# **Curriculum Vitae of Haris Stamatopoulos**

Dr.Eng., M.Eng., Dipl.Eng. (June 2025)

**Note:** This document contains <u>links</u>. Click on the <u>links</u> for more information.

# 1. Personal details

| Name                    | Haris (Charalampos) Stamatopoulos   |                  |
|-------------------------|---|------------------|
| <b>Current Position</b> | Associate Professor, NTNU   | (6.30)           |
| Date of birth           | 28 January 1984 (Patras, Greece)  | 6-               |
| Citizenship             | Greek / Norwegian   |                  |
| Work address            | NTNU, Faculty of Engineering Science <u>Department of Structural Engineering</u> , Materialteknisk, Gløshaugen, Richard Birkelands vei 1a, 7491, Trondheim. | 4                |
| Email (work)            | haris.stamatopoulos@ntnu.no   |                  |
| Phone (work)            | +47 73594675  | Links            |
| Private Address         |   | $\mathbf{D}^{G}$ |
| Email (private)         |   | NTNU             |
| Phone (private)         |   |                  |
| Languages               | Greek, English, Norwegian   | 3'   1           |
| Military duties         | Fulfilled (2008)  |                  |
|                         |   |                  |

**Areas of specialization:** Timber Engineering, Timber Connections, Seismic Analysis and Design, Structural mechanics and dynamics, Experimental testing, Finite Element analysis.

# 2. Academic Positions

| 03/2019 – Present | Associate Professor  Department of Structural Engineering, NTNU |
|-------------------|---|
| 03/2016 - 03/2019 | Postdoctoral Fellow  Department of Structural Engineering, NTNU |
| 04/2011 - 03/2016 | Ph.D. Candidate  Department of Structural Engineering, NTNU     |

# 3. Other Positions

06/2008 – 04/2011 Freelance civil and structural engineer

Duties: Design and construction supervision of buildings.

# 4. University education

| 04/2011 - 03/2016 | Doctor of Philosophy on Structural Engineering (180 ECTS)  Department of Structural Engineering, NTNU, Norway   |
|-------------------|---|
| 09/2008 - 11/2010 | Master of Engineering on Seismic Design of Structures (120 ECTS)  Department of Civil Engineering, University of Patras (Greece)  Grade: 8.50/10 - Honors                       |
| 09/2001 – 10/2007 | Civil Engineering Diploma (M.Eng. equivalent – 300 ECTS)  Department of Civil Engineering, University of Patras (Greece)  Grade: 6.95/10 – Very Good (Ranking in the upper 14%) |

# 5. Pedagogic education

2020 – 2021 Pedagogical Basic Competence Program (200 hours), NTNU

The program meets the government's requirements for pedagogical competence for employment and promotion in teaching and research positions in the university and college sector. The program consisted of an introductory part and project, and four elective modules (Attended modules: <u>Supervision</u>, ICT in learning, <u>Creating meaning by involving students in research</u>, Development of pedagogical portfolio).

2018 Teacher Training Seminar for PhD students and Post-doctoral Research Fellows

3-Days seminar Held by: NTNU, <u>Department of Education and Lifelong Learning</u>, Educational Development Unit.

# 6. Teaching experience

### As a lecturer / developer / course coordinator

|                | T' I G ATAIL  |  |
|----------------|---|--|
|                | Timber Structures 1, NTNU  Pale Gardinaton and Laterray (1999)  |  |
|                | Role: Course Coordinator and lecturer (100%).   |  |
|                | Course info: Master-level course (7.5 ETCS), approx. 60-100 students / semester   |  |
| 2017 - Present | <b>Topics:</b> Wood and engineering wood products, timber structural systems, design of cross-sections, members and connections according to Eurocode 5.                |  |
|                | *Note: Students' evaluations are given in Appendix B.   |  |
|                | <b>Teaching methods:</b> Lectures in-person, Demonstrations and presentations in class, Assignments, Video lectures, Lab demonstration of mechanical properties of wood |  |
|                | Assessment form: Final Exam   |  |
|                | <u>Timber Structures</u> , NTNU   |  |
|                | Role: Course Coordinator and lecturer (90%).  |  |
| 2025- Present  | Course info: Under-graduate course (7.5 ETCS), approx. 60 students / semester.  |  |
| 2023- Fresent  | Assessment form: Final Exam   |  |
|                | Note: This course is provided as a merged course with <u>Timber Structures 1</u> (see   |  |
|                | description above). The lectures and the exam are 85-90% common for the two courses.  |  |
|                | <u>Timber Structures 2</u> , NTNU   |  |
|                | Role (2017-2023): Lecturer and Developer (approx. 40% of the topics, 14-16  |  |
|                | hours/semester). Role (2024): Sensor and Evaluator  |  |
|                | Course info: Master-level course (7.5 ETCS), approx. 15-50 students / semester.   |  |
| 2017 – Present | Topics (2017-2023): Reinforcements, Components and Assemblies, Timber fire safety   |  |
|                | design, Lap Joints, Glued-in rods, Design against human- and wind- induced vibrations,  |  |
|                | Design of Timber Buildings.   |  |
|                | <b>Teaching methods:</b> Lectures in-person, Demonstrations and presentations in class, Assignments, Video lectures, Excursion (some years)                             |  |
|                | Assessment form: Final Exam (2017-2023), Semester Project (2024)  |  |
|                | Timber building engineering, OsloMet University   |  |
|                | <b>Role:</b> Invited Lecturer (20-28 hours/semester, approx. 50% of the course).  |  |
|                | Course info: Master-level course (10 ETCS), approx. 30-40 students / semester.  |  |
| 2023- Present  | <b>Topics:</b> Introduction to wood and engineering wood products, Design of timber cross-  |  |
|                | sections and members, Timber structural systems, Design of Cross-Laminated Timber   |  |
|                | Elements, Serviceability limit-state design: buildings (wind-induced deflections and  |  |
|                | accelerations) and floors (deflections and human-induced vibrations), Timber fire safety  |  |
|                | design, 3D Finite element analysis by use of Abaqus   |  |
|                | <b>Teaching methods:</b> On-line and physical lectures, project gatherings  |  |
|                | Assessment form: Semester project   |  |

| 2025           | Design of Timber Structures according to the new Eurocode 5  Course is funded by HKdir and developed in cooperation with prof. Tomasi at NMBU.  Role: Lecturer, developer and contribution to the funding proposal  Course info: Continuing education course for professionals (10 ETCS), 25 students.  Topics: Design of timber connections, Bracing requirements of timber structures  Teaching methods: Flipped-classroom and physical gathering (2-days)  Assessment form: Project   |
|----------------|--|
| 2016 - Present | Structural Engineering, Specialization Project, NTNU Role: Supervisor Course info: Master-level course (7.5 ETCS), approx. 2-10 students / semester Topics: In this course, the students are working with supervision on a selected topic either alone or in groups of 2-3 students. The topics vary and they may include experimental work, literature study, Finite Element analysis, analytical modelling, etc. The topic is often an introductory topic to the Master Thesis. Teaching methods: Supervision meetings Assessment form: Report |
| 2021 - 2025    | Construction Materials, NTNU Role: Lecturer (4 hours/semester). Course info: Under-graduate course (7.5 ETCS), approx. 200 students / semester. Topics: Introduction to wood as structural material. Teaching methods: Lectures in-person, Demonstrations and presentations in class, Obligatory assignments, Video lectures, Excursion (some years) Assessment form: Final Exam   |
| 2021 - 2022    | Sustainable Building Design, OsloMet University Role: Invited Lecturer (8 hours/semester). Course info: Master-level course (10 ETCS), approx. 40 students / semester. Topics: Introduction to wood and engineering wood products, Design of timber cross-sections and members, Timber structural systems. Teaching methods: On-line lectures and project gathering. Assessment form: Semester project   |

# As a teaching assistant

| 2011-2014  | Construction Materials, NTNU  Role: Teaching assistant (30-60 hours/semester).  |  |
|--|---|--|
|  | Course info: Under-graduate course (7.5 ETCS), approx. 300 students.  |  |
|  | <b>Topics:</b> Responsible for lab demonstrations of properties of wood, steel, and concrete.   |  |
| 2012 - 2013 Structural Design, Advanced Course, NTNU |   |  |
|  | Role: Teaching assistant/Lecturer (approx. 12 hours/semester).  |  |
|  | Course info: Master-level course (7.5 ETCS), approx. 70 students.   |  |
|  | <b>Topics:</b> Teaching parts of the course (Steel-concrete composites and steel joints), exercises and exam correction (partly).                                       |  |
| 2011-2012  | <b>Structural Mechanics/Dynamics courses</b> (TKT4107, TKT4116, TKT4108), NTNU <b>Role:</b> Teaching assistant, responsible for exercises and exam correction (partly). |  |

# 7. Invited lectures

- *Timber Engineering in Norway*, Haris Stamatopoulos, F. Mirko Massaro and Saule Tulebekova, Lecture for Kyoto University (2024).
- Moment resisting connections using screwed in threaded rods, Rothoschool (in Greek), Athens (2024).

- Moment resisting connections using screwed in threaded rods, Rothoschool, Trondheim (2023).
- *Timber structural systems for multi storey buildings and design issues* [in Greek]. Aristotle University, Thessaloniki, Greece (2021).
- Timber Buildings: Modelling, Design and Challenges [in Greek], University of Thessaly (2020).
- Design Aspects of Tall Timber Buildings, Timber Buildings Seminar, OsloMet University (2020).

#### 8. Research interests

- Timber connections with threaded rods, screws or dowel-type fasteners: Experimental testing, Finite-element simulations, and analytical methods.
- Parametric analysis and design of multi-storey timber buildings with focus on serviceability and ductility requirements.
- Development of innovative moment-resisting connections for timber structures with focus on stiffness, resistance, ductility, long-term and moisture effects, variability effects and design for assembly/disassembly/reassembly.
- Experimental testing and 3D Finite Element modelling of various timber components (examples: compression perpendicular to grain, carpentry joints).
- Dynamic testing and modelling of timber components and structures: floors, mock-up structures and buildings.

### 9. Supervision of Ph.D. students

- (Main Supervisor) **Osama Abdelfattah Hegeir** (2020-2024). <u>Moment-resisting timber frames</u> combined with cross laminated timber walls for multistorey timber buildings (NTNU).
- (Main Supervisor) **Alisa Tanja Resch** (2022-present). Working title: *Increasing material circularity within of timber structural systems* (NTNU).
- (Co-Supervisor) **Aivars Vilguts** (2016-2021). <u>Moment-resisting timber frames with semi-rigid connections</u> (NTNU).

# 10. Supervision of Master Theses

The following Table summarizes the number of Master Theses and my role (main supervisor/co-supervisor/examiner) per year. A complete list of the Theses is given in Appendix A.

|       | Main Supervisor         | Co-Supervisor           | Examiner <sup>a</sup>   |  |
|-------|-------------------------|-------------------------|-------------------------|--|
| 2015  | -                       | 1 Thesis / 2 students   | -                       |  |
| 2016  | -                       | 2 Theses / 3 students   | -                       |  |
| 2017  | -                       | 4 Theses / 8 students   | -                       |  |
| 2018  | -                       | 4 Theses / 7 students   | -                       |  |
| 2019  | 1 Thesis / 1 student    | 2 Theses / 5 students   | -                       |  |
| 2020  | 6 Theses / 10 students  | -                       | 4 Theses / 8 students   |  |
| 2021  | 4 Theses / 8 students   | -                       | 6 Theses / 10 students  |  |
| 2022  | 6 Theses / 9 students   | 2 Theses / 4 students   | 5 Theses / 11 students  |  |
| 2023  | 5 Theses / 6 students   | 1 Theses / 2 students   | 4 Theses / 7 students   |  |
| 2024  | 3 Theses / 6 students   | 2 Theses / 2 students   | 1 Thesis / 1 student    |  |
| Total | 25 Theses / 40 students | 18 Theses / 33 students | 20 Theses / 37 students |  |

<sup>&</sup>lt;sup>a</sup> Since 2020, the Master Theses are graded by a committee consisting of one internal and one external examiner (the supervisor cannot act as examiner). The numbers in this column are the sum of theses/students where I was either internal or external examiner. A full list is given in Appendix A. Students feedback is given in Appendix B

#### 11. Participation in Ph.D. assessment committees

- (Evaluation committee) **Joan Gikonyo (2025)**: Finite Element modelling of dowel-type connections in CLT structures From timber embedment behaviour to CLT shear walls, Linnaeus University, Sweden
- (Administrator) **Frida Liljefors (2025)**: *Improved decision support for bridge safety assessment and maintenance by probabilistic methods*. NTNU.
- (Administrator) **Mariia Zakharenko (2024)**: Load model for enhanced fatigue life estimation of Norwegian railway bridges: calibration, application, and uncertainties. NTNU.
- (Evaluation committee) **Shaheda T. Akter (2022)**: Experimental characterization and numerical modelling of compression perpendicular to the grain in wood and cross-laminated timber, Linnaeus University, Sweden.
- (Administrator) Sveinung Ørjan Nesheim (2021): Competitive timber floor elements, NTNU.
- (Administrator) **Katarzyna Ostapska (2020)**: *Fracture in wood of Norway spruce. Experimental and numerical study*, NTNU.
- (Administrator) **Francesco Mirko Massaro (2019)**: *Stress-Laminated Timber Decks in Bridges: Prestressing system, long-term effects and modelling*, NTNU.

# 12. Participation in Committees and Membership in Organizations

- Active member of standardization committees: Committee SN/K 077: Timber Structures (national standardization committee for Eurocode 5), CEN/TC 250/SC5: Eurocode 5: Design of timber structures and CEN/TC250/SC5/WG 11: "Finite Element Based Design"
- Member of the Scientific committee of <u>World Conference on Timber Engineering WCTE 2023</u>
  <u>Oslo Norway and World Conference on Timber Engineering WCTE 2025 Brisbane, Australia.</u>
- Participating in NTNU GREEN 2050 Centre for Green Shift in the Built Environment.
- COST Action CA20139: Holistic design of taller timber buildings (2022-2025).
- Responsible for pre-approval of courses for exchange students at the department of structural engineering NTNU (2019-2020).
- COST Action FP1004: Enhance mechanical properties of timber, engineered wood products and timber structures (2012-2015).
- Member of <u>TEKNA</u> Norwegian Society of Graduate Technical and Scientific Professionals (2023present)
- Member of <u>Technical Chamber of Greece</u> (2008-present).

### 13. Participation in research projects

| 2024-2026 | CRESTIMB: InCREased Service life of innovative TIMber Building systems (CRESTIMB). Funded by the Norwegian Research Council through ForestValue2 (Horizon Europe GA no. 101094340). Total funding: 2,280,000€ (NTNU: 340,000€). Partners: VTT Technical Research Centre of Finland (Coordinator), NTNU, University of L'Aquila, University of Galway, Trinity College Dublin, University of Ljubljana, Łukasiewicz Research Network - Poznań Institute of Technology and other private partners. Role in the project: Principal Investigator/Work Package Leader/Project Proposal developer. |
|-----------|--|
| 2025      | <b>Design of Timber Structures according to the new Eurocode 5.</b> Development of continuing education course for professionals. Funded by <u>HKdir</u> and developed in cooperation with <u>prof. Tomasi</u> at NMBU. Total funding: 1.15 MNOK (NTNU: 308 kNOK). Role: developer of the project proposal and lecturer.   |
| 2024-2026 | MOMENTUM: Moment-Resisting Connections for Timber Constructions (MOMENTUM), Funded by NTNU TECHNOLOGY TRANSFER AS, Total funding: 5 MNOK. Role in the project:   |

# participant, contribution to development

| 2022-2025 | <b>LIFELINE-2050:</b> Optimal Utilization of Resources towards Neutral Climate Built Environments in Europe by 2030-2050. Funded by <i>NTNU</i> . Total funding: Six 3-year PhD positions. <b>Role in the project: Task leader, Supervisor of one PhD student.</b>  |
|-----------|---|
| 2021-2025 | Innovative steps in cultural heritage management. Funded by the Norwegian Agency for International Cooperation and Quality Enhancement in Higher Education (DIKU). Total funding: 2,950,000 NOK. Partners: NTNU, University of Tokyo, University of Tsukuba and other public partners. Role in the project: Participant.  |
| 2019-2022 | <b>DynaTTB</b> (Dynamic Response of Tall Timber Buildings under Service Load). Funded by the Norwegian Research Council through <i>ERA-NET Cofund</i> ForestValue. Total funding: 2,000,000€ (NTNU: 607,000€). Partners: RISE Research Institutes of Sweden (Coordinator), NTNU, University of Exeter, University of Ljubljana, Linnaeus University, CSTB France and other private partners. <b>Role in the project: Researcher / Contribution to the project proposal.</b> |
|           |   |
| 2016-2021 | <u>WOODSOL</u> (Wood frame solutions for free space design in urban buildings). Funded by the <u>Norwegian Research Council</u> . Total funding: 36,000,000 NOK (NTNU: 24,000,000 NOK). Partners: NTNU (Coordinator), SINTEF and other public and private partners. <b>Role in the project: Post-doctoral researcher / Contribution to the project proposal.</b>  |
| 2016-2021 | Norwegian Research Council. Total funding: 36,000,000 NOK (NTNU: 24,000,000 NOK). Partners: NTNU (Coordinator), SINTEF and other public and private partners. <b>Role in the</b>  |

# 14. Other projects

- Structural Evaluation of scene timber floors of Trøndelag Theater (2022). Funding: 100,000 NOK ('oppdragsavtale').
- Writing Book chapter *Timber Buildings in Ductility Class Medium* for *Rådgivende Ingeniørers Forening* (RIF) (2019). Funding: 30,000 NOK ('bidragsavtale').

#### 15. Other skills

- Preparation, execution, and post-processing of experiments.
- Analysis and Design: Linear and non-linear structural analysis, Static and dynamic analysis, Seismic analysis and design, Orthotropic elasticity and failure criteria.
- Standards: EN1995 and timber-related EN standards, EN1990, EN1991, EN1998.
- Finite Element Software: Abaqus, SAP2000.
- Other software: Ms office, Matlab, Maple, AutoCad.

#### 16. Reviewing activity

• Reviewer in peer-reviewed journals: Construction and Building Materials (16 reviews), Engineering Structures (9 reviews), Soil Dynamics and Earthquake Engineering (3 reviews), Journal of Materials in Civil Engineering (2 reviews), Structures and Buildings (1 review), European Journal of Wood and Wood Products (1 review), Journal of Wood Science (1 review), Wood Material Science and Engineering (2 review), International Wood Products Journal (1 review)

### 17. List of publications

# A. International peer-reviewed journals

Source for Impact Factor (IF): <a href="https://jcr.clarivate.com/jcr/browse-journals">https://jcr.clarivate.com/jcr/browse-journals</a> (2023)

- **A.22:** Stamatopoulos, H. and Massaro, F.M. Bracing stiffness requirements of members supported by discrete elastic supports. Submitted for publication.
- **A.21:** Tulebekova, S. Stamatopoulos, H. and Malo, K.A. (2025). <u>A Framework for the Estimation of Damping Ratio of Glued–Laminated Buildings by Use of Analysis in the Time Domain. Materials **2025**, 18, 1545.</u>
- **A.20:** Hegeir, A.O., Stamatopoulos, H. and Malo, K.A. (2024). <u>Parametric analysis of moment-resisting timber frames combined with cross laminated timber walls and prediction models using nonlinear regression and artificial neural networks.</u> Buildings 14 (2975). [IF: 3.1]
- A.19: Pasca, D.P, Massaro, F.M, De Santis, Y., Stamatopoulos, H., Ljungdahl, J. and Aloisio, A. (2024). <u>Deformation level and specimen geometry in compression perpendicular to the grain of solid timber, GLT and CLT timber products.</u> Engineering Structures. Volume 321, 118972. [IF: 5.6]
- **A.18:** Hegeir, A.O., Malo, K.A. and Stamatopoulos, H. (2024). <u>An innovative slip-friction moment-resisting connection using screwed-in threaded rods in cross laminated timber and steel coupling parts: <u>An experimental study.</u> Engineering Structures. Volume 318, 118654. [IF: 5.6]</u>
- **A.17:** Vilguts, A., Stamatopoulos, H. and Malo, K.A. (2024). <u>Experimental and analytical evaluation of semi-rigid timber connection with screwed-in threaded rods and steel coupling part</u>. Journal of Building Engineering. Volume 94 (109923) [IF: 6.7]
- **A.16:** Hegeir, A.O. and Stamatopoulos, H. (2024). <u>Feasibility of outrigger structural system for tall timber buildings: A numerical study</u>. International Wood Products Journal. 2024;15(1):20-38. [IF: 1.3]
- **A.15:** Hegeir, A.O. and Stamatopoulos, H. (2023). <u>Experimental investigation on axially-loaded threaded rods inserted perpendicular to grain into cross laminated timber</u>. Construction and Building Materials 408 (133740). [IF: 7.4]
- **A.14:** Stamatopoulos, H., Bjerve, J., Sagerud, E. (shared first authorship), Malo, K.A. and Rønnquist, A. (2023). <u>Dynamic tests on a long-span, stressed-skin, timber floor</u>, Wood Material Science & Engineering. [IF: 2.2]
- **A.13:** Stamatopoulos, H. and Massaro, F.M, (shared first authorship), Andersen, J. and Brekke-Rasmussen, E. (2023). <u>Finite element modelling and experimental verification of timber halved and tabled scarf joints</u>, International Wood Products Journal. 14:1 (3-12). [IF: 1.3]
- **A.12:** Vilguts, A., Nesheim, S.Ø., Stamatopoulos, H. and Malo, K.A. (2022). A study on beam-to-column moment-resisting timber connections under service load, comparing full-scale connection testing and mock-up frame assembly. European Journal of Wood and Wood Products. 80 (753–77). [IF: 2.4]
- **A.11:** Stamatopoulos, H., K.A. Malo, and A. Vilguts (2022). <u>Moment-resisting beam-to-column timber connections with inclined threaded rods: Structural concept and analysis by use of the</u>

- <u>component method</u>. Construction and Building Materials 322 (126481). <u>Corrigendum to the paper</u>. [IF: 7.4]
- A.10: Hegeir, O.A., Kvande, T., Stamatopoulos, H., Bohne, R.A. (2022). <u>Comparative Life Cycle Analysis of Timber, Steel and Reinforced Concrete Portal Frames: A Theoretical Study on a Norwegian Industrial Building.</u> Buildings, 12 (573). [IF: 3.1]
- A.09: Stamatopoulos, H., Massaro, F.M. and Qazi, J. (2022). <u>Mechanical properties of laterally loaded threaded rods embedded in softwood.</u> European Journal of Wood and Wood Products 80, (169–182). [IF: 2.4]
- **A.08:** Cao, A. and Stamatopoulos, H. (2021). <u>A theoretical study of the dynamic response of planar timber frames with semi-rigid moment-resisting connections subjected to wind loads</u>. Engineering Structures 240 (112367). [IF: 5.6]
- **A.07:** Vilguts, A., Stamatopoulos, H. and Malo, K.A. (2021). <u>Parametric analyses and feasibility study of moment-resisting timber frames under service load</u>. Engineering Structures. 228 (111583). [IF: 5.6]
- **A.06:** Shabani, A., Kioumarsi, M., Plevris, V. and Stamatopoulos, H. (2020). <u>Structural Vulnerability</u> <u>Assessment of Heritage Timber Buildings: A Methodological Proposal</u>. Forests. 11(8):881. [IF: 2.4]
- **A.05:** Stamatopoulos, H. and Malo, K.A. (2020). On strength and stiffness of screwed-in threaded rods embedded in softwood. Construction and Building Materials. 261 (119999). [IF: 7.4]
- **A.04:** Cepelka, M., Malo, K.A. and Stamatopoulos, H. (2018). Effect of rod-to-grain angle on capacity and stiffness of axially and laterally loaded long threaded rods in timber joints. European Journal of Wood and Wood Products. 76 (1311-1322). [IF: 2.4]
- **A.03:** Stamatopoulos, H. and Malo, K.A. (2018). <u>Withdrawal of pairs of threaded rods with small edge distances and spacings</u>. European Journal of Wood and Wood Products. 76 (31-42). [IF: 2.4]
- **A.02:** Stamatopoulos, H. and Malo, K.A. (2016). <u>Withdrawal stiffness of threaded rods embedded in timber elements</u>. Construction and Building Materials. 116 (263-272). [IF: 7.4]
- **A.01:** Stamatopoulos, H. and Malo, K.A. (2015). <u>Withdrawal capacity of threaded rods embedded in timber elements</u>. Construction and Building Materials. 94 (387-397). [IF: 7.4]

#### **B.** International conferences

- **B18:** Massaro, F.M., Stamatopoulos, H., Sciomenta, M., Fragiacomo, M., McGetrick, P., Łukaszewski, D., Fortino, S. Development of an innovative structural system for multistorey timber buildings with increased service life The CRESTIMB project. *World Conference on Timber Engineering, WCTE 2025.* Brisbane, Australia.
- **B.17:** Resch A. and Stamatopoulos, H. (2025). Mechanical properties of axially loaded threaded rods after dis- and reassembly. *World Conference on Timber Engineering, WCTE 2025*. Brisbane, Australia.
- B.16: Stamatopoulos, H., Hegeir, O.A. and Malo, K.A. (2023). <u>Analysis and design aspects of moment-resisting, beam-to-column, timber connections with inclined threaded rods: from fastener level to construction level.</u> World Conference on Timber Engineering, WCTE 2023. Oslo, Norway.
- **B.15:** Hegeir, O.A., Stamatopoulos, H., and Malo, K.A. (2023). <u>Serviceability performance of timber dual frame-wall structural system under wind loading</u>. *World Conference on Timber Engineering, WCTE 2023*. Oslo, Norway.
- **B.14:** Malo, K.A., Stamatopoulos, H., Massaro, F.M and Tulebekova, S. (2023). <u>Serviceability stiffness for timber connections with dowels and slotted-in steel plates</u>. *World Conference on Timber Engineering, WCTE 2023*. Oslo, Norway.
- **B.13:** Malo, K.A., Massaro, F.M and Stamatopoulos, H. (2022). Exploring fatigue rules for timber structures in Eurocode 5. 4th International Conference on Timber Bridges (ICTB), Bern, Switzerland.

- **B.12:** Cao, A. and Stamatopoulos, H. (2021). Theoretical studies of tall timber buildings subjected to service-level wind loads. *World Conference on Timber Engineering WCTE 2021*, Santiago, Chile.
- **B.11:** Abrahamsen, R. et al. (2020). <u>Dynamic response of tall timber Buildings under service load the <u>DynaTTB research program</u>. <u>EURODYN 2020 XI International Conference on Structural Dynamics</u>. Athens, Greece.</u>
- **B.10:** Stamatopoulos, H. and Malo, K.A. (2018). Wood frame solutions for free space design in urban buildings (WOODSOL). *7th Forum Wood Building Nordic*. Växjö, Sweden.
- **B.09:** Vilguts, A., Malo, K.A. and Stamatopoulos, H. (2018) Moment resisting frames and connections using threaded rods in beam-to column timber joints. *World Conference on Timber Engineering, WCTE 2018*. Seoul, Republic of Korea.
- **B.08:** Stamatopoulos, H. and Malo, K.A. (2017). Fatigue strength of axially loaded threaded rods embedded in glulam at 45° to the grain. *International Conference on Timber Bridges (ICTB 2017)*. RISE SP Rapport 2017:26. Skellefteå, Sweden.
- **B.07:** Malo, K.A. and Stamatopoulos, H. (2016). Connections with threaded rods in moment resisting frames. *World Conference on Timber Engineering, WCTE 2016*. Vienna, Austria.
- **B.06:** Stamatopoulos, H. and Malo, K.A. (2015). Characteristic withdrawal capacity and stiffness of threaded rods. 2<sup>nd</sup> meeting of the International Network on Timber Engineering Research, INTER. Paper 48-7-2. Šibenik, Croatia.
- **B.05:** Stamatopoulos, H. and Malo, K.A. (2014). Withdrawal of axially loaded connectors from timber elements Theory and validation. World conference on timber engineering, WCTE 2014. Quebec City, Canada.
- **B.04:** Stamatopoulos H. and Malo, K.A. (2013). A review on seismic response of timber frames. *2<sup>nd</sup> international conference on structures and architecture, ICSA 2013*, Edited by Paulo J. S. Cruz, CRC Press 2013, Pages 74–81, ISBN: 978-0-415-66195-9. Guimaraes, Portugal.
- **B.03:** Malo, K.A. and Stamatopoulos, H. (2012). Impact Loading and Robustness of Wooden Beam Structures. *World conference on timber engineering, WCTE 2012*. Auckland, New Zealand.
- **B.02:** Malo, K.A., Ellingsbø, P. and Stamatopoulos, H. (2011). Notes on Deformation and Ductility Requirements in Timber Structures. *CIB W-18 Meeting 44*. Paper 44-15-5. Alghero, Italy.
- **B.01:** Stamatopoulos, H. and Bazeos, N. (2011). Seismic inelastic response and ductility estimation of steel planar chevron-braced frames. *7th GRACM conference on computational mechanics*. Athens, Greece.

#### C. Theses

- **C.03:** Stamatopoulos, H. <u>Withdrawal properties of threaded rods embedded in glued-laminated timber elements</u>. (2016) [Doctoral Thesis]. Trondheim, Norway: Norwegian University of Science and Technology, ISBN 978-82-326-1437-0, Doctoral theses at NTNU, 2016:48.
- **C.02:** Stamatopoulos, H. (2010). Seismic inelastic response and ductility estimation of steel planar chevron-braced frames (in Greek). [Master Thesis]. <u>Department of Civil Engineering, University of Patras, Patras, Greece.</u>
- **C.01:** Stamatopoulos, H. (2006). Structural analysis and design of 5-floor steel structure (in Greek). [Diploma Thesis]. Department of Civil Engineering, University of Patras, Patras, Greece.

# D. Book chapters

- **D.02:** Hegeir, A.O. and Stamatopoulos, H. (2022). Moment resisting timber frames using connections based on threaded rods in <u>COST ACTION CA 20139</u>, <u>Holistic design of taller timber buildings (HELEN)</u>, <u>State-of-the-art report</u>.
- **D.01:** Stamatopoulos, H. and Malo, K.A (2017). Section 3.5 (Fasteners in wooden bridges) in *Durable Timber Bridges. Final Report and Guidelines*. <u>RISE, SP Rapport 2017:25</u>.

# E. Publications in national journals without peer-review

- **E.02:** Stamatopoulos, H. and Mantanis, G. *Tall timber buildings The case of Mjøstårnet in Norway* (in Greek). KTIPIO Journal, January 2024.
- **E.01:** Stamatopoulos H., Stamatopoulos N. Epoxy resins and their usage for repairing reinforced concrete buildings (in Greek), Journal of the Association of Civil Engineers of Greece, 2006;337:14-20. (Presentation and 1st award by the Association of Civil Engineers of Greece in the 12th student conference Repairing Constructions 2006, February 2006).

### 18. Publication Metrics

| Database                | Citations            | h-index | i10 |  |
|-------------------------|----------------------|---------|-----|--|
| Google Scholar          | 507 (441 after 2020) | 13      | 13  |  |
| <u>Scopus</u>           | 336                  | 11      | 13  |  |
| *Last updated (06/2025) |                      |         |     |  |

### **References / Year**

# **Google Scholar**

# Cited by VIEW ALL ΑII Since 2020 507 441 Citations h-index 13 13 i10-index 17 15 120 90 30

# **Scopus**



#### **Appendix A: Involvement in Master-Theses**

#### As a Main Supervisor: 26 theses (41 students)

- Ørnes Eide, H. (2025) Experimental evaluation of axial capacity and stiffness of threaded rods embedded at an angle in glue-laminated timber (**Tentative tile**).
- Bjørndal, S.G. and Skaatun, A. (2024). *A finite element study on damping of timber components with moment-resisting connections by use of dynamic analysis in a given time domain*. NTNU, Trondheim.
- Flo Hoem, L.E. and Nygård, T. (2024). *Buckling Behavior of threaded rods in Timber: An Analytical, Numerical and Experimental Investigation*. NTNU, Trondheim.
- Ghorbani, I. and Sennesvik Sund, S. (2024). *Mechanical properties of re-used, axially-loaded threaded rods embedded in glued-laminated timber*. NTNU, Trondheim.
- Andersen Torp, J. (2023). *Numerical Analysis of Threaded Rods*. NTNU, Trondheim.
- Bokalrud Kåre, S. (2023). *Eksperimentell studie av gjengestenger i CLT ved 0 og 90 grader* [Experimental study of threaded rods in CLT inserted at 0 and 90 degrees]. NTNU, Trondheim.
- Nagavelchandran, M. (2023). *Properties of Axially Loaded Fasteners: Investigation of Threaded rods embedded in Glued-Laminated Timber*. NTNU, Trondheim.
- Sadat, B. and Bjørnholm, M. (2023). *Moment-resisting timber connection using threaded rods and steel coupling parts in cross laminated timber*. NTNU, Trondheim.
- Tsegai Haile, B. (2023). Review of the new rules for connections on Eurocode 5 Part 1-1. NTNU, Trondheim.
- Blom, H.M. and Grøttebø Hellem, S. (2022). *A parametric analysis of CLT wall and outrigger structural system in tall timber buildings*. NTNU, Trondheim.
- Flaten, H. and Langvik, U. (2022). Axially loaded threaded rods in cross laminated timber for service-level loading. NTNU, Trondheim.
- Andersen, J. and Rasmussen, E.B. (2022). *Carpentry joints: Experimental and numerical analysis of the halved and tabled scarf joint*. NTNU, Trondheim.
- Sangvik, L. (2022). *Review of the proposed rules for Eurocode 5 Part 1-1, focusing on the cross-section and member verifications*. NTNU, Trondheim.
- Melandsø, M.A. (2022). *Dynamisk trykkapasitet i treverk og årringsbreddens betydning for materialegenskapene* [Dynamic compression of wood, and annual ring widths impact on material properties]. NTNU, Trondheim.
- Resch, A. (2022). An experimental investigation of the mechanical properties of axially loaded threaded rods embedded in glued-laminated timber elements. NTNU, Trondheim.
- Fossheim, L. and Sekkesæter, E. (2021). *Eksperimentell dynamisk analyse av en liten CLT-konstruksjon* [Experimental dynamic analysis of a small-scale CLT structure]. NTNU, Trondheim.
- Frette, E., Heggheim, A. and Munkeby, T. (2021). *An experimental investigation of joints with dowels and slotted-in steel plates in glulam under service load*. NTNU, Trondheim.
- Østmoe, S. (2021). *Parametrisk mulighetsstudie ved bruk av momentstive rammer i tre* [Parametric feasibility studies for the use of timber moment resisting frames]. NTNU, Trondheim.
- Irshad, A.M. and Larsen, H. (2021). *Parametric Study of a Tall Timber Building in Økern*. NTNU, Trondheim.
- Bjerve, J. and Sagerud, E. (2020). *Eksperimentell dynamisk analyse av et trebasert komposittdekke* [Experimental dynamic analysis of a timber composite floor]. NTNU, Trondheim.
- Cao, A. S. (2020). *Dynamic response of semi-rigid timber frames subjected to wind loads*. NTNU, Trondheim.
- Fjell, A. and Edvardsen Holm J.A. (2020). *Påbygg av tre i høyden på Sentralbygg 1*. [Rooftop extension of Sentralbygg 1 in timber]. NTNU, Trondheim.
- Hansen, H.H and Fridtun, S.T. (2020). *Mechanical properties of connections between glued-laminated and cross-laminated timber with inclined self-tapping screws*. NTNU, Trondheim.
- Qazi, J. (2020). *Hullkantfasthet og stivhet av gjengestenger i bartrevirke*. [Embedment strength and stiffness of threaded rods in softwood], NTNU, Trondheim.

- Ruud, A. and Øverås, V. (2020). *Ikke-lineære seismiske analyser av plane, momentstive trerammer med duktile søyle-bjelke forbindelser*. [Non-linear seismic analysis of planar moment resisting timber frames with ductile beam to column connections]. NTNU, Trondheim.
- Hulbak, O. S. (2019). Seismiske eigenskapar og duktilitetskrav til plane fleir-etasjars momentstive trerammer.
   [Seismic properties and ductility requirements for planar multi-storey moment-resisting timber frames].
   NTNU, Trondheim.

### As a Co-Supervisor: 18 theses (33 students)

- Haugset Hærdig, E. (2024). Modelling of internally reinforced timber beams with large holes. NTNU, Trondheim.
- Strand, H.A. (2024) Evaluering av trykkapasiteten til treverk på tvers av fiberretningen: En sammenligning mellom Eurokode og eksperimentelle resultater [Evaluation of compression capacity perpendicular to grain: A comparison between Eurocode and Expperimental results]. NTNU, Trondheim.
- Opheim, B. and Heggheim, T. (2023). *Remaining capacity of burned Cross-Laminated Timber (CLT) under asymmetrical conditions*. NTNU, Trondheim.
- Mortensen, M. and Røhne, J. (2022). *Structural behaviour of glued-laminated timber subjected to quasi-static and dynamic-loading.* NTNU, Trondheim.
- Gruben, L. and Kentsrud, S.S. (2022). *Impact loading on cross-laminated timber beams*. NTNU, Trondheim.
- Jerdal, A. and Fretheim, O. (2019). Parametric Design of the WoodSol Building System. NTNU, Trondheim.
- Winnæss, H., Nader, S. and Rist, B. S. (2019). *Horisontal stabilisering av høye trebygg med skrudde CLT skiver*. [Horizontal stabilization of high-rise timber buildings with screwed CLT panels]. NTNU, Trondheim.
- Baartvedt, T. and Pharo, H. (2018). *Numerical Analyses of Moment Resisting Timber Connections with Friction Connector and Threaded Rods as Fasteners*. NTNU, Trondheim.
- Espeland, W. (2018). *Horisontal stabilitet av høyhus i tre ved bruk av momentstive rammer.* [Horizontal stability of high-rise timber building using moment-resisting frames]. NTNU, Trondheim.
- Kristiansen, K.J. and Svendsen, C. (2018). *Skjøting av store limtretverrsnitt I buekonstruksjoner* [Splicing of large glulam cross-sections in arch structures]. NTNU, Trondheim.
- Monsen, I. H. and Nystuen, M. (2018). *Buildability and Assembly of the WoodSol Concept*. NTNU, Trondheim.
- Dalen, B. and Stenberg, C. H. (2017). *Horisontal avstivning med glassfelt*. [Horizontal stiffening with glass field]. NTNU, Trondheim.
- Drageset, A. F. and Hoff, T. H. (2017). *Numerical Analyses of Moment Resisting Beam-to-Column Connections in Timber Structures*. NTNU, Trondheim.
- Klund, V., Skovdahl, P. G. and Torp, K. U. (2017). *Feasibility study of high-rise timber buildings using moment resisting frames*. NTNU, Trondheim.
- Kvittingen, A. (2017). *Fatigue strength of glued-Laminated timber loaded in shear along grain and withdrawal of threaded rods.* NTNU, Trondheim.
- Lied, K. I. and Nordal, K. S. (2016). A conceptual study of glulam connections using threaded rods and connecting circular steel profiles. NTNU, Trondheim.
- Løkken, N. (2016). Fatigue of threaded rods subjected to axial load. NTNU, Trondheim.
- Grytting, H. and Sæle, E.D. (2015). *Aksial og tverrbelastede gjengestenger i trekonstruksjoner.* [Axial and lateral loaded threaded rods in timber structures]. NTNU, Trondheim.

### Internal Examiner of Master Theses: 16 Theses (31 Students)

- Larssen, K.L. (2024). Moment-rigid connections and large storage halls in timber. NTNU Trondheim.
- Falldalen, H. and Gjelsvik Lynggaard, K. (2023). *Carpentry joints: Experimental and numerical analysis of the halved and tabled scarf joint with modern timber material*. NTNU Trondheim.
- Gunnesdahl Jenssen, C. and Dreyer Vetter, E (2023). Experimental analysis of glulam specimens from Tretten bridge and related block failure and fatigue issues. NTNU Trondheim.

- Jenson Plesner B. and Lote Henden, M. (2023). *Parvise gjengestenger påført aksial og tverrlast i endeveden av limtrebjelker* [Pairs of threaded rods screwed into the end grain of glulam]. NTNU Trondheim.
- Kvello Stake, H. (2023). *Trykk vinkelrett på fiberretningen i treelementer* [Compression orthogonal to grain in timber elements]. NTNU Trondheim.
- Erstad, M. and Ivarsøy, B. (2022). *Parvise gjengestenger påkjent aksial og tverrbelastning i trekonstruksjoner* [Paired threaded rods stressed axially and transversely in wooden structures]. NTNU Trondheim.
- Hattestad, E. and Vangsnes, T. (2022). *An experimental and numerical investigation of stiffness in dowel-type connections*. NTNU, Trondheim.
- Sæle, T. and Stendal, A. (2022). *Parametrisk modellering av fortannet trebjelke* [Parametric modelling of timber beams connected with teeth]. NTNU, Trondheim.
- Grytbakk, A., Tanum, M. and Tran, K. (2022). *Numerical and experimental analysis of one- and two-sided moment-resisting timber connection using threaded rods and steel coupling parts*. NTNU, Trondheim.
- Dalheim, H.K. and Bjerkeng, B.H. (2022). *Trykk vinkelrett på fiberretningen i krysslaminerte plater*. [Compression perpendicular to grain in cross laminated timber]. NTNU, Trondheim.
- Elstrand, H.B. and Nummedal Os, H. (2021). *A Parametric Study of Connection Modeling in Tall CLT Structures*. NTNU, Trondheim.
- Lervik, R.H. and Kristiansen, S. (2021). Assessing Wind Induced Dynamic Properties of Two Tall CLT Buildings in Tromsø. NTNU, Trondheim.
- Mestvedthagen, J. and Vasland, K. (2021). *Moment resisting timber connection using threaded rods and steel coupling parts*. NTNU, Trondheim.
- Håvardsen A.H. and Johansen, N.K. (2020). En konseptstudie av momentstiv treforbindelse med bruk av gjengestenger og stålplater [A conceptual study of moment resisting connections with threaded rods and steel plates]. NTNU, Trondheim.
- Reed, D.H. and Wiig L. H. (2020). A Parametric Study of Tall Timber Buildings. NTNU, Trondheim
- Reigstad, H.A. and Sandnes, L.J. (2020). Numerical modelling of damping for timber structures in Abaqus.
   NTNU, Trondheim.

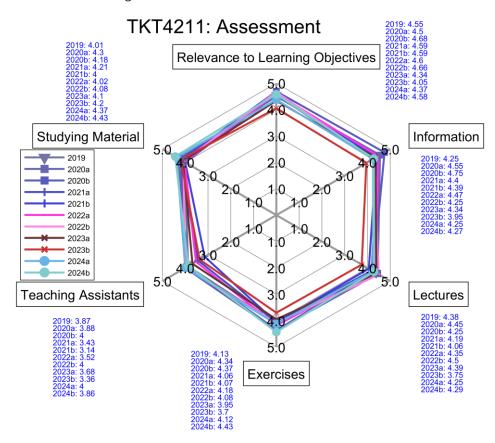
## External Examiner of Master Theses: 4 Theses (6 Students)

- Bettum, H.S. and Granvoll Jørgensen, A.H. (2021). *Evaluation of the modulus of elasticity of timber beams using non-destructive methods*. NMBU-Norwegian University of Life Sciences. Ås, Norway.
- Koh Chuen Hon (2021). *Two-way coupled fluid-structure interaction method on aerodynamic analysis of tall timber building using URANS*. OsloMet University, Oslo, Norway.
- Kotzamanis, V. (2021). Aeroelastic damping of high-rise timber buildings. OsloMet University, Oslo, Norway.
- Furuheim, E.F and Nesse P.M. (2020). *Beam-Column Connections in Glulam Structures, with Gusset Plates of Birch Plywood and Self-Tapping Screws.* NMBU-Norwegian University of Life Sciences. Ås, Norway.

### **Appendix B: Summary of Students Evaluations**

#### • TKT4211: Timber Structures 1

The following spider plot summarizes the feedback from students of TKT4211 in the Period 2019-2024, based on on-line anonymous surveys. As shown in this plot the students of the course are quite satisfied with all aspects of the course (grading scale 1-5). Apart from the good grades, the course has also received very good specific comments from the students. We have got similar feedback for TKT4212.



# Master Theses

In 2022, the timber group at NTNU has received a record high number of students writing a Master Thesis (>30). This high number allowed to carry out an anonymous survey, without risking the anonymous nature of the survey. The students evaluated several aspects of their thesis (grading scale 1-10):

- Topic of the thesis (8.1/10)
- Supervision (8.8/10)
- Learning experience (8.1/10)
- Workload (6.6/10)

According to these grades, the students were quite satisfied which is also confirmed by their specific comments that we received.