



PUBLIC SELECTION ESTABLISHED WITH DIRECTOR'S DECREE NO. 2023_PRA_DMEC_5 OF 04/07/2023 PURSUANT TO THE NOTICE PUBLISHED IN THE OFFICIAL GAZETTE NO. 14/07/2023, n. 53 FOR 1 POSITION AS ASSOCIATE PROFESSOR FOR THE COMPETITION SECTOR 09/A3 - INDUSTRIAL DESIGN, MACHINE CONSTRUCTION AND METALLURGY - SDS ING-IND/15 - DESIGN METHODS FOR INDUSTRIAL ENGINEERING, PURSUANT TO ART. 18 - LAW 240/2010, AT THE POLITECNICO DI MILANO - DEPARTMENT OF MECHANICAL ENGINEERING (PROCEDURE CODE 2023_PRA_DMEC_5).

FINAL REPORT

The Selection Board, appointed with RD Index No. 9345 ref. No. 194019 of 23 August 2023, composed by the following Professors:

Prof. CASCINI Gaetano - Politecnico di Milano;
Prof.ssa Kristin PAETZOLD-BYHAIN - TU Dresden;
Prof. Mario ŠTORGA - University of Zagreb,

met on October 10th, 2023 at 16:30, for the first teleconference meeting.
Each board member was connected from his/her workstation.

At the start of the session the members of the Selection Board named the Chairman and the Secretary of the Selection Board:

PROF. KRISTIN PAETZOLD-BYHAIN, FULL PROFESSOR at the Technical University of Dresden, Chairman;
PROF. GAETANO CASCINI, FULL PROFESSOR at Politecnico di MILANO, Secretary.

Each member of the board declared not to have conjugal nor family relationship or other degree of kinship or affinity up to the fourth degree, not to be in same-sex civil union (as per art. 1 of Law No. 76 of 20.05.2016) and not to form a cohabiting couple (as per art. 1, paragraphs 37 et seq. of Law No. 76 of 20.05.2016) with the other members of this board and that there were no reasons for abstention pursuant to arts. 51 and 52 of the Civil Procedure Code.

The members of the Selection Board and the Secretary declared, pursuant to art. 35-bis of Legislative Decree 165/2001, not to have criminal convictions, even with non-definitive sentences, for offences provided for in Chapter I, Title II of the second book of the Criminal Code.

The Selection Board established the criteria and the parameters according to which the assessment was carried out, and set the minimum score below which the candidate shall not be included in the ranking of candidates.

on October 26, 2023 at 8:00, met online on Microsoft Teams and inspected the list of applicants, who were:

- 1) PANAROTTO MASSIMO.

Each member of the board declared not to have conjugal nor family relationship or other degree of kinship or affinity up to the fourth degree, not to be in same-sex civil union (as per art. 1 of Law No. 76 of 20.05.2016) and not to form a cohabiting couple (as per art. 1, paragraphs 37 et seq. of Law No. 76 of 20.05.2016) with the candidates and stated that there were no reasons for abstention pursuant to arts. 51 and 52 of the Civil Procedure Code.

Pursuant to the examination and after adequate evaluation, the Selection Board assigned a score to each of the established criteria and a judgment to each publication submitted by the candidate; furthermore, the board evaluated the knowledge of the English language.


Therefore, the board, considering the sum of the scores given, expressed a collective judgment in relation to the quantity and the quality of publications, evaluating the overall productivity of the applicant, also with regard to his/her period of activity.

The above-mentioned judgments are attached to this report and they are an integral part of it (Attachment No. 1 to this final report).

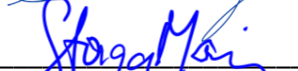
The Selection Board drew up, according to the majority of its members, a ranking of candidates selected to carry out the scientific/teaching functions for which the selection was called, in a number equal to a maximum of five times the number of positions available in the competition (Attachment No. 2 to this final report).

THE SELECTION BOARD

Prof. Kristin PAETZOLD-BYHAIN (Chairman)



Prof. Mario ŠTORGA (Member)



Prof. Gaetano CASCINI (Secretary)





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ATTACHMENT No. 1 to the FINAL REPORT

CRITERIA	Quality of scientific and/or project production, assessed on the basis of criteria and parameters recognized by the international scientific community of reference	Teaching activity at the university level in Italy or abroad	Scientific responsibility for funded research projects	Results obtained in technology transfer in terms of participation in the creation of new enterprises (spin off), development, use and marketing of patents	Total
PANAROTTO Massimo	35 out of 40	30 out of 30	18 out of 20	0 out of 10	83 out of 100

CANDIDATE: PANAROTTO Massimo

CURRICULUM:

The candidate defended his PhD thesis on Value Assessment in Conceptual Design at Blekinge Institute of Technology in 2015. Then, in 2017 he got a Post-Doc position at Chalmers University of Technology, where he became Associate Professor in 2021.

His research activity started with a focus on the "Design Support for the Early Design Stages" and in more recent years has covered also "Traceability of products and components for data-driven design", "Design for X" and "Circular Design". The research activity is very relevant for the position of this evaluation and is confirmed by 19 journal articles and 38 Conference papers indexed by ISI/Scopus and articles published on indexed books, out of which 15 have been submitted for punctual evaluation in this procedure.

Overall, the quality of the scientific production is very good.

The didactic experience is extensive with more than 10 years of teaching of courses in BSc, MSc and PhD programmes. The candidate has also been awarded with Honourable Mention on the "Supervisor of the Year 2020/2021" and has been appointed as Head of Master's Programme in Product Development at Chalmers University of Technology in 2022.

The participation in funded research projects included both applied research with industrial relevance and innovation in education projects through the Erasmus Programme, with Work Package leadership responsibility and a noticeable amount of funds collected for Chalmers University of Technology.

Overall the candidate demonstrates to fully deserve the position of Associate Professor at Politecnico di Milano as requested in the call.

SUBMITTED PUBLICATIONS:

No. of publications	Type/Title of Publication	Judgment
1	Journal Article Bonde, J. M., Kokkolaras, M., Andersson, P., Panarotto, M., & Isaksson, O. (2023). A similarity-assisted multi-fidelity approach to conceptual design space exploration. <i>Computers in Industry</i> , 151, 103957.	Top-quality journal Good contribution

2	Journal Article Panarotto, M., Isaksson, O., & Vial, V. (2023). Cost-efficient digital twins for design space exploration: A modular platform approach. <i>Computers in Industry</i> , 145, 103813.	Top-quality journal Very good contribution High impact
3	Journal Article Borgue, O., Paisonni, C., Panarotto, M., Isaksson, O., Andreussi, T., & Viola, N. (2021). Design for test and qualification through activity-based modelling in product architecture design. <i>Journal of Engineering Design</i> , 1-25.	Top-quality journal Significant contribution
4	Journal Article Müller, J. R., Isaksson, O., Landahl, J., Raja, V., Panarotto, M., Levandowski, C., & Raudberget, D. (2019). Enhanced function-means modeling supporting design space exploration. <i>AI EDAM</i> , 33(4), 502-516.	High quality journal Satisfactory contribution Very high impact
5	Journal Article Müller, J. R., Panarotto, M., & Isaksson, O. (2021). Function Model Based Generation of CAD Model Variants. <i>Comput. Aided Des. Appl.</i>	Fair quality journal Very good contribution
6	Journal Article Borgue, O., Panarotto, M., & Isaksson, O. (2022). Fuzzy model-based design for testing and qualification of additive manufacturing components. <i>Design Science</i> , 8.	Top-quality journal Very good contribution
7	Journal Article Panarotto, M., Borgue, O., & Isaksson, O. (2020). Modelling Flexibility and Qualification Ability to Assess Electric Propulsion Architectures for Satellite Megaconstellations. <i>Aerospace</i> , 7(12), 176.	High-quality journal Very good contribution High impact
8	Journal Article Borgue, O., Panarotto, M., & Isaksson, O. (2019). Modular product design for additive manufacturing of satellite components: maximising product value using genetic algorithms. <i>Concurrent Engineering Research and Applications</i> , 27(4), 331-346.	Top-quality journal Very good contribution Very high impact
9	Journal Article Al Handawi, K., Panarotto, M., Andersson, P., Isaksson, O., & Kokkolaras, M. (2021). Optimization of Design Margins Allocation When Making Use of Additive Remanufacturing. <i>Journal of Mechanical Design</i> , 144(1), 012001.	Top-quality journal Good contribution
10	Journal Article Al Handawi, K., Andersson, P., Panarotto, M., Isaksson, O., & Kokkolaras, M. (2020). Scalable Set-Based Design Optimization and Remanufacturing for Meeting Changing Requirements. <i>Journal of Mechanical Design</i> , 143(2).	Top-quality journal Good contribution Very high impact
11	Journal Article Gericke, K., Eckert, C., Campean, F., Clarkson, P., Flening, E., Isaksson, O., . . . , Panarotto, M., Wilmsen, M. (2020). Supporting designers: Moving	Top-quality journal

	from method menagerie to method ecosystem. Design Science, 6, E21. doi:10.1017/dsj.2020.21	Very high impact
12	Journal Article Panarotto, M., Bertoni, M., & Johansson, C. (2019). Using models as boundary objects in early design negotiations: analysis and implications for decision support systems. Journal of Design Research, 17(2-4), 214-237.	High-quality journal Very good contribution High impact
13	Journal Article Panarotto, M., Bertoni, M., & Johansson, C. (2019). Value models: coordinating artefacts for conceptual design. International Journal of Product Development, 23(4), 326-352.	Fair-quality journal Very good contribution
14	Journal Article Panarotto, M., Isaksson, O., Habbassi, I., & Cornu, N. (2020). Value-Based development connecting engineering and business: A case on electric space propulsion. IEEE Transactions on Engineering Management, 69(4), 1650-1663.	Top-quality journal Good contribution High impact
15	Journal Article Bertoni, A., Bertoni, M., Panarotto, M., Johansson, C., & Larsson, T. C. (2016). Value-driven product service systems development: Methods and industrial applications. CIRP Journal of Manufacturing Science and Technology, 15, 42-55.	Top-quality journal Good contribution Very high impact

Overall collective judgement

QUALITY OF SCIENTIFIC AND/OR PROJECT PRODUCTION, ASSESSED ON THE BASIS OF CRITERIA AND PARAMETERS RECOGNIZED BY THE INTERNATIONAL SCIENTIFIC COMMUNITY OF REFERENCE:

The scientific production of the candidate is relevant for the field of engineering design and specifically methods and tools for product design as required by the call. The candidate demonstrated continuity of scientific production with an increased impact, especially in the last 5 years. The journal articles submitted for this evaluation have been published in recognized journals in the field, 10 out of 15 being Q1 in their subject category. As reported by Scopus, the candidate has an h-index of 12, which is a significant score in the field. Overall the scientific production is very good.

DIDACTIC ACTIVITIES CARRIED OUT IN ITALIAN OR FOREIGN UNIVERSITIES OR BODIES:

The candidate shows an impressive didactic experience for the position of Associate Professor, being in charge Master Degree courses since 2012, followed up by courses relevant for the position of the call taught at Bachelor, Master and PhD levels with continuity until now. Since 2022, he has the role of Head of Master's Programme in Product Development at Chalmers University of Technology. The candidate has also supervised 7 PhD students and 19 MSc students. The candidate has attended pedagogical courses for a total of 18 ECTS and received a Honourable Mention on the "Supervisor of the Year 2020/2021" organized by the Chalmers Board of Graduate Students in 2021. Overall the didactic activity is excellent.

SCIENTIFIC RESPONSIBILITY FOR FUNDED RESEARCH PROJECTS:

The candidate has been involved in several projects at national and European level, both funded by public authorities and private organizations. He has been in charge of multiple Work Package leaderships and overall attracted 930k€ of funds for Chalmers University of Technology. The projects span from applied research with industrial relevance to innovation in education projects through the Erasmus Programme. Overall the participation in funded research projects with scientific responsibility is very good.

RESULTS OBTAINED IN TECHNOLOGY TRANSFER IN TERMS OF PARTICIPATION IN THE CREATION OF NEW ENTERPRISES (SPIN OFF), DEVELOPMENT, USE AND MARKETING OF PATENTS:

The CV doesn't provide information concerning technology transfer activities in terms of spin-off development and patent exploitation. Therefore, the assessment could not be done on this criterion.

SCRUTINY OF THE DEGREE OF KNOWLEDGE OF THE ENGLISH LANGUAGE:

The candidate has been delivering courses in English for ten years, as well as has participated in several international projects and presented in international conferences. As such, his knowledge of the English language is considered trustworthy and fully satisfactory.

THE SELECTION BOARD

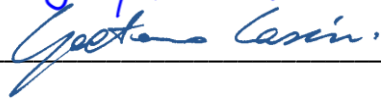
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ATTACHMENT No. 2 to the FINAL REPORT

MERIT RANKING

SURNAME AND NAME	Overall score
PANAROTTO Massimo	83 out of 100

Milan, 26 October 2023

THE SELECTION BOARD

Prof. Kristin PAETZOLD-BYHAIN (Chairman)

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