Ville-Valtteri Visuri

Process Metallurgy Research Unit
University of Oulu
PO Box 4300
FI–90014 University of Oulu

☎ +358 50 412 5642
✉ ville-valtteri.visuri@oulu.fi
villevaltterivisuri.fi
linkedin.com/in/villevaltterivisuri

Date: 9 January 2026

Profile

Metallurgist, academic leader and educator specialising in the metallurgy of steelmaking, with a methodological focus on the thermodynamics and kinetics of chemical reactions.

Experience

Associate Professor, University of Oulu, Process Metallurgy Research Unit — 2022 – PRESENT

- ▷ Professorship in *Sustainable Primary Metallurgy of Steelmaking*.
- ▷ Leader of the Primary Metallurgy Research Group (≈ 15 direct reports).
- ▷ Deputy Head of the Process Metallurgy Research Unit (≈ 60 employees).
- ▷ Academy Research Fellow of the Research Council of Finland (2023 – 2027).
- ▷ Director of the Doctoral Degree Programme in Technology, Chemistry and Geosciences at the University of Oulu Graduate School (2026 – 2029).

R&D Manager – Modelling, Outokumpu Stainless Oy, Tornio — 2020 – 2022

- ▷ Led an R&D department based in Tornio (Finland) and Krefeld (Germany).

Postdoctoral Researcher, University of Oulu, Process Metallurgy — 2017 – 2020

- ▷ Deputy Head of the Process Metallurgy Research Unit (2018 – 2020).
- ▷ Visiting Researcher at the RWTH Aachen University (01/2019 – 12/2019).

Doctoral Researcher, University of Oulu, Process Metallurgy — 2011 – 2017

- ▷ Visiting Researcher at the RWTH Aachen University (01/2014 – 06/2014).

Research Assistant, University of Oulu, Process Metallurgy — 2011

Various trainee positions, *i.a.*, Rautaruukki Oyj, Nokia Siemens Networks Oy — 2005 – 2010

Degrees and qualifications

Title of Docent, Process Metallurgy, University of Oulu — 2020

- ▷ Docentship in *Modelling of Reaction Kinetics in Pyrometallurgy*.

D.Sc. (Tech.), Process Engineering, University of Oulu — 2017

- ▷ Doctoral thesis on modelling of the AOD process (*passed with distinction*).

M.Sc. (Tech.), Industrial Engineering and Management, University of Oulu — 2011

- ▷ Degree *passed with distinction*.
- ▷ Master's thesis on slag formation in the AOD process (5/5, *excellent*).
- ▷ Exchange studies at the Technical University of Munich (10/2009 – 03/2010).

B.Sc. (Tech.), Industrial Engineering and Management, University of Oulu — 2009

Matriculation examination, Kempele Upper Secondary School — 2005

Other education and expertise

Basic studies in University Pedagogy (25 ECTS), University of Oulu	2025
European Engineer (EUR ING), FEANI, Brussels	2021
Science Leadership Program – Class of ´21 (10 ECTS), University of Oulu	—"—
Additional coursework (73 ECTS), U. Oulu, U. Helsinki, Aalto U., TU Munich	2006 – 2020
Goethe-Zertifikat C2: Großes Deutsches Sprachdiplom, Goethe-Institut, Düsseldorf	2019

Language skills

	Proficiency level (CEFR)					
	A1	A2	B1	B2	C1	C2
Finnish	●	●	●	●	●	●
English	●	●	●	●	●	●
German	●	●	●	●	●	●

	Proficiency level (CEFR)					
	A1	A2	B1	B2	C1	C2
Swedish	●	●	●	○	○	○
Russian	●	●	○	○	○	○

Awards, honours, and grants

- Top 3 finalist in the *Innovation awards* category in the Outokumpu Awards 2022. Recognised by Steel Research International with one article among top viewed papers in 2024, one article among the top cited papers in 2021–2022, two papers among top cited papers in 2020–2021, and one paper selected to *Best of steel research international – 2020 Edition*.
- Received the *Best Annual Report Award* from the national Graduate School in Chemical Engineering (2013) and the *Badge of Merit III Class* from the Student Union of the University of Oulu (2019).
- Awarded a 4-year scholarship from the national Graduate School in Chemical Engineering (2012), a PostDocs in Companies Grant by the Finnish Cultural Foundation (2015), and Postdoctoral Researcher (2020, declined) and Academy Research Fellow (2023) positions by the Research Council of Finland, and numerous personal grants (Σ = €139,960).

Teaching, supervision, and service in academia

- Lectures on metallurgy of steelmaking at the University of Oulu, with visiting lectures at Aalto University, Montanuniversität Leoben, and RWTH Aachen University.
- Supervisor for 16 doctoral theses (14 ongoing), one licentiate thesis, and over 30 master's theses. Served as examiner or opponent for doctoral theses in Austria, Australia, Finland, Germany, and Sweden.
- Peer reviewer for 26 scientific journals, and session chair and/or reviewer at several scientific conferences. Serving on the reviewer board of *Metals*. Also served as peer reviewer for various funding bodies, including the Finnish Cultural Foundation and the Natural Sciences and Engineering Research Council of Canada.
- Co-chair of the *5th European Academic Symposium on EAF Steelmaking* in 2023. Member of the scientific committees for the *5th European Academic Symposium on EAF Steelmaking* (2023), *Smelting Symposium* (2024), and *6th European Academic Symposium on EAF Steelmaking* (2025).
- Editorial activities include co-editing two special issues in *Metals* and serving on the editorial board of *Materia*.

Scientific and societal impact

- At University of Oulu, developed or co-developed mathematical models for several metallurgical unit processes (e.g., AOD, BOF, CAS-OB, EAF, HMD, and HPSR). Contributed to the development of a vibration-based monitoring system now standard at SSAB Europe Oy's vacuum tank degasser, with additional measurement systems trialed for BOF converters and hot metal desulfurization.
- At Outokumpu Stainless Oy, established a company-wide *Modelling and Simulation Roadmap* and led the industrial implementation of seven mathematical models in the Horizon 2020 MORSE project. Recognised for research on the AOD process, which has resulted in new decarburisation and reduction practices, supported the development of a novel high-chromium ferrochrome converter concept, and filed two invention notices on converter metallurgy.
- Served as an expert witness for voestalpine BÖHLER Edelstahl GmbH & Co KG (Kapfenberg, Austria) regarding mathematical models from 2022 to 2023. Provided advisory services for Teknoventure Oy (Oulu/Kempele, Finland) since 2017.

Publications

- Authored or co-authored more than 80 peer-reviewed publications (see list of publications).
- Key metrics at Google Scholar: 1098 citations, h-index = 18, $i10$-index = 40.

Positions of trust

Member of the Faculty Board, Faculty of Technology, University of Oulu	2026 – PRESENT
Chair of the Executive Board, Centre for Advanced Steels Research	2024 – PRESENT
Member of the Board, Finnish Association for Mining and Metallurgical Engineers	2024 – PRESENT
Member of the Editorial Board of the journal *Materia* (ISSN 1459-9694)	2024 – PRESENT
Member of the Management Board, Chapter of the University of Oulu, Finnish Union of University Professors	2024 – PRESENT
Vice-Chair of the Board, University of Oulu Association	2022 – PRESENT
Member of the Board, Hannu Luukinen Oy	2015 – PRESENT
Chair of the Management Board, Division of Metallurgical Engineers, Finnish Association for Mining and Metallurgical Engineers	2021 – 2024
Member of the National Expert Committee in Metallurgy, Finnish Association for Mining and Metallurgical Engineers	2020 – 2022
Member of the Management Board, Division of Metallurgical Engineers, Finnish Association for Mining and Metallurgical Engineers	2020 – 2021
Member of the Board, Oulu Technical Society	2018 – 2019