



ISC Home

[Consultancy](#)
[Training](#)
[Rolling Mill Academy](#)
[Software](#)
[PumpSim](#)
[PROBE](#)

ACTC Home

[News](#)
[Events](#)
[Training](#)
[Activities](#)
[Deliverables](#)
[Downloads](#)
[Facilities](#)
[Members](#)
[About ACTC](#)
[Brochures](#)
[ACTC Members Area](#)
[Resource Centre](#)
Benchmarking
[Learning Centre](#)
Vacancies
Contact
Search

Applied Control Technology Consortium

Improving Performance through Understanding and Application of
Control Technologies

E-News March 2006 Edition

[Latest News](#) | [ACTC E-News Issues](#) | [Subscribe to ACTC E-News](#)

ACTC Steering Committee Request Your Input by Prof. Mike Grimble



As you will see in this second edition of our new

electronic newsletter, we have been very busy with training and recruiting up new members. Feedback about this new format has been very positive, but if you have suggestions for improvement then please let me know.

We try to make the various ACTC activities meet immediate needs of our member companies. This task is greatly assisted by the ACTC Steering Committee, made up of individuals drawn from our member companies, who provide us with guidance about collective needs, for example on the need for online training ([see an article below about this](#)). ACTC members are encouraged to let the chairman of the ACTC Steering Committee, Matt MacDonald, SELEX SA&S know of any points they would like to be raised at the Steering Committee Meeting to be held on 4th April 2006 at Ross Priory, on the banks of Loch Lomond.

The Steering Committee meeting will start early afternoon, 12.30pm and finish at 5pm. An evening dinner will be held for those who want to stay and socialise. In

Contents

[ACTC Steering Committee Request Your Input by Prof. Mike Grimble](#)

ACTC News

- [Rolling Mill Academy : Register Now!](#)
- [New On-line Training Material for ACTC Members](#)
- [New Appointment at ISC Ltd.](#)
- [Two New Extended Training Courses](#)
- [New ACTC members](#)
- [New Book: "Robust Industrial Control Systems"](#)

Forthcoming ACTC Events

- 6-10/3/2006, Amsterdam, The Netherlands: [Alstom/ACTC Rolling Mill Academy 2006](#)
- 4/4/2006, Ross Priory, Loch Lomond, Scotland: ACTC Steering Group Meeting No. 27
- 5-6/4/2006, Glasgow, Scotland: [ACTC/EPSRC International Workshop on Nonlinear Control Design for Industrial Applications](#)

Other Events of Interest

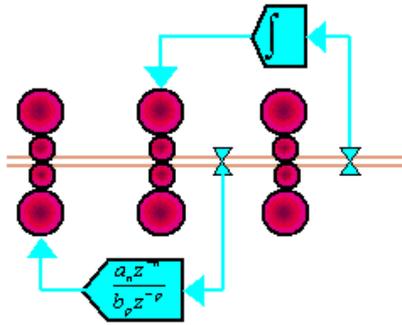
- [UKACC Control 2006](#)
- [IEE Target Tracking](#)
- [The 2nd IEE Conference on Automotive Electronics](#)

previous years this has been a very enjoyable occasion. Immediately following the Steering Committee Meeting is a two-day workshop on "[Nonlinear Control Design for Industrial Applications](#)" which is looking to be quite popular. See the [events web page](#) for full details. Nominations for Steering Committee Members are welcome.

Further details on the Steering Committee Meeting will be sent out shortly.

[Top](#)

Rolling Mill Academy : Register Now!



The next Rolling Mill Academy will be held in Amsterdam in The Netherlands on 6th -10th March 2006. This event continues the very successful series of training courses that began at the University of Strathclyde for the support of ACTC Members. The cooperation with Alstom, Rugby has been highly successful and the recent events held in Rugby and Pittsburgh have been over subscribed. If you would like to attend

the meeting please respond quickly to either [Chris Fryer, Alstom](#) or [Gerrit van der Molen, ISC Ltd](#). Further details, including online registration, of the Rolling Mill Academy maybe found [here](#). ACTC members that are not in metal processing may still find many of the lectures of interest since many are of general process control value.

The ACTC and Alstom are currently discussing the 2007 Rolling Mill Academy that maybe run at Strathclyde University. Interested parties should contact [Mike Grimble, ACTC](#).

[Top](#)

New On-line Training Material for ACTC Members

Responding to suggestions from our members, the ACTC has recently developed two short introductory web-based training modules. This includes the usual text-based content as well as some downloadable hands-on examples used to illustrate the key points. The initial intention is that this material be used as a primer before the delivery of face-to-face training courses on more advanced subjects. However it is also suitable as a re-fresher at anytime.

The on-line training material is available only to the ACTC members (username and password required). The following topics are currently available:

1. Introduction to System Modelling: state space and transfer functions.
2. Introduction to Kalman Filter: basic information

We hope to make more of our training material available this way, so your comments about the usefulness of these would be appreciated.

If you would like to know more about our training courses, then [get in touch](#). or just follow these links:

-  Details of our [standard courses](#), including agendas
-  The list of [courses](#) delivered to ACTC members, as well as centrally held "scheduled" courses which all ACTC member companies can access.
-  Download the [ACTC Training Brochure](#) which contains the same information that can be found on the [ACTC web-site](#)

[Top](#)

New Appointment at ISC Ltd.



Dr. Arek Dutka recently joined ISC from the Industrial Control Centre, University of Strathclyde. His research studies in the ICC involved non-linear predictive control and application to automotive systems. He also worked on a range of fault monitoring and fault detection problems and non-predictive multivariable controls. His experience on predictive control and in automotive systems should be valuable to ACTC members both on training courses and on case studies. In fact, Arek has been helping deliver ACTC training over the past 18 months so many of you may already have met him.

Arek worked with General Motors on powertrain control related projects during and following his PhD studies. He now leads this activity within ISC Ltd.

[Top](#)

Two New Extended Training Courses

Two new extended training courses have been developed on [Neural Networks](#) and on [Kalman Filtering](#), respectively. Both of them run to a full three days though shortened agendas can be derived if needed.

The Kalman Filtering course has just been given to Ford, Dearborn and the hands-on sessions are concerned with automotive systems, although these can be easily modified for different application areas. The Neural Networks course has been presented to SEIC, Loughborough and this has components on fault monitoring and detection.

We have already received requests from other ACTC Members to run the Kalman Filtering course, perhaps at a central location. If you have any interest in either of these courses please contact [Dr. Andrew Clegg](#).

[Top](#)

New ACTC Members

ACTC would like to welcome two new member companies, namely Jaguar/Land Rover and Lyondell (formerly Millennium Chemicals).



The Jaguar car company was previously an ACTC member but there has been a gap year due to changes within the organisation. We are therefore pleased to welcome them back. Jaguar / Land Rover is of course a by-word for excellence in automotive engineering and their engineering centre in Coventry is considered as a Centre of Excellence. The company is particularly interested in training activities but we may also be undertaking case studies for them.



For Lyondell the ACTC hopes to demonstrate that real benefits can be gained through the case study entitlement for process control investigations. The savings derived should justify the investment in the ACTC program. The company is also interested in training activities in the local Grimsby area. The ACTC now has a cluster of process companies in the Grimsby area (on the Humber bank) and the hope is to cooperate with Alan Mason to mount suitable events. There continues to be a strong interest in process control generating further training and case study investigations to the benefit of Lyondell and all the process control companies.

Whilst on the topic of process control the hope is to work with Emerson Process

Control, Leicester to mount a repeat of the successful [Process Control Academy](#) held in September 2005. Further details will be published as soon as we have them.

A full list of ACTC members can be found [here](#). If you would like to know more about the benefits of ACTC membership, please just [contact us](#).

[Top](#)

New Book: "Robust Industrial Control Systems"

A new control text by Professor Mike Grimble has just become available. The book, titled "Robust Industrial Control Systems: Optimal Approach for Polynomial Systems" published by John Wiley and Sons, is a comprehensive introduction to robust optimal control using polynomial and frequency domain design methods for industrial control and signal processing applications.

It starts with simple single-input problems and gradually develops results for multivariable design in the later chapters. Basic design procedures are also introduced which enable cost functions and system descriptions to be specified so that industrial requirements are satisfied.

New material in this edition includes the analysis of multi-degrees of freedom controllers and time-varying systems. There is also an extension of the linear system concepts to the control of non-linear processes, using both multiple models and the link to time-varying optimal control solutions.

Click [here](#) (pdf) for further information and an order form.

[Top](#)

Other Events of Interest

UKACC Control 2006 (30 Aug-1 Sept 2006)

The next [UKACC Control Conference](#), supported by IEE, IMechE and InstMC, will be held in Universities of Strathclyde and Glasgow, 30 August to 1 September 2006. ACTC Members will be entitled to attend at a special discounted rate

The three Institutions (IEE, IMechE and InstMC) are organising Industrial Session on Thursday 31 August 2006. For more information on the conference, contact Dr Reza Katebi at r.katebi@eee.strath.ac.uk.

[Top](#)

IEE Seminar on Target Tracking: Algorithms and Applications (7-8 March 2006)

This event to be held on 7-8 March 2006 and will be directly relevant to Programme and Research Managers, graduates, consultants and senior technical personnel from industry and research laboratories. It will also be of interest to researchers and postgraduates from universities.

Click [here](#) for more information.

[Top](#)

The 2nd IEE Conference on Automotive Electronics (20-21 March 2006)

This conference is being held on 20-21 March and is a key event for engineers and software developers from newly qualified graduates through to system experts and senior design managers who need a detailed understanding of the key issues in the field of automotive electronics. It will be of interest to those involved with

automotive electronics, vehicle design, telematics, traffic planning, environmental policy, fleet management and law enforcement.
Click [here](#) for more information.

[Top](#)

Applied Control Technology Consortium
50 George Street, Glasgow, G1 1QE, Scotland, UK

Last updated: 09/06/2006
11:26:41

tel.: +44 (0)141 553 1111, fax: +44 (0)141 553
1232

email: actc@isc-ltd.com

© 1999 ISC Ltd.