



26th Nordic Process Control Workshop



Technical University of Denmark

August 17-18, 2026

DTU Compute
Department of Applied Mathematics and Computer Science

PROSYS

CERE
Center for Energy Resources Engineering



Nordic Process Control Workshop 2026

26th Nordic Process Control Workshop 2026 (NPCW 2026)

About NPCW

The Nordic Process Control Workshop takes place every 18th month. It brings together leading academics, researchers, and industrialists from the Nordic countries to discuss recent advances in process control. However, everybody irrespective of location is welcome.

Nordic Process Control Working Group

The Nordic Process Control Working Group was founded in Stockholm on October 24, 1994. The group initiates activities to strengthen the ties between the Nordic process control communities. One activity of the Working Group is to propose the location, date and organizers of an annual or semi-annual “Nordic Process Control Workshop”. The Nordic Process Control Working Group also awards the Nordic Process Control Award to persons who have made a lasting and significant contribution to the field of process control.

Links

You can read more about the Nordic Process Control Workshop and the Nordic Process Control Group here

- [Nordic Process Control](#)
- [Nordic Process Control Group](#)

• Number of participants	67
– Denmark	32
– Norway	16
– Sweden	15
– Finland	2
– Germany	1
– South Africa	1
• Academia	41
• Industry	25
• Public research institutions	1



NPC Working Group

NPC Working Group Members (year of election)

- John Bagterp Jørgensen, DTU, Denmark (2009; 2015; 2022) (chair)
- Torsten Wik, CTH, Sweden (2013; 2019; 2025) (Co-Chair)
- Francesco Corona, Aalto University, Finland (2019; 2025) (Past Chair)
- Johannes Jäschke, NTNU, Norway (2018; 2023)
- Wolfgang Birk, Predge AB / Luleå University of technology, Sweden (2018, 2023)
- Gurkan Sin, DTU, Denmark (2009; 2015; 2022)
- Elling W. Jacobsen, KTH, Sweden (1994; 2000; 2006; 2012; 2018; 2023)
- Jenő Kovács, Sumitomo SHI FW Energia, Finland (2010; 2016; 2022)
- Alf Isaksson, ABB, Sweden (2004; 2010; 2016; 2022)
- Christer Utzen, GEA Process Engineering A/S, Denmark (2015; 2022)
- Iiro Harjunkoski, Aalto Univ., Finland (2016; 2022)
- Morten Hovd, NTNU, Norway (2018; 2023)
- Jakob Kjøbsted Huusom, DTU, Denmark (2018; 2023)
- Jari Böling, Tuurku University, Finland (2019; 2023)
- Nicholas Alsop, Borealis, Sweden (2022)
- Olav Slupphaug, ABB, Norway (2022)
- Idelfonso Nogueira, NTNU, Norway (2025)
- Tiina Komulainen, OsloMet University, Norway (2025)
- Dina Shona Laila, Luleå University of Technology, Sweden (2025)
- Elvira Bergheim, Equinor, Norway (2025)

Previous members of the Working Group:

- Steinar Sælid, Prediktor AS, Norway (1994-1999)
- Blenda Weibull, Sweden (1994-1995)
- Ib Dybkjær, Haldor Topsøe A/S, Denmark (1994-1996)
- Magne Hillestad, Statoil, Norway (1994-1998)
- Kurt Waller, Åbo Akademi, Finland (1989-1998)
- Bo Egardt, CTH, Sweden (1994-1998)
- Stig Strand, Statoil, Norway (1998-2002)
- Charlotte Stub Nielsen, Haldor Topsøe, Denmark (1998-2002)
- David Cameron, Fantoft Prosess, Norway (1994-2004)
- Pertti Makila, Tampere Univ. of Technology, Finland (2001-2004)
- Leif Hammarström, Neste Oy Process Automation, Finland (1994-2007)
- Gunnar Berggren, Borealis, Sweden (2001-2007)
- Sten Bay Jørgensen, DTU, Denmark (1989-2009)
- Jørgen Knudsen, FLS-Automation, Denmark (1998-2009)
- Jan Richard Sagli, Statoil, Norway (2003-2009)
- Kaj Juslin, VTT, Finland (1995-2012)
- Claes Breitholtz, CTH, Sweden (1989-1993; 1998-2013)
- Tommy Mølbak, Dong Energy, Denmark (2009-2014)
- Sirkka-Liisa Jamsa-Jounela, Helsinki Univ. Tech., Finland (2004-2016)
- Bjarne Foss, NTNU, Norway (2000-2017)
- Kurt Erik Häggblom, Åbo Akademi, Finland (1998-2019)
- Hans Aalto, Neste Jacobs, Finland (2007-2019)
- Krister Forsman, Perstorp, Sweden (2013-2019)
- Bjørn Glemmestad, Yara, Norway (2007-2019)
- Jan Peter Axelsson, Vascaia, Sweden (1997-2022)
- Tore Hägglund, Sweden (2009-2022)
- Annika Leonard, Vattenfall, Sweden (2004-2023)
- Bernt Lie, Telemark Univ. College, Norway (2007-2023)
- Sigurd Skogestad, NTNU, Norway (1989-2025)



NPCW 2026 Welcome about NPCW NPC Working Group NPCW Award	26th Nordic Process Control Workshop 2026 (NPCW 2026) • Technical University of Denmark (2800 Kgs. Lyngby) • Building 202A • Auditorium 42
Workshop Important Dates Registration	Monday, August 17, 2026
For Authors Submission Information	Registration, 08:30 – 09:00 • 08:30 – 09:00: Registration
Venue and hotels Venue Hotels	Welcome, 09:00 – 09:15 • 09:00 – 09:15: Welcome
Program Tutorial Conference	Nordic Process Control Award, 09:15 – 10:15 • 09:15 – 09:30: Nordic Process Control Award Ceremony • 09:30 – 10:15: Nordic Process Control Award Lecture Tore Hågland (LTH) - Lessons learned during 30 years in control
Contact Contact	Coffee, 10:15 – 10:30 • 10:15 – 10:30: Coffee
	PID Control, 10:30 – 12:10 • 10:30 – 10:50: Sigurd Skogestad (NTNU) - Advanced PID architectures for tracking changing active constraints • 10:50 – 11:30: Margret Bauer (HAW Hamburg) - Tuned Standardizing PID Controllers in the Process Industry • 11:30 – 12:10: Arina Simionescu (Optimization) - PID control of rotary line kites using decoupling control • 11:30 – 11:50: Vikas Gudi (DTU) - A Systematic Plantwide Control Design Procedure for Low-Fidelity Green Ammonia Plants using High-Fidelity Dynamic Simulations • 11:50 – 12:10: Sayed Sabih Mansour (SIC Systems) - Agent-oriented System Control
	Lunch • 12:10 – 13:00: Lunch
	MPC Control / Industry, 13:00 – 14:40 • 13:00 – 13:30: Marcus Knapp Tobiasen (GEA Process Engineering) - Scaling a Process Control Product: Solution Architecture and Service Delivery in Industrial MPC • 13:30 – 13:45: Stefan Skjold (Borealis) - Real-Time Optimization for Multi-Reactor Polymerization Process • 13:45 – 14:00: Frida Nævdal (Svalbard) - MPC Tool-Forward for controller handling • 14:00 – 14:30: Ivo Harjaneh (Aalto) - From Scaled Operations to Co-Designed Energy Systems: Scheduling, Control, and Flexibility • 14:30 – 14:40: Zhenya Yang (Aalto Energy) - Conventional Control or AI-Based Control: What We Learned from Decade Research on the Advanced Process Control for Industrial Offshore Produced Water Process
	Poster Session and Coffee, 14:40 – 15:40 • Chongxin Cui (Jiao Jiaotong University) - Stability Analysis via Palantir Map for Binary Cycle Distillation • Kariyanni Ganesella (University of Duisburg Essen / DTU) - Implementation of an Industrial embedded MPC for a Lab-scale Bioreactor • Søren Vilhussen (DTU) - Modeling and Validation of a Pilot-Scale Falling Film Evaporator • Tobias K.S. Ritschel (DTU) - Optimal control of bioethanol conversion: energy demand through dynamic priors • Tobias K.S. Ritschel (DTU) - A hybrid approach to model-based control of supply temperature and velocity in distillate heating grids • Jonas Derweesh Fribat (NTNU) - A Parametric Sensitivity Based Arrival Cost State Estimator • Emil Skov Mathiesen (DTU) - Demonstration of EMPC of a Solvent-based Carbon Capture Pilot Plant • Armin Devito Lopez Rojas (Chalmers) - Non-Convex Model Predictive Control for Fuel Inference using Control Sensitivity Neural Networks • Mathias Guldskov Arnesen (DTU) - Simulation of Gastrointestinal Adverse Events and Weight Loss under GLP-1 Receptor Agonist Treatment • Pierre Gaudouin (DTU) - FirstFlow: unifying simulation software for bioprocesses - control strategy for penicillin fermentation case study • Shihua Dabou (NTNU) - Control of a Dynamic Bioreactor with Automated Back-Off Calculating Nonlinear MPC: An Easy Example for Increased Process Safety • Andree Varsanescu (Optimization) - A long-term intervention in primary prevention to secure equality in the workforce: preliminary results from AutoSTEM • Jinggang Liang (DTU) - Benchmarking Large Language Model Workflows for Efficient HAZOP Study Generation • Archana Kumaraswamy (NTNU) - Non-linear Modeling and PID Control for CO₂ Pipeline-Injection Networks • John Bagterp-Jørgensen (DTU) - Industrial MPC • John Bagterp-Jørgensen (DTU) - Model-scale simulation and control in industrial biotechnology • Shreyas Parbat (NTNU) - Control Structure Design and Real-Time Optimization for Continuous Bio-Based Aniline Production
	Data-based estimation and control, 15:40 – 17:20 • 15:40 – 16:00: Justin Viel (Purdue) (Purdue & Nanyang) - WS-PEEM: Using data reconciliation for predictive emission monitoring systems • 16:00 – 16:30: Tobias Løwe (RWTH Aachen University) - A process optimality graph for prescriptive analysis generated using established machine learning methods • 16:30 – 16:45: Tima Margita Komalasari (Osaka Metropolitan University) - Clustering and optimization of nutrient removal in biological waste water treatment • 16:45 – 17:00: Johan Derweesh Fribat (NTNU) - High-Dimensional State Estimation with Commercial Process Simulators Using a Variant of the Unscented Kalman Filter • 17:00 – 17:20: Soroush Kargarpoor (ABB) - Self-Explanation in Nonlinear Processes: A Probabilistic Control Framework
	NPC Group Meeting (NPC Board), 17:30 – 18:15 • 17:30 – 18:15: NPC Group meeting for the NPC board
	Royal NPCW Dinner (Madklubben, Kgs. Lyngby), 19:15 – 23:00 • 19:15 – 23:00: Royal NPCW award dinner at Madklubben in Kgs. Lyngby • Venue: Madklubben Lyngby, Kanvej 3, 2800 Kongens Lyngby
	Tuesday, August 18, 2026
	Applications, 08:30 – 09:30 • 08:30 – 08:50: Karim Davari Bevan (ABB) - Process Control and Artificial Intelligence: Challenges and Opportunities • 08:50 – 09:10: Martin Fredriksson (NTNU) - Control of Multi-Stack PEM Water Electrolyzer Systems: From Optimal Operating Regimes to Control Structure Design • 09:10 – 09:30: Osama Sadiq (E.ON Energy Research Center) - Robust Nonlinear Control Designs for a Multistage Hydrogen and Interconnecting System • 09:30 – 09:45: Ivo Harjaneh (Chalmers) - Enhancing the Graphical User Interface of Electrode Potential Measurements • 09:45 – 10:00: Tarek Aoun (DTU) - Supervisory Control of Modular Continuous Pharmaceutical Manufacturing for Enhanced Economic Resilience
	Coffee, 10:10 – 10:30 • 10:10 – 10:30: Coffee
	Modeling for Control, 10:30 – 12:10 • 10:30 – 10:50: Beatrice David Boars (NTNU) - Complete Schem oil-water Separation • 10:50 – 11:30: David Ilae Johan Jakobsson (Chalmers) - One-shot EPN parameter estimation for time series • 11:30 – 12:10: Johannes Lueking (Chalmers) (DTU) - Hybrid Modeling of Batch and Filtration Processes Using Simulink and Stateflow • 11:30 – 11:50: Giovanni Barletti (NTNU) - Data-driven and physics-based adaptive tuning for the Kalman Filter in bioprocessing • 11:50 – 12:10: Marcus John Schyrt (DTU) - Systematic Modeling and Simulation of One-Dimensional Packed-Bed Processes
	Lunch, 12:10 – 13:10 • 12:10 – 13:00: Lunch
	Model-based control, 13:10 – 15:00 • 13:10 – 13:30: Mark Harting (SINTEF) - Inhibitor perturbation-based optimization applied to a dividing-wall distillation column • 13:30 – 13:50: Ipe Gnan Gnan (NTNU) - Performance Limits in Feedback Control of Biomas in Continuous Fermentation • 13:50 – 14:10: Philip Poth (DTU) - NMPC control for recombinant protein production in a 2.8L stirred-cell cultivation • 14:10 – 14:30: Ekin Ngwen (NTNU) - Learning-based Health Anomaly Model Predictive Control: Case Study of Gas-LB Oil Wells and Haber-Bosch Process • 14:30 – 14:50: Tobias K.S. Ritschel (DTU) - Approximation of linear-quadratic regulators for delay differential equations with distributed delays • 14:50 – 15:00: Closing remarks

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Lunch will be in building 202

You need your lunch ticket

The conference dinner will be at

Madklubben Lyngby
Kanalvej 3
2800 Kgs. Lyngby

Approximately 30 min walk from DTU.
Also public busses

Presentations and Posters

npcw2026@gmail.com

If you send a pdf of your presentation slides or a pdf of your poster, we will upload to the homepage



Nordic Process Control Award

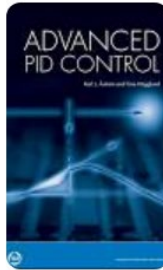
The Nordic Process Control Award is given to outstanding process control professionals who have made a lasting and significant contribution to the field of process control.

Previous Nordic Process Control Award recipients

1. Howard H. Rosenbrock (UK)
Aaland, Finland, August 1995
2. Karl Johan Åström (Sweden)
Wadahl, Norway, January 1997
3. F. Greg Shinskey (USA)
Skeviks Gård, Stockholm, August 1998
4. Jens G. Balchen (Norway)
Lyngby, Denmark, January 2000
5. Charles R. Cutler (USA)
Åbo, Finland, August 2001
6. Roger W. Sargent (UK)
Trondheim, Norway, January 2003
7. Ernst Dieter Gilles (Germany)
Gothenburg, Sweden, August 2004
8. Manfred Morari (Switzerland)
Lyngby, Denmark, January 2006
9. Jacques Richalet (France)
Espoo, Finland, August 2007
10. John MacGregor (Canada)
Porsgrunn, Norway, January 2009
11. Graham Goodwin (Australia)
Lund, Sweden, August 2010
12. Lorenz T. Biegler (USA)
Lyngby, Denmark, January 2012
13. James B. Rawlings (USA)
Oulu, Finland, August 2013
14. Rudolf Kalman (Switzerland)
Trondheim, Norway, January 2015
15. Wolfgang Marquardt (Germany)
Sigtuna, Stockholm, Sweden, August 2016
16. Dale Seborg (USA)
Turku (Åbo), Finland, January 2018
17. Nina Thornhill (UK)
Lyngby, Denmark, August 2019
18. Thomas F. Edgar (USA)
Luleå, Sweden, March 2022
19. Sebastian Engell (Germany)
Trondheim, Norway, August 2023
20. George Stephanopoulos (USA)
Helsinki, Finland, January 2025



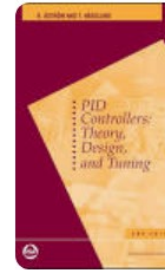
Nordic Process Control Award 2026 – Tore Hägglund



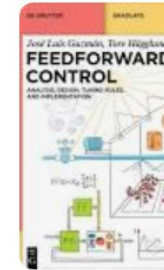
Advanced PID
Control
2005



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Practice
1991



PID
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1995



Feedforward
Control:
Analysis,...
2024

Tore Hägglund - Professor Emeritus of Automatic Control at Lund University (Lund University, Sweden).

for providing lasting and significant contributions to process control in the areas of

PID control, automatic tuning, control performance monitoring, and industrial automation,
including extensive collaboration with industry.

Short CV

Name: Tore Hägglund

Date of Birth: 29 August 1954

Education

- M.Sc. in Engineering Physics, Lund University, 1978.
- Ph.D. in Automatic Control, Lund University, 1984.

Professional Experience

- Professor of Automatic Control, Lund University, 1999 onwards.
- Associate Professor, Lund University, 1989-1999.
- Research Engineer, SattControl Instruments AB (later ABB), 1985-1989, working on industrial adaptive controllers and automation solutions.
- Research Assistant, Department of Automatic Control, Lund University, 1978-1985.





Tore Hägglund

Professor in Automatic Control, [Lund University](#).
Verified email at control.lth.se

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TITLE

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[PID controllers: theory, design, and tuning](#)
KJ Åström, T Hägglund
John Wiley & Sons

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Co-authors

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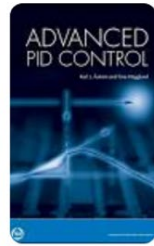
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Advanced PID Control

2005



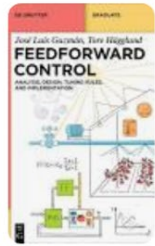
Process Control in Practice

1991



PID Controllers: Theory,...

1995



Feedforward Control: Analysis,...

2024

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