Curriculum Vitae For Hossam El-Din Mohammad Sallam, Professor Materials Engineering Department, Faculty of Engineering, Zagazig University, Zagazig, 44519, EGYPT. e-mail: hem\_sallam@zu.edu.eg hem\_sallam@yahoo.com

### Home Page: https://www.webofscience.com/wos/author/record/G-1334-2011 http://www.hmhelmy.faculty.zu.edu.eg/ https://sciprofiles.com/profile/HossamSallam

Scopus Author ID (http://scopus.com) My Author ID: 55321010400 ORCID (http://orcid.org/) My Public ORCID Record http://orcid.org/0000-0001-9217-9957 Google Scholar: http://scholar.google.com/citations?hl=en&user=P4DA324AAAJ LiveDNA (http://livedna.net), https://livedna.org/20.1066 ResearchGate: https://www.researchgate.net/profile/Hossam\_Sallam

# **EDUCATION**:

1993 Ph.D.	Materials Engineering	Zagazig University, Egypt
1990 M.Sc.	Materials Engineering	Zagazig University, Egypt
1985 B.Sc.	Civil Engineering	Zagazig University, Egypt

# **<u>TITLE OF DISSERTATIONS :</u>**

*Fatigue Crack Closure,* Ph.D. Thesis, Zagazig Univ., Egypt, 1993. *Crack Arresters in Steel Structure Components,* M. Sc. Thesis, Zagazig Univ., Egypt, 1990. <u>TITLE OF STATE-OF-THE-ART REPORTS</u>

submitted to Permanent Scientific Committee 58 for Structural & Construction Engineering, Egyptian Universities Promotion Committees (EUPC), Cairo, Egypt:

- Structural Joints in Polymeric Composite Materials, 2004.

- Fatigue and Fracture Mechanisms in Composite Materials, 1998.

# ADMINISTRATIVE POSITIONS

- Chairman, Scientific Committee, Faculty of Engineering, Jazan University, KSA, 2013-2019.
- Coordinator, Architectural Engineering Department, Jazan University, KSA, 2014-2017.
- Coordinator, Civil Engineering Department, Jazan University, KSA, 2009- 2019.

# AWARDS

Best Researcher Award, the field of Engineering and Computer Science, 2014-2015, Jazan University, KSA. <u>http://deanships.jazanu.edu.sa/res/Pages/ScientificResearchUniversityAward.aspx</u>

# <u>Membership</u>

Member of the Examination Committee of the submitted Scientific Production for the State Incentive Awards in Engineering Sciences 2008, General Administration of Awards & Incentives, Academy of Scientific Research & Technology. http://www.eas.sci.eg/



Member of the Panel of Adjudicators 2008-2011, Committee No. 50 for Structural & Construction Engineering, Egyptian Universities Promotion Committees (EUPC), Supreme Council of Universities (SCU). http://www.eupc.edu.eg/ComMembersJudges.aspx

Member of the Examination Committee for Professors & Associate Professors, *Committee for Structural & Construction Engineering*, Al-Azhar University Promotion Committees.

Member of the Scientific Committee for Sciences & Technology Unit, Jazan University, KSA. Member of the College of Engineering Council, Jazan University, KSA.

### <u>Editorship</u>

- Editor-In-Chief Trends in Applied Sciences Research <u>http://scialert.net/eboard.php?issn=1819-3579</u>
- Associate Editor in Asian Journal of Applied Sciences <u>http://scialert.net/eboard.php?issn=1996-3343</u>
- Associate Editor in Asian Journal of Materials Science <u>http://scialert.net/eboard.php?issn=1996-3394</u>
- Associate Editor in Asian Journal of Scientific Research <a href="http://scialert.net/eboard.php?issn=1992-1454">http://scialert.net/eboard.php?issn=1992-1454</a>
- Editorial board member Buildings, MDPI. <u>https://www.mdpi.com/journal/buildings/editors</u>
- Editorial board member Egyptian International Journal of Engineering Sciences & Technology
   <u>https://eijest.journals.ekb.eg/</u>
- Editorial board member Frattura ed Integrità Strutturale (Fracture and Structural Integrity)
   <u>https://www.fracturae.com/index.php/fis/about/editorialTeam</u>
- Editorial board member of Journal of Materials and Engineering Structures (JMES) <u>http://revue.ummto.dz/index.php/JMES/about/editorialPolicies#custom-0</u>
- Editorial board member of Int. J. of Construction Engineering and Management <u>http://www.sapub.org/journal/editorialboard.aspx?journalid=1105</u>

# <u>TEACHING ACTIVITIES</u> (Under- & Post-Graduate) at {Zagazig Univ., Helwan Univ., Al-Azhar Univ., & HTI *in <u>Egypt</u>*), {Northeastern Univ. *in <u>the USA</u>*} and {Jazan Univ., <u>KSA</u>}.

Courses taught: 1. Engineering Mechanics (Statics) 2. Strength of Materials. 3. Structural Analysis 4.
 Stress Analysis. 5. Special Concretes. 6. Composite Materials 7. Steel Structures Design. 8. Reinforced Concrete Design. 9. Repair of Structures 10. Fracture Mechanics. 11. Design Against Fatigue. 12. Finite Element Analysis.

# **<u>GRADUATE STUDENT ADVISING</u>** (Completed)

- Zagazig Univ. (Egypt): advisor of 7 Ph.D. & 14 M.Sc. Theses in Engineering.
- Al-Azhar Univ. (Egypt): advisor of 3 Ph.D. & 3 M.Sc. Theses in Engineering

and 1 Ph.D. & 1 M.Sc. Theses in Dental Medicine.

- Cairo Univ. (Egypt): advisor of 1 Ph.D. & 1 M.Sc. Theses in Dental Medicine.

And 1 M.Sc. Thesis in Engineering

- Helwan Univ. (Egypt): advisor of 2 Ph.D. & 2 M.Sc. Thesis in Engineering.
- Suez Canal Univ. (Egypt): advisor of 1 Ph.D. Thesis in Engineering.
- Northeastern Univ. (USA): participated with Prof. H. Nayeb-Hashemi for advising 3 M.Sc. Theses in Engineering.

# Examiner for the Degrees of Ph.D. & M.Sc. in Engineering & Dental Medicine

- Annamalai Univ. (India): 1 Ph.D. Thesis in Eng. (overseas examiner).
- Benha Univ. (Egypt): 1 Ph.D. & 1 M.Sc. Theses in Eng. (External examiner).
- Al-Azhar Univ. (Egypt): 8 Ph.D. & 4 M.Sc. Theses in Eng. (External examiner).
- Cairo Univ. (Egypt): 1 M.Sc. in Dental & 1 M.Sc. in Eng. (External examiner).
- Helwan Univ. (Egypt): 1 M.Sc. Thesis in Engineering (External examiner).
- Mansoura Univ. (Egypt): 1 M.Sc. Thesis in Engineering (External examiner).
- Zagazig Univ. (Egypt): 4 Ph.D. & 9 M.Sc. Theses in Eng. (Internal examiner).

# **REFEREE**

- Eng. Fract. Mech., Const. & Build. Mat., Eng. Str., Appl. Math. Mod. Sciencedirect.
- ACI Structural and Materials Journals. ( <u>http://mc.manuscriptcentral.com/aci</u> )
- Materials and Structures, RILEM, (<u>http://www.springer.com/engineering/journal/11527</u>)
- Const. Mat., Bridge Eng.: *Proceedings of the Institution of Civil Engineers*
- Steel and Composite Structures, Techno-Press (<u>http://technop.kaist.ac.kr/</u>)
- Science Alert (<u>http://www.scialert.com</u>)
- Electronic Journal of Structural Engineering <u>http://www.ejse.org/</u>
- Journal of Civil Engineering and Construction Technology (http://www.academicjournals.org/JCECT)
- Scientific Research and Essays (*http://www.academicjournals.org/SRE/*)
- Journal of Chemical Engineering and Materials Science (<u>www.academicjournals.org/JCEMS</u>)
- King Abdulaziz City for Science and Technology (KACST), KSA, (<u>http://www.kacst.edu.sa/</u>)
- The Egyptian Int. J. of Engineering Science & Technology, Zagazig Univ., Egypt.
- ASJCE, Faculty of Engineering Ain Shams University, Cairo.

# **<u>REFERENCES</u>** :

- 1. Prof. Hussein Abdel-Raouf, Materials Engineering Department, Zagazig University, EGYPT. Tel 2-(012)225-8727 e-mail: <u>abdelraouf40@hotmail.com</u>
- **2.** Prof. Mohammad M.I. Hammouda, Mechanical Eng. Dept. Al-Azhar University, Cairo, EGYPT. Tel 2(010)455-7551 e-mail: mohammad.hammouda@yahoo.com
- **3.** Prof. Hamid N. Hashemi, 334 Snell Eng. Center, Northeastern University, Boston, MA 02115, USA., Tel (617)373-5515 e-mail: <u>hamid@coe.neu.edu</u>

# **PROFESSIONAL EXPERIENCE:**

<u>Dates</u>	<u>Position</u>	<b>Employer</b>
<u>2004- present</u>	<u>Professor</u>	<u>Zagazig Univ., EGYPT</u>

Taught several courses, including:

Strength of materials, Composite materials, Fracture mechanics, Failure analysis, Design against fatigue, Repair and strengthening of structures, and Special concretes.

# Supervised and participated in the following research:

Nano-reinforcement effects on damping properties of composite structures under thermal and cryogenic environments, Failure analysis of bolted joints in polymeric composite materials, Strengthening of steel & RC beams, Impact resistance of fiber reinforced concrete (FRC), Fracture behavior of FRC under the mixed mode of loading, and Durability of FRC.

# **<u>2009-2019</u> <u>Professor</u> & Coordinator <u>Jazan Univ., KSA</u>**

*Taught* several courses, including:

Repair and Strengthening of Structures, Structural Analysis, Strength of Material, Engineering Mechanics (Statics), Engineering Drawing,

*Supervised and participated* in the following research:

Professor

Impact Resistance of Polyester Matrix Composite, Impact Behavior of Notched Polymeric Material.

# <u>2004-2009</u>

# Zagazig Univ., EGYPT

*Taught* several courses, including:

Strength of materials, Composite materials, Fracture mechanics, Failure analysis, Design against fatigue, Repair and strengthening of structures, and Special concretes.

### *Supervised and participated* in the following research:

Nano-reinforcement effects on damping properties of composite structures under thermal and cryogenic environments, Failure analysis of bolted joints in polymeric composite materials, Strengthening of steel & RC beams, Impact resistance of fiber reinforced concrete (FRC), Fracture behavior of FRC under the mixed mode of loading, and Durability of FRC.

#### HTI, 10<sup>th</sup> of Ramadan, EGYPT 2004-2009 Adjacent Professor

*Taught* several courses, including:

Strength of Materials, Reinforced Concrete Design, and Steel Structures Design.

Supervised the following Undergraduate Senior Projects: Strengthening RC beams, the Impact resistance of rubberized concrete, and Fracture toughness of fibrous concrete.

#### 1999-2004 Associate Professor

*Taught* several courses, including:

Strength of materials, Composite materials, Design against fatigue, Repair and strengthening of structures, and Special concretes.

Zagazig Univ., EGYPT

Northeastern Univ., USA.

*Supervised and participated* in the following research:

Fatigue crack growth behavior of cracks emanating from notches, Finite element simulation of fatigue cracks under mixed loading, and Nonlinear fracture behavior of FRC.

#### 1995-1997

Visiting Ass. Prof. *Taught* several courses, including:

Advanced strength of materials & Theory of elasticity, and Fracture Mechanics.

*Supervised and participated* in the following research:

Thermo-mechanical fatigue of metal matrix composite, The effect of matrix and fiber properties on the mechanical properties of fiber reinforced aluminum composites, The effect of pH, cold working, and heat treatment on the mechanical properties of Nextel 440/aluminum composite, and the effect of fiber orientation on friction and wear resistance of Cu-Nb composite.

#### **1993-1995 & 1997-1999** Ass. Prof. Zagazig Univ., EGYPT

*Taught* several courses, including:

Composite materials, Stress analysis, Fracture mechanics, and Design against fatigue.

### Supervised and participated in the following research:

3-D Finite element simulation of crack tip closure, Crack arresters techniques in steel structures, Numerical investigation on structural repair and strengthening of cracked RC beams, Fracture behavior of RC beams, Fatigue crack growth behavior of short crack under variable amplitude loading.

<u>1993-1995</u>	Assist. Education Manager (part-time) NEBRAS (IBM Partner), EGYPT	<u>1986-1993</u>
<u>Ass. Lecturer</u>	Zagazig Univ., EGYPT Taught several courses, incl	uding:
Solid M	echanics, Structure I & II, Stress Analysis, and Strength of Materials.	

#### **Engineering Corps, Egyptian Army** 1985-1986 Designer

# **COMPUTER EXPERTISE :**

# Languages: FORTRAN, Q. BASIC

Software: Spreadsheets (EXCEL), Elastic-Plastic 2-D & 3-D Finite Element programs (developed by myself), PowerPoint, Microsoft word.

# **PUBLICATIONS:**

# A- Reviewed Journal Articles: Journal Title

### International Journal of Metalcasting

1- A Bahgat, MAH El-Meniawi, SM Khafagy, H.E.M. Sallam, M. Atta, "Effect of mold casting parameters in interface properties of iron/copper bimetallic composites based upon an ancient Quranic metal matrix composite (QMMC)", International Journal of Metalcasting, In Press (2023). https://doi.org/10.1007/s40962-023-01066-x

### Journal of Materials Research and Technology

- 2- S. Mousa, S., M. Mutnbak, A.A Abd-Elhady, H.E.M. Sallam, R.M. Reda, "The efficiency of advanced polymeric composite sleeves in the rehabilitation of cracked pipelines under combined loadings", Journal of Materials Research and Technology, 25, Pages 6395-6406, July-August 2023. https://doi.org/10.1016/j.jmrt.2023.07.078
- 3- Sultan Althahban, Abdullah S Alomari, H.E.M. Sallam, Yosef Jazaa, "An investigation of wear, mechanical, and water sorption/solubility behaviors of a commercial restorative composite containing nano-additives", Journal of Materials Research and Technology, 23, Pages 491-502, March-April 2023. https://doi.org/10.1016/j.jmrt.2023.01.025

### **Composite Structures**

- 4- M. Taimour, A.A. Abd-Elhady, H.E.M. Sallam, SAA Sayed, "Implementing functionally graded fibers technique to enhance pinned-joint performance in cross-ply laminate polymeric composites", Composite Structures, Vol. 313, 116931, June 2023. https://doi.org/10.1016/j.compstruct.2023.116931
- 5- I. El-Sagheer, A.A Abd-Elhady, H.E.M. Sallam, Soheir AR Naga, SAA Sayed, "Flexural and fracture behaviors of functionally graded long fibrous polymeric composite beam-like specimens ", Composite Structures, Vol. 300, 116140, 2022. https://doi.org/10.1016/j.compstruct.2022.116140

#### Scientific Reports

- 6- R.M. Reda, H.S.E. Mahmoud, S.S.E. Ahmad, H.E.M. Sallam, "Mechanical properties of sustainable concrete comprising various wastes", Scientific Reports, 13, 13234 (2023). https://doi.org/10.1038/s41598-023-40392-2
- 7- S. Mousa, S., M. Mutnbak, A.M. Saba, , A.A Abd-Elhady, H.E.M. Sallam, "Numerical study and experimental validation of the size effect of smooth and mode I cracked semi-circular bend specimens", Scientific Reports, 13, 7570, 2023. https://doi.org/10.1038/s41598-023-34201-z

### **Construction and Building Materials**

8- RA El-Sadany, H.E.M. Sallam, and SH Al-Tersawy, " Effect of hybrid nanoparticles additions to normal weight concrete on its microstructures and mechanical properties before and after exposure to gamma-rays", Construction and Building Materials 376, 131037, https://doi.org/10.1016/j.conbuildmat.2022.127924, 2 may 2023.

### Buildings

9- M.A. AbdAllah, A.A. Elakhras, R.M. Reda, H.E.M. Sallam, and M. Moawad, "Applicability of CMOD to obtain the actual fracture toughness of rightly-cracked fibrous concrete beams", Buildings, 13(8), 2010, 2023. https://doi.org/10.3390/buildings13082010

### Int. Journal of Concrete Structures and Materials

10- SH Al-Tersawy, SE Zakey, RA El-Sadany, and H.E.M. Sallam, "Utilization of various industrial wastes in ordinary concrete under normal manufacturing conditions", International Journal of Concrete Structures and Materials, Vol. 17, 44 (2023). https://doi.org/10.1186/s40069-023-00603-6

### **Construction and Building Materials**

11-A.Y.F. Ali, H.M. El-Emam, M.H. Seleem, H.E.M. Sallam, and M. Moawad, "Effect of crack and fiber length on mode I fracture toughness of matrix-cracked FRC beams", Construction and Building Materials 341, 127924, https://doi.org/10.1016/j.conbuildmat.2022.127924. 25 July 2022.

### **Buildings**

12-A.M. Merwad 1, A.A. El-Sisi, S.A.A. Mustafa, and H.E.M. Sallam, "Lateral Impact Response of Rubberized-Fibrous Concrete-Filled Steel Tubular Columns: Experiment and Numerical Study", Buildings, 12(10), 1566, 2022. https://doi.org/10.3390/buildings12101566

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### Sciencedirect

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# Sciencedirect

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# Springer Nature

13-M. Warda, S.S.E. Ahmed, I. Mahdi, H.E.M. Sallam, and H.S. Khalil, "The Applicability of TOPSIS- and Fuzzy TOPSIS-Based Taguchi Optimization Approaches in Obtaining Optimal Fiber-Reinforced Concrete Mix Proportions", Buildings, 12(6), 796, 2022. https://doi.org/10.3390/buildings12060796

#### **Sustainability**

14-S. Mousa, A.S Alomari, S.Vantadori, W.H. Alhazmi, A. Abd-Elhady, and H.E.M. Sallam, "Mechanical behavior of epoxy reinforced by hybrid short palm/glass fibers", Sustainability, 14(15), 9425, 2022. https://doi.org/10.3390/su14159425

#### Archives of Civil and Mechanical Engineering

15-A.Y.F. Ali, M. Moawad, M.H. Seleem, H.E.M. Sallam, and, H.M. El-Emam, "Mixed-mode fracture toughness of high strength FRC: a realistic experimental approach", Archives of Civil and Mechanical Engineering, 22(168), DOI: 10.1007/S43452-022-00492-8, 2022.

16-A.A. Elakhras, M.H. Seleem, and H.E.M. Sallam, "Real fracture toughness of FRC and FGC: size and boundary effects", Archives of Civil and Mechanical Engineering, 22(99), DOI: 10.1007/s43452-022-00424-6, 2022. Journal of Industrial Textiles Sage

17-M. Atta, A. Abu-Sinna, S. Mousa, H.E.M. Sallam, and A.A. Abd-Elhady," Flexural behavior of functionally graded polymeric composite beams", Journal of Industrial Textiles, Vol. 51(3S) 4268S-4289S, 2022. DOI: 10.1177/15280837211000365

#### **Polymers**

- 18-W. Alhazmi, Y. Jazaa, S. Althahban, S. Mousa, A. Abu-Sinna, A. Abd-Elhady, H.E.M. Sallam, and M. Atta, "Mechanical and Tribological Behavior of Functionally Graded Unidirectional Glass Fiber-Reinforced Epoxy Composites", Polymers, 14(10), 2057, 2022. https://doi.org/10.3390/polym14102057
- 19- Alaa E. El-Sisi, H. El Emam, A. El-Kholy, S.S.E. Ahmed, H.E.M. Sallam, and H. Salim, "Structural Behavior of RC Beams Containing Unreinforced Drilled Openings with and without CFRP Strengthening", Polymers, 14(10), 2034, 2022. https://doi.org/10.3390/polym14102034

#### **Materials**

20-S. Althahban, Y. Jazaa, O. Bafakeeh, A.S. Alomari, H.E.M. Sallam, and M. Atta, "The Effect of Reinforcement Preheating Temperatures on Tribological Behavior of Advanced Quranic Metal-Matrix Composites (QMMC)", Materials, 15(2), 659, 2022. https://doi.org/10.3390/ma15020659

Frattura ed Integrità Strutturale

21-RA El-Sadany, SH Al-Tersawy, and H.E.M. Sallam, "Effect of GFRP and steel reinforcement bars on the flexural behavior of RC beams containing recycled aggregate", Frattura ed Integrità Strutturale 16 (61), 294-307, 2022.

22-A.A. Elakhras, M.H. Seleem, and H.E.M. Sallam, "Fracture toughness of matrix cracked FRC and FGC beams using equivalent TPFM", Frattura ed Integrità Strutturale 16 (60), 73-88, 2022.

23-F. Agag, SSE Ahmad, H.E.M. Sallam, "Experimental assessment of different strengthening techniques for opening in reinforced concrete beams", Frattura ed Integrità Strutturale 16 (59), 549-565, 2022.

#### **Engineering Fracture Mechanics**

24-A.A. Elakhras, M.H. Seleem, and H.E.M. Sallam "Intrinsic fracture toughness of fiber reinforced and functionally graded concretes: An innovative approach", Engineering Fracture Mechanics, Vol. 258, 108098, 2021. **Taylor & Fracis** 

#### The Journal of Adhesion

25-A.A. Abd-Elhady, S. Mousa, W.H. Alhazmi, H.E.M. Sallam, and M. Atta, "Effects of composite patching on cyclic crack tip deformation of cracked pinned metallic joints", The Journal of Adhesion, Vol. 97, No. 16, 1561-1577, **2021**.

#### Archives of Civil and Mechanical Engineering

- 26-M.A. Othman, H.M. El-Emam, M.H. Seleem, H.E.M. Sallam, and M. Moawad, "Flexural behavior of functionally graded concrete beams with different patterns", Archives of Civil and Mechanical Engineering, Vol. 21:169 (4), 16 pp, **2021**.
- 27-Saeed Mousa, Amr A. Abd-Elhady, Gap-Yong Kim, and H.E.M. Sallam, "Fracture behavior of roll bonded Albrass-Al multilayer composites", Archives of Civil and Mechanical Engineering, Vol. 21:60 (2), 11 pp, 2021.
- 28-SH Al-Tersawy, RA El-Sadany, and H.E.M. Sallam, "Long-term behavior of normal weight concrete containing hybrid nanoparticles subjected to gamma radiation", Archives of Civil and Mechanical Engineering, Vol. 21:9(1), 18 pp, 2021.

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### **Engineering Structures**

29-M. Moawad, M. Baena, M, C. Barris, L. Torres, and H.E.M. Sallam, "Time-dependent behavior of NSM strengthened RC beams under sustained loading ", Engineering Structures, Vol. 247, 113210, 2021.

30-Alaa E. El-Sisi, H. El Emam, H. Salim, and H.E.M. Sallam, "Deformation and load transfer analysis of staggered composite-steel lap joints subjected to progressive damage", Engineering Structures, Vol. 215, 110690, 2020.

### **Polymers**

31-I El-Sagheer, A.A. Abd-Elhady, H.E.M. Sallam, and S.A.R. Naga, "An Assessment of ASTM E1922 for Measuring the Translaminar Fracture Toughness of Laminated Polymer Matrix Composite Materials", Polymers, 13(18), 3129, 2021.

# **Materials Research**

32-S. Mousa, H.E.M. Sallam, and A.A. Abd-Elhady, "Mechanical Properties of Al/PU/Perforated CU/PU/Al Sandwich Composites", *Materials Research*, 24(5), e20210104, 2021.

# **Construction and Building Materials**

33- SH Al-Tersawy, RA El-Sadany, and H.E.M. Sallam, " Experimental gamma-ray attenuation and theoretical optimization of barite concrete mixtures with nanomaterials against neutrons and gamma rays, *Construction and Building Materials* 289, 123190, 2021.

# **Polymers and Polymer Composites**

34-A.A. Abd-Elhady, A. Meroufel, H.E.M. Sallam, and M. Atta, "Experimental and numerical determination of critical osmotic blister size affecting the strength of aged FRP seawater pipe", Polymers and Polymer Composites, Vol. 29(5), 456-469, 2021.

# Arabian Journal for Science and Engineering

35- M. A. Mubaraki, and H.E.M. Sallam, "The most effective index for pavement management of urban major roads at a network level", Arab J Sci Eng, 46(5), 4615–4626, 2021.

### Latin American Journal of Solids and Structures

36-W.H. Alhazmi, Y. Jazaa, S. Mousa, A.A. Abd-Elhady, and H.E.M. Sallam, "Tribological and Mechanical Properties of Epoxy Reinforced by Hybrid Nanoparticles", Lat. Am. j. solids struct, 18(3), e361, 2021.

37-H. EL-EMAM, A. ELSISI, M.K. BNENI, S.S. AHMED, and H.E.M. Sallam, "Effects of tensile reinforcing steel ratio and Near-Surface-Mounted bar development length on the structural behavior of strengthened RC beams", Lat. Am. j. solids *struct.*, 17(6), e295, 11 pp. **2020**.

# Journal of Pressure Vessel Technology

38- T. M. El-Bagory, H.E.M. Sallam, and M. Younan, "Effect of Loading Rate and Pipe Wall Thickness on the Strength and Toughness of Welded and Unwelded Polyethylene Pipes", JPVT, 143(1), 011505, (14 pages), 2021.

# International Journal of Pavement Engineering

39-M.A. Mubaraki and H.E.M. Sallam, "Reliability study on fracture and fatigue behavior of pavement materials using SCB specimen ", International Journal of Pavement Engineering, 21 (13), 1563–1575, 2020.

# Frattura ed Integrità Strutturale

40- I El-Sagheer, M Taimour, M Mobtasem, A Abd-Elhady, H.E.M. Sallam, "Finite element analysis of the behavior of bonded composite patches repair in aircraft structures", Frattura ed Integrità Strutturale 14 (54), 128-138, 2020.

41- RM Reda, Z Omar, H.E.M. Sallam, SSE Ahmad, "Effect of different parameters controlling the flexural behavior of RC beams strengthened with NSM using nonlinear finite element analysis", Frattura ed Integrità Strutturale 14 (53), 1106-123, 2020.

# **Engineering Failure Analysis**

- 42-A Bashiri, H.E.M. Sallam, and A.A. Abd-Elhady, "Progressive Failure Analysis of a Hip Joint Based on Extended Finite Element Method", Engineering Failure Analysis, Vol 117, 104829, 2020.
- 43-M. Atta, A. Abu-Sinna, A.A. Abd-Elhady, and H.E.M. Sallam, "Prediction of failure stages for double lap joints using finite element analysis and artificial neural networks", Engineering Failure Analysis, Vol 97, pp 242-257, 2019.

# Journal of Civil Structural Health Monitoring

44-Alaa El-Din El-Sisi, O. M. El-Husseiny, E. B. Matar, H.E.M. Sallam, and H. Salim, "Field-testing and numerical simulation of vantage steel bridge", Journal of Civil Structural Health Monitoring, Vol. 10(3),443-456, 2020.

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# Italian Group of Fracture (IGF)

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**Taylor & Fracis** 

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#### Advances in Structural Engineering

45-A.A. Abd-Elhady, Abu-Sinna, M. Atta, and H.E.M. Sallam, "Identification of damage stages in bolted metallic joints for different joint geometries and tightening torques using statistical analysis", Adv. Struct. Eng. 23(5), 911-923, 2020.

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#### **Composite Structures**

- 46-A.A. Abd-Elhady, I.M. Alarifi, R.A. Malik, H.E.M. Sallam, and T.M. El-Bagory, "Investigation of fatigue crack propagation in steel pipeline repaired by glass fiber reinforced polymer", *Composite Structures*, Vol. 242, 112189, 2020.
- 47-I.A. Sharaky, S.A. Selmy, M. El-Attar, and H.E.M. Sallam, "The Influence of interaction between NSM and internal reinforcements on the structural behavior of upgrading RC Beams", Composite Structures, Vol. 234, 111751, 2020.

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