

## ■ ملخص عن السيرة الذاتية

- الاسم : د / علي محمود عبد التواب علي
- الوظيفة : استاذ ورئيس قسم هندسة السيارات والجرارات كلية الهندسة جامعة المنيا
- ديناميكا السيارات
- استقرار واتزان السيارات على الطريق
- تشخيص وإصلاح أعطال المركبات
- تشخيص وإصلاح أعطال المحركات
- هندسة السيارات (نظرية - تصميم - تشخيص - إصلاح)
- محركات الاحتراق الداخلي
- ثرمودينميك
- انتقال حرارة
- مقاومة مواد وتحليل جهادات
- تصميم محركات
- تصميم شاسية
- الضوضاء في السيارات
- الاهتزازات في السيارات
- التلوث البيئي (قياس - تحليل - معالجات)
- التحكم الالي (الرقمي - الفولتي)
- الانظمة النيوماتيكية والهيدروليكية
- الصيانة (الدورية - الوقائية)
- الحاسب الالي (لغة اليبسك والفورترن والسي)
- تصمي الانظمة الالكترونية للتحكم في منظومات السيارات
- الحديثة (المحرك التعليق التوجيه صندوق السرعات
- (الخ.....)

▪ حتي الان تم نشر حوالي 40 بحث متخصص في مجال هندسة السيارات

▪ الإنجازات

▪ ( المشاركة في ( مؤتمرات المؤسسة بالرياض)

▪ المشاركة مؤتمرات ابحاث الحج

▪ المشاركة المجالات العلمية العالمية على سبيل المثال

• **SAE - VSD -IEEE**

▪ ( رئيس اللجنة العلمية بالقسم)

▪ (عضو لجنة البحوث في الكلية)

▪ المهارات

▪ ( استخدام الحاسب )

▪ تصميم برامج الكمبيوتر بلغات مختلفة

▪ تصميم وصيانة الدوائر الهيدروليكية والهوائية

# **CURRICULUM-VITAE**

Professor Dr. Ali M. Abd-El-Tawwab Ali  
Head of Automotive and Tractor Eng. Dept.  
Faculty of Eng., Minia University  
Minia – Egypt

## **PERSONAL INFORMATION – GENERAL**

Name : Ali M. Abd-El-Tawwab Ali  
Date & Place of Birth : 24/11/1962  
Present Position : Professor Automotive  
and Tractor Eng. Dept.  
Faculty of Eng.  
Minia University  
Minia – Egypt.  
Languages : Arabic and English



## **EDUCATION – QUALIFICATIONS**

- 1995 : **Ph.D.**  
Channel Scheme arrangement between Leeds University in England and Minia University in Egypt. Automotive and Tractor Engineering Department, Faculty of Engineering, Minia University, Minia, Egypt. And Mechanical Engineering, Leeds University, Leeds, LS2-9JT England.
- 1991-1993 : Research programme in Automotive and Tractor Engineering Department, Faculty of Engineering, Minia University, Minia, Egypt.
- 1993-1995 : Research programme Mechanical Engineering, Leeds University, Leeds, LS2-9JT England.
- 1991 : **M.Sc.**  
Automotive and Tractor Engineering Department, Faculty of Engineering, Minia University, Minia, Egypt.
- 1986 : **B.Sc.**  
Automotive and Tractor Engineering Department, Faculty of Engineering, Minia University, Minia, Egypt.

## **PROFESSIONAL EXPERIENCE**

- 8/2010- present Head of Automotive and Tractor Eng. Dept. Faculty of Eng., Minia University, Minia, Egypt
- 8/2000 – 8/2010 Professor, Department of Automotive Technology, College of Technology – Makkah, Saudi Arabia.

5/2000 – 8/2000	Associate Professor, Automotive and Tractor Engineering Department, Faculty of Engineering, Minia University, Minia, Egypt.
5/1995 – 5/2000	Assistant Professor, Automotive and Tractor Engineering Department, Faculty of Engineering, Minia University, Minia, Egypt.
5/2010- Now	Professor, Automotive and Tractor Engineering Department, Faculty of Engineering, Minia University, Minia, Egypt.
8/1991 – 5/1995	Assistant Lecturer, Automotive and Tractor Engineering Department, Faculty of Engineering, Minia University, Minia, Egypt.
1986 – 8/1991	Instructor, Automotive and Tractor Engineering Department, Faculty of Engineering, Minia University, Minia, Egypt.

### **RESEARCH INTERESTS**

Vehicle Ride Comfort, Active Suspension System Design and Control, Noise and Vibration Control, Computer Programming, Vehicle Mathematical Modeling, Vehicle Performance and Control, Vehicle Pollution Control.

### **COURSES TAUGHT**

- Vehicle Dynamics
- Vehicle handling
- Tractors
- Automotive Design
- Digital control
- Pollution Control
- Hydraulic and pneumatic system
- Compressed natural gas fuelled
- Automobile Maintenance and Repair
- Thermodynamic
- Heat transfer
- Engine design
- Chassis design
- Strength of materials
- Testing of Vehicle System Performance
- Engines
- Tyres models
- Off road

- Finit element
- Road surface
- Suspension and Steering Systems
- AMBULANCE STRETCHER
- Computer Programming and Application (Fortran and C Languages.....etc.)
- Mechanical Vibration
- Noise

## **REFERENCES**

Professor D.A. Crola

Department of Mechanical Engineering,  
Leeds University, Leeds LS2 9JT, UK.

Professor F.M. El-Sayed

Automotive and Tractor Engineering  
Department, Faculty of Engineering, Minia  
University, Minia, Egypt.

Professor S.A. Abou-El-Seoud

Automotive and Tractor Engineering Department, Faculty of  
Engineering, El-Matria, Helwan University, Cairo, Egypt.

Professor K.A. Abd-El-Hakim

Automotive and Tractor Engineering Department, Faculty of  
Engineering, Minia University, Minia, Egypt.

Professor S.M. Mostafa

Automotive and Tractor Engineering Department, Faculty of  
Engineering, Minia University, Minia, Egypt.

Dean, College of Technology – Makkah,

College of Technology – Makkah,  
P.O. Box 840, Makkah, Saudi Arabia.

## **LIST OF PUBLICATION**

1. **“The influence of front axle vibration on vehicle ride comfort”  
The Bulletin of the Faculty of Eng. And Tech., Minia University,  
Minia, Egypt 1991.**
2. **“Theoretical prediction of the performance of switchable damper  
suspension systems” Proceeding of 6 th AMME Confer., 3-5 May,  
1994.**
3. **“Semi-Active suspension system with preview control based on a  
quarter car model” The Bulletin of the Faculty of Eng. And Tech.,  
Minia University, Minia, Egypt, 1994.**

4. **“The experimental investigation of a three-state switchable damper characteristics” The Bulletin of the Faculty of Eng. And Tech., Minia University, Minia, Egypt, 1995.**
5. **“An experimental and theoretical study of a switchable damper” SAE No. 960937, USA, 1996.**
6. **“Adaptive control strategies for a switchable damper suspension system” SAE No. 960939, USA, 1996.**
7. **“Active engine mounting and its influence on vehicle ride comfort” The Bulletin of the Faculty of Eng. And Tech., Minia University, Minia, Egypt, Vol. 15, No. 2 Dec., 1995.**
8. **“Interior car noise characteristics” The Bulletin of the Faculty of Eng. And Tech., Minia University, Minia, Egypt, Vol. 15, No. 2 Dec., 1995.**
9. **“Twin-Accumulator suspension system” SAE No. 970384, 1997.**
10. **“Theoretical prediction analysis for a tractor cab interior air-born noise” Scientific and Mechanical Eng., Ain-Shams University, ISSN 1110-1385, part II : Electrical and Mechanical Engineering Physics and Mathematics, Vol. 32, No. 30, 1997.**
11. **“Engine mount for improving vehicle ride performance” ISTVS Conference Italy, Oct., 1997.**
12. **“Noise control for agricultural tractor cab structure” Al-Azhar Eng. Fifth International Conference (AEIC’97), Dec. 19-22, 1997.**
13. **“A theoretical study for the hydro-pneumatic semi-active suspension system with preview” Heavy Vehicle Systems, Int. J. of Vehicle Design, Vol. 5 No. 2 pp 167-181, 1998.**
14. **“The performance of gasoline and compressed natural gas fuelled passenger car” Engineering and Environment Conference, Faculty of Engineering Ain Shams University, 9-10 May, 1998.**
15. **“Noise prediction within agricultural tractor cab” Proceeding of the 8 th Int. AMME Conference, 12-14 May, 1998.**
16. **“The influence of suspension component on hymen being vibration response” Proceeding of the 8 th Int. AMME Conference, 12-14 May, 19998.**
17. **“Utilizing natural gas fuel to improve engine noise, vibration and emission”**
18. **“Continuously variable damper suspension system” under published in Vehicle System Dynamic**
19. **“Characteristics of agriculture tractor interior noise” Heavy Vehicle Systems Design.**
20. **“Agricultural tractor cab suspension to improve ride comfort” 32 nd ISATA, Vienna, Austria, 14-18 th June, 1999.**

21. **“Application of active suspension system on ambulance stretcher” The First Minia International Conference for Advanced Trends in Eng. MICATE’99, 14-16 March 1999.**
22. **“Vehicle performance and exhaust emission on road” The Tenth International Pacific Conference on Automotive Eng. IPC-10, May 23-28, 1999.**
23. **“Modification of tractor ride vibration model” Third International Conference on Eng. Research ICER,99, Port-Said, 9-11 November, 1999.**
24. **Ali M. Abd-El-Tawwab "AMBULANCE STRETCHER with active control isolator SYSTEM" Journal of Low Frequency Noise, Vibration and Active Control Vol. 20 Number 4, 2001.**
25. **Ali M. Abd-El-Tawwab " Semi-active twin-accumulator suspension system" SAE 2002-01-0985 Detroit, Michigan< March 4-7, 2002.**
26. **Ali M. Abd-El-Tawwab "SEMI-ACTIVE TWIN ACCUMULATOR SUSPENSION SYSTEM WITH WHEEL BASE PREVIEW FOR A HALF VEHICLE MODEL " under published**
27. **Ali M. Abd-El-Tawwab "PASSIVE SUSPENSION SYSTEM OPTIMIZATION BASED ON QUARTER CAR MODEL" under published**
28. **Ali M. Abd-El-Tawwab "Effect of rolling resistance on ride comfort and fuel consumption with different tires" under published**
29. **Ali M. Abd-El-Tawwab "New concept of a hydraulic variable damping suspension control to improve vehicle ride comfort" The Bulletin of the Faculty of Eng., Minia University, Minia Egypt, Vol. No. 23, april, 2004.**
30. **Ali M. Abd-El-Tawwab, M.M.M. Salam & K.A. Abd-El-Gawwad "An experimental and theoretical study for advanced hydro-pneumatic passive suspension system" The Minia International Conference in Engineering 2005.**
31. **Ali M. Abd-El-Tawwab and Hilal A. Abdel-Wali "Power Consumption in Hydraulic Active Suspension System" Kuwait International Conference in Engineering 2005.**
32. **Ali M. Abd-El-Tawwab "Twin accumulator semi active suspension system with preview control" under published**
33. **Ali M. Abd-El-Tawwab "PASSIVE SUSPENSION SYSTEM OPTIMIZATION BASED ON QUARTER CAR MODEL" under published**



- 34. Ali M. Abd-El-Tawwab "SEMI-ACTIVE TWIN ACCUMULATOR SUSPENSION SYSTEM WITH WHEEL BASE PREVIEW FOR A HALF VEHICLE MODEL" under published**
- 35. Ali M. Abd-El-Tawwab "AMBULANCE STRETCHER with active control isolator SYSTEM " under published**