

1. Personal details and the date of CV

Surname, first names: **Koistinen, Arto Pekka**
Orcid: <https://orcid.org/0000-0001-7601-9806>
Web: <https://uefconnect.uef.fi/en/group/microplastic-research/>
Date of CV: 14th August 2025

2. Degrees

1.9.2014 Adjunct professor (Title of Docent in Biomaterial characterization), Faculty of Science and Forestry, University of Eastern Finland, Finland
18.12.2012 Doctor of Philosophy (Medical physics; Biomaterials Science), Department of Applied Physics, University of Eastern Finland, Finland
10.6.2002 Master of Science (Medical Physics), Department of Applied Physics, University of Kuopio, Finland

3. Other education and expertise

2023-2024 Leadership training: University administration and leadership 40 ETCS. University of Tampere, Finland
2013-2015 Leadership training: UEF Director (2.0 ETCS), UEF Advanced director (5 ETCS), UEF Accomplished director (5.0 ETCS). University of Eastern Finland, Finland

4. Language skills

Finnish – native language;
English – fluent; Swedish – good; German – satisfactory; French – basics

5. Current employment

15.1.2021 -- Director of Research Infrastructures, University of Eastern Finland
1.7.2018 -- Research Director, Department of Technical Physics, University of Eastern Finland

6. Previous work experience

2016-2020 Director, SIB Labs unit, University of Eastern Finland
2019-2020 Coordinator of the research infrastructures (part-time), University of Eastern Finland
2013-2018 Research Manager, SIB Labs, University of Eastern Finland
2010-2012 Laboratory Supervisor, SIB Labs, University of Eastern Finland
2006-2009 Laboratory Supervisor, BioMater Centre, University of Kuopio
2005-2006 Project coordinator, BioMater Centre, University of Kuopio
2002-2005 Project researcher, Dept. of Applied Physics, University of Kuopio
2001-2002 Research assistant, Universities of Kuopio and Helsinki
2001 Assistant physicist, Kuopio University Hospital

Short-term research visits:

Lund University, Division of Solid Mechanics, Lund, Sweden; February 4 – 12, 2013
VU University Medical Centre, Department of Oral Surgery and Oral Pathology, Amsterdam, The Netherlands; September 24 – October 5, 2012
Yamagata University, Department of Orthopaedics, Yamagata, Japan; October 14 – 26, 2010

7. Research funding and grants (major research funding specified)

- 2024-2028 **Academy of Finland research project funding:** "Nano-/Microplastic Mobility and Contaminant Co-Transport in Groundwater – A Multiscale Study with Finnish Perspective" 664 883 €. Role: Co-Principal investigator at UEF (PI: Jarkko Akkanen)
- 2020-2024 **Academy of Finland research project funding:** "Direct microplastic exposure via foodstuff and food packaging" 528 317 €. Role: Principal investigator
- 2022-2023 **Business Finland funded Research-to-business research project:** "Urban biochar filter for stormwaters" 418 400 €. Role: Principal investigator
- 2021-2023 **Business Finland funded Co-innovation research project:** "Circular economy of water in industrial waters", UEF share 672 858 €. Consortium project with Finnish universities and industrial partners. Role: Principal investigator at UEF, WP leader. PI Matti Vilkkö, University of Tampere.
- 2016-2020 **Academy of Finland research project funding:** "Microplastics in Finnish waters - assessing their potential threat" 375 200 €. Consortium with the Finnish Environmental Institute. Role: Consortium partner principal investigator, PI Maiju Lehtiniemi SYKE
- 2009-- **Other funding for RDI activities and infrastructure investments:**
Several project fundings from the Regional council of Northern Savo (total 5 501 000 €) and from the Centre for Economic Development, Transport and the Environment (total 1 387 000 €). Role: Principal Investigator

8. Research output

- 2003 -- 91 peer reviewed publications with 4032 citations, h-index 27 (Scopus).
In review process: 1 book chapter, 6 submitted manuscripts
- 2023 Patent application: A Stormwater filter, A stormwater treatment arrangement and a method for stormwater treatment (FI patent application 20236013)
- 2023 Invention disclosure: Biochar filter system with remote monitoring

9. Research supervision and leadership experience

- 2016 -- **Principal investigator of microplastics research**, leading a multidisciplinary research team consisting of professors and researchers from various departments at UEF with national and international networks and collaborative funding.
- 2014 -- **Supervisor for 4 post-doctoral** researchers at University of Eastern Finland
- 2012 -- Appointed (co-)supervisor for **8 completed PhD theses** and 4 ongoing PhD theses
- 2002 -- Appointed (co-)supervisor for **completed 27 MSc theses**
Co-Supervisor for 10 DDS theses

10. Teaching merits

- 2006-2020 **Course director for 2 post-graduate courses** at UEF; Electron Microscopy (2.5 ECTS) and Optical Microscopy (2.0 ECTS)
- 2002-- Several appointments for teaching and lectures on courses at University of Eastern Finland, e.g. Analytical chemistry, Material characterization, Biomaterials

11. Awards and honours

- 2016 Science Communicator of the year award 2016, University of Eastern Finland
- 2011 The 2011 SAGE best paper award by the editorial board of journal "Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine"

12. Other key academic merits, such as

- 2024-- **Member of management committee** of COST Action 23131: ISO compatible, efficient and reproducible protocols/equipment for mICro-nanoPLASTIC detection through machine-learning (ICPLASTIC), 2024-2028
- 2022 Officially appointed **opponent of a doctoral dissertation**, Lappeenranta-Lahti University of Technology: Mirka Viitala
- 2021 Officially appointed **opponent of a doctoral dissertation**, Lappeenranta-Lahti University of Technology: Tenzin Tsering
- 2021-2022 Officially appointed **pre-examiner for 2 doctoral dissertations**, Lappeenranta-Lahti University of Technology
- 2018-- **Doctoral steering group member** of 2 PhD students at University of Helsinki
- 2016-- **Evaluation panel member** for 3 PhD students at University of Eastern Finland
- 2016-- **Project assessor** in EuroBioImaging (The European Research Infrastructure for Imaging Technologies in Biological and Biomedical Sciences)

Memberships in 5 scientific societies: including e.g.: European Society for Biomaterials, Nordic Microscopy Society

Referee appointments in appr. 20 scientific journals: including e.g. PLOS ONE, Journal of Biophotonics, Chemical Engineering Journal, Water Research, Science in Total Environment, Journal of Hazardous Materials

Positions of trust in academic positions:

- Chair of the infrastructure board for the Faculty of Science and Forestry at the University of Eastern Finland (2018-2020)
- Vice-board member, Biocenter Finland (2015-2020)
- Board member of Biocenter Kuopio (2015-2020)
- Vice-member in the Faculty council of the Faculty of Science and Forestry at the University of Eastern Finland (2010-2013 & 2016-2020)

13. Scientific and societal impact

Positions of trust in society:

- UEF representative in the Committee of Technology and Industry for Kuopio Chamber of Commerce
- UEF vice-representative in the board for ecosystems agreements between the Finnish government and the cities of Kuopio and Joensuu
- Stakeholder (University of Eastern Finland) representative in CLIC Innovation company, theme group Circular Economy
- Member in ESFRI Stakeholder Forum

Merits in research communication and as an expert in the media:

Several interviews on national and local media related to microplastics research, e.g.:

- National radio interviews and National TV broadcasts: <https://areena.yle.fi/1-50986213>, <https://areena.yle.fi/1-50292732>, <https://areena.yle.fi/1-50603553>, <https://areena.yle.fi/podcastit/1-3527500>
- Expert commenting in local and national newspapers: e.g. Yle (<https://yle.fi/a/3-11505025>, <https://yle.fi/a/3-10237137>), HelsinginSanomat (<https://www.hs.fi/suomi/art-2000011123283.html>, <https://www.hs.fi/suomi/art-2000005709064.html>), Savon Sanomat

(<https://www.savonsanomat.fi/paikalliset/3053454>, <https://www.savonsanomat.fi/uutissuomalainen/7302740>, <https://www.savonsanomat.fi/paikalliset/2825477>)

- Reports for the public audience, e.g., Kehittyvä elintarvike 24.2.2021: <https://kehittyvaelintarvike.fi/artikkelit/uutisia/mikromuovien-vaikutuksista-ihmisen-terveyteen-tiedetaan-hyvin-vahan/>. Must Read 7.2.2023: <https://www.mustread.fi/artikkelit/mikromuovikohu-on-vasta-muovihaasteiden-jaavuoren-huippu/>
- National Science Days 2021 (invited speaker), Tutkijoiden yö 2016 (invited speaker)