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Qualifications

12 Sept 1999 → 17 Jul 2003 Engineering Doctorate Materials Engineering, University of Wales, Swansea, Eng.D (Swan)
11 Sept 1997 → 15 Sept 1999 Master of Philosophy Materials Engineering, University of Wales, Swansea, M.Phil
1 Sept 1993 → 14 Jul 1997 Bachelor of Science with Honours Chemistry with Environmental Chemistry, University of Wales, Swansea, BSc.(Hons)
Chartered Chemist, C.Chem
Chartered European Chemist, EurChem
Chartered Scientist, C.Sci

Research outputs

Utilizing waste lithium-ion batteries for the production of graphite-carbon nanotube composites as oxygen electrocatalysts in zinc-air batteries

Praats, R., Sainio, J., Vikberg, M., Klemettinen, L., Wilson, B. P., Lundström, M., Kruusenberg, I. & Liivand, K., 1 Jan 2025, In: RSC Sustainability. 3, 1, p. 546-556 11 p.

An Alternative Cobalt and Nickel Electrochemical Recovery Method for Improved Process Sustainability

Makarava, I., Sahlman, M., Le, T., Wilson, B. P., Yliniemi, K. & Lundström, M., 2025, *Proceedings of the 63rd Conference of Metallurgists, COM 2024*. 1 ed. Switzerland: Springer, Vol. 1. p. 633-635 3 p.

Electrochemical Aqueous Reduction Used in the Recovery of Critical and Precious Metals

Yliniemi, K., Herrala, R., Cui, L., Wilson, B. P., Vapaavuori, J. & Lundström, M., 2025, *Proceedings of the 63rd Conference of Metallurgists, COM 2024*. 1 ed. Switzerland: Springer, Vol. 1. p. 637-639 3 p.

Effect of pyrolysis temperature on the physical and chemical characteristics of pine wood biochar

Handiso, B., Pääkkönen, T. & Wilson, B. P., 10 Dec 2024, In: Waste Management Bulletin. 2, 4, p. 281-287 7 p.

Life cycle assessment of LTO-rich anode waste from lithium-ion battery with a hazardous waste management approach

Arellano Sanchez, D., Rinne, M., Wilson, B. P. & Lundström, M., Apr 2025, In: Resources, Conservation and Recycling. 215, 10 p., 108058.

Investigating battery black mass leaching performance as a function of process parameters by combining leaching experiments and regression modeling

Partinen, J., Halli, P., Varonen, A., Wilson, B. P. & Lundström, M., 1 Sept 2024, In: Minerals Engineering. 215, 10 p., 108828.

Electrochemical cobalt oxidation in chloride media

Makarava, I., Vänskä, J., Kramek, A., Ryl, J., Wilson, B. P., Yliniemi, K. & Lundström, M., 1 Jul 2024, In: Minerals Engineering. 211, 11 p., 108679.

Supervalent doping and its effect on the thermal, structural and electrochemical properties of $\text{Li}_7\text{La}_3\text{Zr}_2\text{O}_{12}$ solid electrolytes

Košir, J., Mousavihashemi, S., Suominen, M., Kobets, A., Wilson, B. P., Rautama, E.-L. & Kallio, T., 21 Jun 2024, In: Materials Advances. 5, 12, p. 5260-5274 15 p.

Sulfuric Acid Baking and Fe(III)-Cl^- - H_2SO_4 Leaching Behavior of Ni- and Cu-Containing Sulfide and Silicate Rich Suhanko Concentrate

Ke, P., Rinne, M., Kalliomäki, T., Wang, Z., Hannula, P.-M., Wilson, B. P. & Lundström, M., 18 Jun 2024, In: ACS Omega. 9, 24, p. 26121–26132

Gold recovery from cyanidation residue by chloride leaching and carbon adsorption – Preliminary results from CICL process

Karppinen, A., Seisko, S., Nevatalo, L., Wilson, B. P., Yliniemi, K. & Lundström, M., Jun 2024, In: Hydrometallurgy. 226, 10 p., 106304.

A study on recovery strategies of graphite from mixed lithium-ion battery chemistries using froth flotation

Sahivirta, H., Wilson, B. P., Lundström, M. & Serna-Guerrero, R., 15 May 2024, In: Waste Management. 180, p. 96-105 10 p.

Analogical environmental cost assessment of silicon flows used in solar panels by the US and China

Rahimpour Golroudbary, S., Lundström, M. & Wilson, B. P., 25 Apr 2024, In: Scientific Reports. 14, 1, 12 p., 9538.

Construction of hydrophilic-hydrophobic domains in Bi_2O_3 /nitrogen-doped carbon electrode to boost CO_2 -to-formate conversion

Shi, J., Han, N., Jin, B., Suominen, M., Lahtinen, J., Miikki, K., Wilson, B. P. & Kallio, T., Apr 2024, In: Next Materials. 3, 12 p., 100183.

Synergy of green energy technologies through critical materials circularity

Rahimpour Golroudbary, S., Lundström, M. & Wilson, B. P., Mar 2024, In: Renewable and Sustainable Energy Reviews. 191, 20 p., 114180.

Sweet Side Streams: Sugar Beet Pulp as Source for High-Performance Supercapacitor Electrodes

Selinger, J., Meinander, K., Wilson, B. P., Abbas, Q., Hummel, M. & Spirk, S., 30 Jan 2024, In: ACS Omega. 9, 4, p. 4733–4743

The impact of chlorides on NMC leaching in hydrometallurgical battery recycling

Partinen, J., Halli, P., Wilson, B. P. & Lundström, M., Nov 2023, In: Minerals Engineering. 202, 11 p., 108244.

Overlooked residue of Li-ion battery recycling waste as high-value bifunctional oxygen electrocatalyst for Zn-air batteries

Liivand, K., Sainio, J., Wilson, B. P., Kruusenberg, I. & Lundström, M., 5 Sept 2023, In: Applied Catalysis B: Environmental. 332, 10 p., 122767.

TiO_2 nanotubes and Their Photocatalytic Applications

Song, Y., Lee, K., Paramasivam, I., Kim, D., Wilson, B. P. & Schmuki, P., 21 Apr 2023, *Handbook of Self-Cleaning Surfaces and Materials: From Fundamentals to Applications: Volumes 1 and 2*. Fujishima, A., Irie, H., Zhang, X. & Tryk, D. A. (eds.). 1 ed. Germany: Wiley, Vol. 2. p. 579-645 67 p.

Assessment of environmental sustainability of nickel required for mobility transition

Rahimpour Golroudbary, S., Kraslawski, A., Wilson, B. P. & Lundström, M., 5 Jan 2023, In: Frontiers in Chemical Engineering. 4, 978842.

Indium and Gallium Extraction using Ionic liquids: Experimental and Theoretical Study

Teimouri, S., Potgieter, J. H., Billing, C., Conradie, J., Lundström, M. L. & Wilson, B. P., 2023, *Proceedings - European Metallurgical Conference, EMC 2023*. GDMB Verlag, Vol. 2. p. 905-920 16 p.

Indium and Gallium Extraction using Ionic Liquids: Experimental and Theoretical Study

Teimouri, S., Potgieter, J. H., Billing, C., Conradie, J., Lundström, M. & Wilson, B. P., 2023, In: World of Metallurgy - ERZMETALL. 76, 3, p. 169-176 8 p.

A New Hydrometallurgical Process for Metal Extraction from Electric Arc Furnace Dust Using Ionic Liquids

Teimouri, S., Potgieter, J. H., Lundström, M., Billing, C. & Wilson, B. P., 4 Dec 2022, In: *Materials*. 15, 23, 24 p., 8648.

Role of nanocellulose in tailoring electroanalytical performance of hybrid nanocellulose/multiwalled carbon nanotube electrodes

Durairaj, V., Liljeström, T., Wester, N., Engelhardt, P., Sainio, S., Wilson, B. P., Li, P., Kontturi, K. S., Tammelin, T., Laurila, T. & Koskinen, J., Nov 2022, In: *Cellulose*. 29, 17, p. 9217–9233

Separation of Li and Al from spent ternary Li-ion batteries by in-situ aluminum-carbon reduction roasting followed by selective leaching

Ma, S., Liu, F., Li, K., Chen, Z., Chen, F., Wang, J., Zhong, S., Wilson, B. P. & Lundström, M., Aug 2022, In: *Hydrometallurgy*. 213, 105941.

Targeted surface modification of Cu/Zn/Ag coatings and Ag/Cu particles based on sacrificial element selection by electrodeposition and redox replacement

Wang, Z., Yliniemi, K., Wilson, B. P. & Lundström, M., 15 Jul 2022, In: *Surface and Coatings Technology*. 441, p. 1-12 12 p., 128531.

Comparative analysis on the thermal, structural, and electrochemical properties of Al-doped $\text{Li}_7\text{La}_3\text{Zr}_2\text{O}_{12}$ solid electrolytes through solid state and sol-gel routes

Košir, J., Mousavihashemi, S., Wilson, B. P., Rautama, E.-L. & Kallio, T., Jul 2022, In: *Solid State Ionics*. 380, 10 p., 115943.

Green and Controllable Preparation of Cu/Zn Alloys Using Combined Electrodeposition and Redox Replacement

Wang, Z., Yliniemi, K., Wilson, B. P. & Lundström, M., 11 Apr 2022, In: *ACS Sustainable Chemistry and Engineering*. 10, 14, p. 4770–4779

Electrochemical Growth of Ag/Zn Alloys from Zinc Process Solutions and Their Dealloying Behavior

Wang, Z., Yliniemi, K., Rautama, E.-L., Hannula, P.-M., Wilson, B. P. & Lundström, M., 21 Mar 2022, In: *ACS Sustainable Chemistry and Engineering*. 10, 11, p. 3716–3725 10 p.

Utilizing Cu^+ as catalyst in reductive leaching of lithium-ion battery cathode materials in H_2SO_4 -NaCl solutions

Partinen, J., Halli, P., Helin, S., Wilson, B. P. & Lundström, M., Feb 2022, In: *Hydrometallurgy*. 208, 105808.

The interference of copper, iron and aluminum with hydrogen peroxide and its effects on reductive leaching of $\text{LiNi}_{1/3}\text{Mn}_{1/3}\text{Co}_{1/3}\text{O}_2$

Chernyaev, A., Zou, Y., Wilson, B. P. & Lundström, M., 15 Jan 2022, In: *Separation and Purification Technology*. 281, 11 p., 119903.

Study on valuable metal incorporation in the Fe-Al precipitate during neutralization of LIB leach solution

Chernyaev, A., Wilson, B. P. & Lundström, M., 2 Dec 2021, In: *Scientific Reports*. 11, 1, 23283.

Modelling the effect of solution composition and temperature on the conductivity of zinc electrowinning electrolytes

Wang, Z., Aji, A. T., Wilson, B. P., Jørstad, S., Møll, M. & Lundström, M., 13 Nov 2021, In: *Metals*. 11, 11, 12 p., 1824.

Biopolymeric Anticorrosion Coatings from Cellulose Nanofibrils and Colloidal Lignin Particles

Dastpak, A., Ansell, P., Searle, J. R., Lundström, M. & Wilson, B. P., 1 Sept 2021, In: *ACS Applied Materials and Interfaces*. 13, 34, p. 41034-41045 12 p.

Industrial validation of conductivity and viscosity models for copper electrolysis processes

Kalliomäki, T., Aji, A. T., Jafari, S., Leskinen, W., Wilson, B. P., Aromaa, J. & Lundström, M., 1 Sept 2021, In: *Minerals Engineering*. 171, 9 p., 107069.

Investigation into the effect of mechanical activation on the leaching of chalcopyrite in a glycine medium

Khezri Khabisi, M., Rezai, B., Abdollahzdeh, A. A., Wilson, B. P., Molaeinasab, M. & Lundström, M., Aug 2021, In: *Hydrometallurgy*. 203, 105492.

The efficiency of scrap Cu and Al current collector materials as reductants in LIB waste leaching

Chernyaev, A., Partinen, J., Klemettinen, L., Wilson, B. P., Jokilaakso, A. & Lundström, M., Aug 2021, In: Hydrometallurgy. 203, 10 p., 105608.

Controllable Production of Ag/Zn and Ag Particles from Hydrometallurgical Zinc Solutions

Wang, Z., Hannula, P.-M., De, S., Wilson, B. P., Vapaavuori, J., Yliniemi, K. & Lundström, M., 21 Jun 2021, In: ACS Sustainable Chemistry and Engineering. 9, 24, p. 8186–8197 12 p.

Selective lithium recovery and integrated preparation of high-purity lithium hydroxide products from spent lithium-ion batteries

Liu, F., Peng, C., Ma, Q., Wang, J., Zhou, S., Chen, Z., Wilson, B. P. & Lundström, M., 15 Mar 2021, In: Separation and Purification Technology. 259, 9 p., 118181.

Selective extraction of valuable metals from spent EV power batteries using sulfation roasting and two stage leaching process

Chen, Y., Shi, P., Chang, D., Jie, Y., Yang, S., Wu, G., Chen, H., Zhu, J., Hu, F., Wilson, B. P. & Lundström, M., 1 Mar 2021, In: Separation and Purification Technology. 258, Part 1, 10 p., 118078.

Cyclic voltammetry and potentiodynamic polarization studies of chalcopyrite concentrate in glycine medium

Khezri, M., Rezai, B., Abdollahzadeh, A. A., Wilson, B. P., Molaeinasab, M. & Lundström, M., Feb 2021, In: Transactions of Nonferrous Metals Society of China (English Edition). 31, 2, p. 545-554 10 p.

Hazard-free treatment of electrolytic manganese residue and recovery of manganese using low temperature roasting-water washing process

He, S., Wilson, B. P., Lundström, M. & Liu, Z., 15 Jan 2021, In: Journal of Hazardous Materials. 402, 11 p., 123561.

Environmental Aspects of the Electrochemical Recovery of Tellurium by Electrochemical Deposition-Redox Replacement (EDRR)

Halli, P., Rinne, M., Wilson, B. P., Yliniemi, K. & Lundström, M., 2021, *Rare Metal Technology 2021*. Springer, p. 57-63 7 p. (Minerals, Metals and Materials Series).

Global occurrence, chemical properties, and ecological impacts of e-wastes (IUPAC technical report)

Purchase, D., Abbasi, G., Bisschop, L., Chatterjee, D., Ekberg, C., Ermolin, M., Fedotov, P., Garelick, H., Isimekhai, K., Kandile, N. G., Lundström, M., Matharu, A., Miller, B. W., Pineda, A., Popoola, O. E., Retegan, T., Ruedel, H., Serpe, A., Sheva, Y. & Surati, K. R. & 3 others, Walsh, F., Wilson, B. P. & Wong, M. H., 1 Nov 2020, In: Pure and Applied Chemistry. 92, 11, p. 1733-1767 35 p.

A sustainable two-layer lignin-anodized composite coating for the corrosion protection of high-strength low-alloy steel

Dastpak, A., Hannula, P. M., Lundström, M. & Wilson, B. P., Nov 2020, In: PROGRESS IN ORGANIC COATINGS. 148, 9 p., 105866.

Glycine leaching of Sarcheshmeh chalcopyrite concentrate at high pulp densities in a stirred tank reactor

Khezri Khabisi, M., Rezai, B., Abdollahzadeh, A. A., Molaeinasab, M., Wilson, B. P. & Lundström, M., 1 Oct 2020, In: Minerals Engineering. 157, 10 p., 106555.

Clean and efficient recovery of spent LiCoO₂ cathode material: Water-leaching characteristics and low-temperature ammonium sulfate calcination mechanisms

He, S., Wilson, B. P., Lundström, M. & Liu, Z., 20 Sept 2020, In: Journal of Cleaner Production. 268, 15 p., 122299.

Design of optimal electrolyte circulation based on the kinetic modelling of copper dissolution in silver electrorefining

Aji, A., Hamuyuni, J., Aromaa, J., Wilson, B. P. & Lundström, M., 1 Sept 2020, In: Hydrometallurgy. 196, 8 p., 105403.

Mechanism of selective gold extraction from multi-metal chloride solutions by electrodeposition-redox replacement

Korolev, I., Spathariotis, S., Yliniemi, K., Wilson, B. P., Abbott, A. & Lundström, M., 7 Jun 2020, In: Green Chemistry. 22, 11, p. 3615-3625 11 p.

Solubility study of lignin in industrial organic solvents and investigation of electrochemical properties of spray-coated solutions

Dastpak, A., Vergara Lourencon, T., Balakshin, M., Hashmi, F., Lundström, M. & Wilson, B. P., Jun 2020, In: Industrial Crops and Products. 148, 11 p., 112310.

Nickel Metal Hydride Battery Waste : Mechano-hydrometallurgical Experimental Study on Recycling Aspects

Porvali, A., Ojanen, S., Wilson, B. P., Serna-Guerrero, R. & Lundström, M., 1 Mar 2020, In: Journal of Sustainable Metallurgy. 6, 1, p. 78-90 13 p.

Role of impurity copper in Li-ion battery recycling to LiCoO_2 cathode materials

Peng, C., Lahtinen, K., Medina, E., Kauranen, P., Karppinen, M., Kallio, T., Wilson, B. P. & Lundström, M., 29 Feb 2020, In: Journal of Power Sources. 450, 8 p., 227630.

Applicability of solid process residues as sorbents for the treatment of industrial wastewaters

Khalid, M. K., Agarwal, V., Wilson, B. P., Takaluoma, E. & Lundström, M., 10 Feb 2020, In: Journal of Cleaner Production. 246, 11 p., 118951.

Comparison of Different Leaching Media and Their Effect on REEs Recovery from Spent Nd-Fe-B Magnets

Liu, F., Porvali, A., Halli, P., Wilson, B. P. & Lundström, M., 1 Feb 2020, In: JOM. 72, 2, p. 806-815 10 p.

Recovery of High-Purity MnO_2 from the Acid Leaching Solution of Spent Li-Ion Batteries

Peng, C., Chang, C., Wang, Z., Wilson, B. P., Liu, F. & Lundström, M., 1 Feb 2020, In: JOM. 72, 2, p. 790-799 10 p.

Electrochemical recovery of tellurium from metallurgical industrial waste

Halli, P., Wilson, B. P., Hailemariam, T., Latostenmaa, P., Yliniemi, K. & Lundström, M., 1 Jan 2020, In: Journal of Applied Electrochemistry. 50, 1, p. 1-14 14 p.

Investigation of the anticorrosion performance of lignin coatings after crosslinking with triethyl phosphate and their adhesion to a polyurethane topcoat

Dastpak, A., Wilson, B. P. & Lundström, M., 1 Jan 2020, In: Agronomy Research. 18, Special Issue 1, p. 762-770 9 p.

Recovery and separation of rare earths and boron from spent Nd-Fe-B magnets

Liu, F., Porvali, A., Wang, J. L., Wang, H., Peng, C., Wilson, B. P. & Lundström, M., 1 Jan 2020, In: Minerals Engineering. 145, 9 p., 106097.

AALTOLAB Virtual Laboratories

Girmay, S., Karttunen, A., Linnera, J., Nieminen, M., Yliniemi, K., Viitaharju, P., Assad, A., Laaksonen, P., Eklund, K., Hirvi, J., Holopainen, R., Knispel, S., Möttönen, N., Paavola, P., Rautama, E.-L., Sjöholm, T., Torvinen, M. & Wilson, B., 2020

High Purity Nickel Recovery from an Industrial Sidestream Using Concentration and Liquid-Liquid Extraction Techniques

Hu, F., Wilson, B. P., Han, B., Zhang, J., Louhi-Kultanen, M. & Lundström, M., 4 Dec 2019, In: JOM. 8 p.

Recycling of spent NiMH batteries: Integration of battery leach solution into primary Ni production using solvent extraction

Agarwal, V., Khalid, M. K., Porvali, A., Wilson, B. P. & Lundström, M., 1 Dec 2019, In: Sustainable Materials and Technologies. 22, e00121.

Correction to: Recovery of High-Purity MnO_2 from the Acid Leaching Solution of Spent Li-Ion Batteries

Peng, C., Chang, C., Wang, Z., Wilson, B. P., Liu, F. & Lundström, M., 1 Oct 2019, In: JOM. 72, 2, p. 978-978 1 p.

Biomass-Assisted Reductive Leaching in H_2SO_4 Medium for the Recovery of Valuable Metals from Spent Mixed-Type Lithium-Ion Batteries

Chen, Y., Chang, D., Liu, N., Hu, F., Peng, C., Zhou, X., He, J., Jie, Y., Wang, H., Wilson, B. P. & Lundström, M., 11 Sept 2019, In: JOM. 8 p.

Synergistic Recovery of Valuable Metals from Spent Nickel–Metal Hydride Batteries and Lithium-Ion Batteries

Liu, F., Peng, C., Porvali, A., Wang, Z., Wilson, B. P. & Lundström, M., 29 Aug 2019, In: ACS Sustainable Chemistry and Engineering.

Extraction of Li and Co from industrially produced Li-ion battery waste – Using the reductive power of waste itself

Peng, C., Liu, F., Aji, A. T., Wilson, B. P. & Lundström, M., 15 Jul 2019, In: Waste Management. 95, p. 604-611 8 p.

Modelling of silver anode dissolution and the effect of gold as impurity under simulated industrial silver electrorefining conditions

Aji, A. T., Halli, P., Guimont, A., Wilson, B. P., Aromaa, J. & Lundström, M., 15 Jul 2019, In: Hydrometallurgy. 189, 7 p., 105105.

Purification of Nickel Sulfate by Batch Cooling Crystallization

Han, B., Bøckman, O., Wilson, B. P., Lundström, M. & Louhi-Kultanen, M., 1 Jul 2019, In: Chemical Engineering and Technology. 42, 7, p. 1475-1480 6 p.

Recovery of Silver from Dilute Effluents via Electrodeposition and Redox Replacement

Wang, Z., Halli, P., Hannula, P., Liu, F., Wilson, B. P., Yliniemi, K. & Lundström, M., 22 May 2019, In: Journal of the Electrochemical Society. 166, 8, p. E266-E274 9 p.

Recovery and separation of silver and mercury from hazardous zinc refinery residues produced by zinc oxygen pressure leaching

Liu, F., Wang, J., Peng, C., Liu, Z., Wilson, B. P. & Lundström, M., 1 May 2019, In: Hydrometallurgy. 185, p. 38-45 8 p.

Diffusion coefficient of cupric ion in a copper electrorefining electrolyte containing nickel and arsenic

Kalliomäki, T., Wilson, B. P., Aromaa, J. & Lundström, M., 1 Apr 2019, In: Minerals Engineering. 134, p. 381-389 9 p.

Electro-hydraulic fragmentation vs conventional crushing of photovoltaic panels – Impact on recycling

Nevala, S. M., Hamuyuni, J., Junnila, T., Sirviö, T., Eisert, S., Wilson, B. P., Serna-Guerrero, R. & Lundström, M., 15 Mar 2019, In: Waste Management. 87, p. 43-50 8 p.

Recovery of Gold from Chloride Solution by TEMPO-Oxidized Cellulose Nanofiber Adsorbent

Jafari, S., Wilson, B. P., Hakalahti, M., Tammelin, T., Kontturi, E., Lundström, M. & Sillanpää, M., 6 Mar 2019, In: SUSTAINABILITY. 11, 5, 16 p., 1406.

Mechanical and hydrometallurgical processes in HCl media for the recycling of valuable metals from Li-ion battery waste

Porvali, A., Aaltonen, M., Ojanen, S., Velazquez Martinez, O., Eronen, E., Liu, F., Wilson, B. P., Serna Guerrero, R. & Lundström, M., 1 Mar 2019, In: RESOURCES CONSERVATION AND RECYCLING. 142, p. 257-266 10 p.

Selective extraction of lithium (Li) and preparation of battery grade lithium carbonate (Li₂CO₃) from spent Li-ion batteries in nitrate system

Peng, C., Liu, F., Wilson, B. P., Lundström, M. & Wang, Z., 1 Mar 2019, In: Journal of Power Sources. 415, p. 179-188 10 p.

Materials Matter: What if... Wood could protect metals?

Dastpak, A., Wilson, B. P., Lundström, M., Relander, A. (Designer) & Poskiparta, L. (Designer), 23 Jan 2019

Models for the diffusion coefficient of cupric ion and limiting current density in a copper electrorefining electrolyte

Kalliomäki, T., Wilson, B. P., Aromaa, J. & Lundström, M., 1 Jan 2019, *IMPC 2018 - 29th International Mineral Processing Congress*. Canadian Institute of Mining, Metallurgy and Petroleum, p. 2673-2680 8 p.

Toxicity Identification and Evolution Mechanism of Thermolysis-Driven Gas Emissions from Cathodes of Spent Lithium-Ion Batteries

Chen, Y., Liu, N., Jie, Y., Hu, F., Li, Y., Wilson, B. P., Xi, Y., Lai, Y. & Yang, S., 1 Jan 2019, In: ACS Sustainable Chemistry and Engineering. 22, 7, p. 18228-18235

Hydrothermal precipitation of nickel and cobalt oxides

Agarwal, V., Oksanen, E., Seisko, S., Wilson, B. P., Aromaa, J., Bøckman, O. & Lundström, M., 2019, *European Metallurgical Conference EMC 2019*. Düsseldorf, Germany: GDMB Verlag, Vol. 2. p. 793-805 13 p.

Oxalic acid recovery from high iron oxalate waste solution by a combination of ultrasound-assisted conversion and cooling crystallization

Liu, F., Peng, C., Wilson, B. P. & Lundström, M., 2019, In: ACS Sustainable Chemistry and Engineering. 20, 7, p. 17372-17378 22 p.

From Waste to Valuable Resource: Lignin as a Sustainable Anti-Corrosion Coating

Dastpak, A., Yliniemi, K., Cecilio de Oliveira Monteiro, M., Höhn, S., Virtanen, S., Lundström, M. & Wilson, B. P., 8 Dec 2018, In: *Coatings*. 8, 12, 16 p., 454.

Materials Matter exhibition at Slush: What if... Metals could be protected with wood?

Dastpak, A., Wilson, B. P., Lundström, M., Poskiparta, L. (Designer) & Relander, A. (Designer), 4 Dec 2018

A direct synthesis of platinum/nickel co-catalysts on titanium dioxide nanotube surface from hydrometallurgical-type process streams

Yliniemi, K., Nguyen, N. T., Mohajernia, S., Liu, N., Wilson, B., Schmuki, P. & Lundström, M., 10 Nov 2018, In: *Journal of Cleaner Production*. 201, p. 39-48 9 p.

Platinum Recovery from Industrial Process Solutions by Electrodeposition-Redox Replacement

Halli, P., Heikkinen, J. J., Elomaa, H., Wilson, B. P., Jokinen, V., Yliniemi, K., Franssila, S. & Lundström, M., 5 Nov 2018, In: ACS Sustainable Chemistry and Engineering. 6, 11, p. 14631-14640 10 p.

Kinetic study and modelling of silver dissolution in synthetic industrial silver electrolyte as a function of electrolyte composition and temperature

Aji, A., Aromaa, J., Wilson, B., Mohanty, U. S. & Lundström, M., 1 Jul 2018, In: *Corrosion Science*. 138, p. 163-169 7 p.

Structural distinction due to deposition method in ultrathin films of cellulose nanofibres

Wilson, B., Yliniemi, K., Gestranus, M., Hakalahti, M., Putkonen, M., Lundström, M., Karppinen, M., Tammelin, T. & Kontturi, E., 1 Mar 2018, In: *Cellulose*. 25, 3, p. 1715-1724 10 p.

Time-Dependent Behavior of Cation Transport through Cellulose Acetate-Cationic Polyelectrolyte Membranes

Hakanpää, J., Yliniemi, K., Wilson, B., Putkonen, M., Höhn, S., Kontturi, E., Virtanen, S. & Murtomäki, L., 2 Feb 2018, In: *Journal of the Electrochemical Society*. 165, 2, p. H39-H44 6 p.

Lanthanide-alkali double sulfate precipitation from strong sulfuric acid NiMH battery waste leachate

Porvali, A., Wilson, B. P. & Lundström, M., Jan 2018, In: *Waste Management*. 71, p. 381-389

Purification of Nickel Sulfate by Batch Cooling Crystallization

Han, B., Hassanein, J., Bøckman, O., Wilson, B., Lundström, M. & Louhi-Kultanen, M., 2018, p. 30-35. 6 p.

Selective reductive leaching of cobalt and lithium from industrially crushed waste Li-ion batteries in sulfuric acid system

Peng, C., Hamuyuni, J., Wilson, B. P. & Lundström, M., 2018, In: *Waste Management*. 76, p. 582-590 9 p.

Effect of typical impurities for the formation of floating slimes in copper electrorefining

Jafari, S., Kiviluoma, M., Kalliomäki, T., Klindtworth, E., Aji, A. T., Aromaa, J., Wilson, B. P. & Lundström, M., 10 Nov 2017, In: *International Journal of Mineral Processing*. 168, p. 109-115 7 p.

Leaching of Metals from Spent Lithium-Ion Batteries

Aaltonen, M., Peng, C., Wilson, B. & Lundström, M., 31 Oct 2017, In: *Recycling*. 2, 4, 9 p., 20.

The Effect of the Redox Potential of Aqua Regia and Temperature on the Au, Cu, and Fe Dissolution from WPCBs

Elomaa, H., Seisko, S., Junnila, T., Sirviö, T., Wilson, B., Aromaa, J. & Lundström, M., 1 Sept 2017, In: *Recycling*. 2, 3, 9 p., 14.

Recovery and separation of gallium(III) and germanium(IV) from zinc refinery residues: Part II: Solvent extraction

Liu, F., Liu, Z., Li, Y., Wilson, B. P., Liu, Z., Zeng, H.-L. & Lundström, M., 1 Aug 2017, In: *Hydrometallurgy*. 171, p. 149-156 8 p.

Noncovalent surface modification of cellulose nanopapers by adsorption of polymers from aprotic solvents

Kontturi, K. S., Biegaj, K., Mautner, A., Woodward, R. T., Wilson, B. P., Johansson, L. S., Lee, K. Y., Heng, J. Y. Y., Bismarck, A. & Kontturi, E., 13 Jun 2017, In: *Langmuir*. 33, 23, p. 5707-5712 6 p.

Extraction of Ga and Ge from zinc refinery residues in H₂C₂O₄ solutions containing H₂O₂

Liu, F., Liu, Z., Li, Y., Wilson, B. & Lundström, M., 10 Jun 2017, In: *International Journal of Mineral Processing*. 163, p. 14-23 10 p.

Strongly reduced thermal conductivity in hybrid ZnO/nanocellulose thin films

Jin, H., Marin, G., Giri, A., Tynell, T., Gestranus, M., Wilson, B. P., Kontturi, E., Tammelin, T., Hopkins, P. E. & Karppinen, M., May 2017, In: *Journal of Materials Science*. 52, 10, p. 6093-6099 7 p.

Cellulose-inorganic hybrid structures as promising thermoelectric materials

Tammelin, T., Gestranus, M., Putkonen, M., Wilson, B., Karppinen, M. & Kontturi, E., 2 Apr 2017, In: *Abstracts of Papers of the American Chemical Society*. 253, 1 p.

Exclusive surface modification of cellulose nanopapers by adsorption of polymers from non-aqueous solvents

Kontturi, K., Biegaj, K., Mautner, A., Woodward, R., Wilson, B., Lee, K.-Y., Heng, J., Bismarck, A. & Kontturi, E., 2 Apr 2017, In: *Abstracts of Papers of the American Chemical Society*. 253, 1 p.

Fundamental differences due to deposition method in ultrathin films of cellulose nanofibres

Wilson, B., Yliniemi, K., Gestranus, M., Putkonen, M., Tammelin, T. & Kontturi, E., 2 Apr 2017, In: *Abstracts of Papers of the American Chemical Society*. 253, 1 p.

Organisation of cellulose ester monolayers on solid substrates upon Langmuir-Schaefer deposition

Niinivaara, E., Wilson, B., King, A. & Kontturi, E., 2 Apr 2017, In: *Abstracts of Papers of the American Chemical Society*. 253, 1 p.

Behavior of gallium and germanium associated with zinc sulfide concentrate in oxygen pressure leaching

Liu, F., Liu, Z., Li, Y., Wilson, B. P. & Lundstrom, M., 2017, In: *Physicochemical Problems of Mineral Processing*. 53, 2, p. 1047-1060 14 p.

Carbon Nanostructure Based Platform for Enzymatic Glutamate Biosensors

Isoaho, N., Peltola, E., Sainio, S., Wester, N., Protopopova, V., Wilson, B., Koskinen, J. & Laurila, T., 2017, In: *Journal of Physical Chemistry C*. 121, 8, p. 4618-4626 9 p.

Improved Metal Circular Economy-Selective Recovery of Minor Ag Concentrations from Zn Process Solutions

Halli, P., Elomaa, H., Wilson, B., Yliniemi, K. & Lundström, M., 2017, In: *ACS Sustainable Chemistry and Engineering*. 5, 11, 9 p., 7b02904.

Leaching of Sb from TROF furnace Doré slag

Halli, P., Jolivet, S., Klöfverskjöld, A., Wilson, B., Latostenmaa, P. & Lundström, M., 2017, *Minerals, Metals and Materials Series*. Zhang et al (ed.). Springer, p. 43-49 7 p. (Minerals, Metals & Materials Series).

Modelling the physico-chemical effect of silver electrorefining as effect of temperature, free acid, silver, copper and lead concentrations

Aji, A. T., Kalliomäki, T., Wilson, B. P., Aromaa, J. & Lundström, M., 2017, *Proceedings of the 1st International Process Metallurgy Conference, IPMC 2016*. American Institute of Physics, 9 p. 030005. (AIP Conference Proceedings; no. 1805).

Observations of copper deposition on functionalized carbon nanotube films

Hannula, P.-M., Aromaa, J., Wilson, B. P., Janas, D., Koziol, K., Forsen, O. & Lundström, M., 2017, In: *Electrochimica Acta*. 232, p. 495–504 10 p.

Pressure leaching of decopperized copper electrorefining anode slimes in strong acid solution

Seisko, S., Aromaa, J., Latostenmaa, P., Forsen, O., Wilson, B. & Lundström, M., 2017, In: *Physicochemical Problems of Mineral Processing*. 53, 1, p. 465-474 10 p.

Recovery and separation of gallium(III) and germanium(IV) from zinc refinery residues: Part I: Leaching and iron(III) removal

Liu, F., Liu, Z., Li, Y., Wilson, B. & Lundström, M., 2017, In: *Hydrometallurgy*. 169, p. 564–570

Study of transport properties of polyelectrolyte-cellulose acetate membranes

Hakanpää, J., Yliniemi, K., Wilson, B. P., Putkonen, M., Kontturi, E., Virtanen, S. & Murtomäki, L., 2017, *Selected Proceedings from the 231st ECS Meeting New Orleans, LA - Spring 2017*. 11 ed. Electrochemical Society, Vol. 77. p. 663-669 7 p. (ECS Transactions; vol. 77, no. 11).

Modelling the effect of temperature and free acid, silver, copper and lead concentrations on silver electrorefining electrolyte conductivity

Aji, A. T., Kalliomäki, T., Wilson, B. P., Aromaa, J. & Lundström, M., 1 Dec 2016, In: *Hydrometallurgy*. 166, p. 154-159 6 p.

Carbon nanotube-copper composites by electrodeposition on carbon nanotube fibers

Hannula, P. M., Peltonen, A., Aromaa, J., Janas, D., Lundström, M., Wilson, B. P., Koziol, K. & Forsén, O., Oct 2016, In: *Carbon*. 107, p. 281-287 7 p.

The effect of gold on anode passivation and high current density operation under simulated silver electrorefining conditions

Aji, A., Purwadaria, S., Aromaa, J., Wilson, B., Forsen, O. & Lundström, M., 12 Sept 2016, In: *Hydrometallurgy*. 166, p. 57-61 5 p.

Parameters affecting monolayer organisation of substituted polysaccharides on solid substrates upon Langmuir-Schaefer deposition

Niinivaara, E., Wilson, B. P., King, A. W. T. & Kontturi, E., 1 Feb 2016, In: *Reactive and Functional Polymers*. 99, p. 100-106 7 p.

Hydrometallurgical Processing of Jarosite to Value-added Products

Kangas, P., Koukkari, P., Wilson, B., Lundström, M., Rastas, J. K., Saikkonen, P. J., Leppinen, J. & Hintikka, V., 2016.

Value-added materials from the hydrometallurgical processing of jarosite waste

Wilson, B. P., Halli, P., Orko, I., Kangas, P., Lundström, M. & Koukkari, P., 2016, *MINERAL ENGINEERING CONFERENCE (MEC2016)*. Kowalczyk, P. & Drzymala, J. (eds.). EDP Sciences, 1 p. UNSP 01015. (E3S Web of Conferences; vol. 8).

Direct alcohol fuel cells: Increasing platinum performance by modification with sp-group metals

Costa Figueiredo, M., Sorsa, O., Doan, T., Pohjalainen, E., Hildebrand, H., Schmuki, P., Wilson, B. P. & Kallio, T., 1 Feb 2015, In: *Journal of Power Sources*. 275, p. 341-350 10 p.

Electrochemical Scanning Techniques for the Examination of Bi-Metallic Coins

Searle, J. R., Glover, C. F., Khan, K., Wilson, B. P., Williams, G. & Worsley, D. A., 2015, In: *ECS Transactions*. 64, 28, p. 47-59

The use of 3D-SVET for the examination of plasticized PVC coatings: Effect of deformation and UV irradiation on barrier properties

Searle, J., Wilson, B., Yliniemi, K., Worsley, D. A. & McMurray, H. N., 2015, In: ECS Transactions. 64, 26, p. 69-80

Dissolution Control of Mg by Cellulose Acetate-Polyelectrolyte Membranes

Yliniemi, K., Wilson, B. P., Singer, F., Höhn, S., Kontturi, E. & Virtanen, S., 26 Nov 2014, In: ACS Applied Materials and Interfaces. 6, 24, p. 22393-22399 7 p.

An experimental and CFD investigation into the mixing in a closed system stirred vessel

Wilson, B., 2014, *KES Transactions on Sustainable Design and Manufacturing: Proceedings from SDM'2014 International Conference on Sustainable Design and Manufacturing Cardiff, Wales, UK 28-30 April 2014*. Setchi, R., Howlett, R. J., Naim, M. & Seinz, H. (eds.). 1 ed. Future Technology Press, Vol. 1. p. 720-732 12 p.

Formation of Pt/Pb nanoparticles by electrodeposition and redox replacement cycles on fluorine doped tin oxide glass

Yliniemi, K., Wragg, D., Wilson, B. P., McMurray, H. N., Worsley, D. A., Schmuki, P. & Kontturi, K., 2013, In: Electrochimica Acta. 88, xx, p. 278-286

Investigation into the Effect of Spot Weld Electrode Life and Quality on the Corrosion Behavior of Galvanized Automotive Steel Using the Three-dimensional Scanning Vibrating Technique

Wilson, B. P., Searle, J. R., Yliniemi, K., Jones, T. B., Worsley, D. A. & McMurray, H. N., 2013, In: ECS Transactions. 50, 47, p. 53-64

Life cycle assessment of gas atomised sponge nickel for use in alkaline hydrogen fuel cell applications

Wilson, B. P., Lavery, N. P., Jarvis, D. J., Anttila, T., Rantanen, J., Brown, S. G. R. & Adkins, N. J., 2013, In: Journal of Power Sources. 243, XX, p. 242-252

Life cycle assessment of sponge nickel produced by gas atomisation for use in industrial hydrogenation catalysis applications

Lavery, N. P., Jarvis, D. J., Brown, S. G. R., Adkins, N. J. & Wilson, B. P., 2013, In: International Journal of Life Cycle Assessment. 18, 2, p. 362-376

Combined in situ electrochemical impedance spectroscopy-UV/Vis and AFM studies of Ag nanoparticle stability in perfluorinated films

Yliniemi, K., Özkaya, B., Alissawi, N., Zaporotjchenko, V., Strunskus, T., Wilson, B. P., Faupel, F. & Grundmeier, G., 2012, In: Materials Chemistry and Physics. 134, 1, p. 302-308

Effect of probe tip inclination on the response of the Scanning Vibrating Electrode Technique to an idealised pit-like feature

Wilson, B. P., Searle, J. R., Yliniemi, K., Worsley, D. A. & Mc-Murray, H. N., 2012, In: Electrochimica Acta. 66, 66, p. 52-60

Determining the Stability of Perfluorinated Ag Nanoparticle Coatings Using in situ UV/Vis-EIS and AFM

Yliniemi, K., Öskaya, B., Alissawi, N., Zaporotjchenko, V., Strunskus, T., Wilson, B., Faubel, F. & Grundmeier, G., 2011, *ECASIA'11, 4 - 9 Sept 2011, Cardiff, UK*.

QCM study of the adsorption of polyelectrolyte covered mesoporous TiO₂ nanocontainers on SAM modified Au surfaces

Pomorska, A., Yliniemi, K., Wilson, B. P., Shchukin, D., Johannsmann, D. & Grundmeier, G., 2011, In: Journal of Colloid and Interface Science. 362, 1, p. 180-187

Effect of viscosity and applied potential on oscillations at a Pt/Pt dual-electrode in a ferricyanide system

Wilson, B. P., Yliniemi, K., Murtoimäki, L. & Kontturi, K., 2010, In: Electrochimica Acta. 55, 15, p. 4669-4675

Sympathetic current oscillations at an enzyme electrode induced by potential oscillations at a Pt surface

Wilson, B. P., Yliniemi, K., Murtoimäki, L. & Kontturi, K., 2009, In: Electrochemistry Communications. 11, 12, p. 2328-2331

Towards Oscillating and Active Enzyme Surfaces

Wilson, B., Yliniemi, K., Saloheimo, M., Linder, M. & Kontturi, K., 2009, (5th Kurt Schwabe Symposium, Friedrich-Alexander Universität Erlangen-Nürnberg, Erlangen, Germany, May 24 - 28, 2009).

Effect of additives on smut-layer formation and pitting during aluminum etching in hydrochloric acid

Wilson, B. P., Dotremont, A., Biesemans, M., Willem, R., Campestrini, P. & Terryn, H., 1 Jan 2008, In: Journal of the Electrochemical Society. 155, 1

Different Approaches for Surface Modifications: Inhibition of Copper Corrosion and Surfaces with Strongly Adhering Ag Nanoparticles

Yliniemi, K., Barranco, V., Wilson, B., Huuppola, M., Kontturi, K. & Vahvaselkä, M., 2008, *59th Annual Meeting of the International Society of Electrochemistry, Sevilla, Spain, 7.-12.9.2008*.

The formation and characterisation of ultra-thin films containing Ag nanoparticles.

Yliniemi, K., Vahvaselkä, M., Van Ingelgem, Y., Baert, K., Wilson, B. P., Terryn, H. & Kontturi, K., 2008, In: Journal of Materials Chemistry. 18, 2, p. 199-206

Surface Modifications of Metals with Strongly Adhering Silver Nanoparticles

Yliniemi, K., Van Ingelgem, Y., Baert, K., Wilson, B., Grundmeier, G., Terryn, H. & Kontturi, K., 2007, (ECASIA'07, Brussels, Belgium, 9.-14.9.2007).

Formation of ultra-thin amorphous conversion films on zinc alloy coatings: Part 2: Nucleation, growth and properties of inorganic-organic ultra-thin hybrid films

Wilson, B., Fink, N. & Grundmeier, G., 1 Apr 2006, In: Electrochimica Acta. 51, 15, p. 3066-3075 10 p.

Formation of ultra-thin amorphous conversion films on zinc alloy coatings: Part 1. Composition and reactivity of native oxides on ZnAl (0.05%) coatings

Fink, N., Wilson, B. & Grundmeier, G., 15 Mar 2006, In: Electrochimica Acta. 51, 14, p. 2956-2963 8 p.

Investigating changes in corrosion mechanism induced by laser welding galvanised steel specimens using scanning vibrating electrode technique

McMurray, H. N., Searle, J. R., Wilson, B. P. & Worsley, D. A., 1 Jan 2002, In: British Corrosion Journal. 37, 3, p. 225-230 6 p.

Mechanistic and spatial study of ultrasonically induced luminol chemiluminescence

McMurray, H. N. & Wilson, B. P., 20 May 1999, In: Journal of Physical Chemistry A. 103, 20, p. 3955-3962 8 p.

Hydrogen evolution and oxygen reduction at a titanium sonotrode

McMurray, H. N., Worsley, D. A. & Wilson, B. P., 21 Apr 1998, In: Chemical Communications. 8, p. 887-888 2 p.

Activities

Khawla Lamghari

Wilson, B. (Host) & Lundström, M. (Host)
1 Sept 2024 → 30 Nov 2024

External evaluator of "Cyanide use, recovery, and reuse at the DRDGOLD ERGO Brakpan Gold Tailings Mine"

Wilson, B. (Examiner)
20 May 2024

Philipp Leerhof

Wilson, B. (Host)
4 Mar 2024 → 8 Mar 2024

Fund for Innovation and Entrepreneurship - VLAIO

Wilson, B. (Examiner)

1 Jan 2024 → 31 Jan 2024

Scientists in Schools Presentation: Ulvilan lukio

Wilson, B. (Speaker)

6 Nov 2023

International Process Metallurgy Symposium

Wilson, B. (Chair)

1 Nov 2023

Electrochemical Society Meeting

Wilson, B. (Chair)

8 Oct 2023 → 10 Oct 2023

External PhD Examiner "Development of a Dynamic Model for Direct Copper Electrowinning Operations"

Wilson, B. (Examiner)

29 Sept 2023

Sathish Ponnurangam

Lundström, M. (Host), Wilson, B. (Host) & Yliniemi, K. (Host)

23 Jan 2023 → 31 Mar 2023

Finland-based Circular Ecosystem of Battery Metals - BATCircle2.0

Wilson, B. (Speaker)

18 May 2022

Scientific Reports (Journal)

Wilson, B. (Editorial board member)

Sept 2021 → ...

Kerli Liivand

Lundström, M. (Host) & Wilson, B. (Host)

Jun 2021 → Dec 2021

Science of the Total Environment (Journal)

Wilson, B. (Reviewer)

2021 → ...

Scientists in Schools Presentation: Lauttasaaren yhteiskoulu

Wilson, B. (Participant)

30 Oct 2020

Scientists in Schools Presentation: Ressu High School

Wilson, B. (Participant)

27 Oct 2020

Finland - Michigan Energy Circle: Combating Climate Change

Wilson, B. (Organiser), Stefanopoulou, A. (Organiser) & Kivistö, M. (Organiser)

26 Oct 2020 → 12 Nov 2020

Minerals (Journal)

Wilson, B. (Reviewer)
20 Jun 2020

Johannes Herman Potgieter

Wilson, B. (Host) & Lundström, M. (Host)
3 Feb 2020 → 30 Jun 2020

Chemical Engineering and Processing (Journal)

Wilson, B. (Reviewer)
2020

ChemPhysChem (Journal)

Wilson, B. (Reviewer)
2020

Elsevier (Publisher)

Wilson, B. (Reviewer)
2020

Process Safety and Environmental Protection (Journal)

Wilson, B. (Reviewer)
2020

International Process Metallurgy Symposium

Wilson, B. (Member)
5 Nov 2019

Annual Meeting of the International Society of Electrochemistry

Wilson, B. (Participant), Dastpak, A. (Member), Yliniemi, K. (Member), Höhn, S. (Member), Monteiro, M. (Member), Virtanen, S. (Member) & Lundström, M. (Member)
8 Aug 2019

Towards Circular Economy of Metals via Electrodeposition – Redox Replacement (EDRR)

Yliniemi, K. (Speaker), Wang, Z. (Contributor), Halli, P. (Contributor), Korolev, I. (Contributor), Hannula, P.-M. (Contributor), Wilson, B. (Contributor) & Lundström, M. (Contributor)
4 Aug 2019 → 9 Aug 2019

Remote Referee

Wilson, B. (Examiner)
Aug 2019

World Circular Economy Forum

Wilson, B. (Member), Kauranen, P. (Participant), Hannula, P.-M. (Member), Lundström, M. (Participant), Henriksson, T. (Participant) & Löyttyniemi, M. (Participant)
3 Jun 2019 → 4 Jun 2019

Battery Recycling in Practice

Wilson, B. (Speaker) & Lundström, M. (Contributor)
12 Feb 2019

Scientists in Schools Presentation: Kulosaaren yhteiskoulu

Wilson, B. (Participant)
24 Jan 2019

Scientists in Schools Presentation: Mäkelänrinteen lukio

Wilson, B. (Participant)

19 Dec 2018

Scientists in Schools Presentation: Ulvilan lukio

Wilson, B. (Participant)

9 Nov 2018

Sustainable Precious Metal Recovery by Electrodeposition-Redox Replacement (EDRR)

Yliniemi, K. (Speaker), Wilson, B. (Contributor), Korolev, I. (Contributor), Halli, P. (Contributor), Hannula, P.-M. (Contributor), Wang, Z. (Contributor) & Lundström, M. (Contributor)

4 Sept 2018

Annual Meeting of the International Society of Electrochemistry

Wilson, B. (Member)

3 Sept 2018

Environmentally Friendly Coatings Derived from Biorefinery Side Streams for Improved Stainless Steel Corrosion Resistance

Wilson, B. (Speaker), Dastpak, A. (Contributor), Yliniemi, K. (Contributor), Monteiro, M. (Contributor), Höhn, S. (Contributor), Virtanen, S. (Contributor) & Lundström, M. (Contributor)

3 Sept 2018

Ali Ahmadi Ameleh

Wilson, B. (Host) & Lundström, M. (Host)

1 Jul 2018 → 10 Sept 2018

Maryam Khezri Khabisi

Wilson, B. (Host) & Lundström, M. (Host)

1 Jul 2018 → 10 Sept 2018

Friedrich-Alexander University Erlangen-Nürnberg

Wilson, B. (Visiting researcher) & Yliniemi, K. (Visiting researcher)

31 May 2018 → 10 Jun 2018

Effect of Impurities in Precious Metal Recovery by Electrodeposition-Redox Replacement Method from Industrial Side-Streams and Process Streams

Yliniemi, K. (Speaker), Halli, P. (Contributor), Korolev, I. (Contributor), Wang, Z. (Contributor), Hannula, P.-M. (Contributor), Wilson, B. P. (Contributor) & Lundström, M. (Contributor)

15 May 2018

Electrochemical Society Meeting

Wilson, B. (Member)

14 May 2018

Environmentally friendly coatings for improved stainless steel corrosion resistance from biorefinery side streams

Wilson, B. (Speaker)

14 May 2018

Heui-Joo Choi

Wilson, B. (Host) & Lundström, M. (Host)

1 Apr 2018 → 30 Nov 2018

Scientists in Schools Presentation

Wilson, B. (Participant)
12 Mar 2018

Aleksei Kritskii

Wilson, B. (Host) & Lundström, M. (Host)
Jan 2018 → May 2018

International Process Metallurgy Symposium in honour of Professor Pekka Taskinen

Wilson, B. (Member)
7 Nov 2017 → 8 Nov 2017

Metals and the Circular Economy: processing of battery wastes

Wilson, B. (Speaker)
23 Oct 2017

Yelyzaveta Rublova

Wilson, B. (Host) & Lundström, M. (Host)
1 Oct 2017 → 15 Dec 2017

Electrochemical Society Meeting

Wilson, B. (Member)
28 May 2017

Deposition of Ultrathin Cellulose Nanofibers Films As Bio-Implant Corrosion Coatings

Wilson, B. (Speaker), Paukkonen, N. (Contributor), Yliniemi, K. (Contributor), Hakalahti, M. (Contributor), Tammelin, T. (Contributor), Kontturi, E. (Contributor) & Lundström, M. (Contributor)
27 May 2017 → 2 Jun 2017

Study of Transport Properties of Polyelectrolyte-Cellulose Acetate Membranes

Hakanpää, J. (Contributor), Yliniemi, K. (Speaker), Wilson, B. (Contributor), Singer, F. (Contributor), Höhn, S. (Contributor), Kontturi, E. (Contributor) & Virtanen, S. (Contributor)
27 May 2017 → 2 Jun 2017

"Can Wood Stop Rust? Creating Cellulose-Based Coatings for Metals from Biorefining By-Products"

Wilson, B. (Speaker)
23 May 2017

Do Researchers Dream of Thermoelectric Trees?

Wilson, B. (Speaker)
May 2017

Waste Management (Journal)

Wilson, B. (Reviewer)
2017

Mineral Engineering Conference, Swieradow-Zdroj, Lower Silesia, Poland

Wilson, B. (Contributor)
25 Sept 2016 → 28 Sept 2016

Biopolymer-Polyelectrolyte Membranes for Mg Corrosion Control

Wilson, B. (Speaker)
4 Sept 2016 → 7 Sept 2016

IUPAC - International Union of Pure and Applied Chemistry (External organisation)

Wilson, B. (Member)

13 Jul 2016 → ...

Journal of Alloys and Compounds (Journal)

Wilson, B. (Reviewer)

2016

Metals (Journal)

Wilson, B. (Reviewer)

2016

International Hydrometallurgy Symposium in honor of Professor Olof Forsén

Wilson, B. (Member)

2 Nov 2015 → 3 Nov 2015

Electrochemical Society Meeting

Wilson, B. (Member)

11 Oct 2015 → 15 Oct 2015

Baltic Electrochemistry Conference

Wilson, B. (Organiser)

1 Aug 2015 → 30 Jun 2016

Use of Biopolymer-Polyelectrolyte Membranes to Control Mg Corrosion

Wilson, B. (Speaker), Yliniemi, K. (Contributor), Singer, F. (Contributor), Höhn, S. (Contributor), Kontturi, E. (Contributor), Murtomäki, L. (Contributor) & Virtanen, S. (Contributor)

13 Apr 2015 → 15 Apr 2015

Journal of Cleaner Production (Journal)

Wilson, B. (Reviewer)

2015 → 2016

Foreign Organisation

Wilson, B. (Visiting researcher)

1 Apr 2014 → 1 May 2014

Friedrich-Alexander University Erlangen-Nürnberg

Wilson, B. (Visiting researcher)

2014

The 2014 ECS and SMEQ (Sociedad Mexicana de Electroquímica) Joint International Meeting, Oct. 5-9, 2014, Cancun, Mexico

Wilson, B. (Contributor)

2014

UK Colloids 2014, London, 6th to 9th July,, United Kingdom

Wilson, B. (Contributor)

2014

University (External organisation)

Wilson, B. (Chair)

2014

University (External organisation)

Wilson, B. (Chair)
2014

University (External organisation)

Wilson, B. (Chair)
2014

Royal Society of Chemistry (External organisation)

Wilson, B. (Chair)
2013

ISE 2012, Prague, 18th-23 August 2012, Czech Republic

Wilson, B. (Contributor)
2012

Electrochemistry Communications (Journal)

Wilson, B. (Reviewer)
2011 → ...

University of Paderborn

Wilson, B. (Visiting researcher)
2010

5th Kurt Schwabe Corrosion Symposium, 24th to 28th May, Germany

Wilson, B. (Contributor)
2009

Electrochemistry Communications (Journal)

Wilson, B. (Reviewer)
2009

Electrochimica Acta (Journal)

Wilson, B. (Reviewer)
2009

Royal Society of Chemistry Annual General Meeting, 19th to 21st November, UK

Wilson, B. (Contributor)
2009

University (External organisation)

Wilson, B. (Chair)
2009

University (External organisation)

Wilson, B. (Chair)
2009

Electrochimica Acta (Journal)

Wilson, B. (Reviewer)
2007

Prizes

Galloway Award

Wilson, B. (Recipient), 2002

JWT Jones Travelling Fellowship Royal Society of Chemistry, England

Wilson, B. (Recipient), 2014

Projects

-: Batcircle 2.0, WP7

Lundström, M. (Principal investigator), Wilson, B. (Project Member) & Nurmi, S. (Project Member)
01/05/2021 → 31/08/2024

CERES Mod5 Microplas

Wilson, B. (Principal investigator) & Lohtander-Piispa, T. (Project Member)
01/05/2018 → 31/12/2020

CMeco: Circular Metal Ecosystem

Aji, A. (Project Member), Lundström, M. (Principal investigator), Agarwal, V. (Project Member), Hamuyuni, J. (Project Member), Khalid, M. K. (Project Member), Seisko, S. (Project Member), Halli, P. (Project Member), Sinisalo, P. (Project Member), Jafari, S. (Project Member), Peng, C. (Project Member), Wilson, B. (Project Member), Leikola, M. (Project Member), Elomaa, H. (Project Member), Partinen, J. (Project Member), Revitzer, H. (Project Member), Wang, Z. (Project Member) & Kalliomäki, T. (Project Member)
01/01/2017 → 30/04/2019

Cleaning of Mining Waters by Metal Recovery (CleanMET)

Halli, P. (Project Member), Wilson, B. (Project Member), Lundström, M. (Principal investigator), Johansson, L.-S. (Project Member) & Hannula, P.-M. (Project Member)
01/06/2016 → 14/11/2016

Closing the Loop for High-added-value Materials

Lundström, M. (Principal investigator), Aaltonen, M. (Project Member), Peng, C. (Project Member), Porvali, A. (Project Member), Revitzer, H. (Project Member) & Wilson, B. (Project Member)
01/04/2016 → 31/08/2019

EARMetal, Hydro: Electrochemically Assisted Aqueous Reduction of Waste Streams for Metals Recovery and Functional Surfaces

Lundström, M. (Principal investigator), Herrala, R. (Project Member), Cui, L. (Project Member), Yliniemi, K. (Project Member), Wang, Z. (Project Member), Wilson, B. (Project Member) & Mylly, M. (Project Member)
01/09/2021 → 31/08/2025

TUTL Elmery: Electrochemical Recovery of Currently Wasted Valuable Metals

Lundström, M. (Principal investigator), Revitzer, H. (Project Member), Sahlman, M. (Project Member), Yliniemi, K. (Project Member), Halli, P. (Project Member) & Wilson, B. (Project Member)
01/07/2020 → 31/12/2021

-: ENICON, WP3

Lundström, M. (Principal investigator), Wang, Z. (Project Member), Wilson, B. (Project Member), Yliniemi, K. (Project Member), Makarava, I. (Project Member), Zou, Y. (Project Member) & Kaim-Sevalneva, V. (Project Member)
01/06/2022 → 31/05/2026

-: ENICON, WP5

Lundström, M. (Principal investigator), Jokilaakso, A. (Project Member) & Wilson, B. (Project Member)
01/06/2022 → 31/05/2026

-: ENICON, WP7

Lundström, M. (Principal investigator) & Wilson, B. (Project Member)

01/06/2022 → 31/05/2026

-: ENICON, WP8

Jokilaakso, A. (Principal investigator) & Wilson, B. (Project Member)

01/06/2022 → 31/05/2026

BATCircle2: Finland-based circular ecosystem of battery metals

Lundström, M. (Principal investigator), Karppinen, A. (Project Member), Revitzer, H. (Project Member), Sahlman, M. (Project Member), Lappalainen, H. (Project Member), Rinne, M. (Project Member), Chernyaev, A. (Project Member), Wang, Z. (Project Member), Partinen, J. (Project Member), Alajoki, J. (Project Member), Halli, P. (Project Member), Zou, Y. (Project Member), Wilson, B. (Project Member), Vänskä, J. (Project Member), Palomäki, H. (Project Member), Sibarani, D. (Project Member), Klemettinen, L. (Project Member), Liljanko, H. (Project Member), Tran, H. (Project Member), Porkola, T.-M. (Project Member) & Mylly, M. (Project Member)

01/05/2021 → 30/04/2024

BATCIRCLE: Finland-based Circular Ecosystem of Battery Metals

Lundström, M. (Principal investigator), Porvali, A. (Project Member), Aromaa-Stubb, R. (Project Member), Aromaa, J. (Project Member), Wilson, B. (Project Member), Kalliomäki, T. (Project Member), Karppinen, A. (Project Member), Revitzer, H. (Project Member), Zhang, J. (Project Member), Chernyaev, A. (Project Member), Zou, Y. (Project Member), Hu, F. (Project Member), Ke, P. (Project Member), Liu, F. (Project Member), Rinne, M. (Project Member), Khalid, M. K. (Project Member), Palomäki, H. (Project Member), Partinen, J. (Project Member), Seisko, S. (Project Member), Peng, C. (Project Member), Sahlman, M. (Project Member), Wang, Z. (Project Member), Shukla, S. (Project Member), Forde, G. (Project Member) & Ruismäki, R. (Project Member)

01/01/2019 → 30/04/2021

HELIOS: High-pErformance moduLar battery packs for a wide range Of EVS

Lundström, M. (Principal investigator), Arellano, D. (Project Member), Sahivirta, H. (Project Member), Wilson, B. (Project Member), Chernyaev, A. (Project Member) & Rostami, A. (Project Member)

01/01/2021 → 31/12/2024

HydroMetEC - 19033 - 2020

Lundström, M. (Principal investigator) & Wilson, B. (Project Member)

01/01/2020 → 31/12/2020

HydroMetEC - 19033 - 2021

Lundström, M. (Principal investigator), Wilson, B. (Project Member), Halli, P. (Project Member) & Aromaa, J. (Project Member)

01/01/2021 → 31/12/2021

JAROGAIN - Liiketoimintaa sinkkijätteen arvometalleista

Leikola, M. (Project Member), Lundström, M. (Principal investigator), Halli, P. (Project Member), Wilson, B. (Project Member) & Jafari, S. (Project Member)

01/01/2016 → 31/12/2017

METYK: METYK - Metallialan Ympäristö- ja Kiertotalous

Wilson, B. (Project Member), Lundström, M. (Principal investigator), Aaltonen, M. (Project Member), Peng, C. (Project Member), Porvali, A. (Project Member), Leikola, M. (Project Member), Elomaa, H. (Project Member) & Halli, P. (Project Member)

01/01/2016 → 31/05/2017

NoWASTE: Novel Precious Metal Recovery from Waste Streams

Yliniemi, K. (Project Member), Lundström, M. (Principal investigator), Hannula, P.-M. (Project Member), Barranco Asensio, V. (Project Member), Wilson, B. (Project Member), Halli, P. (Project Member), Karppinen, A. (Project Member), Revitzer, H. (Project Member) & Wang, Z. (Project Member)

01/09/2016 → 31/12/2020

RESTART: REcycling of spent Li-ion batteries and end-life photovoltaic panels : From the development of metal recovery processes to the implementation of a START-up

Wilson, B. (Principal investigator), Rahimpour, S. (Project Member), Aromaa-Stubb, R. (Project Member) & Song, Y. (Project Member)

01/03/2022 → 28/02/2025

-: RESPECT, Hydro WP3

Lundström, M. (Principal investigator), Wilson, B. (Project Member), Partinen, J. (Project Member), Rinne, M. (Project Member) & Vänskä, J. (Project Member)

01/09/2022 → 30/06/2026

-: RESPECT, Hydro WP7

Lundström, M. (Principal investigator) & Wilson, B. (Project Member)

01/07/2022 → 30/06/2026

ReVolt - Lundström - 2019

Lundström, M. (Principal investigator), Jokilaakso, A. (Project Member), Klemettinen, A. (Project Member), Partinen, J. (Project Member), Chernyaev, A. (Project Member), Klemettinen, L. (Project Member), Wilson, B. (Project Member) & Revitzer, H. (Project Member)

01/01/2019 → 31/12/2019

Sustainable Drug Discovery and Development with End-of-Life Yield

Lundström, M. (Principal investigator), Agarwal, V. (Project Member), Dastpak, A. (Project Member), Wilson, B. (Project Member), Shukla, S. (Project Member), Revitzer, H. (Project Member) & Halli, P. (Project Member)

01/11/2018 → 30/06/2022

VYR-OXCOR 2021: The effect of oxide layer on copper corrosion in repository conditions (OXCOR)

Aromaa, J. (Principal investigator), Wilson, B. (Project Member), Sahlman, M. (Project Member), Halli, P. (Project Member) & Aromaa, T. (Project Member)

01/03/2021 → 31/01/2022

-: TOCANEM, Hydro

Lundström, M. (Principal investigator), Aji, A. (Project Member), Aromaa-Stubb, R. (Project Member), Palomäki, H. (Project Member), Alajoki, J. (Project Member), Wang, Z. (Project Member), Aromaa, J. (Project Member), Halli, P. (Project Member), Rinne, M. (Project Member), Sahlman, M. (Project Member), Makarava, I. (Project Member), Sibarani, D. (Project Member), Wilson, B. (Project Member), Song, Y. (Project Member) & Tran, H. (Project Member)

01/09/2020 → 31/12/2023

GoldTail: Towards Sustainable Gold Recovery from Tailings (GoldTail)

Lundström, M. (Principal investigator), Yliniemi, K. (Project Member), Halli, P. (Project Member), Karppinen, A. (Project Member), Revitzer, H. (Project Member), Wilson, B. (Project Member), Seisko, S. (Project Member), Sahlman, M. (Project Member) & Wang, Z. (Project Member)

01/10/2018 → 30/09/2021

TUTL Elmer Hydro Com

Lundström, M. (Principal investigator), Wilson, B. (Project Member), Miettinen, M. (Project Member), Paalanne, M. (Project Member) & Halli, P. (Project Member)

01/07/2020 → 30/04/2022

TUTL Elmer IES

Raula, J.-J. (Project Member) & Wilson, B. (Project Member)

01/07/2020 → 31/03/2022

VYR-OXCOR 2020

Aromaa, J. (Principal investigator), Aji, A. (Project Member), Wilson, B. (Project Member), Khalid, M. K. (Project Member) & Dastpak, A. (Project Member)

01/03/2020 → 31/01/2021

