

IFAC 50th Anniversary Celebration

International Conference on
Present and Future of
Automatic Control

Heidelberg
15th September 2006

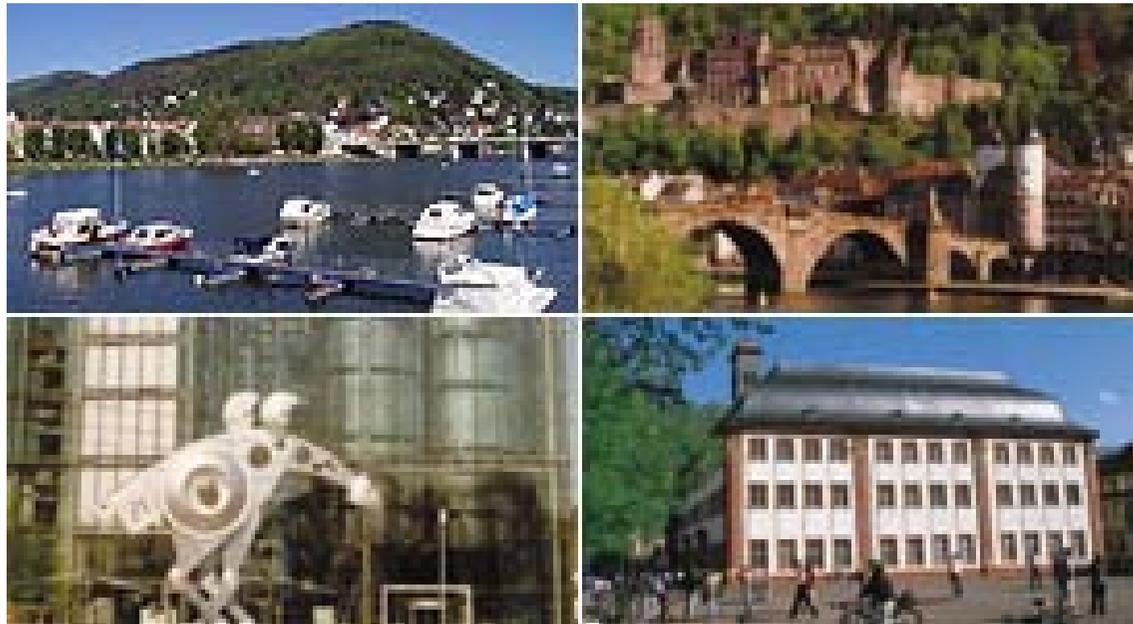


50th IFAC-Anniversary:

International Conference on Present and Future of Automatic Control

Heidelberg, Germany, 15th September 2006

Stadthalle - Townhall



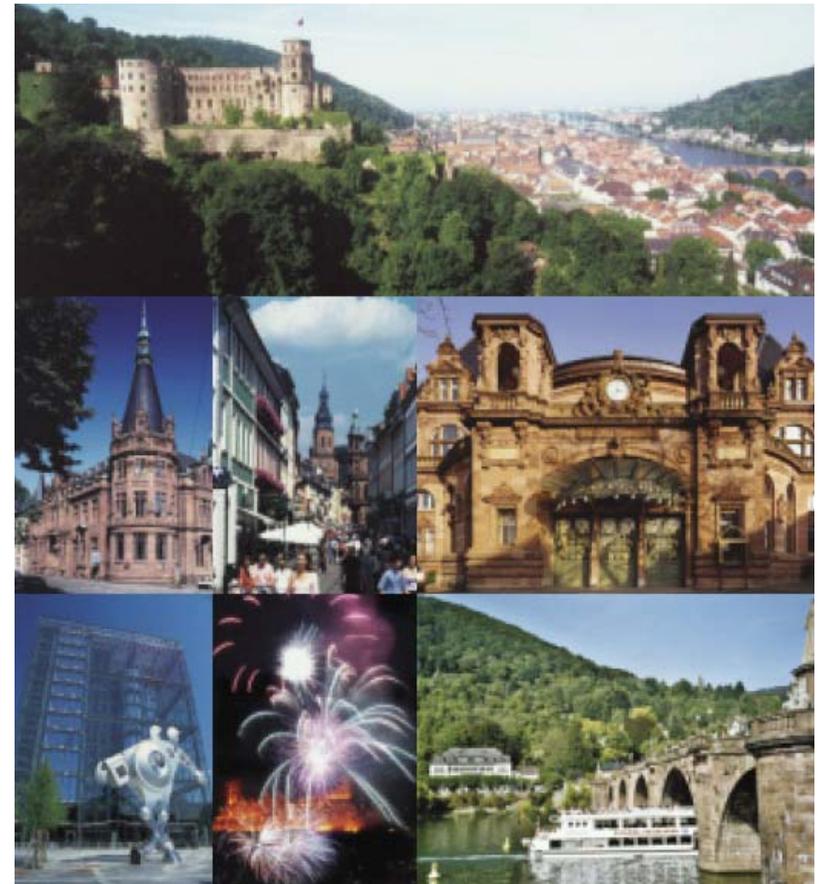
IFAC 50th Anniversary Celebration

Germany: Heidelberg
September 15, 2006

- Task force „IFAC 50“: Projects
Chair: Steve Kahne, USA
- International Program Committee:
Celebration event
Chair: Rolf Isermann, Germany

Organisation:
VDI/VDE-Gesellschaft Mess- und
Automatisierungstechnik (GMA)

www.vdi.de/ifac50



- Sponsored by:** IFAC-Council
IFAC-Technical Board
IFAC-Executive Board
- Organized by:** VDI/VDE-Gesellschaft Mess- und Automatisierungstechnik and
Task Force IFAC 50:
Stephen Kahne, (US), Chair
Tibor Vámos (HU)
Janos Gertler (US)
Rolf Isermann (DE)
Wook Kwon (KR)
Sirkka Jämsä-Jounela (FI)
Lubo Vlacic (AU)
- IPC:** Rolf Isermann (DE), Chair
Stephen Kahne (US)
Wook Kwon (KR)
Mike Masten (US)
Peter Fleming (UK)
Vladimir Kucera (CZ)
- NOC:** Dieter Westerkamp (DE)

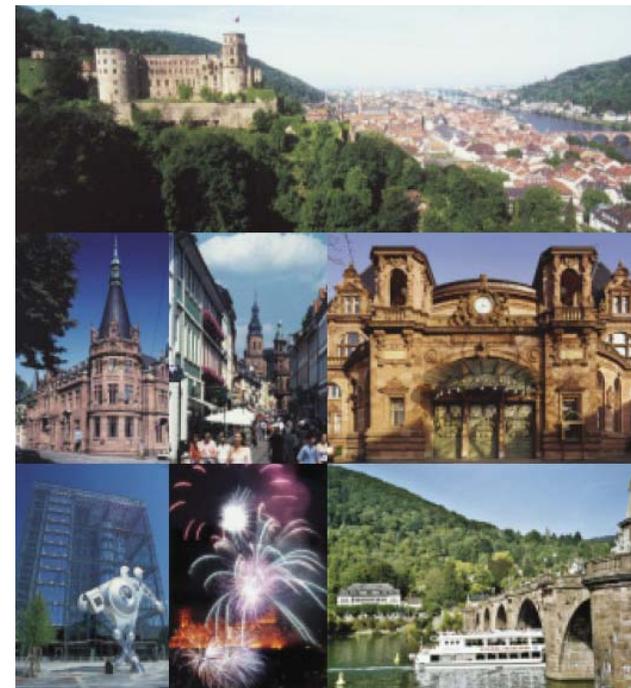
Scope:

To celebrate the IFAC 50th anniversary a special event is planned for Sep. 15, 2006 in Heidelberg, where IFAC was conceived during the "Internationale Fachtagung Regelungstechnik" in 1956. It will take place in conjunction with the 4th IFAC Symposium on Mechatronics (Sep. 12 - 14, 2006). The event includes presentations on the past, with particular emphasis on the present and the future of automatic control in general, both from the theoretical and the application's side as well as focusing on emerging areas. A panel discussion is planned to complement the lecture series, followed by a banquet (by invitation). A special task force prepares several projects to document IFAC's history and to find funds for young people from IFAC countries. The activities will be available in the World Wide Web.

IFAC 50th Anniversary Celebration

OPENING ADDRESS

1. On the foundation of IFAC
2. Earlier IFAC Anniversaries
3. IFAC 50 Program



1. On the foundation of IFAC

- **Conference „Regelungstechnik – Moderne Theorien und ihre Verwendbarkeit“**
25 - 29 September 1956, University of Heidelberg, Neue Aula
 - organized by VDI/VDE-Fachgruppe Regelungstechnik
 - President: Otto Grebe, Secretary: Gerhart Ruppel
 - Conference chair: Rudolf Oetker
 - 932 participants
 - Proceedings: Editor: Gerd Müller, R. Oldenbourg-Verlag, 1957

- **Preparatory meetings for an international organization**

- **Situation:**

- First international conferences on Automatic Control in Cranfield (1951), New York (1953)
- 1956: 8 national conferences in Europe! How to follow up?

- **27 Sep. 56: 1st Meeting**, with Rufus Oldenbourger (US) , Victor Broida (FR) and others, organized by G.Ruppel

- R. Oldenbourger proposes an „**International Federation on Automatic Control (IFAC)**“
- Nations are members (like United Nation)
- **Resolution: signed by 30 participants**

- **28 Sep. 56: Foundation of a provisional committee:** Broida (FR), Grebe(DE), Letov (USSR), Novacki (PL), Oldenbourger (US), Welbourn (UK), Ruppel (DE), Secretary

- 29 Sep. 56: Chair: V. Broida (4 languages), Discussions: Non-political, Languages?, Members?



IFAC

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- **Preparatory meetings for an international organization (cont`d)**

- **18, 19 Dec 56: Meeting of Europeans in Paris**

- Participants from FR, BE, NL, CH, DE
- Financing, permanent secretariat, terminology

- **25 -27 Apr 57: Provisional Committee Meeting in Düsseldorf at VDI**

- Participants: Broida, Grebe, Letov, Novacki, Oldenbourger, Bamford, Ruppel, Müller
- 2 proposals for constitutions from Broida, Oldenbourger: Vote for Oldenbourger`s Const.
- Permanent Secretariat in Düsseldorf, General Secretary: G. Ruppel, Deputy Secretary : Liselotte Schröder, sponsored by VDI until 1975
- 1st IFAC President: Harald Chestnut (US), 2nd President: A.M. Letov (USSR)
- 1st IFAC-Congress in Moscow 1960
- Official language: English



- **Official constitutive meeting of IFAC**

- 11, 12 Sep in Paris:

- All participating countries invited: 19 countries founded IFAC
- Adoption of the Constitution and By-laws

R E S O L U T I O N

Die Unterzeichneten befürworten die Gründung eines internationalen Verbandes für Regelungstechnik und erklären sich bereit, sich für diese Gründung in ihrem Heimatland einzusetzen. Der Verband soll zum Ziel haben:

1. den Austausch von Informationen auf dem Gebiete der Regelungstechnik zu erleichtern und dieses Gebiet zu fördern.
2. internationale Kongresse für Regelungstechnik in die Wege zu leiten.

Heidelberg, 27. September 1956

gez. Otto Grebe, Deutschland	gez. Werner Pohlenz, Deutschld.
gez. Rufus Oldenburger, United States	gez. G. Evangelisti, Italien
gez. A. Tustin, Great Britain	gez. J. Boas-Popper, Israel
gez. J.F. Coales, Great Britain	gez. M. Ajnbinder, Belgique
gez. J.H. Westcott, Great Britain	gez. Ph. Passau, Belgique
gez. H. Märzendorfer, Oesterreich	gez. Victor Broïda, France
gez. M. Mesarović, Jugoslavien	gez. Paul Profos, Schweiz
gez. J.M.L. Janssen, Netherlands	gez. L.v.Hámos, Schweden
gez. Jens G. Balchen, Norwegen	gez. Strejc, Vladimir, CSR
gez. Jens R. Jensen, Danmark	gez. Hanuš, Bořivoj, CSR
gez. Gerd Müller, Deutschland	gez. A.M. Letov, UdSSR
gez. P.J. Nowacki, Polska-Polen	gez. Keisuke Izawa, Japan
gez. Heinrich Kindler, Deutschland	gez. G. Ruppel, Deutschland
gez. H. Chestnut, USA	

Briefe an das Vorläufige Sekretariat
sind zu richten an:
Letters to the Provisional
Secretary should be mailed to:

Kopie erbeten an:
Copy should be sent to:

VDI/VDE-Fachgruppe
Regelungstechnik
Prinz-Georg-Str. 79
D ü s s e l d o r f

Prof. Dr. Rufus Oldenburger
Purdue University
Lafayette, Indiana, USA

RESOLUTION

The following undersigned are in favor of an international union of Automatic Control and are prepared to work toward this end in our own country. This union will have the following aims:

1. To facilitate the interchange of information in Automatic Control and to advance the field
2. To organize international congresses in Automatic Control.

Heidelberg, 27 Sep 1956

Signed:

Otto Grebe ,FRG

Rufus Oldenbourger;USA

A. Tustin, Gt. Britain

H. Chestnut, USA

J.F. Coales, Gt. Britain

J.H. Westcott, Gt. Britain

H. Märzendorfer, Austria

M. Mesarovic, Jugoslavia

J.M.L.Janssen, Netherlands

Jens G. Balchen, Norway

Gerd Müller, FRG

P.J. Novacki, Poland

Heinrich Kindler, GDR

Rudolf Oetker, FRG

Werner Pohlenz, GDR

G. Evangelisti, Italy

J. Boas-Popper, Israel

M. Ajinbinder, Belgium

Ph. Passau, Belgium

Victor Broida, France

Paul Profos, Switzerland

L.V. Hamos, Sweden

Vladimir Strejc, CSSR

B. Hanus, CSSR

A.M. Letov, USSR

Keisuke Izawa, Japan

G. Ruppel, FRG

D.B. Welbourn, Gt. Britain

W.A. Ratscheev, USSR.

Jens R. Jensen, Denmark



Participants of the Provisional Committee, 24 – 27 April 1957 in Düsseldorf

From left to right:: Ruppel (DE), Racejev (USSR), Nowacki (PL), Naumov (USSR), Oldenburger (US), Letov (USSR), Mrs. L. Schröder (DE), Müller (DE), Bamford (UK) (for Welbourn), Grebe (DE), Broida (FR)



**G. Ruppel, IFAC Honorary Secretary
1957-1972**, surrounded by Presidents:
: Coales, Gerecke, and Nowacki
(Rome, 1959-03)



**Mrs. L. Schröder, IFAC Deputy
Secretary 1957-1975**,
on her way to an IFAC assignment
(London Airport, 1975-01)

OPENING ADDRESS

1. On the foundation of IFAC
- 2. Earlier IFAC Anniversaries**
3. IFAC 50 Program

2. Earlier IFAC Anniversaries

- **20th Anniversary publication**
 - Automatica, Vol. 14, pp. 49 – 75 (1978)



IFAC

International Federation of Automatic Control

20 Years Old; 20 Years Young

An Anniversary Publication
1957—1977



PERGAMON PRESS

IFAC

50

2. Earlier IFAC Anniversaries

- **20th Anniversary publication**
 - Automatica, Vol. 14, pp. 49 – 75 (1978)
- **25th Anniversary Day, 1 Oct 1962, Heidelberg**

IFAC

25th Anniversary Day

- IFAC Council Special Meeting

- International Colloquium

October 1, 1982

Heidelberg

R. I.
TU Darmstadt

PROGRAMME

Friday, October 1, 1982

Heidelberg
Aula der Alten Universität

09,00 a.m. IFAC COUNCIL SPECIAL MEETING

In the Chair: Acad. Prof. T. VAMOS (H),
President of IFAC

Opening

Addresses: Dr. A. von BÜLOW (FRG),
German Federal Minister for Research and Technology
Prof. Dr. G. W. BECKER
President Verein Deutscher Ingenieure (VDI)
Dr. D. ERNST
Chairman Verband Deutscher Elektrotechniker (VDE)
Prof. Dr. M. THOMA (FRG),
President Elect of IFAC
Dr.-Ing. F. D. ALTHOFF (FRG),
President VDI/VDE-GMR
Mr. R. ZUNDEL (FRG),
Mayor of Heidelberg

Lecture: Dr. H. CHESTNUT (USA),
1st President of IFAC (1957/58)
**"25 years of IFAC: From Heidelberg
to Heidelberg 1957 — 1982"**

10,30 a.m. Coffee

**11,00 a.m. International Colloquium
AUTOMATIC CONTROL:
PRESENT AND FUTURE**

11,00 a.m. Impact on TECHNOLOGY

Speakers: Dr. R. E. LARSON (USA),
President IEEE
Prof. I. KATO (J),
Waseda University, Tokyo
Prof. H. ZEMANEK (A),
Technical University, Vienna

12,30 a.m. Lunch

01,30 p.m. Impact on SOCIETY

Speakers: Acad. V. A. TRAPEZNIKOV (USSR),
Institute of Control Science, Moscow
Prof. H. H. ROSENBROCK D.Sc. FRS (UK),
University of Manchester

02,30 p.m. Impact on ECONOMY

Speakers: Prof. E. PESTEL (FRG),
University of Hannover
Prof. A. JENSEN (DK),
Technical University, Lyngby

03,30 p.m. Impact on DEVELOPING COUNTRIES

Speakers: Prof. WU Jong-Ming (China),
Academia Sinica, Beijing
A. G. EVSTAFIEV (UNIDO),
Division of Industrial Operations, Vienna

04,30 p.m. Coffee

05,00 p.m. PANEL DISCUSSION



Speakers
25th IFAC Anniversary
Heidelberg, 1 Oct. 1982



H. Chestnut



R.E. Larson



I. Kato



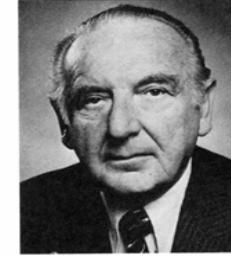
H. Zemanek



V.A. Trapeznikov



H.H. Rosenbrock



E. Pestel



A. Jensen



Wu Jong-Ming



A.G. Evstafiev

International Colloquium:
Automatic Control - Present and Future

Authors

R. I.
TU Darmstadt



2. Earlier IFAC Anniversaries

- **20th Anniversary publication**
 - Automatica, Vol. 14, pp. 49 – 75 (1978)
- **25th Anniverary Day, 1 Oct 1962, Heidelberg**
- **40th Anniversary Session, Fukuoka (JP), 8 July 1997**
 - In conjunction with the IFAC-Symposium on System Identification
 - Publication of talks: IFAC Newsletter June 1997

IFAC's 40th Anniversary Session

Time : July 8, 7p.m. - 9p.m.
Place : Main Hall in the Kitakyushu International
Conf.Center

Opening Remarks
Welcome Address
Giichi Sawaragi, General Chairman

"40 years of IFAC - past, present and future"

1. Stephen Kahne, IFAC Past
2. Yong Zai Lu, IFAC Present
3. Pedro Albertos, IFAC Future

"Control theory, Applications and Education"

4. Vladimir Kucera, Control Theory
5. Rolf Isermann, *→ ~30min* Control Application
6. Walter Schaufelberger, Control Education

"Control technology in Japan"
Katsuhisa Furuta

Closing Remarks
Chairman Yong Zai Lu

This anniversary session is free and open to all.
We look forward to seeing you there.

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9:30 Opening Addresses

Rolf Isermann, IPC-Chair

Wook Hyun Kwon, IFAC President, Korea

Dirk Abel, Vice-President VDI/VDE-GMA, Germany

Raban van der Malsburg, Deputy Mayor of Heidelberg, Germany

10:00 IFAC and Its People

Stephen Kahne, Embry-Riddle University, Prescott, USA, IFAC-President 1993-1996

10:45 BREAK

11:45 Present Developments in Control Theory

Brian D.O. Anderson, Australian National University, Canberra, Australia

IFAC-President 1991 – 1993

CHAIR: Vladimir Kucera, Technical University Prague, IFAC-President 2002 -2005

12:00 Present Developments in Control Applications

Karl Johann Åström, Lund University of Technology, Sweden

CHAIR: Alberto Isidori, University La Sapienza, Rome, IFAC-President 2008-2011

12:45 – 14:15 LUNCH

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14:15 Industrial Automation: Situation and Trends

Zürich,

**Peter Terwiesch, Chief Technology Officer, ABB Asea Brown Boveri Ltd,
Switzerland**

CHAIR: Pedro Albertos, University of Valencia, Spain, IFAC-President, 2000 – 2002

15:00 Emerging Areas in Automatic Control and its Role for Engineering

Panel Discussion

**CHAIR: Sirkka-Liisa Jämsä-Jounela, Helsinki University of Technology,
Finland, IFAC Technical Board Chair**

PANELISTS:

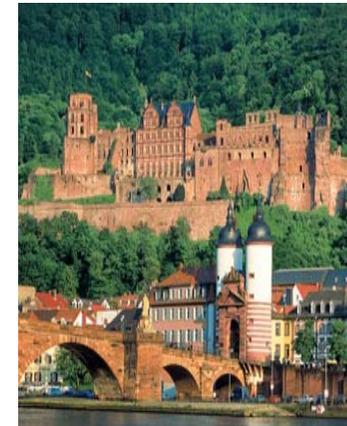
16:00 End of Anniversary Meeting

18:00 Walk to the Castle Cable Railway Station

18:45 Reception at Heidelberg Castle

19:30 Banquet

22:50 Surprises



23:15 Departure of Buses to the Hotels (Detour via Leinen: 30 min, Cable way is closed)

Outcomes of the IFAC 50 – Task force

Members: Steven Kahne (chair), Janos Gertler, Lubo Vlacic and others

- Goals:

- (1) Foundations for the future of IFAC

- (2) Attract young people for IFAC

- Projects:

- Online resources in the control field:

- edited by Lubo Vlacic, Griffith University, Brisbane, Australia and IFAC-Education Committee:

- **IFAC Control Archives:** <http://www.griffith.edu.au/centre/icsl/edcom/ifac50/>

- Animated Control Systems Tutorials
 - Control Education Web sites
 - Control Engineering Textbook Titles
 - Control Systems Applications
 - Control Theory – Timeline Data
 - History of Control – Timeline Data
 - Web based Control Experiments

Outcomes of the IFAC 50 – Task force

Projects (cont`d):

- **Early control textbooks, edited by Janos Gertler, part of registration bag**
- **Funds for young people contributing to IFAC**
- **Documents of NMO´s histories (Italy, Southafrica, Slovenia, ...)**
- **IFAC archive at Secretariat in Laxenburg (and online)**

Distributed material for IFAC 50

- Book „Historic Control Textbooks“, Elsevier
edited by Janos Gertler (IFAC 50 Taskforce)
- CD-ROM with presentation slides of this conference
- Journal „Automatisierungstechnik“, Special edition for IFAC 50
 - Contribution: „Great names and the early days of control in Germany“
by Karl-Heinz Fasol (with assistance of others)
- Journal „atp-International“, a new IFAC affiliated Journal (Oldenbourg-Verlag)
 - Contribution: „History of the Society for Measurement and Automatic Control VDI/VDE-GMA“ (1938 – 2006)
by Rudolf Lauber
- Postcard with special IFAC50-Stamp
„edited“ by B. Aumann & E. Rudas, IFAC Secretariat, Laxenburg, AT,
(gathered here, as stamp only valid in Austria !)



R. Isermann
TU Darmstadt

Schloss Heidelberg



End