ATTARI,N., DERRADJ,Z. and BOUZID,F.** ; 'Historical Building Subjected to Refurbishment in Algeria : Le Bastion 23 in Algiers – Critical Evaluation' ; Contribution to Workpackage 11 of PROHITECH (Protection of Historical Building against Seismic Risks by the Reversed Mixed Technology); 2006, Istanbul, Turkey.
- 48) CHEMROUK, M.** ; 'Ultimate Behaviour of Concrete Deep Beams with Particular Reference to

Slender Deep Beams’ ; Proceedings of the 9<sup>th</sup> International Conference on Concrete Engineering & Technology 2006 (CONCET 2006) – ‘Structural Concrete for the Millenium’, 9 – 11 May 2006, Kuala Lumpur, Malaysia.

**49) CHEMROUK, M.**, BOULEKBECHE, B., HAMRAT, M. and TEHENNI, T. ; ‘High Performance Concrete Using Slags as Mineral Additives and Steel Fibres’; Proceeding of the 10<sup>th</sup> Arab Structural Engineering Conference, Kuwait 13 – 15 November 2006;

**50) CHEMROUK,M.**, ATTARI,A., DERRADJ,Z., and BOUZID,F. ; ‘Concrete Constructions in Seismic Regions: - Intervention Strategies and Lessons Learned from past Earthquakes in Algeria –’ ; Proceedings, 32nd Conference on Our World in Concrete and Structures ; 27 – 29 August 2007, Singapore.

**51) CHEMROUK,M.**, ATTARI,N., DERRADJ,Z. and BOUZID,F. ; Damage Assessment of the Medina of Algiers ; Paper presented at the 6th General Meeting of PROHITECH (Protection of Historical Building against Seismic Risks by the Reversed Mixed Technology); 26-27 April 2007, Liege, Belgium.

**52) CHEMROUK,M.**, ATTARI,N., DERRADJ,Z. and BOUZID,F. ; Conventional Repair and Rehabilitation Techniques in the Old Medina of Algiers; Paper presented at the 6th General Meeting of PROHITECH (Protection of Historical Building against Seismic Risks by the Reversed Mixed Technology); 26-27 April 2007, Liege, Belgium.

**53) CHEMROUK,M.**, ATTARI,N., DERRADJ,Z. and BOUZID,F.; Seismic Strengthening of an Existing 5-Storey Reinforced Concrete Framed Building with the Traditional Method; Paper presented at the 6th General Meeting of PROHITECH (Protection of Historical Building against Seismic Risks by the Reversed Mixed Technology); 26-27 April 2007, Liege, Belgium.

**54) CHEMROUK,M.** ; The Casbah of Algiers - Damage Assessment of the Traditional Houses ; 1st Euro-Mediterranean Conference on ‘Traditional Mediterranean Architecture – Present and Future’ ; 12 – 15 July 2007, Barcelona.

**55) TAHENNI, T. and CHEMROUK, M.** Fissuration en Béton Armé avec Référence Particulière au Béton à Hautes performances, Séminaire National de Génie Civil, Université Badji Mokhtar, Annaba, 20-21 Novembre 2007.

**56) CHEMROUK,M.**, ATTARI,N., DERRADJ,Z. and BOUZID,F. ; ‘Case study: -KOLETTI Building in Athens- Upgrading of the Building against seismic actions using concrete shearwall panels ;

Contribution to Workpackage 11 of PROHITECH (Protection of Historical Building against Seismic Risks by the Reversed Mixed Technology); February 2008.

**57) ATTARI N., AMZIANE S. and CHEMROUK M.**: Strengthening Reinforced Concrete Beams using Hybrid FRP Laminates; Proceeding of the Fourth International Conference on FRP Composites in Civil Engineering (CICE2008), 22 – 24 July 2008, Zurich, Switzerland.

**58) SI YUCEF Y., AMZIANE S. and CHEMROUK M.**: The Influence of CFRP on the Behaviour of Reinforced Concrete Columns Subjected to Buckling; Proceedings of the Fourth International Conference on FRP Composites in Civil Engineering (CICE2008), 22 – 24 July 2008, Zurich, Switzerland.

- 59) BOULEKBECHE B., AMZIANE S. and CHEMROUK M.:** Flowability of Steel Fibre Reinforced Concrete; Proceedings of the International Congress 'Beton 2008', Istanbul, 19-22 June 2008.
- 60) HAMRAT M., AMZIANE S. and CHEMROUK M.:** Behaviour in Shear of High Performance Reinforced Concrete Beams without Stirrups; Proceedings of the International Congress 'Beton 2008', Istanbul, 19-22 June 2008.
- 61) ATTARI N., AMZIANE S. and CHEMROUK M.:** Performance of Strengthened Beam-Column Joints by Hybrid FRP Laminates; Proceedings of the International Congress 'Beton 2008', Istanbul, 19-22 June 2008.
- 62) SI YOUCEF Y., AMZIANE S. and CHEMROUK M.:** Influence of the Geometry on the Effectiveness of Confinement using CFRP; Proceedings of the International Congress 'Beton 2008', Istanbul, 19-22 June 2008.
- 63) CHEMROUK M., BOULEKBECHE B and BOULMELH M.** "Steel Fibre High Strength Concrete Containing Industrial by-Products as Mineral Additives"; Proceeding of the 5th International Congress on Scientific Research Outlook in the Arab world (SRO5): Scientific Innovation and Sustained development; 26-30 October, 2008, Fez (Morocco).
- 64) CHEMROUK, M. ;** "The Design of Reinforced Concrete Deep Beams – Review of the Major Design Approaches" ; Proceedings of the International Conference on Concrete Engineering and Technology CONCET 2009, 02-04 March 2009, Kuala Lumpur, Malaysia.
- 65) CHEMROUK M. :** "Learning from Earthquake Disasters:- the Case of Algeria –"; Paper accepted for the International Symposium on Disaster Management; 3-6 October 2009, Ryadh (SA).
- 66) TAHENNI, T. et CHEMROUK, M.:** 'Etude des Flèches et des Ouvertures de Fissures des Poutres en Béton Armé Contenant des Fibres d'Acier' ; Proceeding, First international Conference on Sustainable Built Environment Infrastructures in Developing Countries – SBEIDCO-, 12- 14 October 2009, Oran, Algeria.
- 67) HAMRAT,M., CHEMROUK,M. et AMZIANE,S. :** 'Effort Tranchant des Poutres en Béton Armé de Hautes Performances'; Proceeding, First International Conference on Sustainable Built Environment Infrastructures in Developing Countries – SBEIDCO-, 12- 14 October 2009, Oran, Algeria.
- 68) CHEMROUK, M. et Tahenni, T.** 'Béton Renforcé en Fibres: un matériau aux avantages multiples'; Article accepté pour présentation et publication dans les actes de la 1ere Conférence Internationale sur les Energies, Matériaux et Environnement CIEME'09 ; centre universitaire de Khemis Miliana, 22 – 23 Novembre 2009.

### **8.3- Awards**

**Henry Adams Awards** given in 1986 by the Institution of Structural Engineers, UK. for a joint publication on Slender Concrete Deep Beams.

### **8.4- Technical Reports**

Co-author of the following technical reports:

69) KONG, F. K., PAINE, J.M., **CHEMROUK, M.** TANG, C. W. and WONG, H. H. A. STRUCT 5/9A: **'Worked Examples on the Use of the CIRIA, Guide n°2 ( in conjunction with CP110: 1972) to calculate the Buckling Strength of Slender Deep Beams.** Department of Civil Engineering University of Newcastle upon Tyne, GB, 1985.

70) KONG, F. K., PAINE, J.M., **CHEMROUK, M.**, WONG, H. H. A. and TANG, C. W. STRUCT 6/4A: **'Worked Examples on the Buckling Design of Concrete Deep Beams'**; Department of Civil Engineering, University of Newcastle upon Tyne, GB, 1986.

71) KONG, F. K., WONG, H. H. A., TANG, C. W. and **CHEMROUK, M.** STRUCT 7/3A: **'Worked Examples on the Use of the CIRIA, Guide n'2 ( in conjunction with BS 8110: 1985) to calculate the Buckling Strength of Slender Deep Beams.** Department of Civil Engineering University of Newcastle upon Tyne, GB, 1987.

### **8.5- Lecture Notebooks**

a) Author of the following lecture notebooks for undergraduate students of the Faculty of Civil Engineering, University of Science and Technology Houari Boumediene, Algiers:

- **Béton Armé (Reinforced Concrete)**
- **Résistance des Matériaux (Strength of Materials)**

b) Author of the following lecture notebooks for postgraduate students of the Faculty of Civil Engineering, University of Science & Technology Houari Boumediene (USTHB), Algiers:

- **Notions Avancées de Béton Structurel (Advanced Structural Concrete)**
- **Matériaux et Confortement des Constructions (Concrete Materials and Construction Repair)**

## **9. UNIVERSITY AND PUBLIC SERVICES**

### **9.1- Membership of professional organisations, associations and societies**

- Member of the American Concrete Institute, Algeria Chapter.
- Has been a member of the Institution of Structural Engineers (UK).

### **9.2- Institutional and professional Service**

#### **i) International**

- Member of the scientific committee of different seminars and conferences
- Session chairman of different international conferences and congresses

#### **ii) National**

- Has been chairman of the National Pedagogic committee for Architecture .
- Has been Chairman of the Scientific Council of the Faculty of Civil Engineering, (USTHB), Algiers.
  
- Has been Member of the Scientific Council of the university of Science and Technology Houari Boumediene (USTHB), Algiers.
- Has been Member of the Scientific Committee of the Department of Structures and Materials,

- Faculty of Civil Engineering, USTHB, Algiers.
- Has been Expert for the Algerian Ministry of Higher Education for degrees and qualification assessments and equivalences.
  - Peer review referee on several national and international conferences

## **10. REFERENCES**

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