

MODELING, IDENTIFICATION AND CONTROL

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The number of articles in each issue will vary, but the number of pages in each issue will never be less than 32.

A NOTE FROM THE OUTGOING EDITOR

This issue of MIC is the first with the new editor, professor Geir Hovland from the University of Agder. It is a pleasure for me to hand over the editorship to such an active and enthusiastic new editor. Professor Hovlands own editorial, or a quick look at the new journal web site <http://www.mic-journal.no> will explain the many and timely changes he has brought to the journal.

MIC is a part of the legacy after professor Balchen. With Balchens passing away earlier this year, it is particularly welcome to see this part of his legacy being revitalized.

I would like to take this opportunity to thank everyone who has helped me with publishing MIC during my years as editor: the authors and reviewers, the editorial secretaries, our sponsors and advisory board members, as well as the publisher, the Norwegian Society for Automatic Control and its director Lars A. Ekornsæter.

*Morten Hovd
Editor 2003 - 2008*

NEWS IN BRIEF

MIC congratulates Telemark University College with the new PhD program in Process, Energy and Automation Engineering. Telemark University College has been a very active contributor to MIC in the past with a current total of 27 articles. We hope that with the new PhD program in place, the number of high-quality articles submitted to MIC from Telemark will increase in the future.

The Department of Engineering Cybernetics at NTNU is ranked number 7 on the national list of publication points in 2008 and is ranked number 1 at NTNU when publication points per researcher is counted with 3.9 points per full-time researcher position. The average for NTNU is 1.8 and for Norwegian universities combined the score is 1.7. When PhD students are included the department produced 1.6 publication points per position, while the average for both NTNU and other Norwegian universities is 0.8. 15% of the department's publications points in 2008 were received from the MIC journal. With such a strong 'locomotive' for Modeling, Identification and Control in Norway, the future for the MIC journal looks bright as long as the researchers from NTNU continue to consider MIC as one of their primary publication channels.

The editorial team of MIC congratulates Lars Imsland and Roger Skjetne with professorial positions in automatic control at NTNU. These new positions will definitely strengthen our research field at the national level. Lars Imsland has worked as a research scientist at SINTEF and Cybernetica in Trondheim since 2004 and during the period 1999 to 2004 he acted on the editorial team of the MIC journal. Currently he has published five articles in MIC ([2001.1.3](#), [2001.4.2](#), [2003.3.3](#), [2006.1.4](#), [2006.3.1](#)). Roger Skjetne has worked as a research scientist at Marine Cybernetics in Trondheim since 2005. He has currently published two articles in MIC ([2004.1.1](#), [2006.4.3](#)). As a curiosity, Imsland and Skjetne both grew up at the same place at Stord (Western Norway) and later shared an office as PhD students.

MIC congratulates Alf Holmelid from Dale in Sunnfjord with his election to the national parliament. Holmelid is a graduate from the Department of Engineering Cybernetics, NTNU and his current position is research director at the University of Agder. He has not published any papers in MIC, but his work was referenced by Ekran and Sira in this article from 1982: [10.4173/mic.1982.4.4](#).

Short news items for future issues can be submitted to the editorial team. We are particularly interested in news related to authors of the journal.

EDITORIAL

This is the first issue of MIC for which I am editor, succeeding professor Morten Hovd who has been editor of MIC since 2003. I would like to thank professor Hovd for successfully implementing MIC's publishing policy during these years and further developing the journal. During his leadership the journal made the necessary transition from a printed to an electronic edition. In addition, the author template files for L^AT_EX were upgraded to look more professional. During professor Hovd's period as editor of MIC, a total of 65 high quality articles have been published. To ensure continuity of the journal professor Hovd has kindly offered to continue as a discipline editor. The editorial secretary since 2007, Pål Johan From, also has kindly offered to continue.

It is with great pleasure that we can present this 30th anniversary volume of the journal MIC. Later this year we plan a special anniversary issue similar to the 15th year special issue published in 1994.

The year 2009 has so far been a year of many changes for MIC. First of all, MIC has made the transition from subscription to open access. We believe that this is a necessary move to ensure that MIC survives as a high quality, high impact journal during the years to come. A new website (www.mic-journal.no) for the journal has been created. Every single article published in MIC from 1980 to 2008 has been made available on this website, including abstract, reference list and the PDF file for free download.

During the first half of 2009 MIC has joined CrossRef and implemented the DOI system. The DOI prefix for MIC is 10.4173 and an individual article has been assigned a DOI on the following format: 10.4173/mic.year.no.paperno. For example, the first article published in MIC by Oddvar Hallingstad has the following DOI: 10.4173/mic.1980.1.1 and the following permanent URL <http://dx.doi.org/10.4173/mic.1980.1.1>. This permanent URL links back to the www.mic-journal.no website. If the MIC website is moved in the future, the DOI information will be updated to point to the new address.

Another advantage of the DOI system, is the possibility to register all the references in an article in a structured manner. All the references made in MIC articles starting from 1980 have been submitted into the DOI system. The effect is an increased visibility of MIC articles, which again will lead to a wider audience. MIC also participates in the 'cited-by' system which shows which papers, including other journals and conferences, have included the actual MIC paper in the reference lists.

A new editorial team has been assembled. In addition to professor Hovd and myself, the following new discipline editors have joined the editorial team: Dr Morten Breivik (NTNU): Marine Control Systems, Ship Control. Professor Bernt Lie (Telemark University College): Process Modeling and Control, MPC, State and Parameter Estimation. Professor Per Johan Nicklasson (Narvik University College): Aerospace and Satellite Modeling and Control. When new articles are received for review, the editor in the closest discipline will be responsible for the completing the review. MIC strives to only publish articles of high academic quality. Each article published in MIC will be refereed by at least two internationally recognised specialists within the field.

From Vol 27, No. 3 to Vol 29, No. 4 MIC was only available in electronic format by subscription. Since May 2009 MIC is again available in printed edition as 'print-on-demand' and printed editions starting from Vol 27, No. 3 can be ordered at <http://stores.lulu.com/micjournal>. Although the electronic edition and open access ensure that the articles become searchable and receive a wider audience, we believe that the printed edition will be of interest to those who are collectors of MIC and we also know that many of our readers prefer the printed format.

Starting from 2009 MIC no longer accepts re-prints from other journals or conferences. One condition of the membership in CrossRef is the fact that only one DOI can be assigned to a given article. MIC has also introduced a small publishing fee to compensate for the loss of subscription income. It is still much cheaper to publish in MIC compared to most international conferences and journals, when conference fees, travel expenses and extra page fees are taken into account. MIC has no page limit on submitted articles and the publishing fee should be seen by authors as payment for a thorough review process, the assignment of a unique DOI number and the hosting of the article on a permanent web-address.

Starting from 2009 MIC also accepts articles from the other Nordic countries. In fact, this is not a new idea. In the MIC editorial of 1990, professor Balchen mentioned previous attempts of creating a Scandinavian Journal of Control. Time will tell if MIC will be able to attract quality articles from authors in the other Nordic countries.

Finally, I will encourage all readers and potential authors to consider submitting their work for review to MIC. The quality and future success of the journal depends entirely on the support from the research community.

Geir Hovland, Editor of MIC

OBITUARY JENS G. BALCHEN, 20.04.1926 - 12.04.2009



The founder of NFA and MIC, Professor Jens Glad Balchen, passed away on April 12, 2009. The following obituary was written by Lars Annfinn Ekornsæter (Director of NFA) and published in *Teknisk Ukeblad*, No 15, April 2009 on page 71. (Translation to English by MIC).

The founder of the Norwegian Society of Automatic Control (NFA), professor and control engineer, Jens Glad Balchen has passed away at an age of nearly 83 years. Jens Glad Balchen was one of the founders of NFA in 1958 and has had a lasting impact on the society and its activities. Naturally, he became the first honorary member of the society in 1992. No other individual in Norway has to such an extent worked in the frontline to generate applications of control theory to the benefit of society. He was a beacon for technological development in Norway and one of the most significant professors throughout the research history of SINTEF and NTH/NTNU.

Balchen received his education (Sivilingeniør) at NTH and continued with a Master degree at Yale University in 1951. When he returned to Norway he created the Institute of Automatic Control at NTH, one of the first of its kind in the world. In 1962 he became professor at NTH in control theory/automation systems. He built the Institute to become a spearhead for basic research and long-term automation studies in Norway. The Institute focused early on practical application of computer based process control systems. Balchen also initiated the construction of the first Norwegian differential analyser, DIANA.

Most of the Master (Sivilingeniør) students in control systems in Norway have received their education at the Institute led by Balchen, and his students remember him as a great inspirer and source of ideas. He was a skilled lecturer and a communicator at the highest level at NTNU. At the time when Balchen retired from lecturing because of the age limit, he was the professor in Norway who had graduated the largest number of PhD candidates (more than 60).

Balchens activities, publications and lectures covered a broad scope and he represented his field of research in many forums nationally and internationally. He received several national and international distinctions for his work. Balchen participated in the very first international conference in automation in Heidelberg in 1956 where he also took part in the foundation of IFAC (the international federation of automatic control), the parent organisation of NFA. In addition to being one of the founders of IFAC, he also actively participated in IFAC activities for many years. In 2006 Balchen was awarded Fellow of IFAC.

Other distinctions Balchen received were IEEE Centennial Medal Award, Fellow IEEE, Docteur Honoris Causa, Universite de Liege, Belgium, the NTNF honorary award and Commander of the Royal Norwegian Order of St Olav.

Balchen was a person who saw "the mathematics" in our surroundings. He had an unusual ability to cover detailed practical, intuitive and theoretical work at the same time. He applied these abilities to his national R&D projects but also at his hut in Høvåg, near his birthplace Kristiansand. His practical abilities resulted in several patents and he was also a skilled designer and illustrator.

On the national scene he was central in the highly regarded committee for Servo Technology (Servoteknisk Utvalg) which created a reference for other committees under the Norwegian Research Council (NTNF) during the 50s and 60s. He was part of the movement called 'the servo enthusiasts' - an avantgarde within the research council who wanted to modernise the country by increasing the level of automation and productivity.

During the last 35 years at NTNU Balchen increasingly focused his work towards research, product development and establishment of spin-off activities within aquaculture and ocean research.

We are left poorer after Balchen passed away, but are thankful for what he has given us and his contributions to research, education and industrial development in Norway.

May Jens Glad Balchen rest in peace and our thoughts are now with his wife Inger, his children and larger family.

Lars Annfinn Ekornsæter, Director of NFA