# **CIRROCUMULI VITAE**

#### **PERSONAL DATA**

Name	:	Ashraf Abdel-Khalek Mostafa Agawa
Gender	:	Male
Nationality	:	Egyptian
Date of Birth	:	March 30, 1964
Mailing addres	s:	Ninth Sector, Building 6, Block 44,
		Information Center St., Apartment # 9, Nasr
		city, Cairo, Egypt.
e-mails	:	ashrafabdelkhalek08@gmail.com, ashraf.abdel.khalek@sva.edu.eg,
Telephone No	:	+201030033663
Social Status	:	Married with three children.

### ACADEMIC QUALIFICATIONS

- **B. Sc.** Civil Engineering, Military Technical College, Cairo, Egypt, 30th June 1987 with **Overall Grade: Very Good, with Honor (Magna Cum Laude).**
- M. Sc. Civil Engineering, Military Technical College, Cairo, Egypt, 9/4/1997. Thesis Title "<u>Effect</u> of Rigid Frames or Bracing Systems on the Elastic Stability of Steel Structures."
- Ph.D. Civil Engineering, Military Technical College, Cairo, Egypt, 30/1/2012.
  Dissertation Title "<u>Retrofit of Fortified Structures to Resist Blast Effect</u>."

#### **PROFESSIONAL EXPERIENCE**

- Demonstrating courtesy, conversational skills, proficient discussion, and persuading abilities.
- Proficiency in team formation and leadership.
- Demonstrating honest administrative and organizational skills.
- Displaying precision and carefulness when arranging and reviewing activities.
- With the ability to make judgments and solve difficulties.

### FOREIGN LANGUAGES & COMPUTER SKILLS

Languages &	: English (Spoken - Written) - TOEFL grade 520.
Computer Skills	: Structural Analysis Software (SAP-Auto-Dyna - ANSYS)
	: Drawing Software (AUTOCAD)
	: Programming (Visual Basic)
	: Management Software (Microsoft Project)

### **OTHER ACADEMIC ACTIVITIES**

Successfully completed a research fellowship to the University of California, Irvine, USA, as a Research Scholar, gathering research materials and literature database for my Ph.D. Dissertation.

### **CURRENT ACADMIC POSITIONS**

- Chairman of the Civil Engineering Department at the Higher Wady Institute for Engineering& Technology, Cairo, Egypt.
- Part-Time Lecturer of Structural Engineering at the Department of Structural Engineering & Construction Management, the Future University in Egypt (FUE).

### **PROFESSIONAL MEMBERSHIPS**

- Egyptian Syndicate of Professional Engineers (Membership ID # 161/14)
- American Society of Civil Engineers (UCI Chapter)
- International Council of Advanced Technologies for Humanity (Voting Member)

### ACADEMIC EXPERIENCE

Taught the following courses in two academic institutions:

- A. Civil Engineering Department, Faculty of Engineering Higher Wady Institute for Engineering& Technology, Cairo, Egypt. (From 2017 to 2024)
  - ► Structural Analysis I
  - ≻Structural Analysis II
  - Design of Reinforced Concrete Structures
  - ➤ Design of Steel Structures
  - ➤ Seminar in Civil Engineering
  - ➤ Selected Topics
  - ≻ Training
  - ➤ Contracts and Bides

- Civil Engineering Department

- ➤ Metallic Strctures-1
- ➤ Metallic Strctures-2
- Metallic Stretures-2 (Advanced)
- Structure. Eng. & Cons. Manag. Dep.
- Structure. Eng. & Cons. Manag. Dep.
- Structure. Eng. & Cons. Manag. Dep.

# FIELDS OF CURRENT RESEARCH INTEREST

- 1- Mitigation System to Resist Blast Effect.
- 2- Analysis & Design of Steel Structures.
- 3- Design, Mechanics, and Durability of Polymer Composites.
- 4- Design and Retrofit of Steel Towers Antennas.
- 5- Self-supported Steel Towers.
- 6- Repair & Rehabilitation of Structures.

# **TEACHING & STUDENTS MENTORSHIP ACTIVITIES**

Taught undergraduate courses and engaged in mentoring undergraduate students at:

- ✓ Military Technical College (MTC).
- ✓ Valley Higher Institute for Engineering & technology.
- ✓ Future University in Egypt (FUE), Cairo, Egypt.

# **TECHNICAL PUBLICATIONS**

- 1- Youssef, M., Ashraf Abdel-Khalek Agwa, and F. A. Almegren (2023). "Experimental Evaluation of FRP Composite Systems Confinement of Axially Loaded Unreinforced Concrete Cylinders." In Civil Engineering, Material and Smart Buildings: New Technologies in Cities' Infrastructures, Proceedings of The Fifth International Conference on Advanced Technologies for Humanity, Rabat, Morocco, December 25-26, 2023. Paper No. 4593, Springer-Nature. (Received the conference Best Paper Award).
- 2- Shaohua He, S., Deng, H., Mosallam, A. S., and Ashraf A. Mostafa, (2023). "Numerical Investigation on Structural Performance Of T-Beam Bridge Strengthened by UHPC," In Civil Engineering, Material and Smart Buildings: New Technologies in Cities' Infrastructures, Proceedings of The Fifth International Conference on Advanced Technologies for Humanity, Rabat, Morocco, December 25-26, 2023. Paper No. 4393, Springer-Nature.
- 3- Mosallam. A. S., Ghaban, N., Mirnateghi, E., Ashraf A. Mostafa, Mahdy, I., and H. Xin (2023)."Structural Evaluation of RC Overhang Cantilever Slab Strengthened with FRP Near-Surface

Mounted (NSM) Composites for Bridge Applications," Structural Concrete Journal, John Wiley & Sons Ltd, <u>https://doi.org/10.1002/suco.202300204</u>

- 4- Akbulut, Y.E., Altunişik, A.C., Adanur, S., Mosallam, A.S., Agwa, A.A.K. (2023). "Fire Damage Prevention Using Innovative Insulation Systems," In: Advances in Smart Materials and Innovative Buildings Construction Systems. Sustainable Civil Infrastructures. Springer, Cham. <u>https://doi.org/10.1007/978-3-031-47428-6\_9</u>
- 5- Huang, X., Zhong, H., He, S., Mosallam, A. S., and Ashraf A. Mostafa, (2023). "Evaluation of Early-Age Cracking in Arch Feet of PC Girder-CFST Arch Rib Composite Bridge," Chapter 16, Sustainable Civil Infrastructures, Springer-Nature, pp. 217-230, <u>https://doi.org/10.1007/978-3-031-47428-6\_16</u>
- 6- Mosallam, A. S., Ghabban, N., Mirnateghi, E., & A. A. K. Agwa (2022). "Nonlinear Numerical Simulation and Experimental Verification of Bondline Strength of CFRP Strips Embedded in Concrete for NSM Strengthening Applications. Structural Concrete Journal, 23(3), 1794-1815. <u>https://doi.org/10.1002/suco.202100537</u>
- 7- Ashraf A-K Mostafa Agwa (2021). "Structural Evaluation of FRP Composite Systems for Repair & Upgrade of Reinforced Concrete Beams," Lecture Notes on Data Engineering and Communications Technologies 110, pp. 428-437, Springer Nature, Switzerland AG 2022, <u>https://doi.org/10.1007/978-3-030-94188-8</u>
- 8- Mosallam, A., Xin, H., He, S., Agwa, A. A., Adanur, S., & Salama, M. A. (2022). "Thermal Cycling and Ultraviolet Radiation Effects on Fatigue Performance of Triaxial CFRP Laminates for Bridge Applications," Journal of Composite Materials, 56(2), 279-294. https://doi.org/10.1177/00219983211055828
- 9- Sherif A. Mazek and Ashraf A. Mostafa (2014). "Impact of Composite Materials on Performance of Reinforced Concrete Panels," Computers and Concrete, An International Journal, Vol. 14, No. 6, 767-783, ISSN: 15988198, <u>https://doi.org/10.12989/cac.2014.14.6.767</u>
- 10 Mazek, S. A. and Ashraf A. Mostafa (2013) "Impact of A Shock Wave on A Structure Strengthened by Rigid Polyurethane Foam." Structural Engineering and Mechanics, Vol. 48, No. 4, 569-585, <u>https://doi.org/10.12989/sem.2013.48.4.569</u>
- 11 A. A. Mostafa , A. H. Salem, M. A. Wahab, S. A. Mazek (2012). "3-D Modeling of Pyramid Cover Systems to Retrofit Hexagonal Core Sandwich Structures," Proceedings of the 9<sup>th</sup> International Conference of Civil and Architecture (ICCAE-9), Military Technical College (MTC), 29-31 May, Vol. 9, pp. 1-15. <u>https://doi.org/10.21608/ICCAE.2012.44270</u>

- 12- Ashraf A. Mostafa A. H. Salem, M. A. Wahab, S. A. Mazek (2010). "Blast Mitigation using Polyurethane Foam to Retrofit Fortified Sandwich Structures," Proceedings of the 8<sup>th</sup> International Conference of Civil and Architecture (ICCAE-8), MTC, 25-27 May, V 8, P 1-17. <u>https://doi.org/10.21608/iccae.2010.44409</u>
- 13 Ashraf A. Mostafa , A. H. Salem, M. S. Raslaan (1997). "Effect of Volume of Eccentric and Knee Bracing Systems on the Sway Buckling Loads of Single-Story Single-Bay Frames. Al-Azhar Engineering Fifth International Conference, 19-22 December 1997, Al-Azhar University, Cairo, Egypt.
- 14- Ashraf A-K Mostafa (1996). "Effect of Volume of N-and K-Bracing Systems on the Sway Buckling Loads of Single-Story Multi-Bay Frames," Proceedings of the 7<sup>th</sup> International Colloquium on Structural and Geotechnical Engineering, 17-19 December, Ain-Shams University, Cairo, Egypt.

### **AWARDS & HONORS**

- Recipient of the Conference Best Paper Award Civil Engineering, Materials and Smart Building Track, the 5<sup>th</sup> International Conference on Advanced Technologies for Humanity (ICATH23), Rabat, Morocco, December 25-26, 2023. Paper No. 4593.
- Recipient of Certificate of Appreciation for my role as Technical and Program Chairman, the 4<sup>th</sup> International Conference on Advanced Technologies for Humanity (ICATH22), November 11-12, 2022.
- Recipient of Certificate of Appreciation for Extraordinary Services to the Organization of the AEAS 49<sup>th</sup> Annual Conference, Ain Shams University, December 2022.
- Recipient of Outstanding Visiting Scholar Award, Structural Engineering Test Hall (SETH), University of California, Irvine (UCI), 2009, Irvine, California, USA.
- Recipient of Certificate of Appreciation from USA Department of Army for my meritorious performance in construction projects in Afghanistan, 2006.
- Recipient of Certificate of Recognition and Appreciation, Military Engineering Institute for Successfully Passing the Special Course on Precast Concrete # 2, November 1992.

### **SEMINARS & WORKSHOPSENTS**

1- Actively participated in the <u>First Strategic Forum for Sustainable Development 2030</u> as a Member of the Construction Waste & Environmentally Friendly Materials Recycling Committee. November 17-18, 2021.

- 2- Actively participated in the <u>3<sup>rd</sup> International Conference on Advanced Technologies for Humanity</u> (ICATH2021), Rabat- Morocco, November 26-27, 2021, as the Conference Technical Committee Co-Chair and a Member of the International Scientific Committee.
- 3- Actively participated in the <u>4<sup>th</sup> of International Conference on Advanced Technologies for Humanity</u> (<u>ICATH2022</u>) in Marrakech, Morocco, November 11-12, 2022, in the following capacities:
  - Conference Technical Committee Chairman,
  - A Peer Reviewer,
  - A Peer Reviewer,
  - A Speaker, and
  - A Member of the International Scientific Committee.
- 4- Actively participated in the 5<sup>th</sup> International Conference on Advanced Technologies for Humanity (ICATH2023), Rabat, Morocco, December 25-26, 2023, in the following capacities:
  - Conference Technical Committee Chairman,
  - A Speaker,
  - A Peer Reviewer,
  - A Member of the International Scientific Committee, and
  - Moderator for two sessions (Construction Track).
- 5- Actively participated in the <u>Association of Egyptian American Scholars (AEAS) 49<sup>th</sup> Annual</u> <u>International Conference</u>, December 2022, Ain Shams University, Cairo, Egypt in the following capacities:
  - A Panelist, and
  - Member of the local Organizing Committee.
- 6- Actively participated in the Joint Asian and African Commissions for Earthquake Science Conference organized by the National Research Institute for Astronomical and Geophysical (NRIAG), 10-13 October 2022, Hurghada, Egypt.

## SELECTED TECHNICAL REPORTS

- 1- Ashraf A. Agwa, Design and implementation of composite gabions to resist smart bombs destroying fortifications. Year (2008-2009) No. (271311). MTC
- 2- Ashraf A. Agwa, Maintenance and implementation of armoured doors for tunnels and fortified installations. Year (2007-2008) No. (2713312). MTC

- 3- Ashraf A. Agwa, Using polyurethane foam technology to increase the ability of facilities to resist explosions. Year (2012) No. (20122864). MTC
- 4- Ashraf A. Agwa, Design and implementation of Explosion Protection Valves to mitigate explotions.
  Year (2007-2008) No. (270207). MTC
- 5- Mosallam, A.S., Feng, M.Q. and A. A. Agwa (2009). Non-Destructive Evaluation of Fiber Reinforced Polymer (FRP) Composite Bridge Decks – Part I, Report No. SETH-CALTRANS-NDE-V1-1009, 64 ps.
- 6- Mosallam, A.S., Feng, M.Q. and A. A. Agwa (2009). Non-Destructive Evaluation of Fiber Reinforced Polymer (FRP) Composite Bridge Decks – Part II, Report No. SETH-CALTRANS-NDE-V2-1009, 62 ps.
- 7- Mosallam, A.S., Ashraf A. Agwa, Miraj, R., and A. Nasr (2009). Structural Evaluation of Composite System for Strengthening of Unreinforced Concrete Columns, A Final Report submitted to SIKA Corporation, Report No. SETH-SKAC06-09, June.
- 8- Mosallam, A.S., N. Ghabban. and Ashraf A. Agwa (2010). Field Performance Monitoring and Proof Tests of NSM- CFRP Composite Strips at Bridge Deck Overhang, Progress Report # SETH-Caltrans0213, Submitted to California Department of Transportation (Caltrans), February.

بعتمد,,,

توقيع المتقدم: د/ أشرف عبدالخالق مصطفر

معهد الوادى العالم لل م العالي



### إلى من يهمة الأمر

تشهد جامعة المستقبل/ كلية الهندسة والتكنولوجيا بأن السيد الدكتور/ أشرف عبد الخالق مصطفى عجوة قد قام بتدريس المقررات الأتي ذكرها بعد بقسم الهندسة الانشائية وإدارة التشييد خلال الفترة من ربيع ٢٠٢٢ حتى خريف ٢٠٢٣ على سبيل إنتداب جزء من الوقت وهى كالأتى :

- Metallic Structures 3 - SCM 512

- Metallic Structures 2 - SCM 417

- Metallic Structures 1 - SCM 413

هذا وقد أعطيت له هذه الشهادة بناءً على طلبه لتقديمها إلى من يهمة الأمر دون أدنى مسئولية على الجامعة.

وتفضلوا بقبول فائق الأحترام والتقدير ، ، ،

أ.د/ السيد محمد تاج الدين de cicl/e/ci) عميد كلية الهندسة والتكنوا



تحريراً في: ٢٠٢٤/٢/٢١

#### All Faculties are Accredited by NAQAAE

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