

טופס הרשמה

לכבוד
האיגוד הישראלי לבקרה אוטומטית
הפקולטה להנדסת חשמל, קרית הטכניון, חיפה
טל: 04-8294780 ; פקס: 04-8295757 ; 04-8295745
דוא"ל: mira@ee.technion.ac.il

א.ג.נ.,

הנני מבקשת/לרשום אותי ליום עיון בנושא:

Process control: Control strategies for optimal operation of complete plants: From art through science to engineering solutions

אשר יערך במלון "דניאל" הרצליה, ביום ב' 11.04.2016

שם: _____

כתובת: _____

דוא"ל: _____

מקום עבודה: _____

טלפון: _____ פקס: _____

מצורפת המחאה ע"ס _____ ש"ח

תאריך _____ חתימה _____

דמי השתתפות:

₪ 450	3.04.2016	רישום מוקדם עד
₪ 500	4.04.2016	רישום החל מ-
₪ 250		סטודנט (בזמן מלא)

דמי ההשתתפות כוללים ארוחת צהרים, כיבוד וזכות הורדת חומר ההרצאות. ההרשמה גם במקום, אם יוותרו מקומות.

קו 29, מתחנת הרכבת בהרצליה למלון, יוצא כל 10 דקות, (זמן נסיעה כ- 15 דקות)

התכנית

08:30	Registration
09:00	Opening. Per-Olof Gutman.
09:10	Session 1: Overview of plant-wide control <ul style="list-style-type: none">- The link between the optimization (RTO) and the control (MPC; PID) layers- Our paradigm- Introductory example
10:15	Coffee break
10:35	Session 2: What to control? (Selection of primary controlled variables based on economics) <ul style="list-style-type: none">- Degrees of freedom- Optimization- Active constraints- Self-optimizing control
11:40	Session 3. Where to set the production rate and bottleneck <ul style="list-style-type: none">- Inventory control- Consistency- Radiation rule- Location of throughput manipulator (TPM)
12:45	Lunch break
14:15	Session 4. PID control <ul style="list-style-type: none">- Obtaining the model- SIMC tuning (simple and close to optimal)- Feedforward design
15:20	Coffee break
15:40	Session 5. Design of the regulatory control layer ("what more should we control") <ul style="list-style-type: none">- stabilization- secondary controlled variables (measurements)- pairing with inputs- cascade control and time scale separation.
16:45	Session 6. Design of supervisory control layer <ul style="list-style-type: none">- Decentralized versus centralized (MPC)- Design of decentralized controllers: Sequential and independent design- Pairing and RGA-analysis
17:50	End

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This Guest Workshop on Process Control is the first step of IAAC's ambition to reconnect with the Israeli Process Control Community to provide a joint forum for academic researchers, students, and researchers and engineers active in the Process Industry and its Equipment Developers and Suppliers.

While it is acknowledged that efficient Process Control can only be had with a profound knowledge of the process itself, algorithms, methods, and equipment have undergone rapid changes during the last decades, including "smart" sensors, adaptation, and the ability to analyze large amounts of data.

In the program of this workshop, the world renowned lecturer of the Guest Workshop, Prof. Sigurd Skogestad, makes the connection between the art, the science, and the engineering aspects of process control.

Prof. Sigurd Skogestad got his Ph.D. degree from the CalTech, Pasadena, USA in 1987. He is a full professor at Norwegian University of Science and Technology (NTNU), Trondheim, Norway since 1987 and was Head of the Department of Chemical Engineering 1999-2009. He is the principal author, with Prof. Ian Postlethwaite, of the book "Multivariable feedback control" Wiley 1996, 2005, and of "Chemical and energy process engineering" CRC Press. 2008. - His research interests include the use of feedback as a tool to make the system well-behaved (including self-optimizing control), limitations on performance in linear systems, control structure design and plant-wide control, interactions between process design and control, and distillation column design, control and dynamics.

We are looking forward to a very successful event.

Prof. Per-Olof Gutman
Workshop organizer

List of exhibitors:
TBD



איגוד ישראלי לבקרה אוטומטית
איגוד ישראל לבקרה אוטומטית – איב"א
Israel Association for Automatic Control

ק. הטכניון, חיפה טל.: 04-8294780, פקס: 04-8295757, 04-8295745
Technion City, Haifa Tel. 04-8294780, fax: 04-8295757, 04-8295745
<http://iaac.technion.ac.il/>

הזמנה

ליום עיון בנושא:

**Process control: Control strategies for
optimal operation of complete plants:
From art through science to
engineering solutions**

במלון "דניאל", הרצליה

יום ב' 11 אפריל 2016

תודתנו נתונה למפעלים ולמוסדות
הבאים אשר תמיכתם באיב"א
מאפשרת לקיים ימי עיון מסוג זה:

אלביט מערכות – יבשה ותקשוב בע"מ

קריה למחקר גרעיני – נגב

רפאל – מערכות לחימה מתקדמות בע"מ