

Poznań, September 2005



Curriculum Vitae

Czesław CEMPEL was born in 1938 in Biskupice, West Poland. During the education process he has received the following academic degrees:

- Master of Physics in Acoustic and Vibration in 1962, at Mickiewicz University in Poznań – Poland
- Doctor of Technical Sciences (Ph D) in 1968, at Poznań University of Technology
- Science Doctor (habilitation) in 1971, at Poznań University of Technology
- Associate Professor in Technical Sciences in 1977, in Poznań University of Technology, conferred by State President of Poland
- Full Professor in 1985, as above.

Since 1962 he is working as staff the member of Mickiewicz University, and after 1964 at Poznań University of Technology, having served in different scientific and academic duties. Since 1974 he is a leader of the group of System Dynamics and Vibroacoustics, and also vice director of Applied Mechanics Institute, latter on also as director of this Institute. He was the Dean of Mechanical Engineering and Management Faculty in 1993 – 1999. In 1991 he was elected as the member of State Research Committee, and currently third time for the new cadency (2004). He is also the elected member of Polish Academy of Science (1994), Engineering Academy in Poland (1998), Scientific – Medical Network in England (1993), Euroscience and Euromech.

In recognition of his contribution to engineering sciences he has received the titles of **doctor honoris causa** from Szczecin University of Technology (1996) and recently from Cracow Mining Academy Poland (2005).

He is the author of more than 360 papers, including 13 books, on vibration and systems condition monitoring, systems theory and systems engineering, and science research methodology. Aiming to help students in learning of engineering by e-learning he maintains Home Page of the Vibroacoustic Group (<http://neur.am.put.pozna.pl>), where several e-books and student e-textbooks are posted.

His CV is published by International Biographical Center – England, Who is Who in the World - USA, and other Polish equivalent sources.

A brief characteristics of System Dynamics and Vibroacoustics Group

The Group was established in 1974 for the research and teaching in machine dynamics, vibration and noise of machinery, human and environment (Vibroacoustics), and machine condition monitoring. Numerous books, papers, reports, patent application, and student textbook was elaborated and published since that time. Currently the staff of the group includes; one full professor as the leader of the group, one associate professor as the leader of Dynamics and Biomechanics Laboratory, working mainly with the dynamics of hand held tools and influence of vibration on humans as machine users. There are also Diagnostic Laboratory – working with the condition monitoring of machines, buildings and systems, Vibroacoustics Laboratory, working with noise of machines and the environment. Altogether the group consist of 14 permanent staff, including 4 technicians, and additionally two PhD students.

Some recent books and papers.

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2. Cempel C. **Vibroacoustic Condition Monitoring**, Ellis Horwood, Chichester - New York, 1991, p212.
3. Natke H. G., Cempel C., **Model - Aided Diagnosis of Mechanical Systems**, Springer Verlag, New York - Heidelberg, 1997, p 300.
4. Cempel C., Fundamentals of Vibroacoustical Condition Monitoring, chapter 13, pp 324 - 253 in: **Handbook of Condition Monitoring**, edited by A. Davies, Chapman and Hall, London, 1998, p 565.
5. Editor of the special issue of: **Bulletin of the Polish Academy of Sciences – Technical Sciences**, Vol. 49 (2), No 2, 2001 – devoted to **Systems Condition Monitoring**.
6. Natke H. G., Cempel C., Holistic Modeling as a Tool for the diagnosis of Critical Complex Systems, **Automatica**, Vol. 32, No 1, 1996, pp 89 – 94.
7. Cempel C., Natke H. G., Holistic Dynamics of Systems, **Journal of Systems Engineering**, Vol 6, 1996, pp 33 – 45.
8. Cempel C., Natke H. G., The Modeling of Energy Transforming and Energy Recycling Systems, **Journal of Systems Engineering**, Vol. 6, 1996, pp 79 – 88.
9. Cempel C., Natke H. G., Tabaszewski M., A Passive Diagnostic Experiment with Ergodic Properties, **Mechanical Systems and Signal Processing**, vol. 11, No 1, 1997, pp 107 – 117.
10. Natke H. G., Cempel C., Model Based Diagnosis – Methods and Experience, **51 – th Meeting of the Society for Machinery Failure Prevention Technology**, Virginia Beach, April 1997, pp 705 – 711.
11. Cempel C., The Life and the Behavior of the Energy Processor, **Advances in System Science and Applications**, Special Issue, 1997, pp 271 – 277.
12. Cempel C., Natke H.G., Symptom Reliability and Hazard in Systems Condition Monitoring, **Acoustical and Vibratory Surveillance Methods and Diagnostic Techniques Conference**, Senlis, France, October 1998, pp 671-679.
13. Cempel C., Application of Holistic Modelling and Singular Value Decomposition in Systems Condition Monitoring, **Materialy Konferencji Diagnostyka Maszyn**, Węgierska Górką, March 1999.
14. Natke. H. G., Cempel C., Holistic Dynamics and Subsystems Modelling: Principles, **International Journal of System Science**, vol 30, no 3, pp 283 - 293, 1999.
15. Cempel C., Natke H. G., Symptom Reliability and Hazard in Systems Condition Monitoring, Bulletin S. F. M. , **Revue Francaise de Mechanique**, 1999, no 2, pp 115 - 120.
16. Cempel C., Innovative Developments in Systems Condition Monitoring, Invited paper, **Proceedings of DAMAS 99**, Dublin, June 1999, pp 172 -188.
17. Cempel C., Energy Models of Processes and Systems in Operation, **International Workshop - Modelling and Reality**, Hannover -1998, pp 2 -29.
18. Cempel C., Modelling and Data Mining in Vibration Condition Monitoring, **9 th International Conference of TC10 IMEKO**, Wrocław, September 1999, pp 33 - 46.
19. Cempel C. Nanonauka – Nanotechnologia; źródła i perspektywy, **Nauka**, Nr 3, 1999, pp 177 - 186.
20. Natke H. G., Cempel C., Natural and Technical Evolution: Trend Investigation Process, **Systems**, Vol. 4, No 1 –2, 1999, pp 91 – 105.

21. Cempel C., Natke H. G., Yao J. P. T., Symptom Reliability and Hazard for Systems condition Monitoring, **Mechanical Systems and Signal Processing**, 2000, Vol. 14, No 3, pp 495 – 505.
22. Cempel C., Life, Dynamics and Condition Monitoring of Mechanical Systems in Operation, **Opening Lecture to II–nd International Congress on Diagnostics**, Warsaw, September 2000.
23. Cempel C. Signals, Symptoms, Faults; Condition Oriented Monitoring of Systems in Operation, **Key Note Lecture of Conference; Modelling and Reality**, Hannover, October 2000.
24. Cempel C., Natke H. G., Energy Model of Social System with Production and Recycling - Eco Energy Processor, **International Journal of System Science**, Vol. 33, No 2, pp87 – 95, 2002.
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27. Cempel C., Reduction of Redundancy of Symptom Observation Space in Systems Condition Monitoring, **Bulletin of the Polish Academy of Sciences, Technical Sciences**, Vol 49, No 2, 2001.
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31. Golec M., Golec Z., Cempel C., Noise of wind power turbine sets, **Mechanika**, ZN AGH, Vol. 23, No 2, 2004, s 169 – 176.
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