

CURRICULUM VITAE – 26th August 2022

Full name: Koistinen, Arto Pekka (male)
Date and place of birth: 10.6.1977, Iisalmi
Nationality: Finnish
Home address: Kirjosiiipi 12, 70900 Toivala
Office address: University of Eastern Finland, SIB Labs; Yliopistonranta 1 E, 70210 Kuopio

Education and training: **Docent/Adjunct professor** (Title of Docent: Biomaterial Characterization), 2014
Doctor of Philosophy (Medical Physics; Biomaterials Science), University of Eastern Finland, 2012
Master of Science (Medical Physics), University of Kuopio, 2002

Language skills: Finnish (native), English (fluent), Swedish (basics), German (basics)

Current position(s): **Director of Research Infrastructures**, University of Eastern Finland (from 15.1.2021)
Research Director, University of Eastern Finland, SIB Labs (from 1.7.2018)
Principal investigator at SIB Labs, University of Eastern Finland (Kuopio Campus)

Previous professional appointments:

2016-2020	Director of SIB Labs, University of Eastern Finland (60 months) Coordinator of research infrastructures, University of Eastern Finland (4 months)
2013-2018	Research Manager, University of Eastern Finland, SIB Labs (60 months)
2011-2013	Laboratory Supervisor, University of Eastern Finland, SIB Labs (34 months) Project manager (part-time), University of Eastern Finland, SIB Labs (36 mo)
2010	Laboratory Supervisor, University of Eastern Finland, BioMater Centre (12 mo)
2006-2009	Laboratory Supervisor, University of Kuopio, BioMater Centre (41 months)
2005-2006	Project coordinator, University of Kuopio, BioMater Centre (12 months)
2002-2005	Project researcher, University of Kuopio (35 months)
2001-2002	Research assistant, Universities of Kuopio and Helsinki (5.5 months)
2001	Assistant physicist, Kuopio university hospital (total 1.5 months)
2000-2003	Part-time teacher, University of Kuopio (total 90 hours)

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

Research funding:

TOTAL in 2009-2022:

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|--|-------------|
| - Academy of Finland | 903 500 € |
| o Project funding: a) "Microplastics in Finnish waters – assessing their potential threat" 2016-2020, b) "Direct microplastic exposure via foodstuff and food packaging" 2020-2024 | |
| - BusinessFinland | 1 091 000 € |
| o Project funding: a) "Circular economy of water in industrial waters" 2021-2023, b) "Urban biochar filter for stormwaters" 2022-2023 | |
| - Regional council of Northern Savo | 5 501 000 € |
| - Centre for Economic Development, Transport and the Environment | 1 387 000 € |

Academic supervision and Teaching experience:

- Officially appointed **opponent** for 1 PhD dissertation
- Officially appointed **pre-examiner** for 1 PhD dissertation
- Officially appointed **supervisor** for 18 PhD/DDS theses (12 ongoing)
- Thesis committee member for 2 PhD students @ University of Helsinki
- Evaluation panel member for 3 PhD students @ University of Eastern Finland
- Supervisor for more than 20 MSc theses (6 ongoing)
- Assessor for 7 MSc theses
- Supervisor for 10 DDS theses
- **Course director** for 2 post-graduate courses at UEF;
 - o Electron Microscopy (2.5 credits) and Optical Microscopy (2.0 credits)
- Several appointments for teaching on other courses at University of Eastern Finland
 - o e.g. Analytical chemistry, Material characterization, Biomaterials

Awards:

- 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”*

Other academic and professional activities:

Responsibilities:

- Representative of University of Eastern Finland 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
- Chair of the infrastructure board for the Faculty of Science and Forestry at UEF (2018-2020)
- Board member of Biocenter Kuopio (from 2015-2020)
- Vice-board member of the Finnish Biological Infrastructure consortium (Biocenter Finland)
- Project assessor in EuroBioImaging (The European Research Infrastructure for Imaging Technologies in Biological and Biomedical Sciences) (from 2016 --)
- Vice-member in the Faculty council of the Faculty of Science and Forestry (2010-2013 & 2016--2020)

Memberships in 5 scientific societies:

European Society for Biomaterials, Finnish Society for Biomaterials, Nordic Microscopy Society, European Orthopaedic Research Society, Finnish Chemical Society (Division of optical spectroscopy)

Referee in appr. 20 international publications:

Journal of Orthopaedic Research, Open Biomedical Engineering, Medical Engineering & Physics, eCells and Materials, Proceedings of the Institution of Mechanical Engineers - Part H: Engineering in Medicine, Journal of Biomedical Materials Research: Part B – Applied Biomaterials, Journal of Engineering Tribology, PLOS ONE, Bioresources, Journal of Materials: Design and Applications, Molecular Vision, Journal of Engineering in Medicine, Frontiers in Physics, European Journal of Pharmaceutical Sciences, Journal of Materials Part L: Design and Applications, Journal of Biophotonics, Chemical Engineering Journal, Water Research, Science in Total Environment

Other activities

- Completed course “UEF Edistynyt johtaja (UEF Advanced director), 5 ETCS” in 2015
- Completed course “UEF Johtaja (UEF Director), 2.0 ETCS” 2014
- Completed course “UEF Osaava johtaja (UEF Accomplished director), 5.0 ETCS” 2013
- Research services (UEF internal and commercial); annual budget approximately 100 k€

Academic peer review publications:

- 88 published or submitted articles, and 69 publications in conference proceedings. Important publications related to microplastics:
 - **Uurasjärvi E, Sainio E, Setälä O, Lehtiniemi M, Koistinen A.** Validation of an imaging FTIR spectroscopic method for analyzing microplastics ingestion by Finnish lake fish (*Perca fluviatilis* and *Coregonus albula*). *Environmental Pollution* 2021, 288: 117780, <https://10.1016/j.envpol.2021.117780>
 - **Asamoah BO, Uurasjärvi E, Rätty J, Koistinen A, Roussey M, Peiponen KE.** Towards the Development of Portable and in Situ Optical Devices for Detection of Micro and Nanoplastics in Water: A Review on the Current Status. *Polymers* 2021: 13, 730 <https://doi.org/10.3390/polym13050730>
 - **Saarni S, Hartikainen S, Meronen S, Uurasjärvi E, Kalliokoski M, Koistinen A.** Sediment trapping – a tool to monitor temporal variation of microplastic flux rates in aquatic systems. *Environmental Pollution* 2021: 274 <https://doi.org/10.1016/j.envpol.2021.116568>
 - **Uurasjärvi E, Hartikainen S, Setälä O, Lehtiniemi M, Koistinen A.** Microplastic concentrations, size distribution, and polymer types in the surface waters of a northern European lake. *Water Environmental Research* 2019, doi: <https://10.1002/wer.1229>
 - **Talvitie J, Mikola A, Setälä O, Heinonen M, Koistinen A.** How well is microlitter purified from wastewater? - A detailed study on the stepwise removal of microlitter in a tertiary level wastewater treatment plant. *Water Research* 2017: 109, 164-172

Societal impact:

- Several interviews on national and local media related to microplastics research, e.g. Ylen radiohaastattelu (National radio interviews), Yle tv-haastattelut (National TV broadcasts), Tieteen päivät (Science Days) 2021, Tutkijoiden yö (Researchers' night) 2016