

Curriculum vitae - Peter Leisner



Education

Academic degree		Scientific field
Docent*	Dec. 2001	Electronic Production (Linköping University, Sweden)
Ph.D.	Nov. 1992	Pulse plating (Technical University of Denmark).
M.Sc.	Jan. 1989	Electrochemistry and metallurgy (Technical University of Denmark)

*) The Swedish degree of DOCENT requires, in addition to a Ph.D. degree, documented abilities in scientific research beyond Ph.D. work and documented pedagogical competence at the advanced graduate level.

Employment

<i>From 01.10.2019</i>	<i>School of Engineering, Jönköping University, Sweden</i>
01.10.2019 –	<i>Position:</i> Professor, Head of the Materials and Manufacturing Department (about 35 persons). <i>Function:</i> Professor, manager. <i>Scientific field:</i> Materials technology, surface technology, electrochemical energy conversion, casting.
<i>01.10.2006 – 30.11.2019</i>	<i>RISE Research Institutes of Sweden (former SP Technical Research Institute of Sweden), Sweden</i>
01.10.2006 – 30.11.19	<i>Position:</i> Head of the Electronics Department (about 100 persons). <i>Function:</i> Manager, research leader. <i>Scientific field:</i> Reliability and safety of electronics, electrochemical energy conversion, materials technology, surface technology.
<i>01.02.1997 - 30.09.2006</i>	<i>Acree AB (former Industrial Microelectronics Center AB), Sweden</i>
01.08.2001 – 30.09.2006	<i>Position:</i> Leader of the Centre for Robust Electronics in Jönköping (a co-operation between Acree, SP, Jönköping University and the industry). <i>Function:</i> Manager of the Centre, programme director for a research school, senior scientist and Ph.D. supervisor. <i>Scientific field:</i> Material and process technology for electronics and electric equipment in harsh environments (processing, simulation, test, analysis and diagnostic) and micro-replication.
01.01.1998 – 31.07.2001	<i>Position:</i> Manager for Materials and Processes (group of up to 19 persons). <i>Function:</i> Manager and senior scientist. <i>Scientific field:</i> Thin and thick film technology, clean room processes.
01.02.1997 – 31.12.1997	<i>Position:</i> Manager for Surface Technology (group of 6 persons). <i>Function:</i> Manager and senior scientist. <i>Scientific field:</i> Surface technology and materials analysis.

01.02.1989 - 31.08.1997 *Institute of Manufacturing Engineering, Technical University of Denmark*

01.07.1994 – 31.08.1997 *Position:* Associate Professor.
Function: European project co-ordinator, project leader, scientist, teacher.
Scientific field: Surface technology, corrosion, and metallurgy.

01.10.1992 – 30.06.1994 *Position:* Scientist.
Function: Project leader and scientist.
Scientific field: Electroplating, corrosion, and metallurgy.

01.09.1989 – 30.09.1992 *Position:* Ph.D. Scholar.
Scientific field: Pulse plating.

01.02.1989 – 31.08.1989 *Position:* Research assistant.
Scientific field: Electroplating and wastewater treatment.

Secondary Affiliations

01.08.2001 – 30.11.2019 *School of Engineering, Jönköping University, Sweden*

01.01.2012 – 30.09.2019 Adjunct full professor in materials and manufacturing – specialisation in surface technology.

28.02.2006 – 01.01.2012 Adjunct full professor in embedded systems – specialisation in robust electronics.

01.08.2001 – 27.02.2006 Adjunct associate professor in electronics production.

15.04.2013 - 14.06.2013 *Department of Science and Technology, Linköping University, Sweden*

15.04.2013 – 14.06.2013 Adjunct associate professor in electronics production.

Boards of companies and organisations

European Academy of Surface Technology (EAST). Swedish representative and member of the European board since 2003. Member of the Executive Board since 2009. President since 2015.

The industrial association Heavy Vehicles, Sweden. Member of the board since 2008. President since 2010.

SP A/S (subsidiary company to SP Technical Research Institute of Sweden AB in Denmark). Chair of the board 2012-2017.

Polymercentrum AB, Sweden. Member of the board since 2021.

The association Hydrogen Sweden. Member of the board 2013 and 2015.

Danish Electrochemical Society. Secretary 1994-1997.

Publications

Papers in Scientific Journals

1. V.F. Buchwald & P. Leisner, *A Metallurgical Study of 12 Prehistoric Bronze Objects from Denmark*, Journal of Danish Archeology **9** (1990) 64-102.
2. P. Leisner, P. Møller & L. Alting, *Neuere Entwicklungen auf dem Gebiet des Pulse-Plating*, Galvanotechnik **82** (1991) 5, 1548-1554.
3. P. Leisner, D. Ulrich & P. Møller, *Optimizing of Current Efficiency in Hard Chromium Pulse Plating by Taguchi Statistics*, Plating and Surface Finishing **79** (1992) 7, 62-66.
4. P. Leisner, P. Møller & L. Alting, *Charakteristische Aspekte bei Pulse-Plating*, Galvanotechnik **83** (1992) 11, 3729-3734.
5. P. Leisner, G. Bech-Nielsen & P. Møller, *Current Efficiency and Crystallization Mechanism in Pulse Plating of Hard Chromium*, Journal of Applied Electrochemistry **23** (1993) 1232-1236.
6. P. Leisner, A.H. Jensen & P. Møller, *Pulse Plating used for Life-Cycle Design*, Electroplating and Surface Treatment **3** (1994) 20-24 (in Russian).
7. P. Leisner, P. Møller & A. McNelly, *Throwing power and ductility of pulse reversal plated copper for PCBs*, Processing of Advanced Materials **9** (1994) 148-154.
8. O. Jørgensen, A. Horsewell, B. Sørensen & P. Leisner, *The Cracking and Spalling of Electroplated Chromium Coatings on a Steel Substrate*, Acta Metall. Mater. **43** (1995) 11, 3991-4000.
9. O. Jørgensen, A. Horsewell, B.F. Sørensen & P. Leisner, *Effect of Inhomogeneous Intrinsic Stresses on the Cracking of Layered Brittle Coating*, Key Engineering Materials **116-117** (1996) 352-370.
10. D.M.A. NabiRahni, P.T. Tang & P. Leisner, *The electrolytic plating of compositionally modulated alloys and laminated metal nano-structures based on an automated computer-controlled dual-bath system*, Nanotechnology **7** (1996) 134-143.
11. P. Leisner, C.B. Nielsen, P.T. Tang, T.C. Dörge & P. Møller, *Equipment for Electrodepositing Composition Modulated Alloys*, Journal of Materials Processing Technology **58** (1996) 39-44.
12. P. Leisner & M.E. Benzon, *Porosity Measurements on Coatings*, Transactions of the Institute of Metal Finishing **75** (1997) 2, 88-92.
13. P. Leisner, R.C. Leu & P. Møller, *Electroplating of Porous Powder Metallurgical Compacts*, Powder Metallurgy **40** (1997) 3, 207-210.
14. C.B. Nielsen, P. Leisner & A. Horsewell, *On Texture Formation of Chromium Electrodeposits*, Journal of Applied Electrochemistry **28** (1998) 141-150.
15. V.D. Papachristos, C.N. Panagoupolos, P. Leisner, M.B. Olsen & U. Wahlstrom, *Sliding Wear Behaviour of Ni-P-W Composition Modulated Coatings*, Surf. Coat. Technol. **105** (1998) 224-231.
16. S. Valizadeh, G. Holmbom & P. Leisner, *Electrodeposition of Cobalt-Silver Multilayers*, Surf. Coat. Tech. **105** (1998) 213-217.
17. V.Papachristos, C. Panagoupolos, U. Walhström L.W. Christoffersen & P. Leisner, *Effect of annealing on the structure and hardness of Ni-P-W multilayered alloy coatings produced by pulse plating*, Materials Science and Engineering **A279** (2000) 217-230.
18. V.Papachristos, C. Panagoupolos, U. Walhström L.W. Christoffersen & P. Leisner, *Ni-P-W multilayered alloy coatings produced by pulse plating*, Scripta Metallurgica et Materialia **43**, 7 (2000) 677-683.
19. S. Valizadeh, J.M. George, P. Leisner & L. Hultman, *Electrochemical deposition of Co nanowire arrays; quantitative consideration of concentration profiles*, Electrochimica Acta **47** (2001) 865-874.
20. S. Valizadeh, E.B. Svedberg & P. Leisner, *Electrodeposition of compositionally modulated Au/Co alloy layers*, J. Appl. Electrochem. **32** (2002) 97-104.
21. S. Valizadeh, J.M. George, P. Leisner & L. Hultman, *Electrochemical synthesis of Ag/Co multilayered nanowires in porous polycarbonate membranes*, Thin Solid Films **402** (2002) 262-271.
22. S. Valizadeh, P. Leisner, L. Hultman & J.M. George, *Template synthesis of Au/Co multilayered nanowires by electrochemical deposition*, Advanced Functional Materials (2002) 12, 766-772.
23. M. Lindgren, I. Belov & P. Leisner, *Thermo-mechanical analysis for design optimisation of an RF module used in automotive applications*, Quality and Reliability Engineering International **20** (2004) 709-726.
24. V. Belov, N. Paldyaev, A. Shamaev, A. Johansson, P. Leisner & I. Belov, *A Complete Mathematical Model of an Independent Multi-phase Power Supply System Based on Multi-phase Bridge-element Concept*, WSEAS Transactions on Circuits and Systems 4, 9 (2005) 1009-1018.
25. V. Belov, N. Paldyaev, A. Shamaev, A. Johansson, P. Leisner & I. Belov, *A Matlab/Simulink Model of an Active Power Filter Based on Multi-stage Inverter Architecture*, WSEAS Transactions on Circuits and Systems 4, 9 (2005) 1217-1221.
26. M. Lindgren, I. Belov & P. Leisner, *Experimental Evaluation of Glob-top Materials for use in Harsh Environments*, Journal of Microelectronics and Electronic Packaging, 2, 4 (2005) 253-268.

27. M. Chedid, I. Belov & P. Leisner, *Electromagnetic coupling to a wearable application based on coaxial cable architecture*, Progress in Electromagnetics Research 56 (2006) 109-128.
28. I. Belov, H. Wingbrant, A. Lloyd-Spetz, H. Sundgren, B. Turner, H. Svenningstorp & P. Leisner, *CFD analysis of packaging and mounting solutions for SiC-based gas sensors in automotive applications*, J. Sensor Letters 4 (2006) 29-37.
29. P. Möller, M. Fredenberg, M. Dainese, C. Aronsson, P. Leisner & M. Östling, *Metal printing of copper interconnects down to 500 nm using ECPR – Electrochemical pattern replication*, Microelectronics Engineering 83 (2006) 1410-1413.
30. V. Belov, A. Shamaev, P. Leisner, A. Johansson, B. Magnhagen & I. Belov, *A simulation-based spectral technique for power quality and EMC design of an independent power system*, International Journal of Emerging Electric Power Systems 7, 1 (2006) Article 7.
31. M. Lindgren, I. Belov, M. Törnvall & P. Leisner, *Application of Simulation-based Decision Making in Product Development of an RF Module*, Microelectronics Reliability 47 (2007) 302-309.
32. M. Chedid, I. Belov & P. Leisner, *Experimental Analysis and Modelling of Textile Transmission Line for Wearable Applications*, International Journal of Clothing Science and Technology 19, 1 (2007) 59-71.
33. P. Leisner, P. Möller, M. Fredenberg & I. Belov, *Recent progress in pulse reversal plating of copper for electronics applications*, Transactions of the Institute of Metal Finishing, 85, 1 (2007) 40-45.
34. N. Gunnarsson, P. Leisner, X. Wang, M. Svensson, C. Vieider & L. Hultman, *Electrochemically based low-cost high-precision processing in MOEMS packaging*, Electrochimica Acta 54, 9 (2009) 2458-2465.
35. V. Belov, P. Leisner, A. Johansson, N. Paldyaev, A. Shamaev & I. Belov, *Mathematical modelling of a wind power system with an integrated active filter*, Electric Power System Research 79 (2009) 117-125.
36. P. Leisner & I. Belov, *Influence of process parameters on crack formation in direct current and pulse reversal plated hard chromium*, Transactions of the Institute of Metal Finishing 87, 2 (2009) 90-96.
37. M. Chedid, I. Belov & P. Leisner, *Modelling and Characterization of Electrostatic Current Noise Induced Mechanically in Wired Wearable Applications*, Journal of Electrostatics 68, 1 (2010) 21-26.
38. P. Leisner, M. Fredenberg & I. Belov, *Pulse and pulse reverse plating of copper from acid sulphate solutions*, Transactions of the Institute of Metal Finishing, 88, 5 (2010) 243-247.
39. N. G. Sarius, P. Leisner, J. Hald & L. Hultman, *Electroplating of nickel in grooves under the influence of low and medium frequency ultrasound*, Journal for Electrochemistry and Plating Technology 1 (2011) 3, pp. 19-28.
40. N. G. Sarius, P. Leisner, P.O.Å. Persson, J. Hald & L. Hultman, *Influence of ultrasound and cathode rotation on the formation of intrinsic stress in Ni films during electrodeposition*, Transactions of the Institute of Metal Finishing 89, 3 (2011) 137-142.
41. K. Davidsson, I. Karlsson, P. Leisner, M. Bobert, P. Blomqvist, *Safety test methods for EV batteries*, World Electric Vehicle (WEVA) Journal, vol. 4 (2011) 414-420.
42. N. G. Sarius, J. Lauridsen, E. Lewin, J. Hu, H. Högberg, Å. Öberg, H. Ljungcrantz, P. Leisner, P. Eklund, L. Hultman, *Ni and Ti diffusion barrier layers between Ti-Si-C-Ag nanocomposite coatings and Cu-based substrates*, Surf. Coat. Technol. 2065 (2012) 2558-2565.
43. J. Johansson & P. Leisner, *Prognostics of Thermal Fatigue Failure of Solder Joints in Avionic Equipment*, IEEE Aerospace and Electronic Systems Magazine 7, 4 (2012) 16-24.
44. N. G. Sarius, J. Lauridsen, E. Lewin, U. Janson, H. Högberg, Å. Öberg, P. Leisner, P. Eklund, L. Hultman, *Contact resistance of Ti-Si-C-Ag and Ti-Si-C-Ag-Pd nanocomposite coatings*, J. Electronic Materials 41, 3 (2012) 560-567.
45. W.E.G. Hansal, G. Sandulache, R. Mann, P. Leisner, *Nickel-phosphorous matrix composites by pulsed electroplating*, Electrochimica Acta 114 (2013) 851-858.
46. J. Johansson, I. Belov, E. Johnson, P. Leisner, *A computational method for evaluating the damage in a solder joint of an electronic package subjected to thermal loads*, Journal of Engineering Computations, 31,3 (2014) 467-489.
47. Wang Hui, Zhang Rong Rong, Xiao Sheng Liang, Peter Leisner, *Design of the System of Centric Crank-Rocker Mechanism Based on Java*, Journal of Advanced Materials Research Vols. 945-949 (2014) 960-965.
48. M. Lindgren, P. Leisner, R. Poder, *Methods for predicting corrosion on electronic products*, Corrosion Engineering Science and Technology 49, 7 (2014) 661-664.
49. J. Johansson, I. Belov, E. Johnson, R. Dudek, P. Leisner, *Investigation on thermal fatigue of SnAgCu, Sn100C, and SnPbAg solder joints in varying temperature environments*, Journal of Microelectronics Reliability 54, 11 (2014) 2523-2535.
50. P. Leisner, C. Zanella, I. Belov, C. Edström, W. Hui, *Influence of anodic pulses and periodic current reversion on electrodeposits*, Transactions of the Institute of Metal Finishing 92, 6 (2014) 336-342.
51. I. Belov, C. Zanella, C. Edström, P. Leisner, *Finite element modeling of silver electrodeposition for evaluation of thickness distribution on complex geometries*, Materials and Design 90 (2016) 693-703.

52. B. Zhu, S. Seifeddine, P.O.Å Persson, A.E.W. Jarfors, P. Leisner, C. Zanella, *A study of formation and growth of the anodised surface layer on cast Al-Si alloys based on different analytical techniques*, *Materials and Design* 101 (2016) 254-262.
53. J. Lang, J.-K. Lim, J. Hellén, T.M.J. Nilsson, B. Schodt, R. Poder, I. Belov, M. Bakowski, P. Leisner, *Reliability Study of a RF Power Amplifier with GaN-on-SiC HEMTs*, *ECS Transactions* 75, 12 (2016) 49-59.
54. J. Lang, I. Belov, J. Hellén, J.-K. Lim, B. Schodt, T.M.J. Nilsson, R. Poder, M. Bakowski, P. Leisner, *Thermo-Mechanical Reliability and Performance Degradation of a Lead-Free RF Power Amplifier with GaN-on-SiC HEMTs*, *Materials Science Forum* 897 (2016) 715-718.
55. B. Zhu, M. Fedel, N-E. Andersson, P. Leisner, F. Deflorian, C. Zanella, *Effect of Si content and morphology on corrosion resistance of anodized cast Al-Si alloys*, *J. Electrochem. Soc.* 164, 7 (2017) C435-C441.
56. J. Lang, I. Belov, J. Hellén, J.-K. Lim, B. Schødt, T.M.J. Nilsson, R. Poder, M. Bakowski, P. Leisner, *Thermo-Mechanical Reliability and Performance Degradation of a Lead-Free RF Power Amplifier with GaN-on-SiC HEMTs*, *Materials Science Forum* 897 (May 2017) 715-718.
57. P. Leisner, C. Zanella, I. Belov, C. Edström, G. Sandulache, W.E.G. Hansal, *Control of silver throwing power by pulse reverse plating*, *Transactions of the Institute of Metal Finishing* 95, 1 (2017) 25-30.
58. V. Belov, A. Shamaev, P. Leisner, A. Mannikoff, I. Belov, *Mathematical model of multi-phase power converter for parallel Computation*, *International Journal of Emerging Electric Power Systems*, January 13 (2018). DOI: 10.1515/ijeejs-2017-0114.
59. D.Ahmadkhaniha, F. Eriksson, P. Leisner, C. Zanella, *Effect of SiC particle size and heat treatment on microhardness and corrosion resistance of NiP electrodeposited coatings*, *Journal of Alloys and Compounds* 769 (2018) 1080-1087.
60. M. Bakowski, J. Lang, J.-K. Lim, J. Hellén, T. M. J. Nilsson, B. Schodt, R. Poder, I. Belov, P. Leisner, *Reliability Study of GaN-on-SiC HEMT RF Power Amplifiers*, *Advances in Technology Innovation* 3, 4 (2018) 157 -165.
61. P. Leisner, C. Zanella, *Application of Assaf panel for evaluating the throwing power of pulse reverse plating*, *Transactions of the Institute of Metal Finishing* 96, 5 (2018) 258-264.
62. P. Leisner, E. Johansson, *Aspects to be considered when making innovation out of promising research results in surface technology*, *Transactions of the Institute of Metal Finishing* 97, 2 (2019) 67-72.
63. S. Pinate, P. Leisner, C. Zanella, *Electrocodeposition of Ni Nano-SiC Particles by Pulse-Reverse Under an Adapted Waveform*, *Journal of the Electrochemical Society* 166, 15 (2019) D804-D809.
64. E. Rosolymou, S. Spanou, C. Zanella, D.S. Tsoukleris, S. Köhler, P. Leisner, E.A. Pavlatou, *Electrodeposition of Photocatalytic Sn-Ni Matrix Composite Coatings Embedded with Doped TiO₂ Particles*, *Coatings* 10 (2020) 775, 21 pages; <https://doi.org/10.3390/coatings10080775>
65. P. Leisner, C. Larson, L. P. Nielsen, S. Müller, W. Hansal, J.-C. Piuppe, A. Zielonka, *Global competitiveness of European surface technology. Part 1: Competitiveness and the relationship between European manufacturing and surface finishing sectors*, *Transactions of the Institute of Metal Finishing* 98, 6 (2020) 279-287.
66. P. Leisner, C. Larson, L. P. Nielsen, S. Müller, W. Hansal, J.-C. Piuppe, A. Zielonka, *Global competitiveness of European surface technology. Part 2: Challenges to and future development of the European surface finishing sector*, *Transactions of the Institute of Metal Finishing* 99, 1 (2021) 4-9.
67. L. Mølmen, K. Eiler, L. Fast, P. Leisner, E. Pellicier, *Recent advances in catalyst materials for proton exchange membrane fuel cells*, *APL Materials* 9, 4 (2021) 1-22. DOI: 10.1063/5.0045801
68. S. Pinate, A. Ispas, P. Leisner, C. Zanella, *Electrocodeposition of Ni composites and surface treatment of SiC nanoparticles*, *Surface and Coatings Technology* (accepted).
69. S. Pinate, P. Leisner, C. Zanella, *Wear resistance and self-lubrication of electrodeposited Ni-SiC:MoS₂ mixed particle composite coatings*, *Surface and Coatings Technology* (accepted).
70. S. Pinate, F. Eriksson, P. Leisner, C. Zanella, *Effects of particles codeposition and ultrasound agitation on the electrocrystallization of metal matrix composites*, (submitted).

Monographs, book chapters and reports

1. Editor of *Proceedings from Scandinavian Pulse Plating Symposium*, Lyngby 20-21/2 1992.
2. P. Møller, T. Tang & P. Leisner, *Pulse Plating*, Institute of Manufacturing Engineering, Lyngby 1995 (video tape 29 min.).
3. Co-author of *Overfladeteknologi* (Surface Technology) by P. Møller (ed.), Teknisk Forlag 1998 (in Danish).
4. P. Leisner, *Materials for High Temperature Interconnect and Packaging – a literature survey*, Acreo 2001-02-01, 31 pages.

5. M. Fredenberg, P. Möller & P. Leisner, *Simulation of copper deposition by electrochemical pattern replication*, invited paper in Honorary volume dedicated to the memory of professor Nicolas Spyrellis by P. Gyftou & E. Pavlatou (eds.), National Technical University of Athens (2009) 153-160.
6. P. Leisner, *Pulse plating of copper on printed circuit boards* in *Pulse Plating* by W. Hansal & S. Roy (eds.), Eugen G. Leutze Verlag 2012, 189-207.
7. W. Hansal & P. Leisner, *Pulse plating of chromium* in *Pulse Plating* by W. Hansal & S. Roy (eds.), Eugen G. Leutze Verlag 2012, 250-268.
8. A. Alexandersson, M. Borgqvist, G-M. Löfdahl, C. Tullin, P. Leisner, J. Segersten, B. Aronsson, R. Granström, P. Ekdunge, *Förstudie av testbädd för bränsleceller (Prestudy of testbed for fuel cells)*, SP Rapport 2013:10, SP Technical Research Institute of Sweden, ISBN 978-91-87461-28-6, 43 pages (in Swedish).
9. C. Wallmark, B. Aronsson & P. Leisner, *Strategisk innovationsagenda för vätgas i fordon (Strategic innovation agenda for hydrogen in vehicles)*, Sweco report 5471359000, 2016-07-08, 69 pages (in Swedish).
10. J. Eriksen, J.C. Gjerløv, K.E. Vik, B.G. Halvorsen, E.L. Rambeck, B.M Rød, E. Wiberg, B. Aronsson, H. Aleryd, S. Svedhem, P. Leisner, *The Blue Move for a Green Economy – Mulighetsstudie for hydrogen produksjon, industri, lagring og distribusjon (Feasibility study of hydrogen production, industry, storage and distribution)*, January 2017, 92 pages (in Norwegian).
11. O. Solér, Å. Bye, B. Aronsson, E. Wiberg, P. Leisner, A. Cornander, K. Nilsson, A. Alexandersson, J. Eriksen, J.C. Gjerløv, E.L. Rambeck, L-E. Kalland, M. Pervik, A. Tibbelin, N-A. Baden, *Rammevilkår og strategier for hydrogen i transportsektoren (Constraints and strategies for hydrogen in the transport sector)*, August 2018, Lillestrøm/Göteborg, 69 pages (in Norwegian/Swedish).
12. A. Cornander, K. Nilsson, P. Leisner, A. Alexandersson, M. Mörstam, M. Pervik, J. Eriksen, J.C. Gerløv, A. Lundblad, *Behovsstudie och teknikkartläggning av arbetsmaskiner*, September 2018, 32 pages (in Swedish).
13. P. Leisner, C. Larson, L. P. Nielsen, S. Müller, W. Hansal, J-C. Puppe, A. Zielonka, *Global competitiveness of European surface technology, east whitepaper*, European Academy of Surface Technology, Schwäbisch Gmünd, 15 September 2020, 29 pages.

Conference presentations – Key Note/Invited Talks/Plenary Lectures

1. P. Leisner, *Pulse Plating Techniques and Applications*, INCOSURF '92, Bangalore 9-19/12 1992.
2. I. Belov, P. Leisner, H. Wingbran, A.L. Spetz, H. Sundgren, B. Thuner & H. Svenningstorp, *Thermal and Flow Analysis of SiC-Based Gas Sensors for Automotive Applications*, Eurosime 2004, Brussels 9-12/5 2004.
3. P. Leisner, P. Möller & M. Fredenberg, *Pulse reversal plating of copper for electronics applications*, 1st European Pulse Plating Seminar, Vienna 10/3 2006.
4. P. Leisner, *Pulse reversal plating of hard chromium*, 3rd European Pulse Plating Seminar, Vienna 7/3 2008.
5. P. Leisner, *Survey of pulse plating of copper from sulphuric acid solutions*, 4th European Pulse Plating Seminar, Vienna 5/3 2010.
6. S. Spanou & P. Leisner, *Pulse plating of Ni-SiC composite coatings*, 5th European Pulse Plating Seminar, Vienna 9/3 2012.
7. Y. Zhang, I. Belov, N.G. Sarius, M. Bakowski, H.P. Nee & P. Leisner, *Thermal evaluation of a liquid/air cooled integrated power inverter for hybrid vehicle application*, Eurosime 2013, Wroclaw 15-17/4 2013.
8. P. Leisner, C. Edström, Å. Hansen, I. Belov & R. Poder, *Controlling throwing power of functional silver by pulse plating*, 6th European Pulse Plating Seminar, Vienna 7/3 2014.
9. Y. Zhang, I. Belov, M. Bakowski, H-P Nee, P. Leisner, *Investigation of a finned baseplate material and thickness variation on thermal performance of a SiC power module*, EuroSimE 2014, Gent, Belgium 7-9/4 2014.
10. P. Leisner, C. Zanella, *Structure modification and process control by pulsed electrodeposition*, EUROMAT 2015, Warsaw, Poland, 20-24/9 2015.
11. P. Leisner, C. Zanella, I. Belov, C. Edström, G. Sandulache, W. Hansal, *Influence of pulse reverse plating parameters on throwing power in a silver cyanide bath*, 7th European Pulse Plating Seminar, Vienna 4/3 2016.
12. C. Zanella, P. Leisner, *A critical review on the use of pulse and pulse reverse plating and their influence on electrodeposition of nanocomposite coatings*, 7th European Pulse Plating Seminar, Vienna 4/3 2016.
13. J. Lang, J-K. Lim, J. Hellén, T.M.J. Nilsson, B. Schødt, R. Poder, I. Belov, M. Bakowski, P. Leisner, *Reliability study of a RF Power Amplifier with GaN-on-SiC HEMTs*, PRIME 2016, Honolulu 2-7/10 2016.
14. I. Belov, A. Nordh, K. Salomonsson, Peter Leisner, *Fin-Tube and Plate Heat Exchangers – Evaluation of Transient Performance*, EuroSimE 2017, Dresden, Germany 2-5/4 2017.

15. P. Leisner, Å. Hansen, C. Zanella, *Application of Assaf panel for evaluating the throwing power of pulse reverse plating*, 8th European Pulse Plating Seminar, Vienna 2/3 2018.
16. P. Leisner, *Aspects to be considered when making innovation out of promising research results in surface technology*, 32th International Conference on Surface Modification Technologies (SMT32), San Sebastian 27-29/6 2018.
17. A. Cornander, P. Leisner, *Electrification of machines and construction sites*, Copenhagen Climate Solutions, Copenhagen, Denmark, 12/11 2018.
18. S. Pinate, A. Ispas, P. Leisner, A. Bund, C. Zanella, *Surface modification of nano-size SiC powders*, 4th Workshop e-MINDs, COST Action MP1407, Milano, 13-15/2, 2019.
19. P. Leisner, C. Larson, L. P. Nielsen, S. Müller, W. Hansal, J-C. Piuppe, A. Zielonka, *Global competitiveness of European surface technology*, 9th European Pulse Plating Seminar, Vienna 5-6/3, Vienna 2020.

Conference presentations

1. T.C. Dörge, P. Møller & P. Leisner, *Design of Galvanostatic and Potentiostatic Wave Forms for Pulse Plating Control with a Newly Developed System*, 4th International Pulse Plating Symposium, Orlando 31/1-1/2 1991.
2. P. Leisner, D. Ulrich & P. Møller, *The Application of the Taguchi Statistical Method in Pulse Plating. Example: Hard Chromium Plating*, 4th International Pulse Plating Symposium, Orlando 31/1-1/2 1991.
3. G. Bech-Nielsen & P. Leisner, *Development and Corrosion Testing of New Conversion Coatings for Magnesium Alloys: Stannate and Zincate Based Coatings*, Sur/Fin '91, Toronto 24-27/6 1991.
4. P. Leisner, *Recent Results in Pulse Plating of Hard Chromium*, Scandinavian Pulse Plating Symposium, Lyngby 20-21/2 1992.
5. P. Leisner, G. Bech-Nielsen & P. Møller, *Throwing Power in Pulse Reverse Plating from an Acid Copper Bath*, Sur/Fin '92, Atlanta 22-25/6 1992.
6. P. Leisner, T.C. Dörge & P. Møller, *A novel system for design of current and potential waveforms for control of pulse plating* (in japanese; abstract + poster), The Surface Finishing Society of Japan, 87. meeting 17-19/3 1993.
7. P. Leisner, G. Bech-Nielsen & P. Møller, *Optimization of Pulse Reversal Chromium Plating based on the Knowledge to the Crystallization Mechanism*, Sur/Fin '93, Anaheim 21-24/6 1993.
8. P.T. Tang, P. Leisner & P. Møller, *Improvements of Nickel Deposit Characteristics by Pulse Plating*, Sur/Fin '93, Anaheim 21-24/6 1993.
9. P. Leisner & T.C. Dörge, *Equipment for Electrodepositing CMA Coatings and Materials*, Symposium on Manufacturing Technology in Electrodeposition, Electrochemical Society 184th Meeting, New Orleans, Louisiana, 10-15/10 1993.
10. P. Leisner & P. Møller, *Chemical and Electrochemical Surface Treatment of Joined Materials*, Joining Aspects of High Performance Materials, European Institute for the Joining of Materials, Elsinore 17-18/5 1994.
11. P. Leisner & P.T. Tang, *Influence of Structure Modification by Pulsed Electrodeposition on Corrosion Resistance and other Properties*, European Interest Group on Applied Electrochemistry, 6th European Workshop on the Electrodeposition of Metals, Dresden 24-27/5 1994.
12. P. Leisner, P.T. Tang & G. Bech-Nielsen, *The Optimization of Throwing Power in Pulse Reversal Plating from a Silver Cyanide Solution*, Sur/Fin '94, Indianapolis 20-23/6 1994.
13. P.T. Tang, P. Leisner, P. Møller, C.B. Nielsen & D. NabiRahni, *Dual Bath Plating of Composition Modulated Alloys (CMA) based on a newly developed Computer Controlled Plating System*, Sur/Fin '94, Indianapolis 20-23/6 1994.
14. D. NabiRahni, P.T. Tang & P. Leisner, *The Investigation and Characterisation of Cobalt Multilayer Metal Nanostructures*, Sur/Fin '94, Indianapolis 20-23/6 1994.
15. P. Leisner, M. Eis & P. Møller, *Control of Material Distribution in Hard Gold Electrodeposition Using Pulsed Current*, Asia Pacific Interfinish '94, Melbourne 2-6/10 1994.
16. P. Møller, P. Leisner & P.T. Tang, *Computergestütztes Pulse Plating - Computer Aided Pulse Plating*, EAST-Conference 1995, Schwäbisch Gmünd 9-10/3 1995.
17. P. Leisner & T. Tang, *Modifikation af egenskaber og struktur for metaller udfældet med pulserende strøm* (abstract + poster), Dansk Elektrochemical society, 25th anniversary symposium, Lyngby 9/6 1995.
18. R.C. Leu, P. Møller & P. Leisner, *Surface Treatment of Powder Metallurgical Compacts*, Sur/Fin '95 Baltimore 26-29/6 1995.
19. P. Møller & P. Leisner, *Experiences from field corrosion test of zinc and zinc alloy coatings*, Sur/Fin '96, Cleveland 10-13/6 1996.

20. P. Møller, P.T. Tang & P. Leisner, *Pulse Plating (video presentation)*, Sur/Fin '96, Cleveland 10-13/6 1996.
21. P. Leisner, M.E. Benzon, L. Christoffersen, C.N. Panagopoulos, V.D. Papachristos & S. Katsikis, *Corrosion and Wear Protective Composition Modulated Alloy Coatings based on Ternary Ni-P-X alloys*, Interfinish 96, Birmingham 10-12/9 1996.
22. M.E. Benzon, P. Leisner, V.D. Papachristos & C.N. Panagopoulos, *Characterisation of Cu-Ni CMA multilayers*, Congress on Metallic Composite Deposits, Saint-Etienne 17-18/10 1996.
23. P. Leisner, *Electrodeposition of CMA coatings*, Workshop on Electrodeposited CMA Coatings, Athens 28-29/5 1997.
24. M.E. Benzon, P. Leisner, V. Papachristos & C. Panagopoulos, *Mechanical Characterisation of Cu-Ni CMA coatings*, Workshop on Electrodeposited CMA Coatings, Athens 28-29/5 1997.
25. C.B. Nielsen, C. Pickup, N.B. Thomsen, M.E. Benzon, P. Leisner & A. Horsewell, *Internal Stress and Hardness of Cu-Ni CMA coatings*, Workshop on Electrodeposited CMA Coatings, Athens 28-29/5 1997.
26. V. Papachristos, C. Panagopoulos, M. Svensson & P. Leisner, *Mechanical Properties of CMA coatings*, Workshop on Electrodeposited CMA Coatings, Athens 28-29/5 1997.
27. L.W. Christoffersen, P. Leisner & E. Maahn, *Corrosion Properties of Nickel Alloy CMA coatings*, Workshop on Electrodeposited CMA Coatings, Athens 28-29/5 1997.
28. P. Leisner, M.B. Olsen & U. Wahlström, *The Influence of Process Parameters on the quality of Cu-Ni CMA coatings (poster)*, Workshop on Electrodeposited CMA Coatings, Athens 28-29/5 1997.
29. M.E. Benzon, V. Papachristos & P. Leisner, *3-D Imaging of Cu-Ni CMA Fractures (poster)*, Workshop on Electrodeposited CMA Coatings, Athens 28-29/5 1997.
30. L. Christoffersen, E.E. Maahn & P. Leisner, *Electrochemical Corrosion Measurements on Nickel-Phosphorus Coatings*, Eurocorr '97, Trondheim 22-25/9 1997.
31. P. Leisner, M. Svensson, Å. Billman & M. Read, *Electrodeposition of Nickel for Microreplication*, Sur/Fin '98, Minneapolis 22-25/6 1998.
32. H. Åhlfeldt, O. Larsson, J. Holm, C. Vieider, L. Bäcklin, T. Ericson, M. Nilsson, R. Buchta, Å. Johansson, M. Adomat, M. Svensson, P. Leisner, J. Haglund & P. Bodö, *Low-Cost Packaging of Fiber Optics Components: Optoelectronics Meets Micromechanics, Love at First Sight! (poster)*, Optik i Sverige, Stockholm 21/10 1998.
33. P. Leisner, *Quality and Project Management in Multi Project Environment (oral presentation without paper)*, International Conferencs on TQM and Human Factors, Linköping 15-17/6 1999.
34. C. Helbo, P. Møller & P. Leisner, *The use of mathematical modelling in optimisation of the pulse plating of copper on printed circuit boards*, 15th World Interfinish Congress, Garmisch-Partenkirchen 13-15/9 2000.
35. M. Scheffle, D. Cottet, J. Grzyb, G. Tröster, K. Delaney, S. Fuchs, N. Ammann, W. Preyss, J. Baumbach, P. Poyet, P. Bodö, P. Leisner, M. Karlsson, U. Wahlström, S-T. Persson, L. Ljungqvist, W. Wendel, R. Epple, T. Centro, S. Motto, F.- Catarsi & P. Demmer, *Low cost large area panel processing of MCM-D substrates and packages (paper + poster)*, InterPack '01, Kauai, Hawaii July 8-13, 2001.
36. S. Valizadeh, L. Hultman & P. Leisner, *Template Synthesis of One Dimensional Single and Multilayered Nanowires*, NANO-7/ECOSS-21 (7th International Conference on Nanometer-scale Science and Technology & 21st European Conferens on Surface Science) Malmö 24-28/6 2002.
37. X. Wang, D. Tomicic & P. Leisner, *Metallization of Microstructured Polymer Surface (poster)*, Summit Seminarium, Uppsala 21/2 2003.
38. P. Möller, P. Wiwen-Nilsson, M. Fredenberg, L. Montelius, P. Leisner & M. Östling, *ECPR – ElectroChemical Pattern Replication for direct metallization*, EAST-Forum 2003, Lyngby 10-12/4 2003.
39. P. Leisner, I. Belov, P. Møller, *Additive-free pulse reversal plating of copper on printed circuit boards*, EAST-Forum 2003, Lyngby 10-12/4 2003.
40. V. Belov, P. Leisner, A. Johansson, B. Magnhagen, I. Belov, *A simulation-based spectral strategy for power filter design in an electrical system*, Submission for the II International conference PEMD 2004, Edinburgh 31/3-2/4 2004.
41. P. Möller, P. Wiwen-Nilsson, M. Fredenberg, P. Leisner & M. Östling, *Printing of Metal Interconnects for Microelectronics – the Electro Chemical Pattern Replication (ECPR) Project*, SSoCC'04, Båstad 13-14/4 2004.
42. M. Lindgren, I. Belov, M. Törnvall & P. Leisner, *Application of Simulation-based Decision Making in Product Development of an RF Module*, Eurosime 2004, Brussels 9-12/5 2004.
43. P. Möller, P. Wiwen-Nilsson, M. Fredenberg, L. Montelius, P. Leisner & M. Östling, *ElectroChemical Pattern Replication (ECPR) – metal printing for microelectronics*, Proceedings of AESF SUR/FIN & Interfinish, Chicago 28/6-1/7 2004, Session H, p 413-424

44. I. Belov, P. Leisner, A. Johansson, B. Magnhagen & V. Belov, *A methodology of using simulation tools in teaching of robust electronics for electronics engineers*, 15th EAEEIE International Conference, Sofia 27-29/5 2004.
45. J. Johansson, I. Belov, K. Säfsen & P. Leisner, *Thermal Design Evaluation of an Electronic Module for Helicopter Applications*, CEPA2, Paris 24-25/5 2004.
46. V. Belov, I. Belov, V. Nemoykin and P. Leisner, *Computer modelling and analysis of EMC in a multi-phase electrical system*, EMB04 - Computational Electromagnetics - Methods and Applications, Göteborg 18-19/10 2004.
47. J. Johansson, I. Belov, K. Säfsen & P. Leisner, *Thermal Analysis of an Electronic Module with a double-sided PCB housed in a 2-MCU enclosure for avionic applications*, IMAPS 2004, 37th International Symposium on Microelectronics, Long Beach, CA, 14-18/11 2004.
48. J. Johansson, I. Belov & P. Leisner, *An experimental setup for validating a CFD model of a double-sided PCB in a sealed enclosure at various power configurations*, 6th IEEE conference Eurosime 2005, Berlin 17-21/4 2005.
49. M. Lindgren, M. Meuwissen & P. Leisner, *Simulation assisted investigation and improvement of the performance of an electronics assembly subjected to temperature cycling*, 6th IEEE conference Eurosime 2005, Berlin 17-21/4 2005.
50. J. Johansson, I. Belov & P. Leisner, *Investigating the effect of power distribution on cooling a double-sided PCB: numerical simulation and experiment*, 2005 Summer Heat Transfer Conference, San Francisco 17-22 July 2005.
51. V. Belov, N. Paldyaev, A. Johansson, P. Leisner & I. Belov, *Mathematical Model of a Multi-phase Active Power Filter Based on Multi-phase Bridge Elements*, 5th WSEAS International Conference on Power Systems and Electromagnetic Compatibility (PSE '05), Corfu Island 23-25/8 2005.
52. V. Belov, N. Paldyaev, A. Shamaev, A. Johansson, P. Leisner & I. Belov, *A Matlab/Simulink Model of an Active Power Filter Based on Multi-stage Inverter Architecture*, 5th WSEAS International Conference on Power Systems and Electromagnetic Compatibility (PSE '05), Corfu Island 23-25/ 2005.
53. M. Chedid & P. Leisner, *Roadmap: Wearable Computers*, IMAPS Nordic 2005, Tönsberg 11-14/9 2005.
54. M. Lindgren, P. Leisner & P-E. Tegehall, *Factors influencing the surface insulation resistance*, IMAPS Nordic 2005, Tönsberg 11-14/9 2005.
55. P. Möller, M. Fredenberg, M. Dainese, C. Aronsson, P. Leisner & M. Östling, *Metal Printing of Interconnects Down to 500 nm Using ECPR – ElectroChemical Pattern Replication*, Micro- and Nano-engineering 2005, Vienna 19-22 September 2005.
56. M. Fredenberg, P. Möller, P. Leisner & M. Östling, *Recent Progress in the Development of ECPR (ElectroChemical Pattern Replication) Metal Printing for Microelectronics*, Electrochemical Society 208th Meeting, Los Angeles 16-21 October 2005, abstract 682.
57. M. Chedid, D. Tomicic & P. Leisner, *Evaluation of Conductive Textile for Wearable Computer Applications*, IMAPS Nordic 2006, Göteborg 17-20/9 2006.
58. J. Johansson, I. Belov, & P. Leisner, *CFD analysis of an avionic module for evaluating power distribution as a thermal management measure for double-sided PCB*, SEMI-THERM 23, San José, CA., USA, pp. 233-243, 2007.
59. V. Belov, N. Paldyaev, A. Shamaev, P. Leisner, A. Johansson & I. Belov, *Mathematical modelling of conducted EMI in an independent power supply system including power line communication technology*, Proc. IEEE International Symposium on Power Line Communication and its Applications (ISPLC 2007) 26-28 march 2007, Pisa, Italy. Pp 360-365.
60. I. Belov, M. Lindgren, P. Leisner & F. Bergner, *CFD Reflow Oven Profiling for Preheating of Unbalanced PCB in Soldering Process*, EuroSime 2007, 16-18 April 2007, London, UK. Pp. 535-542.
61. M. Danilovic & P. Leisner, *Analyzing core competence and core products for developing agile and adaptable corporation*, 9th international Design Structure Matrix Conference, DSM'07, Munich, 16-18 October 2007.
62. N. Gunnarsson, P. Leisner, X. Wang, M. Svensson, C. Vieider & L. Hultman, *Low-cost precision processing in MEMS packaging based on electrochemical processing*, EuroInterfinish 2007, Athens, 18-19 October.
63. J. Johansson, P. Leisner, J-C. Lee, D. Twigg & M. Rassaian, *On thrmomechanical durability analysis combined with computational fluid dynamics thermal analysis*, IMECE2007, ASME International Mechanical Engineering Congress and Exposition, Seattle, 11-15 November 2007.
64. I. Belov, J. Rydén, J. Lindblom, Y. Zhang, T. Hansson, F. Bergner & P. Leisner, *Application of CFD Modelling for Energy Efficient Humidity Management of an Electronics Enclosure in Storage under Severe Climatic Conditions*, EuroSime 2008, Frieburg, 21-23 April, 2008.
65. I. Belov, M. Chedid & P. Leisner, *Investigation of Snap-on Feeding Arrangements for a Wearable UHF Textile Patch Antenna*, Ambience 08, Borås, 2-3 June 2008.

66. E. Ottesen-Hansen, R. Ambat, P. Møller, D. Minzari, P. Leisner, N. Gunnarsson & H. Ljungcrants, *Corrosion behaviour of nano-crystalline MAX phase nc-TiC/a-SiC*, Eurocorr 2008, Edinburgh, UK, 7-11 September 2008.
67. M. Lindgren, I. Belov, A. Johansson, T. Danielsson, N. Gunnarsson & P. Leisner, *Multi-disciplinary Approach to Design of a Power Electronics Module for Harsh Environments*, EuroSime 2009, 27-29 April 2009, Delft, The Netherlands.
68. N. Gunnarsson, P. Leisner, J. Hald & L. Hultman, *Influence of Ultrasound on filling of Grooves during Ni electroplating*, Eurointerfinish 2009, 23-24 September 2009, Bremen, Germany.
69. J. Casselgren, E. Hällstig & P. Leisner, *True Ground Speed Sensor (TGSS)*, The European Nanoelectronics Forum, 17-18 November 2009, Noordwijk, The Netherlands (poster presentation).
70. I. Belov, M. Lindgren, J. Rydén, Z. Alavizadeh, P. Leisner, *CFD Assisted Design Evaluation and Experimental Verification of a Logic-Controlled Local PCB Heater for Humidity Management in Electronics Enclosure*, EuroSimE 2010, 26-28 April, Bordeaux, France.
71. M. Chedid, I. Belov, P. Leisner, *Low Power High bandwidth Power-Line Communication Network for Wearable Applications*, BodyNets 2010 – Fifth International Conference on Body Area networks, Greece, 10-12 Sept. 2010.
72. K. Davidsson, I. Karlsson, P. Leisner, M. Bobert, P. Blomqvist, *Test methods for EV batteries*, EVS25, 5-9 Nov. 2010, Shenzhen, China.
73. I. Belov, Z. Alavizadeh, M. Lindgren, P. Leisner, *Application of engineering optimization to evaluate heating-based humidity management in electronics enclosures*, Electronic Environment 2011, 5-6 April 2011, Stockholm, Sweden.
74. J. Johansson I. Belov, E. Johnson, P. Leisner, *An Approach to Life Consumption Monitoring of Solder Joints in Operating Temperature Environment*, EuroSime 2012, 16-18 April 2012, Lisbon, Portugal.
75. P. Leisner, *About the effect of anodic pulses and periodic current reversion on electrodeposits*, Interfinish 2012, 14-16 November 2012, Milano, Italy.
76. D.S. Tsoukleris, S. Spanou, S. Köhler, C. Zanella, P. Leisner, E.A. Pavlatou, *Study of tribological properties of nickel-based coatings reinforced by TiO₂ nanoparticles produced by pulse electrodeposition*, 1st African Congress of Tribology / Tribo Satellite Forum 2014, 27-30/4 2014, Marrakesh, Morocco.
77. E.A. Pavlatou, K. Chrysagis, A. Zoikis–Karathanasis, J. B. Rasmussen, A. A. Rasmussen, P. Leisner, C. Zanella, L. Gradewald, N.S. Kampakas, G. Panayiotakopoulos, *SelfClean: Novel Self-cleaning, anti-bacterial coatings, preventing disease transmission on everyday touched surfaces*, Industrial Technologies 2014, 9-11/4 2014, Athens, Greece (Poster).
78. V. Belov, A. Butkina, F. Bolschikov, P. Leisner, I. Belov, *Power quality and EMC solutions in micro grids with energy-trading capability*, EMC Europe 2014, 1-4 September 2014, Gotenburg, Sweden.
79. E. A. Pavlatou, D. Tsoukleris, S. Spanou, C. Zanella, P. Leisner, *Novel Self-cleaning, anti-bacterial Sn-Ni electrocoatings of high aesthetics and durability*, 65th Annual Meeting of the International Society of Electrochemistry, 31/8-5/9 2014, Lausanne, Switzerland (abstract s10-054, page 1613).
80. I. Belov, J. Arwidson, R. Poder, P. Johannesson, P. Leisner, *The effect of variation in temperature cycling profile and mechanical properties of solder on thermo-mechanical reliability of a lead-free BGA package*, EuroSime 2015, 19-22/4 2015, Budapest, Hungary.
81. B. Zhu, P. Leisner, S. Seifeddine, A.E.W. Jarfors, *Influence of Si and cooling rate on microstructure and mechanical properties of Al-Si-Mg cast alloys*, VII Aluminium Surface Science & Technology, Madeira Island, Spain, 17-21/5 2015.
82. B. Zhu, P. Leisner, C. Zanella, P.O. Å. Persson, S. Seifeddine, A.E.W. Jarfors, *A study of formation and growth of the anodized surface layer on Al-Si casting alloys based on different analytical techniques*, EAST Forum 2015, Lund, Sweden, 25-26/6 2015.
83. C. Zanella, M. Leimbach, P. Leisner, *Pulse reverse plating of SnNi*, EAST Forum 2015, Lund, Sweden, 25-26/6 2015 (poster).
84. I. Belov, C. Zanella, C. Edström, P. Leisner, *Simulation based investigation of silver plating process parameters and their effect on throwing power*, EAST Forum 2015, Lund, Sweden, 25-26/6 2015 (poster).
85. L. Fast, J. Lang, K. Nygren, A. Bodén, A.B. Ofstad, P. Leisner, *Successful Development of Coating for Bipolar Plates for Proton exchange Membrane Fuel Cell*, EAST Forum 2015, Lund, Sweden, 25-26/6 2015 (poster).
86. P. Leisner, *Electrolytic methods for manufacturing of miniaturized structures*, EAST Special Forum, Milano 1-2/10 2015.
87. C. Zanella, S. Spanou, E. Pavlatou, P. Leisner, *Functional nanocomposite coatings based on SnNi and TiO₂*, EAST Special Forum, Milano 1-2/10 2015.
88. P. Leisner, *Examination of coatings and interfaces by CT X-ray*, Surface Characterization, ATV-SEMAPP, Lyngby 1-2/2 2016, Denmark.
89. P. Leisner, C. Zanella, *Introduction to pulse plating*, EAST Forum 2016, Vienna 2/3 2016.

90. I. Belov, J. Arwidson, R. Poder, P. Johannesson, P. Leisner, *Thermal fatigue prediction: consequences of cycle reduction and material property variation*, Electronic Environment Conference, Kista, Sweden, 19-21/4 2016.
91. I. Belov, M. Payandeh, A. Jarfors, P. Leisner, M. Wessén, *Effect of fillets on heat transfer in a rheocast aluminium heatsink*, EuroSimE 2016, Montpellier, France 18-20/4 2016.
92. I. Belov, J. Lang, J. Hellén, J-K. Lim, B. Schødt, T. Nilsson, R. Poder, M. Bakowski, P. Leisner, *Reliability study of GaN HEMTs*, ISiCEAW, Stockholm 18-19/5 2016.
93. M. Ludvigsson, P. Leisner, P.E. Andersson, P. Dyreklev, D. Nilsson, B. Norberg, L. Grund-Bäck, I. Malmros, K. Falk, U. Clausén, *Laminated display based on printed electronics*, Engineering Transparency, Düsseldorf 20-21/9 2016.
94. B. Zhu, S. Seifeddine, P.O.Å. Persson, A.E.W. Jarfors, P. Leisner, C. Zanella, *Effect of Si particle modification on the growth and microstructure of anodized aluminium oxide*, EUROCORR 2016, Montpellier 11-15/9 2016 (poster).
95. J. Lang, J.-K. Lim, J. Hellén, T.M.J. Nilsson, B. Schodt, R. Poder, I. Belov, M. Bakowski, P. Leisner, *Reliability Study of a RF Power Amplifier with GaN-on-SiC HEMTs*, ECSCRM 2016, Halkidiki, Greece 25-29/9 2016.
96. D. Ahmadkhaniha, P. Leisner, C. Zanella, S. Pinate, *Electrodeposition of Ni high P composite coatings containing nano and submicron ceramic particles*, EUROCORR 2017 & 20th ICC congress, Prague, Czech Republic, 3-7/9 2017.
97. B. Zhu, M. Fedel, N-E. Andersson, P. Leisner, F. Deflorian and C. Zanella, *Influence of the Sr modification and post-treatment on corrosion resistance of oxide layer of cast Al-(low)Si alloys*, EUROCORR 2017 & 20th ICC congress, Prague, Czech Republic, 3-7/9 2017.
98. I. Belov, Z. Alavizadeh, M. Lindgren, J. Ryden, P. Leisner, *Experimental and CFD evaluation of active anti-condensation methods for non-hermetic cabinets*, EuroSime 2018, Toulouse, France, 15-18/4 2018.
99. B. Zhu, S. Seifeddine, A.E.W. Jarfors, P. Leisner, C. Zanella, *A study of anodising behaviour of Al-Si components produced by rheocasting*, S2P2018, Shenzhen, China 22-24/10 2018.
100. L. Mølmen, M. Braun, M. Baumgärtner, P. Leisner, *Pt-P catalyst for fuel cells*, 4th Workshop e-MINDs, COST Action MP1407, Milano, 13-15/2, 2019.
101. L. Mølmen, L. Fast, F. Andreatta, P. Leisner, *Pitting corrosion on coated stainless steel PEMFC flow plates*, Electrochem 2019, 26-28/8 2019 Glasgow, UK (poster).
102. P. Leisner, *Topics of importance for efficient implementation of research results in products*, Danish Metallurgical Society Vinter Meeting 2020, 29-31/1 2020 Brødstrup, Denmark.
103. K. Eiler, E. García-Lecina, L. Mølmen, L. Fast, P. Leisner, J. Sort and E. Pellicer, *Endurance of electrocatalytic mesoporous Ni-Pt particles supported on three-dimensional C and Ni substrates*, EUROCORR 2020, 7-11/9 2020 on-line congress.
104. L. Mølmen, L. Fast, P. Leisner, *Localised corrosion of polymer electrolyte fuel cell flow plates – effect of changing operating conditions*, EUROCORR 2020, 7-11/9 2020 on-line conference.
105. K. Eiler, L. Mølmen, L. Fast, P. Leisner, J. Sort and E. Pellicer, *Nanoscale Ni-Mo-Pt Alloy Catalyst with Tuneable Composition for Hydrogen Economy: Electrosynthesis and Characterisation*, PRiME 2020, 4-9/10 2020 (on-line), ECS Meeting Abstracts MA2020-02(15):1402.
106. S. Pinate, P. Leisner, C. Zanella, *Can We Consider SiC Nanoparticles Inert When We Add Them To Electrodeposition Systems?* PRiME 2020, Meet. Abstr. Vol. MA2020-02, 3756, 4-9/10 2020 on-line conference.
107. L. Mølmen, F. Andreatta, M. Lekka, L. Fast, P. Leisner, *Corrosion of polymer electrolyte membrane fuel cell bipolar plates*, mCBEEs workshop 14/7 2021, on-line.
108. K. Eiler, L. Mølmen, L. Fast, P. Leisner, J. Sort, E. Pellicer, *Electrodeposited electrocatalysts for hydrogen energy*, mCBEEs workshop 14/7 2021, on-line.

Popular science articles in journals and magazines

1. P. Leisner, *Karakteristiske aspekter ved pulsplettering*, Ytforum (1991) 3, 33-36.
2. P. Leisner, P. Møller, *Every Surface has its Own 'Genetic Code'*, New Scandinavian Technology (1991) 3, 21-22.
3. P. Leisner, *Pulsplettering af Hårdkrom*, Industriel Overfladebehandling (1993) 3, 9-10.
4. P. Leisner, *Life Cycle Design Within Electroplating*, Plating and Coating Today (1994) 4, 6-7.
5. P. Leisner, A.H. Jensen, P. Møller, *Pulse Plating as Cleaner Technology*, Plating and Coating Today (1994) 4, 11-13.
6. P. Leisner, T. Tang, *Pulserende strøm ændrer egenskaberne af galvanisk udfældede metaller*, Dansk Kemi 77 (1996) 5, 29-31.
7. P. Leisner, A. Belov, I. Belov, *Computer Aided Design for EMC and Power Quality*, Science Park Jönköping, November 2004.

8. P. Leisner, M.E. Benzon, *Porosity Measurements on Coatings*, Galvanotecnica e nuove finiture, 15, 5 (2005) 284, 286-288.
9. I. Belov, M. Lindgren, P. Leisner, F. Bergner, R. Bornoff, *CFD Aided Reflow Oven Profiling for PCB Preheating in a Soldering Process, Part 1(2)*. Electronic Environment (2007) 3, 25-28.
10. I. Belov, M. Lindgren, P. Leisner, F. Bergner, R. Bornoff, *CFD Aided Reflow Oven Profiling for PCB Preheating in a Soldering Process, Part 2(2)*. Electronic Environment (2007) 4, 25-27.
11. P. Leisner, *Deposizione pulsate di cromo duro con inversione di corrente*, Galvanotecnica e nuove finiture 2 (2008) 84-89.
12. I. Belov, M. Lindgren, A. Johansson, T. Danielsson, N.G. Sarius & P. Leisner, *Thermal Analysis of a Power Electronics Module in the Prototyping Phase*, Electronic Environment Magazine (2009) x, xx-xx.
13. N.G. Sarius, P. Leisner, J. Hald & L. Hultman, *Inverkan av ultraljud på fyllningsegenskaperna under elektroplätning av Ni*, Ytforum (2011) 4, 31-32.
14. C. Zanella, P. Leisner, *Seminar Report: 6th European Pulse Plating Seminar*, Transactions of Institute of Metal Finishing 92, 4 (2014) 178-179.
15. P. Leisner, C. Zanella, *Elektroplätning av antibakteriella beläggningar*, Ytforum (2015) 1, 23.
16. P. Leisner, *Guest Editorial: EAST – European Academy of Surface technology*, Transactions of the Institute of Metal Finishing 93, 6 (2015) 281.
17. C. Zanella, L. Péter, P. Leisner, *Bulletin: Promotion of young European scientists in Surface Technology*, Transactions of the Institute of Metal Finishing 94, 4 (2016) 173-174.
18. P. Leisner, *Bulletin: EAST Prizes for excellence in surface technology*, Transactions of Institute of Metal Finishing 95, 4 (2017) 183-184.
19. L. Péter, C. Zanella, P. Leisner, *Training course and conference report: European Training School for Young Scientists and EAST Forum 2017*, Transactions of the Institute of Metal Finishing 95, 5 (2017) 237-238.
20. M. Lekka, C. Zanella, P. Leisner, *Bulletin: New European Training Network solving corrosion problems on micro-and nanoscale: mCBEEs*, Transactions of the Institute of Metal Finishing 95, 6 (2017) 297-298.
21. Luca Magagnin, P. Leisner, *Obituary: Professor Pietro Luigi Cavallotti: 11 November 1938 – 12 October 2017*, Transactions of the Institute of Metal Finishing 96, 1 (2018) 7.
22. L.P. Nielsen, P. Leisner, P. Møller, *Bulletin: Surface technology is essential for transition to a hydrogen based energy system*, Transactions of the Institute of Metal Finishing 96, 1 (2018) 8-10.
23. Caterina Zanella, Peter Leisner, *mCBEEs Nytt europeiskt utbildningsnätverk löser korrosionsproblem på mikro- och nanonivå*, Ytforum 2018.
24. P. Leisner, *Prices and grants from the European Academy of Surface Technology*, Transactions of the Institute of Metal Finishing 96, 6 (2018) 287-289.
25. P. Leisner, L.P. Nielsen, *Offshoring and backshoring of surface finishing in a perspective from the Nordic countries*, Transactions of the Institute of Metal Finishing 97, 2 (2019) 54-56.
26. L. Mølmen, A. Alexandersson & P. Leisner, *Surface technology should improve PEM fuel cell performance*, Transactions of the Institute of Metal Finishing, 97, 3 (2019) 112-114.
27. P. Leisner, *The European Academy of Surface Technology supports young scientists*, Transactions of the Institute of Metal Finishing, 97, 6 (2019) 282-284.
28. D. R. Gabe, P. Leisner, *Thirty years of the European Academy of Surface Technology: a brief history*, Transactions of the Institute of Metal Finishing, 98, 1 (2020) 3-5.
29. P. Leisner, M. Baumgärtner, *30 years anniversary workshop of European Academy of Surface Technology*, Transactions of the Institute of Metal Finishing, 98, 2 (2020) 59-61.
30. P. Leisner, *The Schwäbisch Gmünd Prize for Young Scientists 2020 and 2021*, Transactions of the Institute of Metal Finishing, 98, 4 (2020) 165-166.
31. P. Leisner, *Optimerade aluminiumkomponenter allt viktigare för kylning på systemnivå*, Electronics Environment Magazine (2020) 3, 14-16.
32. P. Leisner, *Prizes and Grants from European Academy of Surface Technology*, Transactions of the Institute of Metal Finishing, 98, 4 (2020) 165-166.

Research activity

Total outcome of research applications: 93 MSEK

Granted project applications	Year	Grant (SEK)
Composition Modulated Alloys EU (Brite Euram, BRE2-CT94-0608), main applicant	1994- 1997	11 000 000 1100000 €
Neural processoptimering af pulsplettering i elektronikindustrien Erhvervsfremmestyrelsen (DK, MUP2), co-applicant for DTU/IPU	1994- 1998	2 200 000 1551296 DKK
Elektrokemisk fremstilling af multilagdelte metraler og legeringer Danish Technical Research Council, co-applicant for DTU	1995- 1996	1 250 000 935000 DKK
On-line corrosion monitoring – prestudy Danish Technical Research Council, main applicant	1996	80 000 60000 DKK
Metode til fremstilling af magnetisk materiale Erhvervsfremmestyrelsen	1997- 1998	182 000 125000 DKK
PVD-belægning av mjuka metaller SSF	1998- 2000	320 000
Ultraplate EU (G1RD-2000-00427), co-applicant for Acreo	2000- 2003	2 400 000 237 491 €
Ultraplate additional national funding VINNOVA (2001-06622), main applicant for Acreo	2000- 2003	1 049 805
Centre for Robust Electronics IRECO, main applicant	2001- 2005	5 500 000
Institutsdoktorand Niklas Gunnarsson, Low-cost micro-system encapsulation KK-stiftelsen, main applicant	2004- 2009	1 500 000
Institutsdoktorand Daniel Tomicic, Reliable interconnect technology KK-stiftelsen, main applicant	2004- 2009	1 500 000
MaxPhase as electronic contact VINNOVA, 2004-00431, main applicant	2005- 2006	3 000 000
Robusta Intelligentia Produkter VINNOVA, 2006-01064, main applicant	2006- 2008	2 000 000
EraSME MaxContact VINNOVA/EU (Era-SME, 2006-03827), main applicant	2006- 2009	5 700 000 540000 €
EraSME OptiComp VINNOVA/EU (Era-SME, 2006-03985), main applicant	2006- 2009	6 800 000 652000 €
FunMat VINNOVA (VinnEx), co-applicant for SP	2006- 2011	1 366 000
MAX Fuel Cell SSF (ProEnviro, M07.04), co-applicant for SP	2008- 2010	1 667 000
Blixt Energimyndigheten (FFI, 2009-000934), co-applicant for SP	2009- 2010	1 125 000
SE2A VINNOVA/EU (ENIAC, 2008-04185), co-applicant for SP	2009- 2011	960 000
EraSME HIPP Max VINNOVA/EU (Era-SME, 2009-04562), main applicant	2009- 2012	8 000 000 761049 €
FACECAR VINNOVA (FFI, 2009-02814), co-applicant for SP	2009- 2012	650 000
MAXCell2 SSF (ProViking, V09.16), co-applicant for SP	2009- 2014	1 640 000
TRIBUTE VINNOVA/EU (NMT-ERA.NET, 2010-01608), main applicant	2010- 2012	5 200 000 497000 €
HyTrEc EU (Inter Reg NS, 35-2-1-12), co-applicant for SP	2012- 2015	1 700 000 165000€
Säkrare batterisystem och elektrifierade fordon Energimyndigheten (FFI, 35755-01), main applicant	2012- 2015	3 179 500

Rheo Silver KK-stiftelsen (20120184), main applicant	2013	750 000
Hi2CoRe VINNOVA/EU (ERA, 2013-01883), main applicant	2013- 2015	6 800 000 650000 €
SelfClean EU (314988), co-applicant for SP	2013- 2015	1 200 000 110534 €
SelfClean EU (314988), co-applicant for JTH	2013- 2015	2 200 000 205600 €
GF Demo VINNOVA (Grön Flygteknisk Demonstration, 2013-04667), co-applicant for SP	2013- 2015	550 000
Framtida gränsöverskridande forskningsledare inom funktionella nanotekniska ytor, VINNOVA (VINNMER Marie Curie Incoming, 2013-04341), main applicant	2014- 2015	1 118 430
TOPUP RISE TD hybridsystem VINNOVA (2015-03981), main applicant	2015- 2016	650 000
BlueMove EU (Inter Reg ÖKS), co-applicant for SP	2015- 2018	3 100 000 296170 €
FineSol EU (680718), co-applicant for SP	2016- 2018	4 200 000
Ny precisionsmätmetod för in situ detektering av utmattning i lödförbindelser VINNOVA (2017-03546), main applicant	2017- 2018	400 000
mCBEEs EU (Marie Curie, 764977), co-applicant for RISE	2017- 2021	2 673 920 254659 €
Nytt koncept för hållbar energilagringsteknik VINNOVA (2018-04282), co-applicant for RISE	2018- 2019	70 000
Aluminiumbaserad Strömavlederplatta för PEM-bränsleceller (ALUSAP) VINNOVA (2020-03135), co-applicant for JTH	2020- 2021	160 000
Intern återvinning av koppar vid mönsterkortproduktion VINNOVA SMF (2020-xxxx), co-applicant for JTH	2020- 2021	800 000
Guldpläterade wolfram- och molybdentrådar för krävande tillämpningar VINNOVA SMF (2020-04971), co-applicant for JTH	2020- 2021	250 000
CleanCon project extension EU (Inter Reg ÖKS), co-applicant for JTH	2021- 2022	150 000

Participation in other R&D projects

Some of the projects are confidential without references in the scientific literature, but short descriptions of subject are given in the following list.

1. Development of corrosion protective conversion process for magnesium, Norway 1989.
2. Ion exchange of wastewater from electroplating industries, Denmark 1989.
3. Recycling of wastewater from anodising for phosphate precipitation in domestic wastewater treatment, Denmark 1989.
4. Pulse plating, Denmark 1989-1994.
6. Electroplating techniques for deposition of multi layered metals and alloys, Denmark 1995-1997.
8. PVD of MoS₂, Sweden 1997.
9. Deposition of DLC (diamond-like carbon), Sweden 1997.
10. Evaluation of processes for deposition of poly crystalline diamond (PCD), Sweden 1997.
11. Micro replication, Sweden 1997-1998.
12. Development of processes for application of Ormocer (organic metal-organic ceramics) as dielectric and wave guide in micro electronics, European project 1997-1998.
13. Development of process equipment for electroforming of wafers, Sweden, 1997-1998.
14. Development of electroplating processes for GMR (Giant Magneto Resistant) nanowires, European project 1997-1999.
15. Inhibition of corrosion in absorption refrigerators, Sweden 1997-99.
16. Development of wear resistant coatings on soft metal substrates by combining electroplating and PVD, Sweden 1997-2000.

17. Development of industrial electroplating process for self-aligning Au-Sn solder, Sweden 1997-1998.
18. Development of flip-chip bonding processes, Sweden 1997-2000.
19. Development of low-friction coatings on polymers by combining electroplating and PVD, Sweden 1997-1999.
20. Development of process technology for microelectronics on large area panels, European project 1998-2001.
21. Industrial adaptation of processes for application of Ormocer (organic metal-organic ceramics) as dielectric and wave guide in micro electronics, European project 1998-2001.
22. Development of process technology for polymer electronic components, Sweden/Norway 1998-1999.
23. Development of copper pulse plating for the printed circuit board industry, Sweden 1998-1999.
24. Development of interconnect and packaging for electronics in high temperature environments, Sweden 1998-2000.
25. Development of process technology for 3D patterning of opto carriers, Sweden 2001-2002.
26. Technology transfer of process technology for self-aligning Au-Sn solder, Sweden 2001-2002.
27. Development of process technology for integrated polymeric wave guides, Sweden 2001-2002.
28. Development of low-cost interconnect, packaging and sub-system integration technologies for mm-wave applications, European project 2001-2004.
29. Development of low-cost interconnect and packaging technology for gas sensors, Sweden 2003-2005.
30. Development of hardware platform for wearable computers, Sweden 2004-2005.
31. Development of sensor module for harsh environment application, Sweden 2004-2006.
32. High-temperature electronic systems all in SiC for electric vehicles, Sweden 2008-2011.
33. Automotive electronics, Sweden 2009.
34. Battery systems, Sweden 2009.
35. Hybrid technology for heavy vehicles, Sweden 2010-2012.
36. Thermo-mechanical reliability of a lead-free radio frequency power amplifier with GaN/SiC power transistors, Sweden 2014-15.
37. Energy efficient hydraulic systems on mobile machines, Sweden 2015-16.
38. New industrial need within hybrid systems, Sweden 2015-16.
39. Multi-fuel stations, Europe 2016-19.
40. Hydrogen based transportation, Europe 2017-21.
41. Battery technology, Sweden 2017-19.
42. Zero Emission Construction Site, Europe 2018.
43. Polymers and polymer composites, Sweden 2019-2023.

Minor consultant work/technology transfer

1. Corrosion test of hard chromium coatings, Denmark 1990.
2. Soft solder deposition for soldering of nickel matrix onto printing roll, Sweden 1992.
3. Solving corrosion problem on powder metallurgical component, Germany 1993.
4. Through hole pulse plating of printed circuit boards, Sweden 1994.
5. Optimising material distribution by pulse plating of gold on ISDN connectors, Denmark 1994.
6. Dark colouring of stainless-steel mesh for EMC shielding in monitors, Denmark 1995.
7. Solving corrosion and allergy problem in decorative plating of watch cases, USA 1996.
8. Au/Ni plating of kovar components, Norway and Sweden 1997.
9. Evaluation of corrosion risk on temporary aluminium staging in the construction industry, Denmark 1997.
10. Installation of process for replication of micro optical components, Sweden 1997-1998.
11. Cu/Ti sputtering of conductors on micro chips, Sweden 1997-1998.
12. Quality control of decorative gold plating, Sweden 1997-99.
13. Characterisation of process problem by sputtering of optical filters, Sweden 1998.
14. Au/Ni plating of kovar opto carriers, Sweden 1999.
15. Co-deposition of diamond particles into nickel coatings on grinding tools, Sweden 1999.
16. Solving corrosion and wear problem in the cylinder lining of marine diesel engines, Denmark 1999.
17. Manufacturing of prototype for dialysis electrode, Sweden 1999.
18. Process improvement by dental electroforming in gold, Sweden 2000.
19. Electroforming of tool for making medical polymer components, Sweden 2000.
20. Characterising corrosion and process problem for connectors, Sweden 2000.
21. Literature survey of material and process technology for electronics in extreme environments (corrosion, temperature, vibration), Sweden 2000.
22. Hard chromium plating of cylinder linings in marine diesel engines, Denmark 2000.

23. Colouring of electrode surface for LCD application, Sweden 2000.
24. Nickel plating of light metal components for automotive applications, Sweden 2000.
25. Au-Sn plating on patterned alumina substrat, Canada 2000.
26. Ti sputtering on glass substrat, Sweden 2000.
27. Development of process technology for thinfilm pressure sensor, Sweden 2000.
28. Thinfilm electrodes on painted substrats, Sweden 2000-2002.
29. Test structure for integrated thinfilm coils, UK 2000.
30. Pattern etching of gold on flexfolie, Sweden 2000.
31. Processing of μ -wave antenna MCM, Sweden 2000-2003
32. Improvement of hard chromium plating process, Korea 2001.
33. Specification of guidelines for hard chromium plating of cylinder linings in marine diesel engines, Denmark/China 2001.
34. Solving finishing problem on connectors for space application, Sweden/Europe 2002.
35. Packaging of smart card, Sweden 2003.
36. Hard chromium plating of piston rings for marine diesel engines, Denmark 2003.
37. Thermal evaluation of automotive electronics, Sweden 2004.
38. Dispersion plating, Sweden 2005.
39. Electroforming of nuzzles, Sweden 2006.
40. Plating of radoms, Sweden 2006.
41. Miniaturisation of electronics in active hearing protection, Sweden 2006.
42. Reel-to-reel dispersion plating, Sweden 2007-2008.
43. Feasibility study of low-cost sensor encapsulation of demanding environments, Sweden 2008.
44. Dispersion plating, Sweden 2009.
45. Flow sensor, Sweden 2009-2011.
46. Colouring process, Sweden 2010.
47. Tribological coatings, Sweden 2013.
48. Wear resistance, Sweden 2014.
49. Energy efficiency for a forest machine, Sweden 2014.
50. Domestic installation of electrolysis, fuel cells, batteries and hydrogen storage, Sweden 2014-2015.
51. Evaluation of corrosion problem in telecom, Sweden 2016.
52. Prestudy on electrolysis, Sweden 2016.
53. Prestudy on hydrogen fuelled vehicles, Sweden 2016.
54. Prestudy on off-grid house, Sweden 2016.
55. Prestudy on fluorescing glass, Sweden 2016.
56. Electrochemical sensor, Sweden 2017.
57. Wear resistant electroless Ni coating, Sweden 2017.
58. Recycling of Cu in manufacturing of circuit boards, Sweden 2018-2019.
59. Pulse plating of gold, Sweden 2018-2019.
60. Silver coating on telecom antenna, Sweden 2018-2019.
61. Electroplating of antimony in sensor application, Sweden 2018-2019.
62. Joining by electroplating, Sweden 2020-2021.
63. Plating on W and Mo micro-wires, Sweden 2021.
64. Combined electrowinning and electroforming of copper, Sweden 2021-2022.

Teaching and pedagogic experience

Higher vocational education at Jönköping University (1 study year = 200 YH credits):

- 2020 Materials technology for tool engineers (20 c). Developed, coordinated and examined the course, and taught 15%.
- 2021 Materials technology for tool engineers (20 c). Coordinated and examined the course, and taught 15%.

BSc programme at Jönköping University:

- 2021 Examiner for thesis work

Master courses at the Technical University of Denmark (1 study year = 55 credits):

- 1987 Assistant in Chemical Reactions (5 c)
- 1988 Assistant in Analytical Chemistry (5 c)
- 1994 1 lecture in Corrosion Science
2 lectures in Advanced Surface Technology
- 1995 1 lecture in Corrosion Science
2 lectures in Advanced Surface Technology
Assistant in Laboratory Course in Corrosion (spring and autumn, 5+5 c)
- 1996 1 lecture in Corrosion Science
1 lecture in Advanced Surface Technology
- 1997 4 days in Laboratory Course in Metallurgy
1 lecture in Corrosion Science

Master courses at the Jönköping University:

- 2014 3 lectures in Functional Coatings and Materials
- 2015 3 lectures in Functional Coatings and Materials
- 2016 2 lectures in Functional Coatings and Materials
- 2017 2 lectures in Functional Coatings and Materials
- 2018 1 lecture in Functional Coatings and Materials
- 2019 1 lecture in Functional Coatings and Materials
- 2020 1 lecture in Functional Coatings and Materials
- 2021 1 lecture in Functional Coatings and Materials

PhD courses at the Jönköping University:

- 2020 1 lecture in Industrial Product Realization
- 2021 Examiner for licentiate degree of Salil Sainis

PhD courses at the Industrial Research School for Electronics Design (1 study year = 40 credits):

I developed and examined the following courses for the research school and taught them fully or partly.

- 2003 Reliable Hardware Construction (2 c)
- 2005 Life-time prediction (3 c)
Electrochemical processes for electronics and micro-technology (5 c)
- 2010 Inorganic chemistry and thermodynamics (6 c)

European PhD lecturing:

- 2005 Organising and examining group tasks for the European Marie Curie PhD training school on Micro and Nano Deposition (MINDE), five days, Barcelona.
- 2007 Co-organising and co-examining group tasks for the European Marie Curie PhD training school on Micro and Nano Deposition (MINDE), five days, Athens.
- 2016 One lecture on innovation at the European PhD trainings school "Bridging innovation and entrepreneurship with sustainable materials development" within SELECTA ("Smart ELECTrodeposited Alloys for environmentally sustainable applications: from advanced protective coatings to micro/nano-robotic platforms"), Goteborg.
- 2017 Organising and examining group tasks for the European COST training school on "Electrochemical processing methodologies and corrosion protection for device and systems miniaturization (e-MINDS, MP1407)", five days, Schwäbisch Gmünd.
- 2018 One lecture on electrical measurement on surfaces at the European PhD training workshop "Analytical techniques" within mCBEEs ("Advanced integrative solutions to Corrosion problems beyond micro-scale: towards long-term durability of miniaturized Biomedical, Electronic and Energy systems"), Jönköping.

Tutor for undergraduate students:

1. Exchange student C. Hofschneider, Hannover University, *Optimization of material distribution in zinc electroplating* (4 months, DTU 1993).
2. Exchange student A. Marquard, Hannover University, *Optimization of material distribution in silver electroplating* (4 months, DTU 1993).
3. Exchange student N. Bey, Hannover University, *Optimization of material distribution in hard gold electroplating* (4 months, DTU 1994).
4. Exchange student D. Veitner, Hannover University, *Anodising of technical magnesium alloy AZ 91* (4 months, DTU 1994).
5. S.A. Spiegelhauer, *Electrodeposition of Ni-P-Cr coatings* (15 p project, DTU 1995).
6. S.A. Spiegelhauer, *Corrosion evaluation of Ni-P-Cr coatings* (M.Sc. project, DTU 1995).
7. L.W. Christoffersen, *Electrodeposition of Ni-P-W coatings* (15 p project, DTU 1995).
8. L.W. Christoffersen, *Corrosion evaluation of Ni-P-W coatings* (M.Sc. project, DTU 1996).
9. M.B. Olsen, *Electrodeposition of Ni-P-Sn coatings* (15 p project, DTU 1996).
10. M.B. Olsen, *Corrosion evaluation of Ni-P-Sn coatings* (M.Sc. project, DTU 1996).
11. Exchange student, D. Barenbrock, Hannover University, *Optimization of wear resistance and hardness of Ni-P-W coatings* (4 months, DTU 1996).
12. Exchange student Ch. Podolsky, Hannover University, *Optimization of multilayered metal composite coatings* (4 months, DTU 1996).
13. Exchange student G. v. Torklus, Hannover University, *Internal stress determination in electrodeposits* (4 months, DTU 1997).
14. Exchange student H. Hippler, Hannover University, *Pulse plating of Silver for EMC shielding* (4 months, DTU 1997).
15. M. Hedin, *The growth and structure characterisation of composition of modulated cobalt-molybdenum alloy deposits* (M.Sc. project, Linköping University 1997).
16. A. Andersson, *Electrodeposition of metallic multilayer nanowires for giant magnetoresistance applications* (M.Sc. project, Linköping University 1997).
17. Trainee G. v. Torklus, Hannover University, *Microreplication* (6 weeks internship, 1997).
18. A. Sawatdee, *An investigation of adhesion of DVS-BCB to sputtered copper surface using 3-ASTES as coupling agent* (M.Sc. projekt, Linköping University 1998).
19. Trainee F. Karlsson, Linköping University, *Electroplating of indium for microelectronics applications* (6 weeks, 1999).
20. Trainee T. Lidskog, Linköping University, *Fabrication of low cost advanced printed circuit board* (10 weeks, 2000).
21. M. Akdogan and M. Ienesel, *Encapsulation as chemical protection and related thermal problems* (B.Sc. project, Jönköping University 2002).
22. Stephanie Wong & Khizran Zehra, *Core Competence Management* (MBA, Jönköping International Business School 2009).
23. Cecilía K. Kjartansdóttir, *Electrodeposition of Ultra Fine Structured Copper for Microelectronic Applications* (M.Sc. project DTU 2009).
24. Richard Skansare and Daniel Persson, *Control electronics for process for colour patterning* (B. Sc. Thesis, Jönköping University 2010).
25. Curt Edström, *Wet etching of dielectric thin films* (B. Sc. Thesis, Jönköping University 2010).
26. Sune Egelund *Electrodeposition of Ultra Fine Structured Tin for Microelectronic Applications* (M.Sc. thesis DTU 2011).
27. Shovon Goutam, *Synthesis of TiO₂ nanowires* (M. Sc. Thesis, Jönköping University 2013).
28. Baiwei Zhu, *The influence of Si level and morphology on anodizing response of Al-Si casting alloys* (M. Sc. Thesis, Jönköping University 2014).
29. Louise Albo Zieme and Pontus Bergstedt, *Tribological properties and thermal conductivity of a new HPDC Mg-alloy* (M. Sc. Thesis, Jönköping University 2021).

Tutor for graduate students:

1. Ph.D. student L.W. Christoffersen, *Electrodeposition of engineering alloy coatings* (DTU 1996-1999).
2. Ph.D. student S. Valizadeh, *Electrodeposition of nanowires* (Linköping University 1997-2001).
3. Ph.D.-student J.A.D. Jensen, *Engineering of metallic microstructures; process-microstructure-property relations for electrodeposits* (Linköping University 1998-2002).
4. Industrial licentiate student M. Lindgren, *Methodology for realisation of electronics in harsh environments* (Jönköping University & Linköping University 2001-2003).

5. Industrial Ph.D. student M. Chedid, *Wearable Systems in Harsh Environments – Realizing New Architectural Concepts* (Jönköping University & Linköping University 2004-2010).
6. Industrial Ph.D. student N. Sarius, *Surface Technology for Optical and Electrical Connectors* (Jönköping University & Linköping University 2004-2010).
7. Industrial Ph.D. student J. Arwidson, *Thermal Fatigue Life Prediction of Solder Joints in Avionics by Surrogate Modeling – a Contribution to Physics of Failure in Reliability Prediction* (Jönköping University & Linköping University 2003-2013).
8. Ph.D. student Baiwei Zhu, *Optimization of RHEO casting for high thermal conductivity aluminum alloys for telecom applications for outdoor use* (Jönköping University 2014-2019).
9. Ph.D. student Santiago Pinate, *Study of particle-current-electrocrystallization interactions in electroplating of Ni/SiC* (Jönköping University 2017-).
10. Industrial Ph.D. student Live Mølmen, *Materials Reliability in Hydrogen Based Energy Conversion* (Jönköping University 2018-).

Courses for industry

1. *Hard chromium*, two-day course for Nichro Haardchrom A/S, Hvidovre, 14-15/3 1990.
2. *Environmental Advantages of Pulse Plating*, lecture in Course on Cleaner Technology, Vilnius, Lithuania 21-22/4 1993.
3. *Corrosion*, lecture at ATV-SEMAPP lectures in advanced surface technology, Lyngby 8/11 1994.
4. *Electrodeposition of copper and tin*, lecture at ATV-SEMAPP lectures in advanced surface technology, Lyngby 15/11 1994.
5. *Hard and decorative chromium plating*, lecture at ATV-SEMAPP lectures in advanced surface technology, Lyngby 15/11 1994.
6. *Pulse plating*, lecture at ATV-SEMAPP lectures in advanced surface technology, Lyngby 16/11 1994.
7. *Corrosion*, lecture at ATV-SEMAPP lectures in advanced surface technology, Vingstedcentret 31/5-1/6 1995.
8. *Electrodeposition of copper and tin*, lecture at ATV-SEMAPP lectures in advanced surface technology, Vingstedcentret 31/5-1/6 1995.
9. *Pulse plating*, lecture at ATV-SEMAPP lectures in advanced surface, Vingstedcentret 31/5-1/6 1995.
10. *Introduction to Taguchi statistics*, one-day course for IMC AB, Linköping 2/10 1995.
11. *Pulse Plating*, lecture and lab exercise at course on Pulse Plating organised by Zentrum für Oberflächentechnik and ATV-SEMAPP, Lyngby 6-7/5 1996.
12. *Electroplating*, internal education for laboratory technicians and process engineers (10 lectures), Norrköping sept-nov 1999.
13. *Vacuum processes in microelectronics*, internal education of laboratory technicians and process engineers (4 lectures), Norrköping nov 1999.
14. *Hard chromium plating*, half day course for MAN B&W Diesel, Copenhagen 30/4 2003 (40 participants).
15. *Electroplating for connectors*, 1 day course, Jönköping Science Park 9/5 2007 (10 participants).
16. *Electrolysis*, lecture in course on hydrogen fueled mobile machines, Malmö 15/12 2017 (20 participants).
17. *Electrolysis*, lecture in course on hydrogen technology, Borås 12/6 2018 (3 participants).
18. *Electric contacts*, 1 day course for Verisure, Malmö 15/11 2019 (20 participants).

Seminars for industry

19. P. Leisner, *Pulse plating*, seminar for Statoil, Norge, Lyngby 31/11 1990.
20. P. Leisner, *Pulse plating – applications and characteristics*, 2nd meeting in experience group for pulse plating, Brüel & Kjør, Nærum 12/4 1991.
21. P. Leisner, *Pulse plating – characteristics and examples on applications*, Spring Meeting in Dansk Galvanisør Union, Kolding 24/5 1991.
22. P. Leisner, *Pulse plating of copper*, 4th meeting in experience group for pulse plating, DTU, Lyngby 6/3 1992.
23. P. Leisner, *Hard chromium pulse plating*, seminar for participants in NIF project on hard chromium, Lyngby 4/5 1993.
24. P. Leisner, *Pulse Reversal Plating of Hard Chromium*, Pulse Plating Workshop, AESF Week, Orlando 24-28/1 1994.
25. P. Leisner, *Pulse Plating from Non-Additive Containing Solutions*, Seminar for Stork Screens B.V. and Stork Veco B.V., Boxmeer, Holland 25 /8 1994.
26. P. Leisner, *Structure modification for metals deposited by pulsed current*, Symposium in surface reactions and coatings, Danish Society for Salt Melt Research, Lyngby 19/5 1995.
27. P. Leisner, *Electrochemical synthesis of multi layered structures*, Materialeforskning uden grænser, Risø 10/10 1996.

28. P. Leisner, *Pulse plating and CMA coatings*, Seminar for Philips Galvanoteknik, Eindhoven 18/2 1997.
29. P. Leisner, *Electroplating and Electroreplication*, presentation at internal Toolex-Alpha conference, Uppsala 5-6/2 1998.
30. P. Leisner, *Clean room processes at IMC Linköping and perspectives for future expansion in Norrköping*, Forum Renhetsteknik, Göteborg 1/4 1998.
31. P. Leisner, *Surface Technology in Interconnect and Packaging*, presentation for Japanese Industrial delegation, Norrköping 22/9 1999.
32. P. Leisner, *Trends in Interconnect and Packaging*, presentation for Asachi Chemical (Japan), Norrköping 2/11 1999.
33. P. Leisner, *Microelectronics*, presentation for Polytekniska Foreningen, Norrköping 9/11 1999.
34. P. Leisner, *SiC gas sensors*, presentation at conference at Kitron Development, Jönköping 3/6 2002.
35. P. Leisner, *Design optimisation of an RF module for automotive applications by means of thermal and thermo-mechanical simulations*, Nordic Flotherm user group seminar, Jönköping 29/11 2002.
36. P. Leisner, *Pulsplättering av avancerade mönsterkort*, MQS Nätverk temadag om mikroelektronik och bärareteknik, 4/12 2002, Norrköping.
37. I. Belov, P. Leisner, M. Lindgren, H. Wingbrant, *CFD and FE stress analysis for optimization of interconnect and packaging design: automotive applications*, presentation at SNDFT Workshop, Jönköping 5/5 2003.
38. I. Belov, M. Lindgren, P. Leisner, *Thermal and thermo-mechanical modelling for optimization of interconnect and packaging design: automotive radar module*, presentation at Internal research conference of the School of Engineering, Jönköping 7/5 2003.
39. J. Johansson, I. Belov, P. Leisner, *Comparison of different methods and tools for thermal simulation: case study*, presentation at Nordic thermal modelling workshop, Stockholm 15/5 2003.
40. I. Belov, H. Wingbrant, P. Leisner, *CFD analysis of an exhaust gas sensor for automotive applications*, presentation at Nordic thermal modelling workshop, Stockholm 15/5 2003.
41. I. Belov, M. Lindgren, P. Leisner, *Thermal and cost evaluation of a radar module within the TOPSIS analysis*, presentation at Nordic thermal modelling workshop, Gråsten, Denmark 14/11 2003.
42. I. Belov, P. Leisner, M. Lindgren, H. Wingbrant, *Integrated approach in interconnect and packaging design evaluation: automotive applications*, presentation at Acreo seminar, Norrköping 7/11 2003.
43. P. Leisner, *Vi har en tvättmaskin i labbet – Wearable computer*, 4:e Svenska Inkubator konferensen, Jönköping 11-13/1 2005.
44. P. Leisner, *Robust elektronik – Byggsätt och komponenter*, Research seminar at Elektronikmässan, Stockholm 2/2 2005.
45. Organizer of seminar on *Future Radar Front End*, Jönköping 9/3 2005.
46. P. Leisner, *Robust Elektronik*, Research seminarium at Elektronik Mässan, Göteborg 6/9 2006.
47. P. Leisner, *Design av Robusta Intelligenta Produkter*, Installationsföredrag, JU 23/9 2006.
48. P. Leisner, *Intelligence in Heavy Vehicles*, presentation at Workshop on Heavy Vehicles 21/8 2007 during South Sweden Swedish-American Entrepreneurial Days, 20-23/8 2007.
49. P. Leisner, *Nuläge sensorer – Elektronik i textila material*, Seminarium om fibrer och sensorer, Textilhögskolan i Borås 6/12 2007.
50. *Framtidens driftscentraler*, Moderator at seminarium, Espira, Borås 3/12 2008.
51. P. Leisner, K. Palm, M. Lindgren, *Influence of solder process residues on surface insulation resistance*, Seminar on Process related contamination on PCBAs and climatic reliability, DTU, Lyngby 22/2 2012.
52. Organizer of workshop on *energy efficiency* for the industrial association Heavy Vehicles, Växjö 24/10 2013.
53. Organizer of workshop on *energy efficiency* for the industrial association Heavy Vehicles, Växjö 19/3 2014.
54. P. Leisner, *Reliability and corrosion in electronics*, Workshop on Robust Electronics, Stockholm 9/4 2015.
55. Organizer of workshop on *Fuel cells* for Kalmar Industries, Lidhult 31/8 2015 (13 participants).
56. P. Leisner, *State-of-the-art och framtida elektrolysörer*, Workshop: Vätgas – en möjlig brygga mellan förnybar el och grön kemi, Västsvenska kemi- och Materialklustret, Göteborg 16/5 2016 (42 participants).
57. P. Leisner, *Hur tar vi nästa steg mot målet: Ett fossilfritt samhälle? - Och vilka möjligheter ger det oss?*, Seminarium: Utveckling och möjligheter – Vad betyder en omställning från fossila bränslen?, Smålandsstenar 15/3 2018 (65 participants).
58. P. Leisner, *Vätgas – vad betyder det för arbetsmaskiner*, at Fuel Cell Day, VCE, Braås 2/5 2018 (30 participants).
59. P. Leisner, *Vätgas – Säkerhet*, at Fuel Cell Day, VCE, Braås 2/5 2018 (30 participants).
60. P. Leisner, *Blue Move for a Green Economy - Overview*. At Nordic Clean Energy Week, Malmö 22/5 2018 (60 participants).

61. Co-organizer of seminar on *Thermal challenges (termiska utmaningar)* within the strategic innovation programme *smartare elektroniksystem*, Västerås 15/1 2020 (12 participants).
62. Co-organizer of seminar on *Heavy Vehicles* within the strategic innovation programme *smartare elektroniksystem*, on-line 14/1 2021 (60 participants).

Other activities related to teaching

- Programme director of the Research School for Electronic Design. A multi-disciplinary Ph.D. education in electronic hardware design co-funded by the Knowledge Foundation, involving close co-operation between Swedish universities and industrial partners. 2002-2008.
- Member of the organising committee for the European Marie Curie training courses on Micro and Nano Deposition (MINDE) for graduate students. 2005-2008.
- Member of the research & education committee at the Institute of Manufacturing Engineering during 1995-1997 when the master and PhD courses were reorganized by the committee.
- Leading the development of a new master programme in Materials and Manufacturing at Jönköping University. 2020.
- During the years, I have been mentor for four young female leaders in different research organizations.
- Ph.D. opponent/evaluation committee 39 times in 7 countries (Belgium, Denmark, Finland, India, Italy, Netherlands, Sweden):
 - External Ph.D. examiner for Indian Institute of Science, 1996.
 - External Ph.D. examiner at ATV (Academy for Engineering Science), Denmark, 2000.
 - External Ph.D. examiner at ATV (Academy for Engineering Science), Denmark, 2001.
 - Ph.D. opponent at DTU, Denmark 2002.
 - Ph.D. opponent at DTU, Denmark 2007 (twice).
 - Ph.D. opponent at Uppsala University, Sweden 2008.
 - Ph.D. opponent at DTU, Denmark 2008.
 - Ph.D. opponent at DTU, Denmark 2009 (four times).
 - Ph.D. opponent at Linköping University, Sweden 2009.
 - Evaluation committee for Ph.D. at Uppsala University, Sweden 2010.
 - Ph.D. opponent at DTU, Denmark, 2010 (twice).
 - Ph.D. opponent at DTU, Denmark, 2011.
 - Evaluation committee for Ph.D. at Chalmers University of Technology 2013.
 - Ph.D. opponent at DTU, Denmark, 2014 (twice).
 - Evaluation committee for Ph.D. at University of Trento, Italy, 2014 (five times).
 - Ph.D. opponent at TU Delft, Holland, 2014.
 - Ph.D. opponent at TU Delft, Holland, 2015.
 - Ph.D. opponent at DTU, Denmark, 2015 (three times).
 - Ph.D. opponent at Uppsala University, Sweden 2016.
 - Ph.D. opponent at Aalto University, Finland 2019.
 - Ph.D. opponent at DTU, Denmark 2019 (three times).
 - Ph.D. opponent at Vrije Universiteit Brussel, Belgium 2019.
 - Ph.D. opponent at Chalmers University of Technology 2020.
 - Ph.D. opponent at Uppsala University, Sweden 2021.
 - Evaluation committee for Ph.D. at Linköping University 2021.
 - Ph.D. opponent at DTU, Denmark 2021.
- External examiner for the M.Sc. programme at DTU, Denmark, 1999-2009.
- External examiner of the M.Sc. programme at Institute of Technology at Carlow, Ireland, 2021-2024.

Other professional activities

- Externa scientific evaluator of research applications and appointment of scientific staff:
 - International evaluator of research application to Fonds zur Förderung der Wissenschaftlichen Forschung, Austria, 1999.
 - External scientific reviewer of project application for Loughborough University, UK 2012.
 - External scientific reviewer of project application for VINNOVA, Sweden 2015.
 - External scientific reviewer of project application for National Research, Development and Innovation Office (NKFIH), Hungary 2015.
 - External scientific reviewer of project application for Ministry of Education, Netherlands 2015.
 - External assessor for appointment of Chair (professor) at Loughborough University, UK 2015.
 - External expert reference on future strategy in the field of surface technology at CIDETEC, Spain 2016.
 - External scientific reviewer of project application for Innovation Fund Denmark, Denmark 2016.
 - External scientific reviewer of project application for Netherlands Organisation for Scientific research, Netherlands 2016.
 - External assessor for employing academic staff at Linköping University, Sweden 2017.
 - External scientific reviewer of project application for Fonds Recherche Québec-Nature at technologies, Canada 2017.
 - Member of panel for evaluation technology idea for the innovation office at Royal Institute of Technology, Stockholm, Sweden, since 2018.
- Organizer of conferences and experience groups 12 times in 7 countries:
 - Organiser of experience group for pulse plating with 20 industrial participants in Scandinavia, 1990-1994.
 - Member of organising committee for Scandinavian Pulse Plating Symposium, Lyngby 20-21/2 1992.
 - Member of organising committee for First East West International Convention on Surface Engineering, Bangalore, India 9-19/12 1992.
 - Chairman of the organising committee for Workshop on Electrodeposition and Properties of Composition Modulated Alloys, Athens, 28-29/5 1997.
 - Member of the scientific organising committee for EAST-Forum 2003, Lyngby 10-12/4 2003.
 - Member of the organising committee for Swedish System-on-Chip Conference 2004, Båstad 13-14/4 2004.
 - Member of the scientific organising committee for EuroSIME 2005, Berlin 17-20/4 2005.
 - Member of the scientific committee for the 8th International Conference on Electronics Packaging Technology (ICEPT 2007), Shanghai 14-17 August 2007.
 - Member of the scientific committee for EuroInterfinish 2007, Athens 18-19 October 2007.
 - Member of the scientific committee for Ambience 08, Borås 2-3 June 2008.
 - Member of the organising committee for EAST Forum 2015, Lund 25-26 June 2015.
 - Chairman of the organising committee for the EAST 30 years Anniversary Workshop, Schwäbisch Gmünd, 17 October 2019.
- Member of different scientific committees and advisory boards:
 - Member of the Swedish Corrosion Institutes committee for inorganic coatings 1997-2000.
 - Member of industrial reference group at the Swedish Corrosion Institute 1997-2000
 - Member of the board of the Thin Film Consortium (Swedish research programme), 1997-2000.
 - Member of industrial reference group for the NUTEK project: PVD coating of soft metals, 1997-2000.
 - Member of the editorial board of Transaction of the Institute of Metal Finishing, since 2005
 - Member of the management committee for European COST Action MP1407 “Electrochemical processing methodologies and corrosion protection for device and systems miniaturization (e-MINDS)”, 2015-2018.
 - Member of the research council for the strategic innovation programme Metallic Materials, Sweden since 2020.
 - Member of reference group for the Swedish Environmental Protection Agency for the EU revising of STM BREF (Best Available Techniques for the Surface Treatment of Metals and Plastics), since 2020.
- Scientific reviewer of publication for 16 scientific journals:
 - Coatings and Surface Technology
 - Electrochimica Acta
 - Electronics Reliability
 - IEEE Transactions on Components and Packaging Technologies
 - Industrial & Engineering Chemistry Research
 - Journal of Applied Electrochemistry
 - Journal of Electrochemical Society
 - Journal of Materials Science – Materials in Electronics
 - Journal of Micromechanics and Microengineering
 - Materials Chemistry and Physics
 - Microelectronics Journal
 - Microelectronics Reliability
 - Plasma Processes & Polymers
 - Philosophical Magazine Letters
 - Transaction of the Institute of Metal Finishing
 - Vacuum

Scholarship and awards

1. Ph.D. Scholarship for excellent student at DTU, 1989-1992.
2. Frantz Alling Grant for young scientists, 7. september 1989.
3. Silver Medal Award for the best paper in the journal *Plating & Surface Finishing* in 1992.
4. First-Time Author's Award from American Electroplaters and Surface Finishers Society, 1993.
5. Best poster award at the 25th Anniversary Symposium, Danish Electrochemical Society, Lyngby 9/6 1995.
6. Outstanding Paper Award 2008, Emerald LiteratiNetwork for "Experimental analysis and modelling of transmission line for wearable applications" in *International Journal of Clothing Science and Technology*, Vol. 19, No. 1, 2007.
7. The Westinghouse Prize from The Institute of Metal Finishing for paper published in *TIMF* 2009 Vol. 87 (2) p 90-96.