Besides the Council, both the Technical Board and Executive Board met, and there were also meetings of the executive committees, the Cape Town World Congress IPC, the IFAC Foundation, as well as the Technical Committee on Mining, Mineral and Metal Processing (TC 6.2). There was also a brainstorming and feedback session held regarding the ongoing strategic planning happening throughout IFAC.

At the Council meeting seven NMOs presented their initial bids for the 2020 IFAC World Congress and the IFAC presidency for the 2017-2020 triennium. During a closed session of Council the bids were narrowed down to three. The three NMOs–Germany, Japan, and the USA, will give a second presentation at the 2013 Council meeting in Zurich, Switzerland. The Council will make the final decision at that time.

In addition to the Congress bids, many other issues were discussed at the Council meeting. IFAC currently has 52 NMOs and is always seeking suitable organizations in countries which are not represented in IFAC to join the Federation. To see if your country is represented go to the list of IFAC NMOs on the IFAC website at http://www.ifac-control.org/about/structure/nmo.

Papers from IFAC proceedings and journals are already quoted in some very renowned citation indices. However, IFAC is following up with a Task Force to promote IFAC further to be included also in other renowned indices.

At the Secretariat, the transition from the two longtime staff members to the two newer staff members has been smoothly managed. The Executive Board has been looking at many issues, including open access and policies relating to PapersOnLine. The Policy Committee, which has Juergen Hahn as a new Chair, made a survey amongst IFAC’s affiliates to solicit opinions and find trends with regard to IFAC. A report on the results and the possible conclusions to be drawn has been prepared, and various strategies and possible changes are being discussed. Issues related to Strategic Planning will be taken up at the 2013 IFAC Council meeting. Some of the decisions may require amendments to the IFAC Constitution, thus needing a vote by the General Assembly.

The meetings came to a conclusion with a festive dinner for the IFAC Council members, hosted by the Japanese NMO at a traditional Gifu restaurant.
A Great Loss to the Control Community

Vladimir Andreevich Yakubovich
21 October 1926 – 17 August 2012

Vladimir Andreevich Yakubovich was born in Novosibirsk on October 21, 1926. In 1949 he graduated from the Faculty of Mechanics and Mathematics of the Moscow State University. In 1956 he joined the Faculty of Mathematics and Mechanics of Leningrad University where he was the founder and chair of the Department of Cybernetics. As a researcher, Yakubovich had a very wide range of scientific interests. He first concentrated on linear periodic Hamiltonian systems where he obtained some profound results in studies of the structure of functional space of Hamiltonian, the construction of various criteria for stability and instability, the establishment of a new geometrical approach to the theory of oscillations of linear Hamiltonian systems. Yakubovich made some important findings in the theory of parametric resonance. He demonstrated that the method of constructing the boundaries of the dynamic instability domains that was used in the practice of engineering calculations may result in the loss of some instability domains and proposed a method enabling identification of all domains of dynamic instability. His theory was used to analyze the wreck of the Tacoma Bridge (USA, 1940) and substantiate the hypothesis that an active role in this disaster was played by the parametric resonance.

Yakubovich ranks among one of the main contributors to modern control theory. His paper of 1962 [39] “Containing the Frequency Theorem” was reprinted in a special volume Twenty-Seminar Papers in Control (Wiley–IEEE Press) consisting of papers which, by the opinion of an international panel, exerted the greatest impact on the development of the control theory in the last century. This seminal work was translated in 1963 by the American mathematician R. Calman, is known now as the Yakubovich–Kalman lemma. It relates frequency-domain methods of control theory to methods of Lyapunov functions and finds use in diverse areas such as stability, adaptation, optimal control, or strange attractors. This lemma enabled determination of various frequency criteria for absolute stability which gave a second wind to the method of Lyapunov functions. Additionally, since various properties of control systems are naturally expressed in terms of the Lyapunov functions, for one or another type of behavior of solutions, this lemma enabled the development of frequency-domain conditions concerning all conditions that can be obtained using Lyapunov functions from some multiparametric classes such as “invariant,” “quadratic form,” “plus integral of nonlinearity,” etc.

In a series of papers Yakubovich developed his celebrated “Method of Matrix Inequalities.” This method extends the concepts of optimal control and information processing Yakubovich developed a new approach to nonconvex global optimization. Its efficiency is corroborated by solving many particular problems of stochastic and deterministic optimal control. In his works on optimal damping of oscillations and optimal tracking the concept of “universal controller” maintaining optimality of control under unknown but bounded disturbances and uncertainties is developed. Universal controller also provides invariance of the system output relative to external perturbations. A characteristic feature of Yakubovich’s research style is the combination of applied and abstract mathematical ideas and successful studies of applied problems. He possessed a wonderful ability to pose conceptual and mathematical problems based on the practical needs. Yakubovich is one of the founders and a leader of the international panel, exerted the greatest impact on the development of algorithms for linear matrix inequalities. His approximation method enabled solution of quite a number of problems of development of algorithms for linear matrix inequalities. In the theory of adaptive systems for pattern recognition systems. His approximation method enabled solution of quite a number of problems of development of algorithms for linear matrix inequalities. In the theory of adaptive systems for pattern recognition systems. His approximation method enabled solution of quite a number of problems of development of algorithms for linear matrix inequalities.

Yakubovich spent a lot of time on his pedagogical activities. Three new specializations of cybernetic profile were opened at his initiative with the Faculty of Mathematics and Mechanics. He developed an annual cycle of lecture courses on the general title Theoretical Cybernetics. More than 40 of his postgraduates became candidates of science and 16 others have been awarded doctorates. Owing to the efforts of Yakubovich, the chair constructing the Department of Theoretical Cybernetics was established, which enjoys a well-deserved recognition in the scientific community. The scientific school of Yakubovich is counted in hundreds and hundreds of publications, among which there are more than forty books. The graduates of the department work successfully at many Russian and foreign research and educational institutions. It is possible to state with certainty that there exists the Yakubovich’s scientific school whose range of interests covers the most important areas of theoretical cybernetics and control theory. The scientific community highly appreciates the scientific and pedagogical activity of Yakubovich. He was awarded the prize of the Leningrad University for pedagogical mastery in 1986, as well as the prize of the St. Petersburg University for original works on control in 1996. In 1995 he was awarded the prize of the international academic publishing company Nauka for the best publishing activity in journals, and in 1996 he was awarded the main annual IEEE Control Systems Award with a medal with the citation “For pioneering and fundamental contributions to stability analysis and optimal control.” In 1998 Yakubovich was awarded the title of the “Honored Scientist of the Russian Federation,” in 2005 he was awarded the title of “Honorary Scientist of the Russian Federation,” and in 2013 he was awarded the title of “Honored Scientist of the Russian Federation.” 

Gennady Leonov
Alexander Kharisov
Call for Nominations
Giorgio Quazza Medal, Nathaniel B. Nichols Medal, Industrial Achievement Award, High Impact Paper Award

According to the provisions as outlined for the Giorgio Quazza Medal, for the Nathaniel B. Nichols Medal, the Industrial Achievement Award and the High Impact Paper Award (Statutes see below), the IFAC NMOs and the IFAC Technical Committee Chairs as well as other individuals are invited to nominate a candidate (candidates) for one or more of these awards and to send these nominations to the IFAC Secretariat (mailto: secretariat@ifac-control.org) until March 15, 2013.

The nominations should contain a curriculum vitae for the candidates, a summary of his/her major contributions and a proposed citation. Submission by e-mail is requested to: secretariat@ifac-control.org

Please note that it is possible to resubmit a nomination that was made in the past.

The Selection Committees, with Graham Goodwin (Quazza Medal), Karl Hedrick (Nichols Medal), Tariq Samad (Industrial Achievement Award) and Paul van den Hof (High Impact Paper Award) as Chairs will give a report on potential awardees at the forthcoming Council meeting, to take place in Zurich, Switzerland, mid-July, 2013.

To make a clear distinction between these awards, find below the history of each award and the nomination and selection criteria to be applied:

GIORGIO QUAZZA MEDAL:
(Created 1979)
This is an IFAC award to a distinguished control engineer as a memorial to the late Giorgio Quazza, a leading Italian electrical and control engineer who served IFAC in many capacities in a most distinguished manner. The medal is presented by the President at each IFAC Triennial Congress at the Opening Ceremony. The award includes a cash prize and a certificate that is presented to the recipient by the President at each IFAC Congress. Financing is provided by IFAC.

Selection Criteria for the Quazza Medal
The award is given in technical fields covered by IFAC. The contributions should be manifested in technical publications. A nominee should have served IFAC in some capacity, formally or informally. IFAC Officers are not eligible. The Selection Committee and the Council may add further suitable candidates for consideration. The selection is based on:

• Quality of publications
• Impact of publications
• Engineering significance
• Service to IFAC
• International recognition

Nominations should contain:

• Summary of the contributions
• a Curriculum Vitae
• List of publications
• Supporting letters
• Suggested citation

NATHANIEL B. NICHOLS MEDAL:
(Created 1996)
This is an IFAC award that recognizes industrial leadership, outstanding contributions of an individual to design methods, software tools and instrumentation, or significant projects in major applications and advancement of control engineering. The medal is presented by the President at each IFAC Triennial Congress at the Opening Ceremony. The award includes a cash prize and a certificate that is presented to the recipient by the President at each IFAC Congress. Financing is provided by IFAC.

Selection Criteria for the Nichols Medal
The award is given in technical fields covered by IFAC. The contributions should be manifested in technical publications, patents or reports documenting completed projects or developed products. IFAC Officers are not eligible. The Selection Committee and the Council may add further suitable candidates for consideration. The selection is based on:

• Quality of publications
• Impact of publications
• Innovation level of patents
• Impact of patents
• Engineering significance of products and projects
• International recognition

Nominations should contain:

• Summary of the contributions
• a Curriculum Vitae
• List of publications
• Supporting letters
• Suggested citation

INDUSTRIAL ACHIEVEMENT AWARD
(Created 2000)
The IFAC Industrial Achievement Award is given to an individual, or a team of individuals, who has made significant contributions to industrial applications of control. The award includes a cash prize and a certificate that is presented to the recipient by the President at each IFAC Congress. Financing is provided by IFAC.

Selection Criteria for the Industrial Achievement Award:
The selection is based on industrial achievements in technical fields covered by IFAC, measured in terms of:

• Inventions in the control area
• Engineering significance of products and projects
• Industrial leadership
• Promotion of control technology in industry
• Impact of patents
• International recognition

The award may be given to a team of engineers for joint achievements. IFAC Officers are not eligible. There is no requirement that the nominated candidates must have been involved in IFAC. The award can be given to a single achievement (an invention or a leadership of a major project) or a record of achievements over a period of time.

Nominations should contain:

Nominators should include the following in their submissions of Industrial Achievement Award candidates:

• Summary of the contributions by the individual or team addressing the criteria above
• Brief curriculum vitae (curricula vitae of all members in case of a team nomination)
• Supporting letters
• A suggested citation for the award

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Nominations are now open for the IFAC High Impact Paper Award 2014, one of IFAC’s major awards. This award is to acknowledge the impact of a paper published in any of the official IFAC journals on the broad areas of Automatic Control theory and applications. At most two such awards will be made in any triennium and will be presented by the President at the Opening of each IFAC Triennial Congress. The award includes a cash prize and a certificate that is presented to the recipient(s) by the President at each IFAC Congress. Financing is provided by IFAC. The next award will be made at the IFAC World Congress in Cape Town in 2014.

Eligibility Criteria

Eligible papers must have been published in any of the official IFAC Journals (Automatica, Control Engineering Practice, Annual Reviews in Control, Journal of Process Control, Engineering Applications of Artificial Intelligence, Mechatronics). For the award(s) to be given at the 2014 Congress, only papers published within the time period 1 January 1984 through 31 December 2005 are eligible. Papers authored or co-authored by IFAC Officers (President, Past President, President-elect, Vice Presidents, Treasurer, Secretary) are not eligible.

Selection Criteria

The award(s) are given in all technical fields covered by IFAC and should acknowledge impact upon the progress of control science as well as upon the practice of control engineering. The High Impact Selection Committee (HISC) will evaluate and rate the impact of the proposed papers on the basis of the following information, to be provided by the nominator:

1. Evidence of high number of citations, as obtainable from either (or both) the engineering databases: Thompson ISI’s Web of Science and Elsevier’s SCOPUS.

2. Evidence that the work under consideration has been actually used by others in their research/ professional activity, consisting of a detailed description of all research and industrial achievements made possible by the prior contributions of the nominated paper.

3. Opinions expressed by (no more than three) persons (co)authored by one of the authors of the nominated paper cannot be used for this purpose.

4. A description (if appropriate) of industrial achievements made possible because the prior contributions of the nominated paper.

5. Up to three letters of reference.

Guidelines for Nominators

Interested nominators are invited to send a nomination package to the IFAC Secretariat consisting of a nomination letter accompanied by the following attachments:

1. A statement specifying the number of citations, as obtainable from either (or both) the engineering databases: Thompson ISI’s Web of Science and Elsevier’s SCOPUS.

2. Excerpts of technical papers documenting work and progress made possible because the prior contributions of the nominated paper. Papers (co)authored by one of the authors of the nominated paper cannot be used for this purpose.

3. A description (if appropriate) of industrial achievements made possible because the prior contributions of the nominated paper.

WHO IS WHO IN IFAC

Carlos Eduardo Pereira

Carlos E. Pereira received the Dr.-Ing. degree in electrical engineering from the University of Stuttgart (Germany) in 1995, the MSc degree in computer science in 1990 and the B.S. degree in electrical engineering in 1987, both from the Federal University of Rio Grande do Sul (UFRGS) in Brazil. He is a 2011-2014 IFAC Council member and served as the chair of the IFAC Technical Committee on Manufacturing Plant Control (TC 5.3) from 2005-2011. Pereira is the past president of the Brazilian Automation Society (2009-2010) and the current president of the SBA Council. He acted as technical director for CETA, an applied research center, whose goal is to promote collaborative research work between academia and industry, focusing on the areas of industrial automation, information and communication technologies, and optimization of production processes, following the Fraunhofer operation model. From 2000 to 2001 he was a visiting researcher at the United Technologies Research Center (UTRC) in Hartford, CT (USA), where he acted as group leader of the Embedded Information Devices Group and has coordinated a group of 15 research engineers involved with research projects for United Technologies companies, such as Carrier, Otis, Pratt and Whitney, Sikorsky and UT Fuel Cells. At UTRC he worked on a building automation project for new facilities at MIT Media Lab, upon which a framework for integrating appliances such as elevators and air conditioners was proposed.

Prof. Pereira is also a Level 1 Researcher of CNPQ, a Brazilian research agency. His research focuses on methodologies and tool support for the development of distributed real-time embedded systems, with special emphasis on industrial automation applications and the use of distributed objects over industrial communication protocols. He has worked on several research projects in collaboration with industry, mostly dealing with the development of real-time computer-based systems. He is also an associate editor of the IFAC journal Control Engineering Practice. He has published more than 250 technical publications in conferences and journals and has acted as a member of international program committees for several conferences in the fields of industrial automation, manufacturing, industrial protocols, and real-time distributed object computing. He has received the Friedrich Wilhelm Bessel Research Award from the Alexander von Humboldt Foundation (Germany) in 2012 for his outstanding research record.

At the General Assembly of IFAC at the World Congress in Milan, Carlos Pereira was elected Council member for the 2011 – 2014 Triennium.
| Title                                                                 | 2013       | Place               | Further Information                                      |
|----------------------------------------------------------------------|------------|---------------------|----------------------------------------------------------|
| IFAC Symposium System Structure and Control                           | February   | Grenoble, France    | http://www.gipsa-lab.grenoble-inp.fr/colloque/sssc2013/  |
| IFAC Conference Biobiotics                                           | March      | Sakai, Japan        | http://ifac2013.shita.jp/index.html                      |
| IFAC Symposium Mechatronic Systems                                   | April      | Hangzhou, China     | http://sklofp.zju.edu.cn/ifac2013/                       |
| IFAC Workshop Convergence of Information Technologies and Control    | May        | Cluj-Napoca, Romania| http://icps13.conference.utcluj.ro/                      |
| IFAC Workshop Workshop on Intelligent Manufacturing Systems (IMS 2013)| May        | São Paulo, Brazil   | http://www.ims2013.poli.usp.br/                          |
| IFAC Workshop International Stability, Technology and Culture (SWHS 2013)| June | Pristina, Kosovo | http://www.ubt-unj.net/swis2013                          |
| American Control Conference - in cooperation with IFAC               | June       | Washington, DC, USA | http://a2c2.org/conferences/acc2013/                     |
| IFAC Conference Manufacturing Modelling, Management, And Control (MIM 2013)| June | St. Petersburg, Russian Fed. | http://mim2013.org/                                       |
| IFAC Symposium Intelligent Autonomous Vehicles - IFIAV 2013          | June       | Gold Coast City, Australia | http://www.iai2013.org/                                  |
| IFAC Workshop Periodic Control Systems - PSYCO'2013                   | July       | Caen, France        | http://psyco-2013.sciencesconf.org/                      |
| IFAC Workshop Adaptation and Learning in Control and Signal Processing (ALCOSP 2013) | July | Caen, France       | http://www.ubt-uni.net/swis2013                          |
| IFAC IFORS, IMACS, IFIP Symposium Large Scale Complex Systems: Theory and Applications - 13th | July | Shanghai, China | http://ls2013.sjtu.edu.cn                                |
| IFAC Workshop Thermodynamic Foundations of Mathematical Systems Theory| July       | Lyon, France        | http://not yet available                                  |
| European Control Conference (ECC 13) - in cooperation with IFAC      | July       | Zürich, Swiss       | http://www.ecc13.ch/                                     |
| IFAC Conference Modelling and Control in Agriculture, - Horticulture and Post Harvest Industry (AGRICONTROL 2013) | August | Espoo, Finland | http://agricontrol2013.automaatioseura.com/              |
| IFAC / IFIFROS / IEA Symposium Analysis, Design, and Evaluation of Human-Machine Systems – HMS 2013 | August | Las Vegas, USA | http://www.cs.wright.edu/ifac/                           |
| IFAC Symposium Mining, Mineral and Metal Processing (MMM 2013)       | August     | San Diego, California, USA | http://www.flogen.org/MMM2013/                            |
FORTHCOMING EVENTS (ctd.)

| Event                                                                 | Date       | Place           | Website                                      | Contact                           |
|----------------------------------------------------------------------|------------|-----------------|----------------------------------------------|-----------------------------------|
| IFAC Symposium Advances in Control Education - ACE 2013               | August     | Sheffield, UK    | http://ace2013.group.shef.ac.uk/             | e-mail: ace2013@shef.ac.uk        |
| IFAC Symposium Automatic Control in Aerospace - ACA 2013              | September  | Wuerzburg, Germany | http://www7.informatik.uni-wuerzburg.de/aca2013 | e-mail: aca2013@informatik.uni-wuerzburg.de |
| IFAC Conference Intelligent Control and Automation Science ICONS 2013 | September  | Chengdu, China  | http://risit.org/icons2013                   | e-mail: sec.icons@gmail.com        |
| IFAC Symposium Nonlinear Control Systems - NOLCOS                     | September  | Toulouse, France | http://www.laas.fr/NOLCOS2013               | e-mail: nolcos2013@laas.fr         |
| IFAC Workshop Dependable Control of Discrete Systems (DCDS 4th)      | September  | York, United Kingdom | http://ddds13.net.dcs.hull.ac.uk/         | e-mail: not yet available          |
| IFAC Symposium Advances in Automotive Control AAC 2013               | September  | Tokyo, Japan     | http://www.sice.or.jp/IFAC-AAC2013          | e-mail: ifac-aac2013@e-linkage.co.jp |
| IFAC Conference Management and Control of Production and Logistics – MCPL 2013 | September | Fortaleza, Brazil | http://not yet available                      | e-mail: not yet available          |
| IFAC Workshop Distributed Estimation and Control in Networked Systems (NecSys 4th) | September | Koblenz, Germany | http://www.necsys2013.rub.de                | e-mail: necsys2013@atp.rub.de      |
| IFAC Conference Programmable Devices and Embedded Systems PDeS 2013  | September  | Velké Karlovice, Czech Republic | http://pdes-conference.eu            | e-mail: nec@pdes-conference.eu    |
| IFAC/IEEE CSS Workshop Control of Systems Modeled by Partial Differential Equations (CPDE) | September | Paris, France     | http://www.cpde2013.fr                   | e-mail: not yet available          |
| IFAC Symposium Computer Applications in Biotechnology (CAB 2013)      | December   | Mumbai, India    | http://not yet available                      | e-mail: not yet available          |
| IFAC Symposium Dynamics and Control of Process Systems (DYCOPS 2013)  | December   | Mumbai, India    | http://not yet available                      | e-mail: not yet available          |
| Title                                                                 | 2014       | Further Information | http://www.ifac2014.org/                    | email: not yet available          |
| 19th IFAC World Congress                                             | August     | Cape Town, South Africa | http://www.ifac2014.org/                    | email: not yet available          |
| Title                                                                 | 2015       | Further Information | http://not yet available                      | e-mail: not yet available          |
| IFAC Symposium System Identification – SYSID 2015                     | October    | Beijing, China   | http://not yet available                      | e-mail: not yet available          |