



### SCHIFFBAUTECHNISCHE GESELLSCHAFT e.V.

Bramfelder Straße 164, D-22305 Hamburg Tel. + 49(0)40-6904910

http://www.stg-online.de E-Mail: office@stg-online.de

## STG Symposium

# "Selected Topics on Strength, Vibrations and Noise" on March 13th, 2024

# in Hamburg

Technical committees: "Construction and Strength" and "Vibrations and Noise" Heads of the technical committees: Prof. D.Sc. Dipl.-Ing. S. Ehlers, Dipl.-Ing. N. Reichstein

Location: Hamburg University of Technology (Technische Universität Hamburg), Dietze-Hörsaal,

Building H, Room H0.16, Am Schwarzenberg-Campus 5, 21073 Hamburg

Language: English

#### Please register for the conference by March 8th, 2024 under www.stg-online.de

(If you have no access to the online address please contact STG under the above mentioned communication data.)

Participation fees (including lunch and drinks):

Non Member Euro 250,—
Member Euro 150,—
Pensioner Euro 75,—
Student Non Member Euro 60,—
Student Member Euro 20,—

Please transfer the fee to the following account of the Schiffbautechnische Gesellschaft e.V., Hamburg:

Commerzbank AG, Hamburg IBAN: DE02 2008 0000 0950 5714 00 BIC: DRESDEFF200

When making the transfer, please state the name of the participant and the date of the event! If registrations are cancelled after March 8th, 2024, the full conference fee must be paid. Video and audio recordings are not permitted during the event.

SCHIFFBAUTECHNISCHE GESELLSCHAFT e.V.

Prof. Dr.-Ing. Stefan Krüger Chairman of the Association Dr.-Ing. Hans Jakob Gätjens Managing Director

PROGRAM

STG Symposium
"Selected Topics on Strength, Vibrations and Noise" on March 13th, 2024 in Hamburg

08	8:30	Registration
8:	:50 – 9:00	Welcome by Sören Ehlers and Nils Reichstein
9:	:00 – 9:30	Session 1 – Strength topics Structural optimization of a large cruise ship section Carl Rupp, Technische Universität Hamburg
9:	:30 – 10:00	Strength Aspects of Wind Assisted Propulsion Systems Marcus Ihms, DNV, Hamburg
10	0:00 – 10:30	Evaluating a Simplified Beam Model for Predicting Ship Vibrations Gunnar Kistner, Universität Rostock
10	0:30 – 11:00	Coffee break
1 <sup>-</sup>	1:00 – 11:30	Session 2 – Noise and Vibration – emission reduction and alternative fuels Scrubbers, LNG tanks, and Co New vibration challenges driven by emission reduction Sebastian Knees, DNV, Hamburg
1	1:30 – 12:00	Noise and vibration characteristics of methanol engines in the maritime sector Veerappan Saravanan, Hochschule Wismar
12	2:00 – 12:30	The Influence of Propeller Retrofits in the Torsional Vibration Behaviour of Shafting in Marine Vessels Kevin Lal, Mecklenburger Metallguss GmbH, Waren
12	2:30 – 13:30	Lunch
1;	3:30 – 14:00	Session 3 – Noise and Vibration – new developments  New Design of Highly Flexible Misalignment Couplings with Improved Structure- Borne Noise Attenuating Characteristics for High Demanding Markets  Tebong Andogho, VULKAN Deutschland, Herne
	3:30 – 14:00 4:00 – 14:30	New Design of Highly Flexible Misalignment Couplings with Improved Structure- Borne Noise Attenuating Characteristics for High Demanding Markets
14		New Design of Highly Flexible Misalignment Couplings with Improved Structure-Borne Noise Attenuating Characteristics for High Demanding Markets Tebong Andogho, VULKAN Deutschland, Herne  Accelerating product development through the targeted use of simulation for complex acoustic problems in the powertrain
14	4:00 – 14:30	New Design of Highly Flexible Misalignment Couplings with Improved Structure-Borne Noise Attenuating Characteristics for High Demanding Markets Tebong Andogho, VULKAN Deutschland, Herne  Accelerating product development through the targeted use of simulation for complex acoustic problems in the powertrain Nora Yazdandoost, Geislinger GmbH, Salzburg  Experimental parameters influencing the cavitation noise of an oscillating NACA0015 hydrofoil
14	4:00 – 14:30 4:30 – 15:00	New Design of Highly Flexible Misalignment Couplings with Improved Structure-Borne Noise Attenuating Characteristics for High Demanding Markets Tebong Andogho, VULKAN Deutschland, Herne  Accelerating product development through the targeted use of simulation for complex acoustic problems in the powertrain Nora Yazdandoost, Geislinger GmbH, Salzburg  Experimental parameters influencing the cavitation noise of an oscillating NACA0015 hydrofoil Leonie Föhring, Fachhochschule Kiel
14	4:00 – 14:30 4:30 – 15:00 5:00 – 15:30	New Design of Highly Flexible Misalignment Couplings with Improved Structure-Borne Noise Attenuating Characteristics for High Demanding Markets Tebong Andogho, VULKAN Deutschland, Herne  Accelerating product development through the targeted use of simulation for complex acoustic problems in the powertrain Nora Yazdandoost, Geislinger GmbH, Salzburg  Experimental parameters influencing the cavitation noise of an oscillating NACA0015 hydrofoil Leonie Föhring, Fachhochschule Kiel  Coffee break  Session 4 – Noise and Vibration – measurement and monitoring Underwater noise radiation of fast craft: Comparison of different propulsion concepts and analysis of dominant mechanisms for noise radiation
14 19 19	4:00 – 14:30 4:30 – 15:00 5:00 – 15:30 5:30 – 16:00	New Design of Highly Flexible Misalignment Couplings with Improved Structure-Borne Noise Attenuating Characteristics for High Demanding Markets Tebong Andogho, VULKAN Deutschland, Herne  Accelerating product development through the targeted use of simulation for complex acoustic problems in the powertrain Nora Yazdandoost, Geislinger GmbH, Salzburg  Experimental parameters influencing the cavitation noise of an oscillating NACA0015 hydrofoil Leonie Föhring, Fachhochschule Kiel  Coffee break  Session 4 – Noise and Vibration – measurement and monitoring Underwater noise radiation of fast craft: Comparison of different propulsion concepts and analysis of dominant mechanisms for noise radiation Max Schuster, DW-ShipConsult GmbH, Schwentinental  Energy efficiency and URN of a ship Online monitoring on board

Laboratory tours are optional following the closing words!