

Register online **NOW**.  
<https://www.laschet.com/en/seminars/>



# Rotordynamics & Bearings

Basics & Theory / Practical Applications & Case Studies

## 14<sup>th</sup> INTERNATIONAL SEMINAR & SHORT COURSE

**10 - 13 October 2022** – Leonardo Hotel Köln, Cologne / GERMANY

A cooperation between RBTS, USA & LASCHET CONSULTING, Germany

This INTERNATIONAL SEMINAR & SHORT COURSE is dedicated to engineers and technical managers who are involved in **ROTATING MACHINERY DYNAMICS** design, operation, maintenance, diagnosis, and trouble shooting, with emphasis on **machinery rotor dynamics (LATERAL VIBRATION analysis)**, **drive train dynamics (TORSIONAL VIBRATION analysis)**, and **bearing systems (FLUID-FILM BEARINGS)**. Course coverage of the field is illustrated by the presentation of real life case histories and the application of advanced technologies for the modeling, analyses, and trouble shooting real life bearings and vibration problems.

This seminar is NOT an ARMD software user training but a **TECHNOLOGY TRANSFER** and is therefore dedicated to all engineers interested in the dynamics of rotating machinery, independent of the use of a software tool. No previous experiences are required – just register and come to the seminar to understand the world of vibrations, and above all how to solve and avoid vibration problems in rotating machinery.

**Seminar Days** (Note: All sessions are in English language only. There are 2 parallel sessions on the 4<sup>th</sup> day.)

|  |  |
|--|--|
| <b>1<sup>st</sup> Day:</b> 10 Oct 2022 (Monday)    | <b>Seminar</b> "FLUID-FILM BEARINGS" (Technology & Applications)   |
| <b>2<sup>nd</sup> Day:</b> 11 Oct 2022 (Tuesday)   | <b>Seminar</b> "ROTOR DYNAMICS" (Part 1: Basics & Technology)  |
| <b>3<sup>rd</sup> Day:</b> 12 Oct 2022 (Wednesday) | <b>Seminar</b> "ROTOR DYNAMICS" (Part 2: Applications & Case Studies)  |
| <b>4<sup>th</sup> Day:</b> 13 Oct 2022 (Thursday)  | <u>Choice of TWO (2) parallel sessions:</u><br><b>Seminar</b> "TORSIONAL VIBRATIONS" (Basics & Applications)<br><b>Workshop</b> "ARMD SOFTWARE APPLICATIONS" |

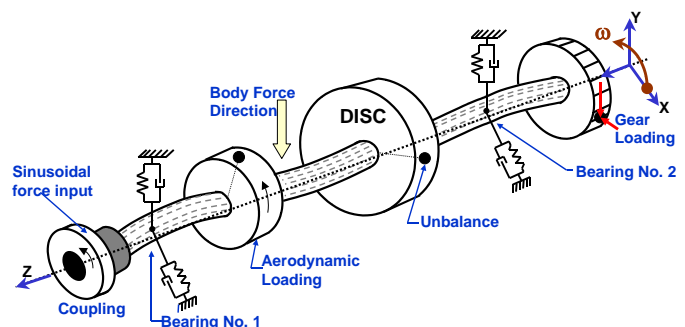
This seminar is presented by **Victor Obeid**, who is a rotordynamic & fluid-film bearing specialist with acknowledged high reputation worldwide. He is also head of:

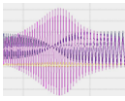
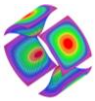
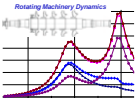
**RBTS, Inc. – 1041 West Bridge Street – Phoenixville, PA 19460 / U.S.A. – [www.rbts.com](http://www.rbts.com)**

LASCHET is RBTS ' partner in Europe and official distributor of the ARMD software and therefore your contact partner for software purchase and support. LASCHET also offers the associated **engineering services worldwide**.

Please use our **ONLINE REGISTRATION** form:  
<https://www.laschet.com/en/seminars/>.

Detailed seminar brochure is also available as download from this web site.





**Register online NOW.**  
<https://www.laschet.com/en/seminars/>



## About the Course

This course is presented by **Victor Obeid (RBTS, Inc. / USA)** and designed for engineers and technical managers who are involved in **rotating machinery design, operation, maintenance, diagnosis, and trouble shooting**, with emphasis on machinery **rotor dynamics (analysis of lateral vibrations)**, drive train **torsional vibrations** and **bearing systems** that support, guide, and locate the rotating assembly.

The course is designed to introduce the **theory and practice** of vibration analysis in rotating machinery ("**Rotor Dynamics**") from fundamental principles through present state-of-the-art analytical methodology for the solution of common, as well as, unique machinery vibration problems (for example in couplings, gears, or cracks in rotors). The discussion of special and advanced topics is planned as well.



Design consideration and application of **fluid-film bearings** will be discussed along with a **presentation of practical examples and case histories** for many industrial applications.

The **interacting influence of bearings on the dynamic behavior (rotor dynamics) of machinery** will be reviewed and illustrated by the construction of analytical models, and evaluated by PC-implemented computerized solutions. Participants are encouraged to present problems to be discussed. Informal technical sessions and workshops are intended to provide participants with adequate time to describe problems they have encountered in **BEARING SYSTEMS, ROTOR DYNAMICS (LATERAL VIBRATIONS), TORSIONAL VIBRATIONS**.

Computers and computer software will be available at the course for problem-solving, and for the application of **state-of-the-art computer-aided engineering of bearings and rotor dynamics**. Participants will have access to the latest release of **RBTS'** popular advanced rotating machinery dynamics software package **ARM<sup>DM</sup>**.

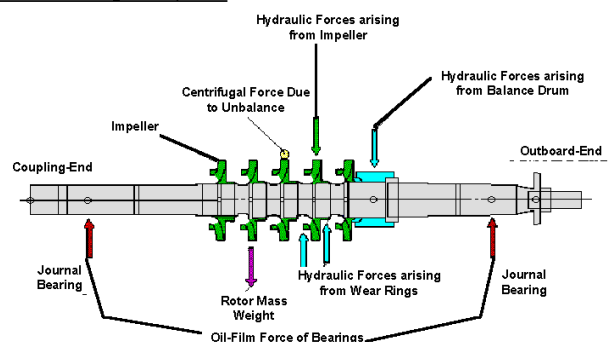
The course can be booked as a whole, but also separately for every section. You may use **LASCHET's ONLINE REGISTRATION** form that is available at <https://www.laschet.com/en/seminars/>. Having registered you will receive a confirmation and also the invoice from **LASCHET** as soon as possible. It is recommendable (and up to you) to register your accommodation directly at the mentioned hotel (venue of the seminar) as soon as possible due to the limited room contingent. If there are any questions, please contact **Dr. Andreas Laschet** (Phone: +49 2204 84-2630, E-mail: [info@laschet.com](mailto:info@laschet.com)).

Note: The actual seminar program of the seminar days may differ slightly from the current download version.

Please download the **extensive official seminar brochure** with all details concerning the program, the location, the accommodation, the travel from our **special seminar website**: <https://www.laschet.com/en/seminars/>.



Radial forces Acting on Pump Rotor



Vers. 1.0 / 2021.04