Marie Wahlgren
Division of Food and Pharma
Department of Process and Life Science Engineering
LTH Profile Area: Engineering Health
LTH Profile Area: Food and Bio

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Research

I have worked in the field of physical chemical characterisation of proteins since 1987. First as a PhD and research assistant working with protein adsorption to solid surfaces and the influence of other surface active components on this. After this I worked with oral and parenteral delivery of pharmaceutical peptides, in the capacity as head of formulation at Ferring AB. Upon my return to the University I have broaden the scope of delivery problems that I work with I have been involved in research endeavours often together with industry partners dealing with controlled delivery of both biological and traditional drugs. When it comes to protein delivery the focus has been on depo-formulations and recently on protein/surfactant interactions. For the traditional drugs most of the focus has been in using hydrogels both classical ones and hydrophobically modified ones for controlled delivery of lipophilic substances. An important part of this work is to investigate the physicochemical properties of the gels, including rheological properties. I am also involved in projects related to Pickering emulsions and primarily their use in formulations for topical creams. I have had several collaborations with pharmaceutical companies especially through diploma workers but also in research collaborations. The companies include Ferring, AstraZeneca, McNeal, Bioglan, Bonesupport, Biogaia Zelmic technology, Nycomedpharma, Leopharma, and NovoNordisk.

Employment

Professor, Office director
Division of Food and Pharma
Lund University
Lund, Sweden
2015 Sept 21 → present

Deputy head of department
Department of Process and Life Science Engineering
Lund University
Lund, Sweden
2024 Jan 3 → present

Profile area member
LTH Profile Area: Engineering Health
Lund University
Sweden
2024 Jun 17 → present

Profile area member
LTH Profile Area: Food and Bio
Lund University
Sweden
2024 Sept 16 → present

Riksdagsledamot
Swedish Parliament
Stockhom, Sweden
2002 Jan 1 → 2006 Jan 1

Head Pharmaceutical department
Ferring AB
Copenhagen, Denmark
1997 Oct 1 → 2000 Jul 30

Ferring AB, Malmö Group manager Peroral group
Ferring AB
Copenhagen, Denmark
1997 Apr 1 → 1997 Dec 30

Research output

Interactions between polysorbate and antimicrobial preservatives in aqueous parenteral products
Wahlgren, M., Börjesdotter, A.-M., Hjalte, J., Martín, J. L., Zhang, L., Sjögren, H. & Ulvenlund, S., 2025 May, In: Journal of Drug Delivery Science and Technology. 107, 7 p., 106765.

Pneumatic tube transport of trastuzumab in IV bags—Effect of headspace and surfactant on subvisible particle formation
Kjellström, A., Cederwall, I., Martínez, C. S., Kwok, S., Rosenthal, F., Elofsson, U., Paulsson, M. & Wahlgren, M., 2025 Feb, In: Journal of Pharmaceutical Sciences. 114, 2, p. 1142-1151 10 p.

Exploring industry stakeholder perspectives on a clinical testbed for evaluating the handling of protein drugs in hospitals
Arvidsson, J., Alkhatib, Y., Egen, M., Elofsson, U., Millqvist, A. F., López-Cabezas, C., Wahlgren, M., Rosenberger, M. & Paulsson, M., 2025, In: Journal of Pharmaceutical Sciences. 114, 4, 10 p., 103704.

Particle formation during peristaltic pumping of therapeutic proteins: Hofmeister anions effect
Västberg, A., Markova, N., Nilsson, L., Nylander, T., Sivakumar, B., Wahlgren, M. & Elofsson, U., 2025, In: Journal of Pharmaceutical Sciences. 114, 4, 6 p., 103700.

How are we handling protein drugs in hospitals? A human factors and systems engineering approach to compare two hospitals and suggest a best practice
Sabaté-Martínez, C., Paulsson, M., González-Suárez, S., Elofsson, U., Millqvist Fureby, A., Wahlgren, M. & López-Cabezas, C., 2024 Jan 1, In: International Journal for Quality in Health Care. 36, 1, mzae020.

The use of starch microspheres and nanoparticles in pharmaceutical applications
Fureby, A. M., Gidlöf, Z. & Wahlgren, M., 2024 Jan 1, *Starch in Food: Structure, Function, and Applications.* Nilsson, L. (ed.). Third Edition ed. Elsevier, p. 487-501 15 p.

Impact of Post Manufacturing Handling of Protein-Based Biologic Drugs on Product Quality and User Centricity
Cappelletto, E., Kwok, S. C., Sorret, L., Fuentes, N., Medina, A., Burleigh, S., Fast, J., Mackenzie, I. S., Fureby, A. M., Paulsson, M., Wahlgren, M., Elofsson, U., Flynn, A., Miolo, G., Nyström, L., De Laureto, P. P. & De Paoli, G., 2024, In: Journal of Pharmaceutical Sciences. 113, 8, p. 2055-2064 10 p.

Modulating protein unfolding and refolding via the synergistic association of an anionic and a nonionic surfactant
Hjalte, J., Diehl, C., Leung, A. E., Poon, J. F., Porcar, L., Dalgliesh, R., Sjögren, H., Wahlgren, M. & Sanchez-Fernandez, A., 2024, In: Journal of Colloid and Interface Science. 672, p. 244-255 12 p.

The Impact of Annealing Methods on the Encapsulating Structure and Storage-Stability of Freeze-Dried Pellets of Probiotic Bacteria
Palmkron, S. B., Bergenståhl, B., Hall, S., Håkansson, S., Wahlgren, M., Larsson, E. & Fureby, A. M., 2024, In: Pharmaceutical Research. 41, p. 1671-1682 12 p.

Examination of the Protein Drug Supply Chain in a Swedish University Hospital: Focus on Handling Risks and Mitigation Measures
Martínez, C. S., Amery, L., De Paoli, G., Elofsson, U., Fureby, A. M., Kwok, S., López-Cabezas, C., Rosenberger, M., Schoenau, C., Wahlgren, M. & Paulsson, M., 2023 Nov, In: Journal of Pharmaceutical Sciences. 112, 11, p. 2799-2810 12 p.

Realizing the AF4-UV-SAXS on-line coupling on protein and antibodies using high flux synchrotron radiation at the CoSAXS beamline, MAX IV
Bolinsson, H., Söderberg, C., Herranz-Trillo, F., Wahlgren, M. & Nilsson, L., 2023 Oct, In: Analytical and Bioanalytical Chemistry. 415, 25, p. 6237-6246 10 p.

Quantification of structures in freeze-dried materials using X-ray microtomography
Bai Palmkron, S., Bergenståhl, B., Håkansson, S., Wahlgren, M., Fureby, A. M. & Larsson, E., 2023 Feb 5, In: Colloids and Surfaces A: Physicochemical and Engineering Aspects. 658, 130726.

Utilising phase diagram to understand barley starch microsphere preparation in an aqueous two-phase system
Gidlöf, Z., Lomstein Pedersen, B., Nilsson, L., Teleman, A., Wahlgren, M. & Millqvist-Fureby, A., 2023 Feb 5, In: Colloids and Surfaces A: Physicochemical and Engineering Aspects. 658, 130652.

Charge and zeta-potential distribution in starch modified with octenyl succinic anhydride (OSA) determined using electrical asymmetrical flow field-flow fractionation (EAF4)
Fuentes, C., Choi, J., Wahlgren, M. & Nilsson, L., 2023 Jan, In: Colloids and Surfaces A: Physicochemical and Engineering Aspects. 657, 130570.

Investigating thermally induced aggregation of Somatropin- new insights using orthogonal techniques
Västberg, A., Bolinsson, H., Leeman, M., Nilsson, L., Nylander, T., Sejwal, K., Sintorn, I. M., Lidayová, K., Sjögren, H., Wahlgren, M. & Elofsson, U., 2023, In: International Journal of Pharmaceutics. 637, 122829.

Deep eutectic solvents for the preservation of concentrated proteins: the case of lysozyme in 1 : 2 choline chloride : glycerol
Sanchez-Fernandez, A., Prevost, S. & Wahlgren, M., 2022 May 6, In: Green Chemistry. 24, 11, p. 4437-4442 6 p.

Aggregation Behavior of Structurally Similar Therapeutic Peptides Investigated by ^{1}H NMR and All-Atom Molecular Dynamics Simulations
Hjalte, J., Hossain, S., Hugerth, A., Sjögren, H., Wahlgren, M., Larsson, P. & Lundberg, D., 2022 Mar 7, In: Molecular Pharmaceutics. 19, 3, p. 904-917 14 p.

Tactile friction of topical creams and emulsions: Friction measurements on excised skin and VitroSkin® using ForceBoard™
Ali, A., Ringstad, L., Skedung, L., Falkman, P., Wahlgren, M. & Engblom, J., 2022 Mar 5, In: International Journal of Pharmaceutics. 615, 121502.

Relationship between sensorial and physical characteristics of topical creams: *A comparative study on effects of excipients*
Ali, A., Skedung, L., Burleigh, S., Lavant, E., Ringstad, L., Anderson, C., Wahlgren, M. & Engblom, J., 2022 Feb 5, In: International Journal of Pharmaceutics. 613, 12 p., 121370.

Shear-induced nanostructural changes in micelles formed by sugar-based surfactants with varied anomeric configuration
Larsson, J., Williams, A. P., Wahlgren, M., Porcar, L., Ulvenlund, S., Nylander, T., Tabor, R. F. & Sanchez-Fernandez, A., 2022 Jan 15, In: Journal of Colloid and Interface Science. 606, p. 328-336 9 p.

Oil-Based Delivery Control Release System Targeted to the Later Part of the Gastrointestinal Tract—A Mechanistic Study
Zhang, L., Wahlgren, M. & Bergenståhl, B., 2022, In: Pharmaceutics. 14, 5, 896.

Temperature and Heat Transfer Control During Freeze Drying. Effect of Vial Holders and Influence of Pressure
Palmkron, S. B., Gustavsson, L., Wahlgren, M., Bergensthål, B. & Fureby, A. M., 2022, In: Pharmaceutical Research. 39, 10 , p. 2597-2606

Topological Dynamics of Micelles Formed by Geometrically Varied Surfactants
Sanchez-Fernandez, A., Larsson, J., Leung, A. E., Holmqvist, P., Czakkel, O., Nylander, T., Ulvenlund, S. & Wahlgren, M. , 2022, In: Langmuir. 38, 33, p. 10075-10080 6 p.

Mucoadhesion: mucin-polymer molecular interactions
Pham, Q. D., Nöjd, S., Edman, M., Lindell, K., Topgaard, D. & Wahlgren, M., 2021 Dec 15, In: International Journal of Pharmaceutics. 610, 9 p., 121245.

The impact of glycerol on an affibody conformation and its correlation to chemical degradation
Ramm, I., Sanchez-Fernandez, A., Choi, J., Lang, C., Fransson, J., Schagerlöf, H., Wahlgren, M. & Nilsson, L., 2021 Nov, In: Pharmaceutics. 13, 11, 14 p., 1853.

Tail unsaturation tailors the thermodynamics and rheology of a self-assembled sugar-based surfactant
Larsson, J., Leung, A. E., Lang, C., Wu, B., Wahlgren, M., Nylander, T., Ulvenlund, S. & Sanchez-Fernandez, A., 2021 Mar, In: Journal of Colloid and Interface Science. 585, p. 178-183 6 p.

Molecular structure of maltoside surfactants controls micelle formation and rheological behavior
Larsson, J., Sanchez-Fernandez, A., Leung, A. E., Schweins, R., Wu, B., Nylander, T., Ulvenlund, S. & Wahlgren, M., 2021 Jan 1, In: Journal of Colloid and Interface Science. 581, p. 895-904 10 p.

Capturing progression of formal knowledge and employability skills by monitoring case discussions in class
Ramberg, U., Edgren, G. & Wahlgren, M., 2021, In: Teaching in Higher Education. 26, 2, p. 246-264

Characterization of binding between model protein GA-Z and human serum albumin using asymmetrical flow field-flow fractionation and small angle X-ray scattering
Choi, J., Wahlgren, M., Ek, V., Elofsson, U., Fransson, J., Nilsson, L., Terry, A. & Söderberg, C. A. G., 2020 Nov, In: PLoS ONE. 15, 11 November, 19 p., e0242605.

An integrative toolbox to unlock the structure and dynamics of protein-surfactant complexes
Sanchez-Fernandez, A., Diehl, C., Houston, J. E., Leung, A. E., Tellam, J. P., Rogers, S. E., Prevost, S., Ulvenlund, S., Sjögren, H. & Wahlgren, M., 2020, In: Nanoscale Advances. 2, 9, p. 4011-4023 13 p.

Separation and zeta-potential determination of proteins and their oligomers using electrical asymmetrical flow field-flow fractionation (EAF4)
Choi, J., Fuentes, C., Fransson, J., Wahlgren, M. & Nilsson, L., 2020, In: Journal of Chromatography A. 1633, 461625.

Effects of starch granules differing in size and morphology from different botanical sources and their mixtures on the characteristics of Pickering emulsions
Saari, H., Rayner, M. & Wahlgren, M., 2019 Apr 1, In: Food Hydrocolloids. 89, p. 844-855 12 p.

In vitro methods to study colon release: State of the art and an outlook on new strategies for better in-vitro biorelevant release media
Wahlgren, M., Axenstrand, M., Håkansson, Å., Marefati, A. & Pedersen, B. L., 2019 Feb 22, In: Pharmaceutics. 11, 2, 95.

A comparison of emulsion stability for different OSA-modified waxy maize emulsifiers: Granules, dissolved starch, and non-solvent precipitates
Saari, H., Wahlgren, M., Rayner, M., Sjöö, M. & Matos, M., 2019 Feb 1, In: PLoS ONE. 14, 2, e0210690.

Dehydration affects drug transport over nasal mucosa
Ali, A., Wahlgren, M., Rembratt-Svensson, B., Daftani, A., Falkman, P., Wollmer, P. & Engblom, J., 2019 Jan 1, In: Drug delivery. 26, 1, p. 831-840 10 p.

Characterization of non-solvent precipitated starch using asymmetrical flow field-flow fractionation coupled with multiple detectors
Fuentes, C., Saari, H., Choi, J., Lee, S., Sjöö, M., Wahlgren, M. & Nilsson, L., 2019, In: Carbohydrate Polymers. 206, p. 21-28 8 p.

The effect of the anomeric configuration on the micellization of hexadecylmaltoside surfactants
Larsson, J., Sanchez-Fernandez, A., Mahmoudi, N., Barnsley, L., Wahlgren, M., Nylander, T. & Ulvenlund, S., 2019, In: Langmuir. 35, 43, p. 13904-13914

Pickering emulsions based on $CaCl_2$-gelatinized oat starch
Saari, H., Johansson, D. B., Knopp, N., Sjöö, M., Rayner, M. & Wahlgren, M., 2018, In: Food Hydrocolloids. 82, p. 288-295 8 p.

Sifting segregation of ideal blends in a two-hopper tester: Segregation profiles and segregation magnitudes
Marucci, M., Al-Saaigh, B., Boissier, C., Wahlgren, M. & Wikström, H., 2018, In: Powder Technology. 331, p. 60-67 8 p.

Will a water gradient in oral mucosa affect transbuccal drug absorption?
Ali, A., Wahlgren, M., Pedersen, L. & Engblom, J., 2018, In: Journal of Drug Delivery Science and Technology. 48, p. 338-345 8 p.

Production of starch nanoparticles by dissolution and non-solvent precipitation for use in food-grade Pickering emulsions
Saari, H., Fuentes, C., Sjöö, M., Rayner, M. & Wahlgren, M., 2017 Feb 10, In: Carbohydrate Polymers. 157, p. 558-566 9 p.

Comparative Emulsifying Properties of Octenyl Succinic Anhydride (OSA)-Modified Starch: Granular Form vs Dissolved State
Matos González, M., Marefati, A., Gutiérrez, G., Wahlgren, M. & Rayner, M., 2016 Aug 1, In: PLoS ONE. 11, 8, p. e0160140 0160140.

Preparation and Characterization of Starch Particles for Use in Pickering Emulsions
Saari, H., Heravifar, K., Rayner, M., Wahlgren, M. & Sjöö, M., 2016, In: Cereal Chemistry. 93, 2, p. 116-124

Formulation of emulsions
Wahlgren, M., Bergenståhl, B., Nilsson, L. & Rayner, M., 2015 Jan 1, *Engineering Aspects of Food Emulsification and Homogenization.* Rayner, M. & Dejmek, P. (eds.). CRC Press, p. 51-100 50 p.

Particle-stabilized emulsions
SjÖÖ, M., Rayner, M. & Wahlgren, M., 2015 Jan 1, *Engineering Aspects of Food Emulsification and Homogenization.* Rayner, M. & Dejmek, P. (eds.). CRC Press, p. 101-122 22 p.

Amperometric In Vitro Monitoring of Penetration through Skin Membrane
Gari, H., Rembiesa, J., Masilionis, I., Vreva, N., Svensson, B., Sund, T., Hansson, H., Moren, A. K., Sjöö, M., Wahlgren, M., Engblom, J. & Ruzgas, T., 2015, In: Electroanalysis. 27, 1, p. 111-117

Barrier properties of heat treated starch Pickering emulsions.
Sjöö, M., Emek, S. C., Hall, T., Rayner, M. & Wahlgren, M., 2015, In: Journal of Colloid and Interface Science. 450, p. 182-188

Do surface active parenteral formulations cause inflammation?
Söderberg, L., Engblom, J., Lanbeck, P. & Wahlgren, M., 2015, In: International Journal of Pharmaceutics. 484, 1-2, p. 246-251

Release of a Poorly Soluble Drug from Hydrophobically Modified Poly (Acrylic Acid) in Simulated Intestinal Fluids.
Knöös, P., Svensson, A. V., Ulvenlund, S. & Wahlgren, M., 2015, In: PLoS ONE. 10, 10, e0140709.

Biomass-based particles for the formulation of Pickering type emulsions in food and topical applications
Rayner, M., Marku, D., Eriksson, M., Sjöö, M., Dejmek, P. & Wahlgren, M., 2014, In: Colloids and Surfaces A: Physicochemical and Engineering Aspects. 458, p. 48-62 15 p.

Effects of Added Surfactant on Swelling and Molecular Transport in Drug-Loaded Tablets Based on Hydrophobically Modified Poly(acrylic acid)
Knöös, P., Wahlgren, M., Topgaard, D., Ulvenlund, S. & Piculell, L., 2014, In: The Journal of Physical Chemistry Part B. 118, 32, p. 9757-9767

Quantifying the release of lactose from polymer matrix tablets with an amperometric biosensor utilizing cellobiose dehydrogenase.
Knöös, P., Schulz, C., Piculell, L., Ludwig, R., Gorton, L. & Wahlgren, M., 2014, In: International Journal of Pharmaceutics. 468, 1-2, p. 121-132

The use of micro- and nanoparticles in the stabilisation of pickering-type emulsions for topical delivery.
Wahlgren, M., Engblom, J., Sjöö, M. & Rayner, M., 2014, In: Current Pharmaceutical Biotechnology. 14, 15, p. 1222-1234

Monitoring and stimulating development of integrated professional skills in university study programmes
Wahlgren, M. & Ahlberg, A., 2013, In: European Journal of Higher Education. 3, 1, p. 62-73 12 p.

Using NMR Chemical Shift Imaging To Monitor Swelling and Molecular Transport in Drug-Loaded Tablets of Hydrophobically Modified Poly(acrylic acid): Methodology and Effects of Polymer (In)solubility
Knöös, P., Topgaard, D., Wahlgren, M., Ulvenlund, S. & Piculell, L., 2013, In: Langmuir. 29, 45, p. 13898-13908

Using observed student team problem solving to monitor and stimulate development of complex integrated professional skills
Ahlberg, A. & Wahlgren, M., 2012 Oct 22, p. 53-54.

Characterization of starch Pickering emulsions for potential applications in topical formulations.
Marku, D., Wahlgren, M., Rayner, M., Sjöö, M. & Timgren, A., 2012, In: International Journal of Pharmaceutics. 428, 1-2, p. 1-7

Comparison of in vitro methods of measuring mucoadhesion: Ellipsometry, tensile strength and rheological measurements.
Ivarsson, D. & Wahlgren, M., 2012, In: Colloids and Surfaces. B, Biointerfaces. 92, p. 353-359

Assessing progression in engineering study programs
Ahlberg, A. & Wahlgren, M., 2011 Jan 1, p. 608-614. 7 p.

Development of mass transport resistance in poly(lactide-co-glycolide) films and particles - A mechanistic study.
Fredenberg, S., Jönsson, M., Laakso, T., Wahlgren, M., Reslow, M. & Axelsson, A., 2011, In: International Journal of Pharmaceutics. 409, 1-2, p. 194-202

Pore formation and pore closure in Poly(D,L-lactide-co-glycolide) films.
Fredenberg, S., Wahlgren, M., Reslow, M. & Axelsson, A., 2011, In: Journal of Controlled Release. 150, p. 142-149

Reversible Conformational Transitions of a Polymer Brush Containing Boronic Acid and its Interaction with Mucin Glycoprotein.
Ivanov, A. E., Solodukhina, N., Wahlgren, M., Nilsson, L., Vikhrov, A. A., Nikitin, M. P., Orlov, A. V., Nikitin, P. I., Kuzimenkova, M. & Zubov, V. P., 2011, In: Macromolecular Bioscience. 11, p. 275-284

The mechanisms of drug release in poly(lactic-co-glycolic acid)-based drug delivery systems-A review.
Fredenberg, S., Wahlgren, M., Reslow, M. & Axelsson, A., 2011, In: International Journal of Pharmaceutics. 415, 1-2, p. 34-52

Curriculum building and student progression in two LTH engineering study programmes
Wahlgren, M. & Ahlberg, A., 2010, *6:e Pedagogiska Inspirationskonferensen 2010.* Lund: Lund University, (Pedagogiska inspirationskonferensen LTH; vol. 6).

Changera in starch structure during manufacturing of starch microspheres for use in parenteral drug formulations: Effects of temperature treatment
Elfstrand, L., Eliasson, A.-C. & Wahlgren, M., 2009, In: Carbohydrate Polymers. 75, 1, p. 157-165 9 p.

Oral-based controlled release formulations using poly(acrylic acid) microgels.
Wahlgren, M., Christensen, K. L., Jørgensen, E. V., Svensson, A. & Ulvenlund, S., 2009, In: Drug Development and Industrial Pharmacy. 35, p. 922-929 8 p.

The effect of starch material, encapsulated protein and production conditions on the protein release from starch microspheres.
Elfstrand, L., Eliasson, A.-C. & Wahlgren, M., 2009, In: Journal of Pharmaceutical Sciences. 98, p. 3802-3815

The effects of lipophilic substances on the shape of erythrocytes demonstrated by a new in vitro-method
Söderberg, L., Haag, L., Höglund, P., Stenberg, P. & Wahlgren, M., 2009, In: European Journal of Pharmaceutical Sciences. 36, 4-5, p. 458-464

Vad är en civilingenjör och hur blir studenter civilingenjörer?
Wahlgren, M., Ahlberg, A. & Roxå, T., 2009, *Proceedings 2:a Utvecklingskonferensen för Sveriges ingenjörsutbildningar.* LTH

Rundabordssamtal: Är det skillnad att utbilda naturvetare och tekniker?
Wahlgren, M., Reimer, J. & Bergenståhl, B., 2008, *[Host publication title missing].* Lunds Tekniska Högskola

En genomgång av laborativa moment i de obligatoriska kurserna på kemiteknikprogrammets första tre år
Wahlgren, M., 2007, (Unpublished) högskolepedagogiskt projekt programledning B&K. 30 p.

Recrystallization of waxy maize starch during manufacturing of starch microspheres for drug delivery: Influence of excipients
Elfstrand, L., Eliasson, A.-C., Jönsson, M., Larsson, M., Simpraga, A., Thelin, B. & Wahlgren, M., 2007, In: Carbohydrate Polymers. 69, 4, p. 732-741

Recrystallization of waxy maize starch during manufacturing of starch microspheres for drug delivery: Optimization by experimental design
Elfstrand, L., Eliasson, A.-C., Jonsson, M., Reslow, M., Thelin, B. & Wahlgren, M., 2007, In: Carbohydrate Polymers. 68, 3 , p. 568-576

From starch to starch microspheres: Factors controlling the microspheres quality
Elfstrand, L., Eliasson, A.-C., Jönsson, M., Reslow, M. & Wahlgren, M., 2006, In: Stärke. 58, 8, p. 381-390

Molecular characterisation of native and processed waxy maize starch in relation to the recrystallisation behaviour of model systems and starch microspheres
Elfstrand, L., Eliasson, A.-C., Jönsson, M., Reslow, M. & Wahlgren, M., 2004, *Starch : From Polysaccharides To Granules, Simple And Mixture Gels.* Nova Science Publishers, Inc., p. 203-214

Recrystallisation behaviour of native and processed waxy maize starch in relation to the molecular characteristics
Elfstrand, L., Frigard, T., Andersson, R., Eliasson, A.-C., Jönsson, M., Reslow, M. & Wahlgren, M., 2004, In: Carbohydrate Polymers. 57, 4, p. 389-400

Starch-lipid interactions and their relevance in food products
Eliasson, A.-C. & Wahlgren, M., 2004, *Starch in Food Structure, Function and Applications.* Eliasson, A.-C. (ed.). Woodhead Publishing Limited, p. 441-460

Formation of amylose-lipid complexes and effects of temperature treatment. Part 1: Monoglycerides.
Tufvesson, F., Wahlgren, M. & Eliasson, A.-C., 2003, In: Stärke. 55, 2, p. 61-71 11 p.

Formation of amylose-lipid complexes and effects of temperature treatment. Part 2. Fatty acids.
Tufvesson, F., Wahlgren, M. & Eliasson, A.-C., 2003, In: Stärke. 55, 3-4, p. 138-149 12 p.

Non-invasive monitoring of protein adsorption and removal in a turbulent flow cell
Karlsson, C. A. C., Wahlgren, M. C. & Trägårdh, A. C., 2001 Jan 15, In: Colloids and Surfaces B: Biointerfaces. 20, 1, p. 9-25 17 p.

Adsorption studies of interaction between water-extractable nonstarch polysaccharides and prolamins in cereals
Elofsson, U., Eliasson, A.-C., Wahlgren, M., Loosveld, A.-M., Courtin, C. M. & Delcour, J. A., 2000, In: Cereal Chemistry. 77, 5, p. 679-684 6 p.

Adsorption of α-, β-, γ- and ω-Gliadins onto Hydrophobic Surfaces
Örnebro, J., Wahlgren, M., Eliasson, A.-C., Fido, R. J. & Tatham, A. S., 1999, In: Journal of Cereal Science. 77, 5, p. 105-114

Detergent Induced Removal of b-Lactoglobulin from Stainless Steel Surfaces at Influenced by Surface Pretreatment
Karlsson, C.A.-C., Wahlgren, M. C., Olsson, C.-O. A. & Trägårdh, C. A., 1999, In: Journal of Colloid and Interface Science. 220, p. 471-473 3 p.

Adsorption of human carbonic anhydrase II onto silicon oxides surfaces: The effects of truncation in the N-terminal region
Billsten, P., Wahlgren, M. & Elwing, H., 1998, *The Colloid Science of Lipids New Paradigms for Self-Assembly in Science and Technology.* Lindman, B. & Ninham, B. W. (eds.). Springer, Vol. 108. p. 161-165 5 p. (Progress in Colloid & Polymer Science book series, PROGCOLLOID; vol. 108).

Some surface-related aspects of the cleaning of new and reused stainless-steel surfaces fouled by protein
Karlsson, C.A.-C., Wahlgren, M. C. & Trägårdh, C., 1998, In: International Dairy Journal. 8, 10, p. 925-933 9 p.

The Interaction between Protein and Surfactants at Solid Interface
Wahlgren, M., Welin-Klintström, S. & Karlsson, C., 1998, *Biopolymers at Interfaces.* Malmsten, M. (ed.). New York: Marcel Dekker, p. 485-512 28 p.

THE REMOVAL OF β-LACTOGLOBULIN FROM STAINLESS STEEL SURFACES AT HIGH AND LOW TEMPERATURE AS INFLUENCED BY THE TYPE AND CONCENTRATION OF CLEANING AGENT
Karlsson, C., Wahlgren, M. & Trägårdh, C., 1998, In: Journal of Food Process Engineering. 21, 6, p. 485–501 17 p.

Ellipsometry and radio-labelling studies on the adsorption of human serum albumin (HSA) and anti-HSA to hydrophobic silicon
Tengvall, P., Askendal, A., Wahlgren, M. & Lundström, I., 1997, In: Colloids and Surfaces B: Biointerfaces. 10, p. 61-66 6 p.

Removal of T4 Lysozyme from Silicon Oxide Surfaces by Sodium Dodecyl Sulphate (SDS): A Comparison between Wild Type Protein and a Mutant with Lower Thermal Stability.
Wahlgren, M. & Arnebrant, T., 1997, In: Langmuir. 13, 1, p. 8-13 6 p.

Simple Models for Adsorption Kinetics and Their Correlation to the Adsorption of b-Lactoglobulin A and B
Wahlgren, M. & Elofsson, U., 1997, In: Journal of Colloid and Interface Science. 188, 1, p. 121-129 9 p.

The interactions in solution between nonionic surfactants and globular proteins: Effects on cloud point
Wahlgren, M., Kedström, J. & Arnebrant, T., 1997, In: Journal of Dispersion Science and Technology. 18, 4, p. 449-458 10 p.

The use of mutant proteins in protein adsorption studies
Wahlgren, M., Billsten, P. & Elofsson, U., 1997, In: Acta Polytechnica Scandinavica, Chemical Technology Series. 247, p. 98-105 8 p.

Adsorption from lipase-surfactant solutions onto methylated silica surfaces
Wannerberger, K., Wahlgren, M. & Arnebrant, T., 1996, In: Colloids and Surfaces B: Biointerfaces. 6, 1, p. 27-36 10 p.

Adsorption of protein fractions from wheat onto methylated silica surfaces
Wannerberger, L., Wahlgren, M. & Eliasson, A.-C., 1996, In: Cereal Chemistry. 73, 4, p. 499-505 7 p.

Removal of Lysozyme from Methylated Silica Surfaces by a Nonionic Surfactant Pentaethyleneglycol Mono n-Dodecyl Ether (C12E5)
Wahlgren, M. & Arnebrant, T., 1996, In: Colloids and Surfaces B: Biointerfaces. 6, 2, p. 63-69 7 p.

Time and temperature aspects of β-lactoglobulin removal from methylated silica surfaces by sodium dodecyl sulphate
Karlsson, C.A.-C., Wahlgren, M. C. & Trägårdh, C., 1996, In: Colloids and Surfaces B: Biointerfaces. 6, 4, p. 317-328 12 p.

β-Lactoglobulin fouling and its removal upon rinsing and by SDS as influenced by surface characteristics, temperature and adsorption time
Karlsson, C.A.-C., Wahlgren, M. C. & Trägårdh, C., 1996, In: Journal of Food Engineering. 30, 1-2, p. 43-60 18 p.

Comparative Adsorption Studies with Synthetic, Structural Stability and Charge Mutants of Bacteriophage T4 Lysozyme.
McGuire, J., Krisdhasima, V., Wahlgren, M. & Arnebrant, T., 1995, *Proteins at Interfaces II.* Horbett, T. A. & Brash, J. L. (eds.). The American Chemical Society (ACS), Vol. 602. p. 52-65 14 p. (ACS Symposium Series; vol. 602).

Competition Between Fibrinogen and a Nonionic Surfactant at Adsorption to a Wettability Gradient Surface
Wahlgren, M., Welin-Klintström, S., Arnebrant, T., Askendal, A. & Elwing, H., 1995, In: Colloids and Surfaces B: Biointerfaces. 4, 1, p. 23-31 9 p.

Protein-surfactant interactions at solid surfaces
Arnebrant, T. & Wahlgren, M. C., 1995, *Proteins at Interfaces II Fundamentals and Applications.* Horbett1, T. A. H. & L. Brash, J. (eds.). The American Chemical Society (ACS), Vol. 602. p. 239-255 17 p. (ACS Symposium Series; vol. 602).

Structural Changes of T4 Lysozyme upon Adsorption to Silica Nanoparticles Measured by Circular Dichroism
Billsten, P., Wahlgren, M., Arnebrant, T., McGuire, J. & Elwing, H., 1995, In: Journal of Colloid and Interface Science. 175 , 1, p. 77-82 6 p.

Structural Stability Effects on Adsorption and Dodecyltrimethylammonium Bromide-Mediated Elutability of Bacteriophage T4 Lysozyme at Silica Surfaces
McGuire, J., Wahlgren, M. & Arnebrant, T., 1995, In: Journal of Colloid and Interface Science. 170, p. 182-192 11 p.

The adsorption of lysozyme to hydrophilic silicon oxide surfaces: comparison between experimental data and models for adsorption kinetics
Wahlgren, M., Arnebrant, T. & Lundström, I., 1995, In: Journal of Colloid and Interface Science. 175, 2, p. 506-514 9 p.

The Influence of Net Charge and Charge Location on Adsorption and Dodecyltrimethylammonium Bromide-Mediated Elutability of Bacteriophage T4 Lysozyme at Silica Surfaces
McGuire, J., Wahlgren, M. & Arnebrant, T., 1995, In: Journal of Colloid and Interface Science. 170, 1, p. 193-202 10 p.

Adsorption of Lysozyme
Wahlgren, M. & Arnebrant, T., 1994, In: ACS National Meeting Book of Abstracts. 207, 1, p. 74-COLL

INTERACTIONS OF PROTEINS AND SURFACTANTS AT SOLID-SURFACES
WAHLGREN, M. & ARNEBRANT, T., 1994, In: ACS National Meeting Book of Abstracts. 207, 1, p. 215-COLL

LIPASE ADSORPTION AND INTERACTION WITH SURFACTANTS AT SILICA SURFACES WITH DIFFERENT HYDROPHOBICITY, AN ELLIPSOMETRY STUDY
WANNERBERGER, K., ARNEBRANT, T. & WAHLGREN, M., 1994, In: ACS National Meeting Book of Abstracts. 207, 1, p. 187-COLL

Adsorption of globular model proteins to silica and methylated silica surfaces and their elutability by dodecyltrimethylammonium bromide
Wahlgren, M. C., Paulsson, M. A. & Arnebrant, T., 1993, In: Colloids and Surfaces A: Physicochemical and Engineering Aspects. 70, 2, p. 139-149 11 p.

The adsorption from solutions of β-lactoglobulin mixed with lactoferrin or lysozyme onto silica and methylated silica surfaces
Wahlgren, M. C., Arnebrant, T. & Paulsson, M. A., 1993, In: Journal of Colloid and Interface Science. 158, 1, p. 46-53 8 p.

The Elutability of Fibrinogen by Sodium Dodecyl Sulphate and Akyltrimethylammonium Bromides.
Wahlgren, M., Arnebrant, T., Askendal, A. & Welin-Klintström, S., 1993, In: Colloids and Surfaces A: Physicochemical and Engineering Aspects. 70, 2, p. 151-158 8 p.

Contact angles of ultrafiltration membranes and their possible correlation to membrane performance
Gekas, V., Persson, K. M., Wahlgren, M. & Sivik, B., 1992, In: Journal of Membrane Science. 72, 3, p. 293-302 10 p.

The concentration dependence of adsorption from a mixture of β-lactoglobulin and sodium dodecyl sulfate onto methylated silica surfaces
Wahlgren, M. C. & Arnebrant, T., 1992, In: Journal of Colloid and Interface Science. 148, 1, p. 201-206 6 p.

Interaction of Cetyltrimethylammonium Bromide and Sodium Dodecylsulphate with b-lactoglobulin and Lysozyme at Solid Surfaces
Wahlgren, M. C. & Arnebrant, T., 1991, In: Journal of Colloid and Interface Science. 142, 2, p. 503-511 9 p.

Protein adsorption to solid surfaces
Wahlgren, M. & Arnebrant, T., 1991, In: Trends in Biotechnology. 9, 1, p. 201-208 8 p.

Adsorption of b-Lactoglobulin onto Silica, Methylated Silica and Polysulphone
Wahlgren, M. & Arnebrant, T., 1990, In: Journal of Colloid and Interface Science. 136, 1, p. 259-265 7 p.

A Rehological Screening Method for Membrane Modifying Polymers
Sivik, B., Wahlgren, M. & Miezis, Y., 1990, In: Desalination. 77, p. 181-194 14 p.

Dextran modifications of polysulfone UF-membranes: Streaming potential and BSA fouling characteristics
Wahlgren, M. C., Sivik, B. & Nystrom, M., 1990, In: Acta Polytechnica Scandinavica, Chemical Technology Series. 194, p. 3-18

Membrane characterization by the contact angle technique: II. Characterization of UF-membranes and comparison between the captive bubble and sessile drop as methods to obtain water contact angles
Zhang, W., Wahlgren, M. & Sivik, B., 1989, In: Desalination. 72, 3, p. 263-273 11 p.

Activities

FORMULATION TECHNOLOGY IN PHARMACEUTICS, NUTRACEUTICS AND COSMETICS
Wahlgren, M. (Participant)
2016 Oct 10

Powder Technology in Pharma, Food and Chemistry
Wahlgren, M. (Contributor)
2013 → 2020

Awards

Hållbar och kontinuerlig tillverkning av biotekniska läkemedelsprodukter
Wahlgren, M. (PI)
Swedish Government Agency for Innovation Systems (Vinnova): SEK680,000.00
2024/08/01 → 2025/07/31