



# CURRICULUM VITAE

## PERSONAL DETAILS

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**Date of Birth:** 23.05.51

**Qualifications:** B.A. Environmental Sciences  
M.Sc. Geophysics

**Affiliations:** Member, Institute of Explosives Engineers  
Member, International Society of Explosives Engineers (USA)  
Member, Institute of Quarrying

## EXPERIENCE

### 1991 to present **VIBROCK LIMITED - TECHNICAL DIRECTOR**

VibroRock Limited is a company which provides a wide range of environmental services with specific expertise in the environmental implications of the use of explosives and heavy earth moving plant.

My experience in these fields dates from 1977 when I joined a recently formed company of noise and vibration consultants. In 1979 I was promoted to Operations Manager and in 1986 was promoted to Senior Technical Consultant.

During my 14 years with this consultancy and subsequent years with Vibrock Limited I have been involved in an extensive range of problems associated with ground and airborne vibrations generated from impulsive sources. This has involved the collection and collation of data to present as an expert witness to Courts of Inquiry on behalf of the British Coal Opencast, and private quarrying and operating companies, advising on explosive charge weights for the protection of a wide variety of structures such as oil and gas pipe lines, oil storage tanks, reservoirs, computer and other electronic installations, private housing, offices, factories etc and investigative studies into factors which affect the magnitude of air overpressure and ground vibration around surface mineral workings.

I undertake predictions of plant noise relative to quarries, opencast coal sites and civil engineering works and on many occasions have appeared at Public Inquiries as an expert witness concerning these matters.

I also undertake vibration predictions relative to the demolition of structures such as those associated with power stations, bridges, multi-storey blocks of flats, etc prior to permission being granted which is then related to the possibility of structural damage from this activity. Likewise I monitor and predict vibration effects from piling operations in relation to their damage potential.

I also attend various British Standard meetings discussing environmental aspects of blast induced vibration, and am co-author of the revised BS 6472 document concerning human response to vibration. I also wrote the Code of Good Practice concerning ground and airborne vibration from the use of explosives on behalf of the Federation of European Explosives Manufacturers and was on the committee responsible for the production of BS 7385: 1993 regarding damage levels from groundborne vibration.

I have completed a Research Project on behalf of the Department of the Environment, Transport and the Regions studying the environmental effects of blasting from surface mineral workings.

I regularly give technical lectures on the environmental aspects of vibration at training seminars organised by such bodies that include the Institute of Explosives Engineers.

#### **1973 to 1977**

Geophysical Research at Leicester University investigating the crustal structure of the East Africa Rift Valley by means of seismic and gravity surveys.

A list of Technical Papers is attached.

## TECHNICAL PAPERS

1. BLUNDELL, D.J., GARSIDE, A.W., WILTON, T.J. 1974  
Geophysical Surveys across the Centre of the Roman Fort at Watercrock, Kendal  
*Prospezioni Archeologiche* 9 35 – 45
2. WILTON, T.J. 1977  
KRISP 1975. Seismic Profiles within the Gregory Rift Valley, Kenya (Abstract)  
*Geophys. J.R. Astr. Soc.* 49 287
3. BROADHURST, K.A., WILTON, T.J. 1977  
Blasting Vibration and Noise - A Comprehensive Review
4. BROADHURST, K.A., WILTON, T.J. 1978  
Blasting Vibration and Noise  
*The Journal of the Environmental Health Officers Association* 86 No. 6 126 – 129
5. BROADHURST, K.A., WILTON, T.J. 1979  
How to Avoid Complaints and Property Damage when Blasting  
*World Construction, August 1979* 47 – 50
6. WILTON, T.J. 1981  
Human Response to Ground and Airborne Vibration - A Case History  
*Proceedings of UK Meeting, Human Response to Vibration, Herriot-Watt University, Edinburgh*  
19 – 24
7. SWAIN, C.J., KHAN, M.A., WILTON, T.J., MAGUIRE, P.K.H., GRIFFITHS, D.H. 1981  
Seismic and Gravity Surveys in the Lake Baringo - Tugen Hills area, Kenya Rift Valley  
*J. Geol. Soc. London* 138 93 – 102
8. BROADHURST, K.A., WILTON, T.J. 1981  
Environmental Aspects of Blasting in the United Kingdom  
*Proc. 7th Conf. on Explosives and Blasting Technique, Pheonix* 1 – 9
9. LANDE, G., CLARKE, D., WILTON, T.J. 1982  
Controlled Tunnel Blasting  
*Tunnels and Tunnelling* 14 No. 9 34 – 36
10. BROADHURST, K.A., WILTON, T.J. 1983  
Opencast Mining and Quarrying and Other Activities using Explosives - an Assessment of Human and Physical Impact  
*Proceedings of Inter-Noise* 83 2 969 – 72
11. WILTON, T.J. 1984  
Air Overpressure from Blasting

*Quarry Management 11 No. 10 657 – 62*

12. BROADHURST, K.A., WILTON, T.J., HIGGINS, J.P. 1984  
Review of Current Standards and Recommendations for Vibration and Noise  
*Trans. Instn. Min. Metall, (Sect. A: Min. Industry) 93 A210 – 13*

12a. Reprinted in:-  
*Hong Kong Contractor June 1984 15 – 18*

13. BROADHURST, K.A., WILTON, T.J. 1985  
Blast Induced Ground Vibration and Air Overpressure - Terminology Standards and Control

14. WILTON, T.J. 1985  
Air Overpressure from Blasting  
*Explosives Engineer Vol. 1 No. 4 86 - 91*

15. WILTON, T.J., HILLS, R.L. 1986  
Blast Vibration Monitoring on Anchored Retaining Walls and within Boreholes  
*Proc. Conf. on Rock Engineering and Excavation in an Urban Environment. Inst. Min. Metall. Hong Kong 421 - 427*

16. WILTON, T.J. 1986  
Air Overpressure from Blasting  
*Hong Kong Contractor, October 1986, 7 - 10*

17. WILTON, T.J., HOGG, D.J. 1987  
Good Vibrations  
*Mine and Quarry 16 No. 1 51 - 52*

18. WILTON, T.J. 1991  
The Air Overpressure Problem  
*Quarry Management 1991 Vol. 18 No. 7 25 - 27*

18a. Reprinted in:-  
*Explosives Engineering, December 1991 11 - 14*

19. JOHNSON, D.B., WILTON, T.J. 1992  
Blast Induced Vibration - Applicable British Standards  
*Environmental Manager's Journal, Vol. 1 No. 1 17 - 18*

20. WILTON, T.J. 1992  
Blast Vibration Criteria - How Safe Should They Be?  
*SECED Newsletter*

21. WILTON, T.J., JOHNSON, D.B. 1992  
Blast Vibration - Effects, Measurement and Control  
*Part 1 Explosives Engineering, December 1992 10 - 18*  
*Part 2 Explosives Engineering, April 1993 28 - 34*

22. WILTON, T.J. 1995  
Monitoring Explosions  
*Proc. Conf. On Modern Demolition and Explosives*  
*New College, Oxford, 77 - 79*
23. WILTON, T.J., JOHNSON, D.B., et al.  
The Environmental Effects of Production Blasting  
from Surface Mineral Workings, DETR.  
*TSO, 1998, ISBN 011 7534129*
24. WILTON, T.J., HOGG, D.J.  
Environmental Risk Assessment for the Demolition of Structures  
by the Controlled Use of Explosive Charges  
*Proc. Conf. Explo 98*
25. WILTON, T.J.  
BS 6472: Fact or Fiction?  
*Proc. Institute of Acoustics. Vol 23 Part 7, 2001*
26. WILTON, T.J.  
Respirable Crystalline Silica: Are We Exposed  
*QPA Health, Safety and Environmental Seminar, Perth, 2002*
27. WILTON, T.J., HOGG, D.J.  
Stimulation by third party – the successful way to satisfy complainants  
*Explosives Engineering, September 2003, 12 – 13*
28. WILTON, T.J., JOHNSON, D.B. 2007  
Environmental Effects of Quarry Blasting.  
The Institute of Quarrying, Environmental Management