

Curriculum Vitae

(1) Personal information

Full name: Tapani Juhani Samuel Viitala Gender: Male Date of preparing CV: 26th January 2018

(2) Date and place of birth, citizenship, contact details

Date and place of birth: 30th September 1971, Borås, Sweden Citizenship: Finnish E-mail: tapani.viitala@helsinki.fi

Home Address: Alakartanontie 6 B 37, 02360 Espoo, Finland Phone: +358-(0)50-4154529

Work Address: University of Helsinki (UH), Faculty of Pharmacy, Division of Pharmaceutical Biosciences (DPB), P.O. Box 56 (Viikinkaari 5E), 00014 University of Helsinki, Finland.

(3) Highest academic degree and title

Degree: Doctor of Philosophy (Ph.D.), Åbo Akademi University, Faculty of Mathematics and Natural Sciences, Department of Physical Chemistry, 9th November 1999, Turku, Finland. PhD thesis approved with distinction.

Title: Adjunct Professor (Docent) in Pharmaceutical Surface Chemistry and Biophysics, Åbo Akademi University, Faculty of Science and Engineering. 1st November 2017, Turku, Finland

(4) Language skills

1) Finnish: Mother tongue, 2) Swedish: Excellent (second mother tongue), 3) English: Excellent

(5) Current professional appointment

University Researcher/Pharmaceutical Biophysics Group leader at DPB, UH, Finland, 1.8.2015 → .

(6) Grants and funding, supervision and management

Grants and funding:

Received over 1.6 M€ in external research funding including e.g. the Academy of Finland Research Fellow position (2010-2015), Academy of Finland funding for high risk - high gain project (2015-2016), co-applicant in TEKES funded projects "Printable Pharmaceuticals for Drug Delivery" (2011-2013) and "Extracellular vesicles as drug carriers and liver toxicity biomarkers" (2015-2016).

Supervisions:

- 1) Currently main supervisor of two doctoral students and co-supervisor of two doctoral students.
- 2) Previous supervisions: Three PhD theses, 2010-2016; Fourteen Master's theses (including five Erasmus students) 2010-2017; Two CIMO exchange researchers, 2012 – 2015; Eight Bachelor theses, 2011 – 2016.

Management and project coordination skills:

- 1) Acting professor of Biopharmaceutics at DPB, UH. 1.1.2016 -31.7.2016.
- 2) Conference chair for the 16th International Conference on Organized Molecular Films, 25th – 29th July 2016, Helsinki, Finland. 25.7.2014 → 29.7.2016.
- 3) Group leader of the Pharmaceutical Biophysics research group at DPB, UH. 1.5.2015 → .
- 4) PI for the Academy of Finland project associated with the Research Fellow position. 1.8.2011 – 31.7.2015.
- 5) Member of organizing committee for the CRS Nordic Chapter symposium 2015, 25th July 2015, Edinburgh, United Kingdom. 1.9.2014 → 25.7.2015.
- 6) Member of the senior staff steering group of the Biopharmaceutics research group at DPB, UH. 1.1.2011 → 30.4.2015.

(7) Teaching credentials and experience

Pedagogic training:

- 1) University Pedagogy I-II course (10 ECTS) in Swedish language at UH. 19.9.2013-24.1.2014 (Grade: 5 out of 5).

Teaching experience:

- 1) Responsible person for the Biopharmaceutics discipline at DPB, UH. 1.1.2016 -31.7.2016.
- 2) Responsible teacher at DPB, UH for Introduction to Nanoscience course (5 ECTS, Master's/doctoral students), 2014→ ; Pharmacokinetics course (3 ECTS, Bachelor students), 2016 → ; Physical Pharmacy course (2.5 ECTS, Master's students), 2016 → ; Calculus exercises in Physical Pharmacy course (Master's students), 2010→ ; Nanoforum seminar course 2013 and 2015.

- 3) Visiting lecturer/teacher in Biopharmaceutics (Åbo Akademi, Bachelor students), 2011, 2013; Biopharmaceutics and Pharmacokinetics (UH, Bachelor students), 2010-2012; Nanotechniques III course (Aalto University, Master's students), 2011-2012.; Nanoforum seminar course (UH, Master's/doctoral students), 2010-2015.

(8) Other Scientific and Academic merits

Research visits

Visiting Senior Researcher, Faculty of Pharmacy/Department of Chemistry, University of Montreal, Canada. Hosts: Prof. Francoise Winnik and Prof. Antonella Badia. 5.5.2011 – 22.8.2011.

Scientific expert duties:

- 1) Pre-examiner of 7 PhD theses and opponent/member of defense committee of 3 PhD theses
- 2) Evaluator of 2 Docent/Adjunct professor applications.
- 3) First stage evaluator for the European Union Frame Program 7 call: NMP-2007-1.1-2 "Self-assembling and self-organisation". May – June 2007.

Invited presentations at domestic and international seminars, conferences and universities:

- 1) Two invited oral presentations at international conferences. 2011-2015.
- 2) Five invited symposium presentations at universities and research centres. 2011-2016.
- 3) Six invited lectures at universities. 2011-2016.

Commissions of trust in the scientific and academic community:

- 1) Member of the steering group for the doctoral programme in Materials Research and Nanosciences at UH. 1.1.2018 →.
- 2) Member of the steering group for the Master's Program in Pharmacy at UH. 1.1.2017 →.
- 3) Member of the international advisory committee for the 16th International Conference on Organized Molecular Films. 29.7.2016 →.
- 4) Member of teaching skills evaluation committee at the Faculty of Pharmacy, UH. 1.4.2015 → 31.12.2016.
- 5) Board member of the Nordic local chapter of the Controlled Release Society. 1.8.2014 → 30.11.2016.

Reviewer for scientific journals:

Reviewer of over 60 manuscripts for 22 different scientific journals.

(9) Scientific and societal impact of research

Publications:

- 1) 69 peer-reviewed scientific publications, 7 non-reviewed scientific publications
- 2) Author/co-author of over 80 posters and oral presentations in domestic and international conferences

Patents and invention disclosures:

- 1) Co-inventor in 1 patent and 5 invention disclosures

Societal activities:

- 1) Presented a chemist's career path using my own career as an example for junior high school students. 10.5.2017.
- 2) Public talk for Pirkanmaan yrityskummit, Tampere. Nanotechnology – Next industrial revolution?. 16.4.2015.
- 3) Hosting and presenting Faculty of Pharmacy at UH for junior high school students. 22.5.2013.

(10) Other merits

- 1) Work safety manager, KSV Instruments Ltd/Biolin Scientific Oy (2007-2009)
- 2) Management Committee Member, KSV Instruments Ltd/Biolin Scientific Ab (2007 - 2008).
- 3) Board member of KSV Instruments Ltd (2001 - 2007).
- 4) Shareholder of KSV Instruments Ltd (2001 - 2007).

Short research profile

I have an extensive background in physico-chemical characterization of interfaces and nanoscale layers in close connection to biophysics and nanotechnology. I am the co-group leader of the Pharmaceutical Biophysics research group at DPB, UH. My research group develops and use powerful new hybrid experimental-computational tools to gain mechanistic understanding of the key intermolecular interactions involved in drug action and delivery. A special interest of mine is to develop novel ***real-time label-free*** experimental *in vitro* platforms as complementary tools for existing static biological assays and animal tests in the field of preclinical drug research and drug discovery. I primarily use the multi-parametric surface plasmon resonance (MP-SPR) and impedance-based quartz crystal microbalance techniques (QCM-Z) as detection platforms in my research.