? Questions: "Acoustic Knowledge" - English

1. What is the difference in the propagation of sound waves and electromagnetic waves?

UdK Berlin Sengpie
10.96 F + A

- 2. What does the speed of sound depend on?
- 3. What is the speed of sound c in the medium air at 20°C and at 0°C?
- 4. How many centimeters path length does the sound change in a second when the temperature increases 1 degree?
- 5. What is the speed of propagation of electromagnetic waves and of light waves in vacuum?
- **6.** What is meant by sound pressure?
- 7. What sound pressure receivers do you know?
- 8. What is meant by sound velocity?
- 9. Microphone developers are familiar with the term "pressure gradient". What does this term mean?
- 10. What are the various sound levels and their reference sizes? Name four of them.Sound level Reference sizes (field size as rms value)

- 1.
- 2.
- 3.
- 4.
- 11. A sound pressure of $p=0.5~{\rm N/m^2}=0.5~{\rm Pa}$ is measured by a microphone. How much is the sound pressure level $L_{\rm p}$?
- **12**. How can the sound propagation be affected?
- 13. What is meant by the word "level or a measure", and what use is the introduction of these calculation sizes?
- **14**. How do the curves of equal loudness level differ from the rating curves like dBA?
- **15**. What level of compensation does the A-weighting require according to IEC 651 (DIN 45 633) with a sound at 100 Hz?