



MASTER THESIS

Analysis of Acoustic Emissions along Lifetime Test

Are you looking for an opportunity to write your thesis in an industrial environment or obtain valuable industry experience, during or after your technical education? Here is one of many interesting topics we have on offer. We are also very open to your own ideas in order to create a matching opportunity for you at VAT.

Innovation has always been the driving force at VAT since the company was founded over 50 years ago. This has made us the world leader in vacuum valves and vacuum sealing technology. This pioneering spirit motivates us daily to meet our customers' requirements with enthusiasm. Together with our employees we stand for passion, innovation and quality. VAT is headquartered in Haag (Switzerland) and employs approximately 2 000 people worldwide. It has production centers in Haag (Switzerland), Penang (Malaysia) and Arad (Romania) as well as a production facility in Xinwu (Taiwan). With our customers mainly being situated in the United States and Asia, this provides a great opportunity to start an international career.

What you will explore:

VAT is always searching for new methods & techniques in order to characterize products over their lifetime. In order to get an early stage information that a product or part is going to wear out, acoustic emissions measurements can be used to look into the structural properties of parts and give an early stage information. Development of a measurement setup.

- Measurement of acoustic emissions along long-term test
- Characterize different failure mechanism in regard of acoustic emission
- Show influences of temperature to wear-out mechanisms

What you will need:

- Knowledge of electronics, mechatronics, software development
- Knowledge of sensor technology and electrical integration
- Programming skills as an advantage

Are You Ready for the Challenge?

Then we look forward to receiving your **electronic application sent to André Gahler.**

E-Mail: a.gahler@vat.ch

Telephone Number: +41 81 772 48 53