CURRICULUM VITAE PROFESSOR Dr. AREF M. A. SOLIMAN



[1] GENERAL DATA

Name Aref Mohamed Ahmed Soliman

Post Professor, Dean of The Faculty of Engineering, Benha, Benha

University, Egypt.

Date Of Birth October 24, 1960

Citizenship Egyptian Marital Status Married

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[2] EDUCATIONAL QUALIFICATIONS

- 1. B.Sc., Mechanical Engineering, Minia University, Egypt, 1984.
- 2. M.Sc., Mechanical Engineering, Minia University, Egypt, 1988. Title of M.Sc. "Study of Some Factors Affecting Internal Combustion Engine Vibrations", (30/4/1988)
- 3. Ph. D., Mechanical Engineering, Minia University, Egypt, 1992. (Channel Scheme arrangement between Leeds University in England (UK.) and Minia, University in Egypt, (1992). Title of Ph.D. "Limited Bandwidth Active suspension for Automobiles".(23/2/1992)
- 4 Associate Professor, Mechanical Engineering, Minia University, Egypt, (29/4/1997).
- 5. Professor, Mechanical Engineering, Minia University, Egypt, (28/5/2002).

[3] ACADEMIC POSITIONS

1-4 th Augest 2018 untill now	Dean of the Faculty of Engineering, Benha, Benha University, Egypt.		
2- January 2016 until 3/8l2018	Vice Dean of Education and Students Affairs, Faculty of Engineering, Benha, Benha University, Benha, Egypt		
3-November 2011 until 2/1/2016.	 Vice Dean of the Faculty of Engineering, Modern University for Technology and Information, Cairo, Egypt Dean of the Faculty of Engineering, South Valley University, Qena, Egypt. 		
4- Feb. 2008 To October 2011)			
5- (4/1/ 2005 - To 3/2/2008)	Head of Automotive and Tractor Eng. Dept., Faculty of Engineering, Minia University, Egypt		
6- (28-May-2002 To Date)	Professor in Mechanical Engineering, Faculty of Eng., South Valley University, Egypt.		
7-(1997-2002)	Associate Professor in Mechanical Engineering, Faculty of Engineering, Minia University, Minia, Egypt		
8-(1992-1997)	Lecture, Mechanical Engineering Dept., Faculty of Engineering, Minia University, Minia, Egypt.		
9-(1988-1992)	Associated Lecture, Mechanical Engineering Dept., Faculty of Engineering, Minia University, Minia, Egypt.		
10-(1984-1988)	Instructor, Mechanical Engineering Dept., Faculty of Engineering, Minia University, Minia, Egypt		
11- 5/3/2008 to date	Manager of QAAP2 Project, the Faculty of Engineering, Qena, South Valley University		
12- 15/1/2009 to 15/10/2013	Manager of MEDINNOALL_SVU project - Tempus ("Mediterranean Innovation Alliance (Medinnoall)"		

[4] International Travel and Residence for Research/Study/Work/training

1- 1988 - 1991	(26 months) Research work (Ph.D. study according to Channel Scheme, Leeds University, England)
2- (22/8/1994- To 7/1/1995)	Research work with Prof. Dr./ Crolla D. A., Mechanical Engineering, Leeds University, England
3- (15/6/1999-	
To 1/8/1999)	Research work, Mechanical Engineering, Leeds University, England.
4- (23/6/ 2000 -	
To 16/9/2000)	Research work, Mechanical Engineering, Leeds University, England.
5- (17/8/1998- To 20/6/2000)	Lecturer, Buraydah College of Technology, Kingdom of Saudi Arabia.
6- 2/2/2012 25/22012	Visiting Professor, Mechanical Eng., Leeds University, England.
7-1992 to 2018	Traveling conference or meeting, see No. 8.

[5] ACADEMIC AND ADMINISTRATIVE EXPERIENCE

- 1. Over 70 Scientific Papers in International Conferences and Journals or Periodicals. See Appendix (1).
- 2. Supervised of M.Sc. and Ph.D. Students in the Fields of Vehicle dynamics ((20) M.Sc. and Ph.D. Thesis).
 - Thesis supervised and completed: (3) Ph. D. Thesis, (12) M.Sc.Thesis Thesis under supervision (In progress): (1) Ph. D. Thesis, (4) M.Sc. Thesis
- 3. Referee (Reviewer) for some papers (articles) in SAE International Congress (Reviewer for some papers in SAE Congress).
- 4. Referee (Reviewer) for some papers (articles) in international Journal of Vehicle Design.
- 5. Develop various type of active suspension system (Monoroa Company-Leeds University Co-operation)
- 6. Teaching Experience in the Field of Mechanical Eng. System Dynamics and Control, Mechanical Vibration, Automatic control, Theory of machines, Mechanical vibrations, Process Control and Automation, Control of Industrial Systems, Mechatronics (1), Noise, Fluid Mechanics, Hydraulic systems, Active suspension systems, Power transmission, Brake systems, Suspension and steering, Measurements, Engineering Mechanics, Engineering drawing and other relevant courses relating to Mechanical Engineering).
- 7. Established the Postgraduate (M.Sc. and Diploma) Program in Mechanical Engineering, Faculty of Engineering, Minia University, Minia, Egypt (since 1992), Which Played A Major Role in Either Defining A new Courses or Redefining An Existing ones, Including Preparation of Course Syllabus and/or Notes for Undergraduate.
- 8. Approved and Discussed M.Sc. Researches ((20) Thesis). Established & Supervised The Vehicle Dynamics Labs., Faculty of Engineering, Minia University, Minia, Egypt (since 1992).
- 9. Consultant In Studies & Researches and Consultant Engineering Center (Automotive Eng. Field). Faculty of Engineering, Minia University, Minia, Egypt (since 1992)
- 10. Areas of Research are; Dynamics, control, Vibrations and Noise.
- 11. Three months training in Nasr Automotive Company, Egypt.
- 12. Two months training in Zalmot Automotive Company, Warsow, Poland.
- 13. Supervised of Studies & Researches and Consultant Engineering Center. Faculty of Engineering, Qena University, Qena, Egypt (since 2008).
- 14. Manager of QAAP2 Project, the Faculty of Eng., Qena, SVU (From 4/3/2008 to date)
- 15. Manager of MEDINNOALL_SVU project Tempus ("Mediterranean Innovation Alliance (Medinnoall)" (From 15 January 2010 15/10/2013).
- 16. Establish (with Faculty staff members) three Program for Credit hours ((1) Electromechanical Eng, (2) Construction Eng., and Management, and (3) Infrastructure and Utilities Engineering.

[6] EXPERIMENTAL APPLICATION

- (1) A slow active suspension system is developed and examined to improve vehicle ride Performance
- (2) Theoretical and experimental research is done to introduce a solution of the vehicle dynamics problem (The solution is applied on Nasr Sahin type).
- (3) Three setting switchable damper suspension system is developed and the damper setting is modified to improve vehicle ride comfort
- (4) Some factors (tyre parameters, seat position) affecting on the vehicle ride comfort are investigated to improve vehicle ride comfort.

[7] ACTIVATES IN PROFESSIONAL ORGANIZATIONS, SPECIAL HONERS AND SOCIETIES

- 1. Member of International Society of American (SAE), (since 1996).
- 2. Member of Egyptian Engineering Society. (since 1984)
- 3. Member of Educational development section in Minia University, Egypt, 1993.
- 4. Testimonial of Honer Degree, Faculty of Engineering, Minia University, Egypt. 1984
- 5. Certificate of Scientific and student activities distinction, Educational Minstry, Egypt, 1996.
- 6. Testimonial of Efficiency and Competence in Vehicle Braking Systems, Buraydah, College of Technology, Kingdom of Saudi Arabia, 1998.
- 7. Nine (9) testimonials of Efficiency from Higher Education Ministry, Egypt.
- 8. Referee for some papers in the Society of Automotive engineering SAE Congress, Detroit, USA (Reviewer for some papers in SAE Congress)
- 9. Referee for some papers in International Journal of Vehicle Design (Reviewer for some papers in IJVD).
- 10. Referee for some papers in the field of Vehicle Dynamics in scientific committee for engineering sector in Egypt.

[8] CONFERENCES AND MEETING

- (1) Institute of Hadsfield and Leeds University Seminar, (Vehicle dynamics area),1993.
- (2) Minia University, Egypt and Kassel University, Germany Seminar The Role of Universities, Rural Development, Minia, Egypt, September 28-30, 1992.
- (3) Third International Conference, Faculty of Engineering, Al-Azhar.
- (4) University, Nasr City, Cairo, Dec. 18-21 1993.6th Conference on applied Mechanics and Mechanical Eng., Military, Technical College, Cairo, Egypt, 3-5 May 1994.
- (5) Minia First Conference in Eng. And Tech., Faculty of Engineering, Minia University, Minia, Egypt, 8-10 October, 1995.
- (6) SAE International Congress & Exposition, Detroit, Michigan, USA, Feb. 26-29, 1996.
- (7) Al-Azher Engineering Fifth International Conference, Faculty of Eng., Al-Azhar University, Nasr City, Cairo, December 19-22 1997.
- (8) Students Universities Meeting (1993- June1998).
- (9) SAE International Congress & Exposition, Detroit, Michigan, USA, 2001.
- (10) International Conference on Advanced Simulation and Control for Automotive Applications, Oxford, UK, 24-26 Sept., 2001.
- (11) SAE International Congress & Exposition, Detroit, Michigan, USA, 2008.
- (12) SAE International Congress & Exposition, Detroit, Michigan, USA, 2010
- (13) Meeting at Alicante university, "Mediterranean Innovation Alliance (Medinnoall)", Tempus Project, Spain, March 2010
- (14) SAE International Congress & Exposition, Detroit, Michigan, USA, 2010.
- (14) Meeting at Algira, "Mediterranean Innovation Alliance (Medinnoall)", Tempus Project, Algeria, October 2010.
- (15) Meeting at Tunisia, "Mediterranean Innovation Alliance (Medinnoall)", Tempus Project, Tunisia, 2-3 June 2011.
- (16) Meeting at Glasgow University, "Mediterranean Innovation Alliance (Medinnoall)", Tempus Project, Glasgow, Uk,17-21 October 2011.
- (17) Meeting at Tunisia, "Mediterranean Innovation Alliance (Medinnoall)", Tempus Project, Tunisia, 21-22 June 2012.

- (18) Meeting at, Morocco "Mediterranean Innovation Alliance (Medinnoall)", Tempus Project, Marakesh, Morocco, 27-28 June 2013.
- (19) Meeting at, Morocco "Mediterranean Innovation Alliance (Medinnoall)", Tempus Project, Fes, Morocco, 10-11 October 2013.
- (20) Conference, Tokyo Japan Mar 27-28, 2018.

[9] TEST RIGS - BUILT AND DESIGNED IN THE VEHICLE DYNAMICS LABORATORY

Place Test Rigs

Faculty of Eng., (1) Built and Design Test Rig for Evaluate Various Types of Minia University Suspension System Components.

Eng., (2) Built and design Test Rig for Measuring Various Types of Faculty of Dampers and springs Characteristics. Minia University

Eng., (3) Built and Design Test Rig for Determining The area of Contact Faculty of and Rolling Resistance Coefficient of Tyres Interacting with off-Minia University Road Test Rig

Faculty ulty of Eng., (4) Built and Design Power transmission model Minia University

of Eng., (5) Built and design Test Rig for Measuring Road Measurement Faculty Minia University Coefficient

> (6) Establish (with mechanical staff members) the following laboratories;

Faculty of Eng.,

University, SVU

Qena, South Valley Vibration and noise Lab. –Automotive Lab. – Mechatronics lab -Heat transfer lab -Strength of material lab. – Universal test lab. Internal combustion Engine lab. Hydraulic Lab. – CNC Lab.

Faculty of Eng., (7) Establish (with Electrical Eng. staff members) Electrical Qena, SVU **Engineering Laboratories**

Faculty of Eng., (8) Establish (with civil Eng. staff members) -Civil Engineering Qena, SVU Laboratories

Faculty of Eng., (9) Establish (with mechanical Eng. staff members) Faculty of Eng. Qena, SVU Workshop

Faculty of Eng., Benha, Develop (with Faculty staff members) of some Laboratories and . Benha University.

Faculty of Eng., Benha, Establish (with Faculty staff members) three

Program for Credit hours ((1) Electromechanical Eng,

- (2) Construction Eng., and Management, and
- (3) Infrastructure and Uti; ities Engineering.

[10] ACTIVATES IN TEMPUS PROJECT

Tempus IV- Mediterranean Innovation Alliance (MEDINNOALL)

No	Activity Title	Place and Date
1	Study Visit of top management staff to Alicante	University of Alicante, Spain (22 -27 March 2010)
2	MEDINNOALL Training Module 1 First Training Module: Strategic Implementation of University-Industry Cooperation	Oran - Argelia. (17– 22 October 2010)
3	MEDINNOALL Training Module 2 – Second Training Module: Technology Transfer and Entrepreneurship	Fes Morroco - Université Sidi Mohamed Ben Abdallah (7 March to 10 March 2011)
4	Third Training Module: Technology Audits of the MEDINNOALL Project.	Sousse - Tunisia. 2 and 3 June 2011
5	Practical Training in Glasgow. The aim of this activity is to develop a basis for detecting possible technology transfer and research collaboration opportunities and to provide an informational platform for the internal and external university community.	Glasgow Caledonian University, Scotland, UK. (17 Oct. 2011 – 21 October 2011)
6	Medinnoall Project Event 'Promoting Innovation culture in Mediterranean! Universities'	Tunis, 21 and 22 of June 2012
7	Medinnoall Project Event- VALORIZATION OF RESEARCH RESULTS IN EGYPTIAN UNIVERSITIES	Marakesh – Morocco (27-28 June 2013).
8	Medinnoall event. 1-Medinnoall Project Assessment in Egypt 2-Alexandria University experience in term of Valorization of Research.	Fes – Morocco 10-11 October 2013.
9	Staff selection for Knowledge Transfer Center and identification of Business Link advisors	The Staff members have been selected for each University.
10	Purchase and Installment of IT equipment. The Egyptian project coordinator has sent to KTIC_SVU the required equipments (3 desktop computers, 3 laptops, 1 video projectors, 1 multifunctional machine, So-ware, 1 modem, 1 fax, Internet server), including installation, delivery, etc., in additional to the reference manuals, software.	South Valley University (KTIC_SVU)April-2011

APPENDIX (1): LIST OF PUBLISHED PAPERS

- 1. F. M. El-Sayed, K. A. Hakim, S. M. Moustafa and <u>A. M. A. Soliman</u> "Internal combustion engine vibrations and wear" The Bulletin of the Faculty of Eng., Minia University, Minia, Egypt, Vol. 7, No. 1, 1988.
- 2. F. M. El-Sayed, D. A. Crolla and <u>A. M. A. Soliman</u> "A Theoretical comparison between passive, switchable damper and slow active suspension systems" The Bulletin of the Faculty of Engineering and Tech., Minia University, Minia, Egypt, Vol. 10, Part 1, 1991.
- 3. F. M. El-Sayed, D. A. Crolla and <u>A. M. A. Soliman</u> "A study of the passive suspension system" The Bulletin of the Faculty of Engineering and Tech., Minia University, Minia, Egypt, Vol. 10, Part 2, December 1991.
- 4. F. M. El-Sayed and <u>A. M. A. Soliman</u> "The role of agriculture machinery in the development of arid zones" The Role of Universities, Rural Development, Minia, Egypt, September 28-30, 1992.
- 5. D. A. Crolla, <u>A. M. A. Soliman</u>, F. M. El-Sayed and M. M. Alaily "Experimental results from a slow active suspension" International Journal of Vehicle Design, Vol. 14, nos 2/3, pp 226-245, 1993.
- 6. <u>A. M. A. Soliman</u>, D. A. Crolla and F. M. El-Sayed "A comparison of control strategies for the switchable damper suspension system" International Journal of Vehicle Design, Vol. 14, No. 4, pp 308-324, 1993.
- 7. A. M. A. Soliman "The modified variable damper used in a quarter vehicle model" The Bulletin of the Faculty of Engineering and Tech., Minia University, Minia, Egypt, Vol. 12, No. 1, June 1993.
- 8. <u>A. M. A. Soliman,</u> S. M. Moustafa, F. M. El-Sayed and K. A. Abd El-Gawwad "Effect of drawbar pull on the tractor ride comfort" Engineering Research Bulletin, University of Helwan, Faculty of Engineering and Technology, Mataria, Cairo, Vol. 5, October 1993.
- 9. <u>A. M. A. Soliman</u> "Experimental study of the tractor ride comfort" Third International Conference, Faculty of Engineering, Al-Azhar University, Nasr City, Cairo, Vol. 8, December 18-21 1993.
- 10. <u>A. M. A. Soliman</u> "The effect of the trailing implement characteristics on the tractor ride comfort" 6 th conference on applied Mechanics and Mechanical Engineering, Military Technical College, Cairo, Egypt, 3-5 May 1994
- 11. A. M. A. Soliman, D. A. Crolla, F. M. El-Sayed and M. M. El-Alialy "Experimental results from a three setting switchable damper" 6 th Conference on applied Mechanics and Mechanical Engineering, Military Technical College, Cairo, Egypt, 3-5 May, 1994.
- 12. <u>A. M. A. Soliman</u> "A hydro-pneumatic limited bandwidth active suspension system for road vehicles" Bulletin of the Faculty of Engineering and Technology, Minia University, Minia, Egypt, Vol. 13, No. 3, September, 1994.
- 13. A. A. El-Betar and A. M. A. Soliman "A study of the behaviour of passive and active suspension systems for passenger cars" The Bulletin of the Faculty of Engineering and Tech., Minia University, Minia, Egypt, Vol. 14, No. 1, January, 1995.
- 14. A. M. A. Soliman, S. M. Moustafa, F. M. El-Sayed and K.A. Abd El-Gawwad "An experimental and analytical study of the tractor ride comfort" Heavy Vehicle Systems, Special series, International Journal of Vehicle Design, Vol. 2, No. 1, pp 58-76, 1995.
- 15. A. M. A. Soliman "The effect of road and wheelbase preview sensors on the performance of the active suspension system using half vehicle model" The Bulletin of the Faculty of Engineering and Technology, Minia University, Minia, Egypt, Vol. 14, Part 2, September, 1995.
- 16. <u>A. M. A. Soliman</u>, F. M. El-Sayed, D. A. Crolla and K. A. El-Gawwad "The area of contact and rolling resistance coefficient of tyres interacting with off-road" Minia First Conference in Eng. And Tech., Faculty of Engineering, Minia University, Minia, Egypt, 8-10 October, 1995.

- 17. <u>A. M. A. Soliman, "Experimental results from a hydro-pneumatic slow active suspension system"</u> The Bulletin of the Faculty of Engineering and Tech., Minia University, Minia, Egypt, Vol. 14, No. 3, December, 1995
- 18. <u>A. M. A. Soliman</u>, A. M. Abd El-Tawwab and D. A. Crolla "Adaptive control strategies for a switchable damper suspension system", SAE International Congress & Exposition, Detroit, Michigan, USA, February 26-29, 1996.
- 19. A. M. A. Soliman and D. A. Crolla "Preview control for a semi active suspension system", International Journal of Vehicle Design, Vol. 17, No. 4, 1996.
- 20. A. M. A. Soliman, "On the ride comfort available from road and wheelbase preview with semi active car suspensions" Al-Azher Engineering Fifth International Conference, Faculty of Engineering, Al-Azhar University, Nasr City, Cairo, Vol. 7, pp 197-208, December 19-22 1997.
- 21. A. M. A. Soliman, and A. M. Abd El-Tawwab "Engine mount for improving vehicle ride performance" International Society for Terrain Vehicle Systems, 7th European ISTVS Conference, Ferrara, Italy, October 8-10, 1997.
- 22. A. M. A. Soliman "Review of the main design parameters affecting the ride comfort in agricultural vehicles", Automotive and Tractor Engineering Dept., Minia University, Egypt, 1997.
- 23. A. M. A. Soliman," On the ride comfort available from road and wheelbase preview with semi active car suspensions" The Bulletin of the Faculty of Engineering, Minia University, Minia, Egypt, Vol. 17, No. 1, pp. 82-95, 1998.
- 24. A. M. A. Soliman, S. A. Abd Allah, A. A. El-Betar and M. S. Hamed "Effect of suspension spring stiffness on the vehicle dynamics" The Bulletin of the Faculty of Engineering and Tech., Minia University, Minia, Egypt, December, 1998.
- 25. K. A. El-Gawwad, D. A. Crolla, <u>A. M. A. Soliman</u> and F. M. El-Sayed "Prediction of the performance of off road tyres" Heavy Vehicle Systems, International Journal of Vehicle Design, Vol. 5, Nos. 34, pp 359-378, 1998.
- 26. K. A. El-Gawwad, D. A. Crolla, <u>A. M. A. Soliman</u> and F. M. El-Sayed "Off-road tyre modelling I: the multi-spoke tyre model modified to include the effect of straight lugs" Journal Terramechanics, 36, pp 3-24, 1999.
- **27** K. A. El-Gawwad, D. A. Crolla, <u>A. M. A. Soliman</u> and F. M. El-Sayed "Off-road tyre modelling II: effect of camber on tyre performance" Journal Terramechanics, 36, pp 25-38, 1999.
- 28 K. A. El-Gawwad, D. A. Crolla, <u>A. M. A. Soliman</u> and F. M. El-Sayed "Off-road tyre modelling III: effect of angled lugs on tyre performance" Journal Terramechanics, 36, pp 63-75, 1999.
- 29. K. A. El-Gawwad, D. A. Crolla, <u>A. M. A. Soliman</u> and F. M. El-Sayed "Off-road tyre modelling IV: extended treatment of tyre-terrain interaction for the multispoke model" Journal Terramechanics, 36, pp 77-90, 1999.
- 30. K.A. Abd El-Gawwad, D. A. Crolla, <u>A. M. A. Soliman</u>, F. M. El-Sayed "The effect of combined lateral, longitudinal slip and yaw for a cambered tyre on off-road vehicle performance" Bulletin of the Faculty of Engineering, Minia University, Egypt, Vol. 18, 1999.
- 31. A. Ibrahim, A. M. A. Soliman and H. A. Housin "Influence of work piece support on the generated surface in turning" SPIE The international Society for Optical Engineering, Boston, Massachusetts, USA, November 5-8, 2000.
- 32. A. M. A. Soliman "A Vehicle seat suspension with hybrid control system", SAE International Congress & Exposition, Human Factors in Automotive Design, SP-1591, 0390, Detroit, Michigan, USA, March 5-8, 2001.
- 33. A. M. A. Soliman and D. A. Crolla "Limited bandwidth active suspension employing wheelbase preview", SAE International Congress & Exposition, 1063, Detroit, Michigan, USA, March 5-8, 2001.
- 34. <u>A. M. A. Soliman</u> and D. A. Crolla "A Self-tuning controller for a switchable damper suspension", International Journal of Engineering Simulation with Industrial Applications" Vol. 2, No. 2, ISSN 1468-1137, May 2001.
- 35. Aref M. A. Soliman "Improvement of full vehicle ride performance by an appropriate engine mount systems", International Conference on Advanced Simulation and Control for Automotive Applications, Oxford, UK, 24-26 Sept., 2001.

- 36. <u>A. M. A. Soliman</u> "An investigation for passive suspension system and ride comfort in vehicles", International Conference on Advanced Simulation and Control for Automotive Applications, Oxford, UK, 24-26 Sept., 2001.
- 37. A. M. A. Soliman, S. A. Abd Allah, A. A. El-Betar and M. S. Hamed "Effect of suspension spring stiffness on the vehicle dynamics" Heavy Vehicle Systems, A Series of the International Journal of Vehicle Design, Vol. 8, Nos. 34, pp 316-334, 2001.
- 38. A. M. A. Soliman "Parameters affecting ride comfort in road vehicles" A Review, Automotive and Tractor Engineering Dept., Minia University, Egypt, 2002.
- 39. <u>A. M. A. soliman</u> "A comparison of the performance and power requirements of three semi-active suspension control laws", World Automotive Congress, FISITA, Barcelona, Spain, F2004 F001, May 23-27 2004.
- 40. <u>A. M. A. Soliman</u> "Evaluation of active suspension systems performance and power requirements" 7th International Symposium on Advanced Vehicle Control, AVEC 04, Hun University, Arnhem, The Netherlands, 23-27 August, 2004.
- 41. <u>A. M. A. soliman</u> "Effect of Road Roughness on the Vehicle Ride Comfort and Rolling Resistance", SAE Int. Congress, 1297, Detroit, Michigan, USA, April 3-6, 2006.
- 42. A. M. A. Soliman, S. A. Abd Alla, Y. A. El-Mashed and M. S. A. Hamid "Improvement of Vehicle Ride Performance Using a Hydro-pneumatic Active Suspension System" SAE International Congress, 1298, Detroit, Michigan, USA, April 3-6, 2006.
- 43. <u>A. M. A. Soliman</u> "An investigation of passive, twin accumulator and active suspension systems for passenger cars", International Conference on Advances in Mechanical Engineering and Mechanics (ICAMEM2006), Hammamet, December 17-19, Tunisia, 2006.
- 44. <u>A. M. A. Soliman</u> "Improvement of vehicle ride performance using a switchable damper suspension system", SAE International Congress, Detroit, Michigan, USA, April 16-19, 2007.
- 45. A. M. A. Soliman, S. M. Moustafa and A. O. Moaz "Engine mount systems for improving ride comfort using half and full vehicles", JIME, Jordan, 2007.
- 46. A. M. A. Soliman "Improvement of the Truck Ride Comfort Via Cab Suspension" A special publication collections Published By: SAE International Published: April 2008, Pages: 246, 2008 and also, SAE International Congress, Detroit, Michigan, USA, 1148, 2008.
- 47. A. M. A. Soliman, S. M. Moustafa "Parameters Affecting Vehicle Ride Comfort Using Half Vehicle Model" SAE International Congress, Detroit, Michigan, USA, , 2008.
- 48. <u>A. M. A. Soliman</u>, M. M Saber, K. R. M. Mahmoud An Investigation of Combined Twin Accumulator Suspension and Anti-Lock Braking System for Passenger Cars'', International conference on Advances in Mechanical Engineering and Mechanics, Sousse, Tunisia, 16-18 December 2008.
- 49. <u>A. M. A. Soliman</u>, M. M Saber, K. R. M. Mahmoud "Active Suspension and Antilock Braking Systems for Passenger Cars" SAE International Congress, Detroit, Michigan, USA, 2009.
- 50. <u>A. M. A. Soliman</u> "Effect of Road Roughness on the Vehicle Ride Comfort using Semi-active Suspension System", SAE International Congress, Detroit, Michigan, USA, 2010.
- 51. A. M. A. Soliman "Adaptive LQR Control Strategy for Active Suspension System", SAE International Congress, Detroit, Michigan, USA, 2011.
- 52. <u>A. M. A. Soliman</u> "Improvement of Truck Semi-Trailer Ride Comfort using Different Control Strategies", International Journal of Engineering & Simulation (IJES), Volume 12, No. 2, 2011.
- 53. A. M. A. Soliman and M. M.S. Kaldas_"An Investigation of Anti-lock Braking Automobiles", Simulation and System for Load Analysis in Automotive Engineering (Part 4 Influence of Load Vehicle of on Drivability/Handling/Braking/Stability Characteristics SAE and Control, International Congress, Detroit, Michigan, USA, 2012.
- 54. A. M. A. Soliman, M. M.S. Kaldas, D. C. Barton and P. C. Brooks "Fuzzy-Skyhook Control for Active Suspension Systems Applied to a Full Vehicle Model",

- International Journal of Engineering and Technology innovation (IJETI), Volume 2, No. 2, 2012.
- 55. M. Attalla, A. M.A. Soliman, A. Abd El-Naeem "Study to enhance the Performance of air cooling system by mixing direct expansion unit and chilled water system." International Journal of Engineering Science and Technology, IJEST-ISSN: 0975-5462, 2012.
- 56. <u>A. M. A. Soliman</u>, M. M Saber and S. A. Abdalla "Influence of Road Roughness on the Ride and Rolling Resistance for Passenger Car" SAE International Congress, Detroit, Michigan, USA, 2013.
- 57. M. Attalla, A. M. A. Soliman and Mahmoud A. Torky "Engine Performance and Exhaust Emissions of an SI Engine Using Acetic Acid, Ethanol, and Gasoline Blended Fuel", International Journal of Engineering & Technology, Vol. 13 Issue: 05, Paper ID: 1310305-8989-IJET-IJENS, October, 2013.
- 58. M.S. Kaldas,; Aref M.A. Soliman, "Improvement of Bus Ride Comfort via Active Suspension and Connected Dampers" SAE Technical Paper 2013-01-0990, 2013, doi:10.4271/2013-01-0990.
- 59. <u>A. M. A. Soliman</u>, N. M Ghazaly and F. S. Kadry "Parameters Affecting Truck Ride Comfort" SAE International Congress, Detroit, Michigan, USA, 2014.
- 60. M.S. Kaldas,; <u>Aref M.A. Soliman</u>, "Influence of Active Suspension Preview Control on Vehicle Ride and Braking Performance" SAE International Congress, Detroit, Michigan, USA, 2014.
- 61. <u>A. M. A. Soliman</u> "A comparison of the performance and power requirements for various active suspensions with gain scheduling strategies", SAE International Congress, Detroit, Michigan, USA, 0616, April 2015.
- 62. A. M. A. Soliman and M. M Saber "Ride Comfort Performance Investigation for Compressed Natural Gas Fuelled Car", SAE International Congress, Detroit, Michigan, USA, 0611, April 2015...
- 63. <u>A. M. A. Soliman</u> "Improvement of vehicle ride comfort using control strategies for the switchable damper suspension system", SAE International Congress, Detroit, Michigan, USA, 2016-01-00144, April 2016.
- 64. A. M. A. Soliman "Effect of Road Disturbance on the Ride Performance of Twin Accumulator and Semi-Active Suspension Systems," SAE Technical Paper 2017-01-0410, doi:10.4271/2017-01-0410, 2017.
- 65. Mina M.S. Kaldas' Nouby M. Ghazaly' Aref M.A. Soliman and Al-Shimaa H. Kamal El-Deen "Study of Anti-Lock Brake System and Anti-Roll Bar for Passenger Cars" International Sino-Egyptian Congresson Agriculture, Veterinary Sciences and Engineering (2nd ISEC-AVE), Benha University, Eypt, 7-10 October 2017.
- **66.** Aref M. A. Soliman, Mahmoud A. Hassan "Dry Friction Occurring in the Suspensions for Passive and Switchable Damper Systems and Its Effect on Ride Comfort" Conference Proceedings, Tokyo Japan, 20 (3) Part XXIV, March 27-28, 2018.
- 67. Mina MS Kaldas, Aref MA Soliman, Sayed A Abdallah, Fomel F Amien "Model Reference Control for Active Suspension System" SAE International Congress, Detroit, Michigan, USA, SAE Technical Paper 2019-01-0165, 2019.
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