



**International Institution for Production Engineering Research**

# **NEWSLETTER**

**N° 24 - May 2004**

CIRP Office: 9, rue Mayran, 75009 Paris France

Tel +33 1 45262180 - Fax +33 1 45269215

e-mail [cirp@cirp.net](mailto:cirp@cirp.net) - web site: <http://www.cirp.net>

# Contents

1. From the President
2. About CIRP
3. Awards
  - Doctor honoris causa for Profesor Tilo Pfeifer
  - Professor Hans-Peter Wiendahl receives honorary doctorate
  - Professor Manfred Weck receives Euspen Award and Georg-Schlesinger-Prize
  - Professor Christopher A. Brown on the move
  - Professor Yoram Koren elected to the National Academy of Engineering
  - Professor Jack Jeswiet Fellow of CSME
4. The CIRP Annals and the Science Citation Index
5. Associate Members News
6. SME
7. Paris meetings January 2004
8. From the STC's
9. Meetings Seminars, conferences
10. From the secretariat
11. Miscellaneous

The next issue of the Newsletter is scheduled for October 2004. Your contributions are much appreciated; you may send it to the CIRP office in Paris or directly to the editor at: [j.meijer@utwente.nl](mailto:j.meijer@utwente.nl) preferable before **September 15<sup>th</sup> 2004**

Johan Meijer (Technical Secretary)

# 1. From the President

Professor Michel Veron

## The future of CIRP

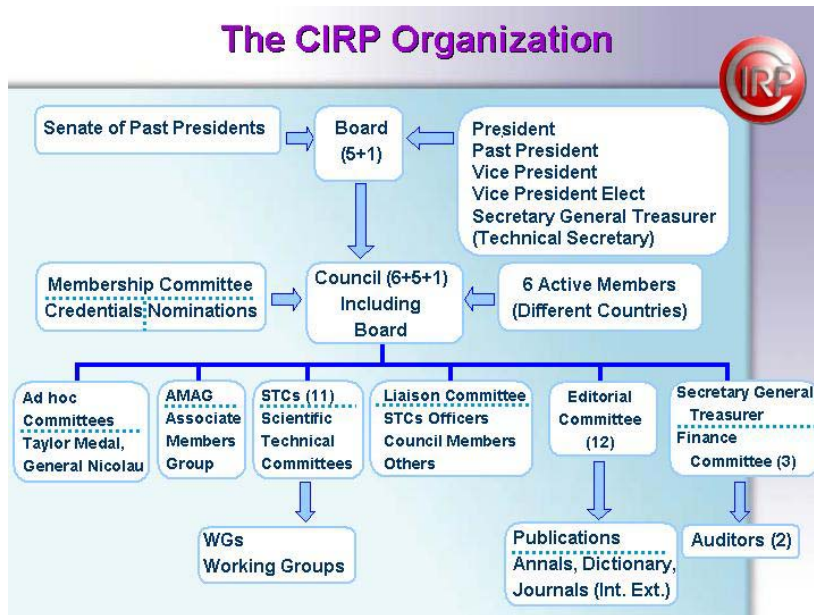
CIRP is a well-established Institution now, with about 500 members (Honorary, Emeritus, Active, Associate, Corresponding, Invited) from 42 countries. Our scientific production is very much appreciated among the Manufacturing Engineering world. This state has been achieved by a strict evaluation of the Papers by our Editorial Committee and the programme committees of all the seminars and conferences that CIRP is sponsoring. Thanks a lot to the members of these committees, because it is a hard work.

CIRP relations with Industries have been improved during the last years by a better preparation of the AMAG meeting (Associate Members Advisory Group) during the General Assembly: the Associate Members Lunch, on Tuesday, followed by the AMAG Meeting with presentations and discussions. This success and worldwide recognition are now well established, but we have to think over the future of CIRP. Along the years to come, many of our colleagues will retire and ask for Emeritus membership, which is a good way of keeping experienced people in our community. We have to think of recruiting good Corresponding and Active members. The procedure is rather long to reach Active membership, and that is why we have to think already now to young brilliant researchers.

Since some years, the Council is suggesting to increase, step by step, the number of Corresponding members from 125 to 150. I have sent a request to the membership and the answers I have got are very positive. For who has not answered yet, I am glad to get your opinion. At the coming General Assembly we have to decide about this.



## 2. About CIRP



The International Institution for Production Research (CIRP) was founded in 1951 to bring together research workers studying the application of scientific methods to production technology.

At present, CIRP has about 500 members representing some 40 different countries. The unique contribution of CIRP to manufacturing research is acknowledged by many of the world's leading companies and research institutes, who provide active

support through the associate membership. Today, CIRP is turning its attention to the use of computerized methods for manufacturing control, automation, robotics, interfacing and the computer-integrated factory of the future. The CIRP is organised in Scientific and Technical Committees (STC's) that are the groups responsible for coordinating the collaborative research. The main activities are:

- Studying new techniques and technologies;
- Organising cooperative research projects, comparative testing and standardisation;
- Collecting and analysing bibliographies on manufacturing;
- Publishing synthesis reports on important technical problems;
- Organising seminars and meetings on specialist topics;
- Preparing internationally accepted terminology;
- Contributing to the work of the International Standardisation Organisation;
- Surveying the state of the art of research in different laboratories over the world;

The Scientific and Technical Committees (STC's) are:

- A: Assembly
- C: Cutting
- Dn: Design
- D: Dictionary
- E: Electro-Physical and Chemical processes
- F: Forming
- G: Abrasive Processes
- M: Machines
- O: Optimisation of manufacturing systems
- P: Precision engineering and metrology
- S: Surfaces

## 3. Awards

### Doctor honoris causa for Professor Tilo Pfeifer



The University of Zaragoza, Spain, has awarded Prof. Dr.-Ing. Dr.-Ing. h.c. Prof. h.c Tilo Pfeifer Doctor honoris causa honoring his scientific and academic efforts in the field of Production Metrology and Quality Management.

In his laudatio Prof. Torres, Chair of Industrial Design and Manufacturing, University of Zaragoza, underlined the continuous readiness of Prof. Pfeifer to co-operate in different common scientific and

academic projects. Prof. Torres especially emphasized the development of new study courses for Industrial Engineering and the intensive exchange of students based on the Socrates program. Prof. Pfeifer's co-operation in different European research projects for the development of methods and tools for Quality Control and Co-ordinate Measuring Technology has been very important, explained Prof. Torres. Thanks to Prof. Pfeifer these topics promoted decisively at the University. Prof. Pfeifer is the 5<sup>th</sup> engineer in the 500 year history of the Zaragoza University honored with the Doctor h.c. award.

*This ceremony was held in June 2003 already, unfortunately CIRP missed the press release at that time.*

### Professor Hans-Peter Wiendahl receives honorary doctorate



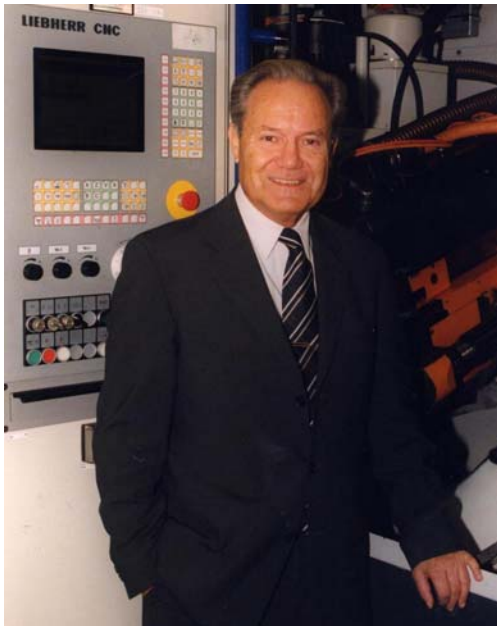
At 22 November 2003 the ETH Zurich bestowed a honorary doctorates to professor Hans-Peter Wiendahl, Universität Hannover (Germany) in appraisal of his whole work in the field of Industrial Logistics, Production Planning and Control as well as Facility Planning.

Three statements describe the further development of the ETH: Integration of social science in all curricula. The Bachelor-Master system will be applied for all studies within

two years. The ETH will be extended to a real "Science City". Further it was declared that more and more courses will be given in English.



## Professor Manfred Weck receives Euspen Award and Georg-Schlesinger-Prize

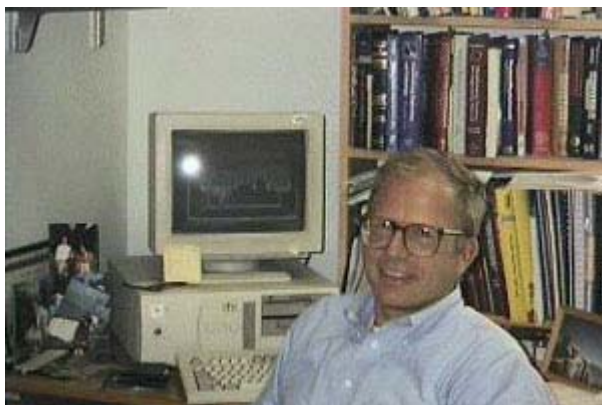


During the International Conference of the European Society for Precision Engineering and Nanotechnology, Euspen, on Precision Technology, Microtechnology, and Measurement Professor Dr.-Ing. Dr.-Ing. h.c. Manfred Weck was honored with the Lifetime Achievement Award of the Euspen. Professor Weck was honored with that outstanding award in recognition of his merits and contributions to lectures, research, design, and development of ultraprecise machine tools and manufacturing processes, which led to worldwide reputation and renomnee.

The Senate of the Country of Berlin honoured Prof. Manfred Weck the Georg-Schlesinger-Award, one of the most reputable prizes of production technology in the world. Professor Weck got that important international award both for his multiple activities and developments in the field of machine tools and engineering and his

extraordinary engagement as university professor. The Georg-Schlesinger-Award is given on proposal of an international board to a very outstanding scientist every three years.

## Professor Christopher A. Brown on the move



In July 2004, after four years as director of the Manufacturing Engineering program at WPI, professor Brown will step down. In March of 2000 he was asked to rescue the MFE program and labs, which were in tough shape. The rescue job is done, mission accomplished. Professors Sisson and Rong will take over.

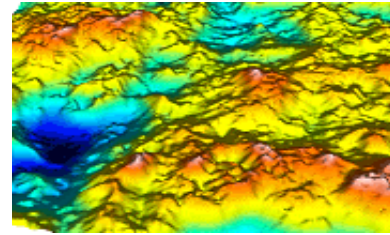
Professor Brown has realized a full 6-year ABET accreditation, increased enrolments and over \$3 million support including 11 Haas CNC machine tools. WPI now has an outstanding

reputation nationally and internationally for supporting Manufacturing Engineering Education.

He says: *"It has been a privilege and a pleasure for me to have had the opportunity to serve WPI as director of the Manufacturing Engineering program. I am grateful for all the support and recognition the program has been given. I am proud of our students and of the success we had in rebuilding the academic programs and laboratories. WPI's Manufacturing Engineering laboratories are in many respects now among the best equipped in the world"*.

Now he will look forward spending more time on teaching and research building on the scientific and engineering breakthroughs in understanding surface roughness and developing more industrial support for WPI's Surface Metrology Laboratory. Chris Brown has been a member of the WPI faculty since 1989. He spent four years in the Swiss Federal Institute of Technology. Next two years he was senior research engineer, working on product and process development, responsible for coatings,

microscopy and the machine shop at Atlas Copco's European research center. He has over a hundred articles and presentations on surfaces and surface metrology and a patent on a fractal method for characterizing surface textures, develops software for surface texture analysis and teaches courses on surface metrology, manufacturing processes and design and works on national standards on surfaces texture (ASME B46).



## **Professor Yoram Koren elected to the National Academy of Engineering**



In February it was announced that Prof. Yoram Koren has been elected to the National Academy of Engineering (NAE). His citation is read; *"For contributions to the science, education, and practice of manufacturing through innovations in reconfigurable manufacturing systems, robotics, and manufacturing system control"*. Election to the National Academy of Engineering is among the highest professional distinctions to those who have made important contributions to engineering theory and practice, including significant contributions to the literature of engineering theory and practice and those who have demonstrated accomplishment in the pioneering of new fields of engineering, making major advancements in traditional fields of engineering, or developing and implementing innovative approaches to engineering education.

## **Professor Jack Jeswiet Fellow of CSME**



Professor Jack Jeswiet was made a Fellow of CSME, the Canadian Society of Mechanical Engineers, at their General Meeting in Calgary in 2003. He continues to be the chair of the Manufacturing and Robotics division of CSME.

## 4. The CIRP Annals and the Science Citation Index

Assessment of research in academic institutions is increasingly based on bibliometric analysis. Published research papers are rated according to the importance of the journal they are published in and on the number of times the paper has been cited in other highly ranked journals. The Institute of Scientific Information (ISI) has established the so-called **Science Citation Index (SCI)** for keeping track of the citation history of published papers. The scientific standing of a journal is expressed by its so-called **Impact Factor (IF)**.

In 2001, after more than ten years of trying, the then-President of CIRP, Hendrik Van Brussel, succeeded in convincing ISI to include the CIRP Annals in the SCI. If you surf on the Web of Science of ISI you will indeed find the CIRP Annals under the name 'CIRP Annals. Manufacturing Technology' in the SCI. You will however not find yet the CIRP Annals in the so-called Journal Citation Report, where the Impact Factors (and other bibliometric characteristics) of the journals are published. This will happen in mid 2004. The reason is that, in order to compute the IF for a certain year, e.g. 2003, the number of times the papers of the CIRP Annals of 2001 and 2002 have been cited during 2003 by all manufacturing journals included in the Science Citation Index have to be counted. So, mid 2004, the CIRP Annals will for the first time have an Impact Factor. We will keep you informed when this happens.



How will CIRP Annals rate among the other manufacturing journals? In engineering, an IF of 1 is already high. An average ASME Transactions, for instance, has an impact factor of 0.5 or less. I have made the exercise for the CIRP Annals and I came to an estimated impact factor of 0.5. This means that already now CIRP Annals can be rated among the top journals in manufacturing, but we knew that already. It can however be much higher if we observe a few elementary principles. These are:

- If you publish a paper in the CIRP Annals, refer to as many relevant references published in CIRP Annals of the previous two years. Reference to earlier work doesn't help.
- If you publish in another journal that is included in SCI then again refer as much as possible to CIRP references of the previous two years.

By observing these simple rules, we will very soon see the Impact Factor of CIRP Annals rise above 1. It goes without saying that selling more copies of the CIRP Annals would help. The large circulation of medical journals explains their very high IF's. Eventually CIRP has to help the publisher in this respect.

We of course all know how relative these figures are, particularly in manufacturing research. For us, industrial pickup of our ideas, creation of spin-offs and similar society-orientated parameters are of equal or even more importance. But as long as our academic authorities are putting bibliometric data as their highest priorities we can only profit from trying to bring the CIRP Annals to the top of the list of manufacturing journals.



## 5. Associate Members News

We are proud to announce that one of our associate members; Dr. Anil Srivastava, Manager, Manufacturing Technology TechSolve, Inc. (USA) has been awarded 6 million dollars from NIST-ATP program to do research in the area of grinding technology. Details can be found on NIST-ATP's website or on: [www.techsolve.org](http://www.techsolve.org)

## 6. SME

### **SME Members have free access to CIRP Papers**

At the SME website ( [http://www.sme.org/cgi-bin/membhtml.pl?/memb/cirp\\_hp.htm&&&SME&](http://www.sme.org/cgi-bin/membhtml.pl?/memb/cirp_hp.htm&&&SME&) ) the following text can be found:

Through an alliance between SME and CIRP, your SME membership entitles you to free access to the keynote papers of the 2003 CIRP General Assembly and the Cutting papers from the CIRP meeting. This alliance also allows SME membership free access to the keynote papers of the CIRP General Assemblies from 1994 to 2002.

The meetings are:

[2003: 53rd General Assembly, Montreal, Canada](#)

[2002: 52nd General Assembly, San Sebastian, Spain](#)

[2001: 51st General Assembly, Nancy, France](#)

[2000: 50th General Assembly, Sydney, Australia](#)

[1999: 49th General Assembly, Montreux, Switzerland](#)

[1998: 48th General Assembly, Athens, Greece](#)

[1997: 47th General Assembly, Tianjin, China](#)

[1996: 46th General Assembly, Como, Italy](#)

[1995: 45th General Assembly, Enschede, Netherlands](#)

[1994: 44th General Assembly, Singapore](#)

### **About CIRP**

CIRP (International Institution for Production Engineering Research), [www.cirp.net](http://www.cirp.net), is an international organization composed of the leading manufacturing R & D experts from all over the world. Regular membership, limited to those individuals who have demonstrated excellence as manufacturing researchers, may not exceed 15 regular members from any single country. CIRP's purpose is to improve manufacturing productivity through cooperation and exchange of information among the members themselves and also with companies and other organizations who become [CIRP Associate Members](#).

### **Aims**

- To promote international collaborative research into manufacturing processing methods, including the enhancement of production efficiency and quality of work;
- To establish regular contacts between research workers and hence provide a forum to stimulate information exchange;
- To convene conferences to discuss the results of promising research and to ensure their publication in an industrially useful form.

### **About the CIRP General Assembly**

The CIRP General Assembly's purpose is to provide a venue for the presentation and discussion of refereed scientific and technical papers, as well as keynote papers summarizing significant results of work performed over an extended period.

## 7. Paris meetings January 2004

The January meetings are concluded with the Liaison committee meeting at Friday afternoon. with the council and all the STC officers attending.



The Board



and the STC officers

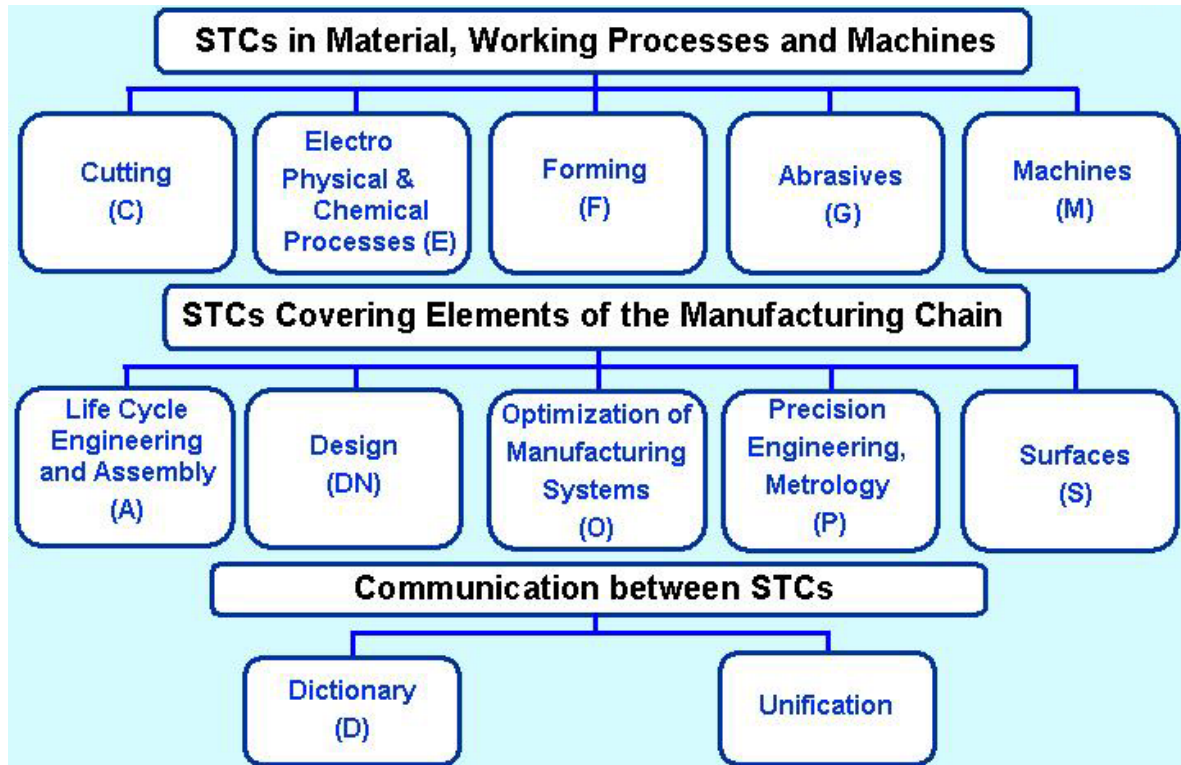
Topics were: Preparation of the General Assembly, the 2004 Paper Sessions, report of the editorial committee, the August 2004 time-tables, Round Table preparation, Keynote Papers, report of the Technical Secretary, reports from sponsored conferences, CIRP Dictionaries, CIRP International Conferences & Seminars and several various items

But there was also time and space for informal contacts animated by the presidential champagne.



## 8. From the STC's

There are two kinds of STC's. Five STC's covering the Processes and Machine and five covering the Manufacturing chain as shown below.



### STC "A"

The agenda of STC-A | Paris had the following items: Discussion of future conferences related to STC-A. Future Round Table topics. Discussion on keynotes for 2004 and 2005. A presentation by Professor W. Sihn on 'Harmonizing the Dismantling, Recycling and Remanufacturing of Cars through the Use of Best Available Technologies and Networks', see appendix 5 of the STC-A minutes. A presentation by Professor T.K. Lien on 'Reliability issues in automatic assembly', see appendix 6 of the STC-A minutes. An item very new to STC-A, is the establishment of three steering committees on:

- *Assembly/disassembly technologies/systems including human factors and logistics.* Steering committee: E. Westkaemper (chair), H. Bley, D. Ceglarek.
- *Design for Life Cycle Engineering.* Steering committee: W Knight (chair), H. Kaebnick, S. Takata.
- *Methods/tools for Life Cycle Assessment, resource management, Life Cycle Management, Sustainable Production incl. the ethical and social dimension.* Steering committee: M. Hauschild (chair), J. Sutherland, W. Sihn.

These committees reported on the future activities for the areas shown above. (see the minutes of STC-A).

## STC “E”

In the January meeting there were technical presentations on:

- “New Materials and Sintering Methods for 3-D Rapid Manufacturing and Rapid Tooling Applications” by R. Resnick and H. Kuhn).
- “Nano Mechanical Fabrication, Lab on a Chip” by A Malshe.
- “Modelling of Absorption Waves in Laser Material Processing” by E Govekar.

They can be found on as Annex to the minutes on the web.

Summary of decisions:

1. The keynote paper for 2004 “Trends in Photochemical Machining” by D. Allen was finalised.
2. The definition and scope of the internal keynote paper for 2005, “Future of EDM through fundamental insight into the process”, coordinated by M Kunieda was verified and approved. Contributions are invited.
3. Keynote paper for 2006: “Unconventional micro and nano processes” (Rajurkar).
4. Cooperative work on Rapid Manufacturing by sintering & deposition – fundamental research will continue. Regularly meetings amongst the four major parties interested (K.U.Leven, Fraunhofer ILT & IPT, University. of Leeds) will be held and new members invited to join.

## STC “F”

In the January meeting much of the activities were standard for STC-F, such as reports by groups affiliated with STC-F, including IDDRG, ICFG and ICTP. Future conferences were also announced; these can be seen in the minutes for STC-F. The activities of STC-F included a presentation by Professor Bariani on the STC-F keynote in 2004: *Testing and Modelling of Material Response to Deformation* by P. Bariani. Two presentations were given on prospective proposals for keynotes at the 2005 and 2006 AGM’s.

- *Warm Sheet Forming* by M. Putz

- *Single Point Incremental Forming of Sheet Metal* by J. Jeswiet

A vote by the membership decided *Single Point Incremental Forming of Sheet Metal* would be the keynote for 2005 and *Warm Sheet Forming* would be the keynote for 2006.

Professor Neugebauer agreed to assemble a set of presentations for the AGM in Krakow, on the special theme of Warm Sheet Forming. This will be used in preparation for the keynote on Warm Sheet Forming in 2006. There was a long discussion, somewhat heated at times, about the rejection rate of paper submissions for STC-F and how reviews were conducted. Comments can be seen in the minutes of STC-F. Some members of STC-F are beginning to question the process used to evaluate paper submissions for the annals.

## STC “U”

Main Decisions:

- The keywords list has been updated in accordance with the 2003 Annals.
- The Unified Terminology on Design (English, German, French) has been updated by the colleagues Gu, Weil, Mathieu and Selinger. The list is now available on the web.



## 9. Meetings Seminars, conferences

### **CIRP 2004 Design Seminar**

**“Design in the Global Village”**

**16 – 18 May 2004, Cairo, Egypt**

**Scope:** Advances in computer technology and the exponential growth of the Internet have created opportunities for local and global communication, which were never before possible. This Seminar aims to highlight contributions in the areas of design theories, principles and methodologies, their practical application, the development of computational tools to support distributed design and manufacturing and the whole product life cycle in a changing world. The discussion of leading edge research work will stimulate exchange of ideas among participants and potentially establish collaborative work in the global village: West to East and North to South.

**Topics:** Design Knowledge In A Changing World. Appropriate Technologies And Standards. Creative And Innovative Solutions. Holistic Design. Methods For Product & Process Design. Product Design, Modelling And Simulation. Integration Of Design Methodologies With Advanced Technologies and Business Models. Human Factors And Cognitive Models. Industrial Collaboration & Team Work. Quality By Design, Optimization And Control. Manufacturing Databases - Design Education. Collaborative And Participatory Techniques. Digital Design And Virtual Manufacturing. Virtual And Rapid Prototyping & Mock-Ups. Smart Design For Sustainability. Design For Local And Global Consumers. E-Design & Manufacturing For New Economies. Linking R&D Institutions With Industry : Examples and Case Studies. Innovation in Design Education - Models and Implementation. **Contact:** CIRP 2004Dn Secretariat, e-mail: [cirp2004dn@uwindsor.ca](mailto:cirp2004dn@uwindsor.ca) website: [www.uwindsor.ca/CIRP2004Dn](http://www.uwindsor.ca/CIRP2004Dn)

### **37<sup>th</sup> CIRP International Seminar on Manufacturing Systems (ISMS)**

**Digital Enterprises, production networks\**

**19 - 21 May 2004, Budapest, Hungary**

**Topics:** Product design support systems; Modelling, simulation, control and monitoring of manufacturing processes and systems; Production planning, scheduling; Quality management; Design and implementation methods for CIM; Architectures of intelligent manufacturing systems; Robotics in manufacturing; Complexity, flexibility, transformability, maintainability, reliability, safety and dependability in CIM; Integration and communication; Artificial intelligence and machine learning approaches; Multi-agent approach in the context of manufacturing systems; Digital factories, extended enterprises, production networks; Industrial standards; Knowledge management in production; Human factors and education;

Contact: László Monostori [isms2004@conferences.hu](mailto:isms2004@conferences.hu)), (<http://www.sztaki.hu/CIRP-ISMS2004/>

### ***5<sup>th</sup> International Workshop on Emergent Synthesis (IWES'04),***

**24 - 25 May 2004, Budapest, Hungary**

**Topics:** The Workshop will cover a range of topics - from philosophical studies and theoretical developments to practical applications - that are relevant to emergent synthesis. Topics of interest

include but are not limited to: concepts for emergence toward engineering synthesis, design theory with relation to emergence, emergent synthesis methods for the design, emergent synthesis methods for manufacturing systems, emergent computation for utilizing artifactual systems, relational emergence in artifactual environment, modelling and simulation of emergent systems, applications to technical and economic systems.

Contact: László Monostori: [iwes04@conferences.hu](mailto:iwes04@conferences.hu) (<http://www.sztaki.hu/IWES04/>)

## **2<sup>nd</sup> International Conference on Tribology in Manufacturing Processes ICTMP 2004**

**16-18 June 2004, Nyborg, Denmark**

The objective is to bring together professionals from industry and academia to present and discuss recent advances in *Tribology in Manufacturing Processes* including forming, cutting and casting of metals, polymers, ceramics and composites.

**Topics:** Friction, lubrication and wear phenomena; Modelling of friction, lubrication, wear and heat transfer; Testing of friction, lubrication and wear; Development and characterization of lubricants; Tool materials and tool coatings; Tribology assisted or tribology controlled processes; Surface engineering, generation and properties of tribologically suitable surfaces.

[ICTMP2004 - 2nd International Conference on Tribology in Manufacturing Processes](#),

## **APE 2004**

### **ADVANCES IN PRODUCTION ENGINEERING**

**17 - 19 June 2004**

**Warsaw, Poland**

**Scope:** Material Removal Processes Cutting, Abrasive and Non-conventional Machining: EDM, ECM, LBM, Metal Forming, Casting and Joining Processes, Machine Tools and Manufacturing Systems, CAD/CAM and Concurrent Engineering, Computer Integrated Manufacturing, Artificial Intelligence in Production Engineering, Production Management, Rapid Prototyping, Time Conserving Technologies, Human Factor in Manufacturing, Clean Manufacturing, Transfer of Innovations.

Contact: Lucjan Dabrowski, e-mail: [ape2004@meil.pw.edu.pl](mailto:ape2004@meil.pw.edu.pl)

website: <http://www.meil.pw.edu.pl/ape2004>

## **3<sup>rd</sup> International Conference and Exhibition on Design and Production of DIES AND MOLDS and the**

**7<sup>th</sup> International Symposium on Advances in Abrasive Technology ISAAT 2004**

**17-19 June 2004, Bursa Turkey**

Information Prof. Bilgin KAFTANOGLU, [info@diemold-isaat.org](mailto:info@diemold-isaat.org) [www.diemold-isaat.org](http://www.diemold-isaat.org)

## **11<sup>th</sup> International CIRP Life Cycle Seminar**

**Life cycle product – Quality management issues**

**20-22 June 2004, Belgrade, Serbia**

The management of sustainable development considered from the aspect of product's life cycle and its quality management represents a real challenge for researchers, economy and educational

system. The aim of this Seminar is to acquaint the home public and experts with the achievements and trends in the world in this field. This will later serve as a basis for building of national strategy in this respect. The main objective of the Seminar is to provide an international forum for the exchange of knowledge, experience, research results and information about various aspects of LCP in QM.

**Topics:** Quality Management Issues on different stages of Life Cycle Product (Engineering, Design (Eco-Design), Assessment, Management, Disassembly), in the context of sustainable development and manufacture: Research, Applications Education

Contact Prof. V. D. Majstorovic. e-mail: [majnem@EUnet.yu](mailto:majnem@EUnet.yu) website: [www.lcs04.mas.bg.ac.yu](http://www.lcs04.mas.bg.ac.yu)

### **3<sup>rd</sup> International Seminar on Axiomatic Design 21-24 June 2004, Seoul, Korea**

### **4<sup>th</sup> CIRP International Seminar on Intelligent Computation in Manufacturing Engineering ICME '04 30 June – 2 July 2004, Sorrento, Italy**

The Seminar will examine the applications of intelligent computation and related methodologies including expert systems, fuzzy logic, neural networks, genetic algorithms, multi agent systems, evolutionary and emergent computation.

**Topics:** Manufacturing applications of expert systems, artificial neural networks, fuzzy and neuro-fuzzy models. Manufacturing processes (machining, forming, casting, welding, etc.) Process modeling and monitoring Design, simulation and modeling Concurrent/Simultaneous engineering Reverse engineering Rapid and virtual prototyping. Assembly and disassembly. Diagnostics and maintenance. Automated inspection and quality control Sensors and sensing techniques for manufacturing. Planning and control. Dynamic scheduling in complex manufacturing. Distributed and co-operative production. Customer driven production. Intelligent machines and robots. Intelligent manufacturing systems. Factory design, reconfigurability and integration. Virtual reality for manufacturing. Product life cycle management. Human factors in intelligent manufacturing systems.

**Contact:** Prof. Roberto Teti, e-mail: [tetiro@unina.it](mailto:tetiro@unina.it) website: [http://www.icme.unina.it/ICME\\_04.htm](http://www.icme.unina.it/ICME_04.htm)

### **7<sup>th</sup> International Conference on Monitoring and Automatic Supervision in Manufacturing, AC'04 19–21 August 2004, Zakopane Poland**

**Topics:** Introduction: general situation of automatic control in monitoring with the stress on automatic monitoring and supervision, nomenclature, classification. Sensors and basic processing of signals for monitoring in manufacturing. Strategy and algorithms of the design systems for the monitoring and supervision of manufacturing processes, accidents and breakdowns, product quality, machines and manufacturing equipment. Monitoring and supervision in a multi-stand manufacturing system as a whole. Monitoring and supervision through network and/or the Internet. Monitoring and supervision in manufacturing processes: Turning, Milling, Drilling, Abrasive machining, EDM, ECM and Assembly.

**Contact:** M. Szafarczyk, [mzybura@ios.krakow.pl](mailto:mzybura@ios.krakow.pl)

**1<sup>st</sup> International Conference on New Forming Technology, ICNCT  
6-9 September 2004, Harbin China**

**Topics:** Micro-forming; Incremental forming; Laser forming; Thixo-forming; Reconfigurable die forming; Hydroforming; Special jointing; Special casting; Forming of ceramics and composites; Other new processes and materials. **Contact:** Z. R. Wang. E-mail: [hithe@hit.edu.cn](mailto:hithe@hit.edu.cn).  
website [1st International Conference on New Forming Technology \(ICNFT\)](#),

**2nd International Seminar in Digital Enterprise Technology,  
13-15 September 2004, Seattle, USA**

**CAPE – Computer Aided Production Engineering  
16-17 September 2004 Glasgow, UK**

**International Conference on High Performance Cutting (HPC),  
19-20 October 2004 Aachen, Germany**

**2nd International Symposium on Nanomanufacturing (ISNM 2004)  
3-7 November 2004, KAIST, Daejeon, Korea**

Nanomanufacturing is expected to be high-volume, high-rate, integrated assembly of nano elements into commercial products. For the breakthrough in manufacturability of new nanoscale materials, components, devices and systems, innovative and fundamental researches in the science and technology are needed. The goal of the symposium is to address the transition from current developments in fundamental innovative researches in laboratories into commercial products in industries floors and to serve as a forum for industries and academia to interact and collaborate.

**Information:** [2nd International Symposium on Nanomanufacturing](#) ,

---

## **2005**

**9<sup>th</sup> CIRP International Seminar on Computer Aided Tolerancing  
11-12 April 2005, Arizona State University, USA**

**Topics:** Tolerance and functionality; Tolerance specification; Tolerance analysis; Task-specific uncertainty in metrology; Specification and correlation uncertainty in design; Uncertainty metrics for design and verification; Tolerance synthesis; Tolerancing for flexible parts; Tolerance representation; Statistical tolerancing; Assembly modeling and analysis; Computational metrology, verification; Geometric quality control; Tolerancing and life cycle Issues; Tolerancing standards; Industrial applications and CAT systems.

**Information:** [9th CIRP International Seminar on Computer Aided Tolerancing](#),

**12th International CIRP Life Cycle Engineering Seminar**  
April 2005, Grenoble, France

**38<sup>th</sup> CIRP Manufacturing Systems Seminar**  
16-18 May 2005 Florianopolis, Brazil  
Information: [38th CIRP Manufacturing Systems Seminar](#)

**3rd International Working Conference Total Quality Management**  
23-26 May 2005, Belgrade, Serbia & Montenegro

**3rd Reconfigurable Manufacturing Conference**  
May 2005, Ann Arbor, USA

**2005 CIRP Design Seminar, New Innovation in Engineering Design**  
May 2005, Shanghai, China  
Contact: S. Lu

**8th CIRP International Workshop on Modeling in Machining  
Operations**  
May 2005, Chemnitz, Germany

---

## **2006**

**13th International CIRP Life Cycle Engineering Seminar**  
Leuven, Belgium

---

## **2007**

**14th International CIRP Life Cycle Engineering Seminar**  
Tokyo, Japan

**ISEM 15**  
May 2007



## 10. From the secretariat



Chantal Timar-Schubert

The Annals Volume 1 and 2 from 1991 to 2003 have now been downloaded on the Website. You will find them in two different places:

1. In the "CIRP Member Area". From the link "Publications", you will have direct access to the .pdf files of the papers, classified by years, Volumes, STCs, and pages.
2. In "Publications". From the link "Annals year by year", you will have access, for each year and each Volume, to the list of the Papers and Keynote Papers, with their Title, Authors, STC session, Keywords, Abstract and a direct link to each paper.

The Research Engine has been improved, including now a search in the Keynote Papers. A yearly subscription fee for non-members to get access to these "papers online" will be soon available.

In the CIRP Member Area, the 2004 Directory is regularly up-dated, and proposes active links to each member, just by clicking on the email address or the website address of the member. Still in the CIRP Member Area, for the Sponsored Conferences and Seminars, Guidelines to prepare a Report, Reviewing Procedure for Papers and the Flow Chart for Chairmen are available.

### **CIRP Dictionaries**

Available are the CIRP dictionaries: Vol. I -1 Metal Forming, Vol. I -2 Metal Forming.

Two new dictionaries will be published in May: Vol.II Material Removal and Vol. III Manufacturing Systems

These dictionaries can be ordered directly at the publisher: Springer Verlag, P.O.box 311340, D-10643 Berlin, Germany Fax: 49 30 827 87301, e-mail: [orders@springer.de](mailto:orders@springer.de)



and Agnès Chelet at the office

# 11. Miscellaneous

## New book received:

"An Interpretive Review of 20th Century U.S. Machining and Grinding Research" by **M. Eugene Merchant** as an e-monograph (146 pages), available as a free publication on the TechSolve website: <http://techsolve.org>, Home page, "products & services", "helpful to all who are teaching or doing research on manufacturing-related subjects. machining solutions". This book will be

**Contact:** [merchant@techsolve.org](mailto:merchant@techsolve.org)

## Vacancies/ Opportunities

### University of Wisconsin-Madison

The Department of Industrial Engineering at the University of Wisconsin-Madison invites applicants for a tenure-track faculty position in the area of *human-computer interaction* (interface design, web navigation, universal design and access, usability) or *manufacturing and production systems* (emphasis on manufacturing, supply chain management, quality systems) beginning August 2004. Candidates should have a distinguished academic record, exceptional potential for creative research, and a commitment to both undergraduate and graduate teaching.

**Contact:** Faculty Recruitment Group, Department of Industrial Engineering, 1513 University Avenue, Madison, WI 53706-1572 USA.

### The Technical University of Denmark

Is looking for an assistant or associate professor in the field of **micro/nano manufacturing**. The research program micro/nano manufacturing is both technology driven and product driven. The technology driven approach covers materials, processes and production systems related to the development and manufacture of products with one or more dimensions in the  $\mu\text{m}$ -range. The main focus is on metals and polymers and the associated production technologies. The product driven approach focuses on new product concepts and perspectives as guiding for the technology development and industrial applications. An integrated approach in development of micro products and micro manufacturing technologies is essential in order to realize the industrial potentials, which are linked to mass production principles and low cost.

The candidate should work together with the professor in micro/nano manufacturing and the group to build up expertise and conduct research in the following areas:

- Integrated micro product development with emphasis on manufacturing issues
- Process integration in micro manufacturing with focus on the micro injection moulding process chain
- Handling and assembly of micro products.

Applicants must be able to demonstrate qualifications and research results within one or more of the above fields. The position includes both research and teaching. Research includes fundamental and applied research in collaboration with industrial partners and organizations, and teaching includes supervision of M.Sc. and Ph.D. students as well as courses in micro/nano manufacturing.

**Contact:** Professor Leo Alting, Head of Department of Manufacturing Engineering and Management Technical University of Denmark