



**The International Academy for Production Engineering**

# **NEWSLETTER**

**N° 36 – October 2008**

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# From the President

Dear Colleagues,

I hope you have all recovered from the final banquet at the General Assembly, particularly the Beatles, and are ready to face the next year in CIRP. For those of you who couldn't attend, it was a great meeting and I hope to see you in Boston for an equally productive and enjoyable week.

As I said in my presentation to Council and my address at the final banquet, I believe that CIRP is in good health and is the best technical organization in the world for manufacturing technology. With that said, I would like to add that we need to encourage the best young people in the world to participate, make an aggressive effort to recruit first-class engineers from diverse backgrounds and developing countries, and to encourage the reporting of exciting work in process at our STC's. These activities will help ensure that we remain the world's leader in manufacturing research.



This next year will be an interesting one. We have three on-going experiments that we should watch closely. First we have the new journal, the first copy of which you have just received. Please read it carefully and contribute as needed to help it grow and prosper. Second we have our new Research Affiliates who will be joining us at our meetings to perform collaborative research. Please greet them with your usual warm hospitality and I am confident that they will add more vitality to our Academy. Lastly, we have the new tracks which give us the opportunity to collaborate more easily across STC's. Their success depends upon the active participation of all of you. Your feedback will be appreciated.

It should be an exciting time and I look forward to being your president. Hope to see you in Paris.

Robert J. Hocken

# 2008 General Pierre Nicolau Award

*Presidential address at the presentation of the General Pierre Nicolau Award  
at August 25 in Manchester*

In honour of General Nicolau, the International Academy for Production Engineering has instituted the General Pierre Nicolau Award. It is the highest distinction awarded by the International Academy for Production Engineering. The prize honours persons that have, in a very special way, initiated and been actively involved in developments within the area of production engineering. And this is particularly the case with the person we are going to honour today. It is with great pleasure that, in the name of the International Academy for Production Engineering, I can award this year's General Pierre Nicolau Award to



**Professor Dr.-Ing. Klaus Wucherer from Siemens AG**

It will not be possible to give a comprehensive overview on the career development of Professor Wucherer. Let me just address a few milestones.

Klaus Wucherer learned the engineering trade from the very beginning. By first taking evening courses, then attending a polytechnic, followed by courses at a University of Technology, he attained two engineering degrees – one in Electrical engineering and one in Mechanical engineering. He then went on to gain his engineering PhD. In addition to his professional activities within Siemens, Professor Wucherer was always in close contact to the scientific community. In several research projects, he worked very closely together with university institutes in Germany, Europe, the US and Asia.

In 1970, Klaus Wucherer became an employee at Siemens AG. Due to his profound knowledge in mechanical engineering and electrical engineering, he very quickly became the development director responsible for numerical control systems and industrial applications. Klaus Wucherer saw great opportunities for numerical control systems in the area of machine tools, handling technology and industrial applications, and initiated close partnerships with industry and universities in these areas. The entire area of drive technology was responsibly designed and developed by Klaus Wucherer. Following a longer period abroad in Brazil, he became President

of the Automation and Drive Group of Siemens AG in 1998. Professor Dr.-Ing. Klaus Wucherer was a member of the board at Siemens AG until April 2007.

The engineering areas which Professor Wucherer competently represented encompass Computer Aided Design, Computer Numerical Control, factory automation, electric and hybrid drives, systems engineering, and many others. All of these areas are closely related to the core business of the Academy. Furthermore, Professor Wucherer has a very pronounced social competence when it comes to motivating teams and managing people in a goal-oriented way. It has always been and still is a pleasure to work together with him.

It is thus a particularly great pleasure to award this year's General Nicolau Award to Professor Dr.-Ing. E.h. Klaus Wucherer.

Our Congratulations!

# 2008 Taylor Medal

*Presidential address at the presentation of the Taylor Medal at August 25 in Manchester*

The Taylor Medal is awarded to young researchers of outstanding merit who are authors of original scientific research work on topics falling within the field of CIRP. It is with great pleasure that I can present this medal today to:



**Dr. Kazutoshi Katahira**

Mr. Katahira is receiving this great merit for his paper on the topic of

## **Microscopic grinding effects in the fabrication of ultra fine micro tools.**

In his work, Mr. Katahira describes a grinding system used to reliably produce ultra fine micro tools that exhibit various required geometries. Mr. Katahira describes the production of cylindrical tools with a tip diameter of less than one micrometer. Furthermore the paper presents basic analyses of the obtained surface employing advanced high resolution technologies, such as SEM, nano-indentation and XPS. Beside of basic understanding of fundamental interactions with his work, Mr. Katahira is also laying an important foundation for the future ability to produce diffractive structures on feature-rich optical systems.

Mr. Katahira received a Masters Degree from the University of Ibaraki. He worked as a post-doctoral researcher at the Institute of Physical and Chemical Research (RIKEN). He was a visiting researcher at Keio University and at the Fraunhofer Institute for Production Technology in Aachen. Currently, Mr. Katahira is working as a Senior Scientist at the Riken Institute.

It is always a special pleasure to our Academy to present awards to young scientists and to accompany them in this way along their scientific career paths. Dear Dr. Katahira, we wish you all the best for the future and are pleased to be able to present you today with the Taylor Medal in recognition of your work.

Congratulations!

# The Taylor Medal selection procedure

The "F.W. Taylor Medal of CIRP" is an award conferred upon younger research workers of outstanding merit who author original scientific research papers on topics falling within the fields of CIRP. Looking at the directory you will find the awardees among the great names in our Academy.

At the last General Assembly the selection process has been revised in order to get the best candidates in view. Therefore the Taylor Medal Selection Committee (TMSC) chaired by professor Kimura will play a more active role in future.

On the Certificates for Sponsored Papers the sponsor has to indicate if, according to his opinion, the first author is a candidate for Taylor Medal. A list of such candidates is given to the TMSC chairman. Additionally, after the Editorial board meeting in January the TMSC chairman will meet the chairman of the Editorial board to see if there are potential candidates between the high ranked papers. Based on both results extra attention can be paid to the paper presentations of the potentials in August.

Following the regulations, a candidate for the award must be proposed by a Fellow who has to send to the Secretariat, before October 1st the nomination but it is preferable that the proposer gives prior notice about his/her intention to the TMSC chairman before the August meeting where the paper will be presented.

The Chairman of the TMSC submits the nomination related to each candidate to three expert assessors. The Chairman of the TMSC is responsible for choosing the expert assessors which are chosen in coordination with the Chairman of the STC concerned.

Their reports, together with the proposer's nomination will be reviewed by the Taylor Medal Selection Committee at its January meeting in Paris. The TMSC will recommend to Council the candidate it selects following this meeting.

After the approval by the Council the successful candidate is to be informed of their selection and is to be invited to attend the following General Assembly to receive the Award. With this new procedure the Award will be received one year earlier than with the old procedure.

# A year in retrospect

Dear Colleagues,

Let me do a little retrospect on a most exciting and challenging year from August 2007 till August 2008.

About one month has past since we met in Manchester at the 58<sup>th</sup> general assembly. We had a very good conference, good paper sessions and also time to informally get together with colleagues to chat and to socialize. We remember University Place, Manchester's new congress centre. University Place on Oxford Road at the heart of the University of Manchester campus. We have manifold been given the opportunity to hear about the history of this region, in particular the history of engineering and technology. And we know that Manchester has played an important role in the development of technology and engineering, not only in England but across the whole world. The University of Manchester Institute of Science and Technology, UMIST, as many of us still know it, was founded in 1824. It specialized in engineering sciences and was the main hub for research and development. The motto of UMIST was



“Sincere et Labore” (knowledge and work).

It is a motto which still befits the university today and which could also serve as a motto for our Academy, in particular it was a wonderful motto for this year's general assembly. The International Academy for Production Engineering unites research and industry from the area of production engineering. It is highly understandable then that it is always a highlight for engineers to visit Great Britain, and in particular Manchester.

We have had a lovely time in Manchester, in the city and its surroundings. We have seen a lot, learned a lot, and we have enjoyed very warm and pleasant hospitality again and again. We have got to know the city of Manchester, experiencing its culture, sport and technology. We've got to know the people on the streets and in the shops, in the country and in one encounter or another. We all know that lengthy preparations were involved leading up to it, many concepts and questions, cancellations and new arrangements. And of course the question as to whether everything would work out well was ever present; action plans for “what-happens-if”-scenarios were in place. The UK Organizing Committee has done a wonderful job, all above Sri Hinduja and his wife Maya.

I would like to sincerely thank the UK Organization Committee and all those who offered their assistance in preparing, accompanying and carrying out this General Assembly. You were a great team.

In previous newsletters many strategic and knowledge based issues were addressed. The CMAG activities did not get the attention they deserve. I will highlight a few aspects.

## CMAG, Corporate Members Advisory Group

The industry representatives play a very special role at our Academy. There are only few academies in which industry representatives are admitted. CIRP is the first academy which, at its founding, consciously envisaged uniting research and industry, even among its members. This was a vision which was then implemented step-by-step. For production engineering this is of enormous importance. The science of production engineering is not a fundamental science in the strict sense. We work on issues with the aim of rapidly finding a practical application. To achieve this, we are constantly reliant on industry. The planning horizon in production engineering is considerably shorter than in classic fundamental sciences. At the same time, we always need people from industry to talk with us, to let us know which market requirements should flow into the sciences, which issues the research institutes should be dealing with, as well as what industry has already undertaken and what industry can do better than independent research labs.

To intensify the collaboration with CMAG members we have circulated a questionnaire to learn about what items of our agendas are well received by the CMAG members and what expectations have not been fulfilled yet. About 150 letters/emails were sent out. The return rate was about 25%, what is very good and must be considered to be above average. We got very solid feed back information. More than 75% of CMAG members are in general satisfied with the work output. But we got also very valuable input recommendations to be considered when discussing future developments of the academy. These are

- Fostering CIRP relationships with emerging countries.
- What is the position of CIRP with regard to environmental challenges and opportunities? A position statement would be very valuable.
- Are there possibilities to involve CMAG presentations in the opening session to address industrial needs?

All these issues were already brought to discussion in the council and first action items have been initiated. We will keep you in touch and let you know about any activities in these fields. But the survey also offered many possibilities for the CMAG members to intensify collaboration among its members and with research institutes: These are

- Definition of roadmaps
- Share experiences and trends
- New generation cutting tool materials
- 5 axis machines (high stiffness)
- Standardized methods for frequency analysis

In particular the development of a technology roadmap was put to highest importance.

I am convinced that close connection between industry and science is a really important success factor. We have triggered off many good activities which now have to be worked out in detail and to be turned into practical application. We are on a good way and it drives me to take this opportunity to thank John Barry from the company *Element Six* in particular for his high degree of personnel involvement and in making things happen.

I look forward to further developing this very good collaboration in future, and I would really like to encourage the whole membership of the academy to challenge and support the collaboration between CMAG and CIRP research institutes. Everybody might be appealed for naming the burning issues from his own point of view in order to find ways to tackle the questions side-by-side.



## **Thank you**

Finally I would like to thank all of you. It was a great pleasure and also an honor to be able to serve you as your President. You have all assisted in a wonderful way and you have furthered the work of our Academy. Sincere thanks to you all.

Thank you to my colleagues on the board, on the council and the liaison committee. Let me in place of all colleagues in particular mention Didier Dumur, Johan Meijer and Laszlo Monostori. These colleagues in general do not appear in the spotlight, but I assure you, they work most effectively and with highest commitment to the academy, but discreetly. They are doing an extraordinary great service for the academy.

A special thank goes to the President, Bob Hocken, the Vice-President, Gerald Byrne and the Vice-President-Elect Fred van Houten. How busy business was, how challenging discussions were, we always kept the culture of CIRP. The real assets are creating a common understanding, a corporate identity to the academy and a platform for discussion to argue and exchange findings on production engineering. We should not take this as a given, we have continuously to work on it and carefully keep an eye on these values.

And because everything has gone so well, I must not forget to offer a special thanks to the administrative office in Paris. Chantal und Agnes are always there; they keep their eye on everything. You can be certain that they protect everybody from falling too deep. They are always there offering support. It is enormously reassuring to know that someone who is highly competent is watching over all procedures. This should be a reassurance to all future Presidents and provide motivation to make courageous decisions.

We were a very good team and I look forward to continue supporting you with words and deeds in order to bring about one thing or another in future. I would be more than happy to do this.

Prof. Fritz Klocke, past president of CIRP –

# PowerPoint Presentations on the web

The question came from the CMAG meeting:

*“Can we get access to the PowerPoint slides of the presentation? When we will show latest results in our company than often it happens that the slides used at the oral presentation contains more and/or later information than in the printed Annals”.*

In January it was agreed already to put the slides on the web but it worked out that it was not possible to have a link to the papers itself in ScienceDirect. Now it has been decided to put them on CIRPnet. There you will find a page showing the abstracts of the Annals (Publications/CIRP Annals/Annals Year by Year. This page contains all the abstracts (Vol 1 and Vol 2).

To proper identify the presentations, especially afterwards on a printout, the first slide (title page) **should contain:**

- Logo and affiliation of CIRP
- Details about the conference (Name, place, date)
- Title of the paper (with e-link to Science Direct)
- Authors (all)
- Presenting author (with link to e-mail address)

**The next slides may contain:**

CIRP logo + authors institute's logo (except for a keynote paper, which is a combined STC effort). An example will be places on the web site (Instruction to Authors/Oral Presentations).

Presentations will be stored in a compact .pdf format. Authors will be asked (at the paper submission form) to agree with publication of their slides on the web. They have the right to refuse or may remove “confidential” slides. This process will start with the 2009 Annals.

# About Keywords

The use of keywords in the abstract of papers is fundamental for the documentation of papers and articles in the international scientific world. The CIRP community has always been aware of this requirement and, to this aim, the working group on UNIFICATION has prepared and continuously updated CIRP UNIFIED KEYWORD LIST, which is used by all the authors of papers in the CIRP Annals and in any other publication under the CIRP heading. All papers are identified by three keywords:

- The first keyword identifies the general subject of the paper
- The two following keywords give details about particular aspects of the paper.

Because the keywords represent the dynamic working area of the CIRP, authors may use one keyword free, taking into account new emerging areas. The free keyword should always be the last one.

CIRP keeps record about the use of keywords. When a keyword is not or rarely used in the past 10 years it is skipped from the list. At the other hand free keywords showing up more often than incidental are added to the list.

Every year a top 10 in of the used of keywords is drawn up. For 2008 we got:

***1.Surface, 2.Grinding, 3.Modelling, 4.Simulation, 5.Cutting, 6.Design, 7.Product, 8.Microstructure, 9.Production, 10.Tool.***

The keywords ***Design and Grinding*** appear in the top 10 for five or more years.

# From the secretariat

## The website

- A new website has been created: the CIRP Family Website (<http://family.cirp.net>) It is dedicated to the wives and husbands of CIRP Members (as well as to the Members themselves) who wish to talk together in an informal way. The aim is to consolidate the family spirit of CIRP by keeping in touch all over the year through different possible channels of communication: Forums, Chats, private messages and emails. This new site might also be useful for some private forums or chats inside working-groups, or among some selected users. You can ask the CIRP Secretariat for any request. A link to this new website is available in the CIRP site Main Menu through the section “Links”.
- A new Forum dedicated to the Research Affiliates has also been set up on the CIRP Website. We remind you that a Forum dedicated to Corporate members and another one for general discussions or information are already available.
- New sections have been set up in the Main Menu to get direct access to the new Research Tracks, STCs, Collaborative Working-Groups, the January Meetings and the August General Assembly.
- In the section General Information, through the link History/CIRP Members commemorations, you will find already some commemorations from past members. CIRP Members are welcome to forward other commemorations to the Secretariat.

With Kind Regards,  
Chantal

# CIRP Annals in the mirror of the Journal Citation Reports

Independently of whether we find it appropriate, or not, researchers and research laboratories are more and more frequently measured by the so-called cumulative impact factors which, we must point out, characterise the journals, and not the given persons concerned or their publications. (The impact factor which is associated with a publication is calculated through the citations to the papers published in the given journal in the preceding two years, i.e., it has no or very indirect relation to the scientific-technical content of the paper in question.)

Independently of the above issues, CIRP, as the leading Academy of our field, has profound interest in the way how the outside world values its flagship publication forum, the CIRP Annals.

In the coming space I would like to summarise some important information on how Thomson Scientific measures the journals. The information is based on the 2007 Journal Citation Reports (JCR) of Thomson. The most frequently used parameters are: (<http://scientific.thomson.com/isi/> )

- Journal impact factor,
- Aggregate impact factor,
- Immediacy index,
- Journal cited half-life,
- Aggregate cited half-life,
- Journal citing half-life,
- Aggregate citing half-life,
- Cited journal graph,
- Citing journal graph,

## Data related to the CIRP Annals

Disregarding the fact that – according to our viewpoint, which has been confirmed by Elsevier in the meantime – Table 1 incorporates some important data which are appropriate for illustrating the method of how the journal impact factor is computed.

Year	Total cites	Cites in year n to articles published in year n-1	Cites in year n to articles published in year n-2	No of articles published in year n-1	No of articles published in year n-2	Impact factor	Immediacy index	Articles	Cited half-life
2003	2375	116	112	130	104	<b>0.974</b>	0.040	125	10
2004	2752	108	140	125	130	<b>0.973</b>	0.038	133	>10
2005	2348	100	130	133	125	<b>0.891</b>	0.037	136	>10
2006	3066	131	135	136	133	<b>0.989</b>	0.046	153	>10
2007	2690	80	145	153	136	<b>0.779</b>	0.036	138	>10

Table 1: Official JCR data related to the Annals

The impact factor of 2007, for example, is the result of the following computation:

Number of cites in 2007 to articles published in 2006	=	80
Number of cites in 2007 to articles published in 2005	=	145
<b>Sum</b>	<b>=</b>	<b>225</b>
Number of articles published in 2006	=	153
Number of articles published in 2005	=	136
<b>Sum</b>	<b>=</b>	<b>289</b>

The 2007 impact factor (cites to recent articles / number of recent articles)  $225 / 289 = \mathbf{0.779}$ .

Similarly,

The 2006 impact factor

$$266 / 269 = \mathbf{0.989}.$$

The 2005 impact factor

$$230 / 258 = \mathbf{0.891}.$$

The 2004 impact factor

$$248 / 255 = \mathbf{0.973}.$$

The 2003 impact factor

$$228 / 234 = \mathbf{0.974}.$$

As to the questionable 2007 impact factor, after the GA in Manchester, I received the following e-mail from Elsevier:

„Further to our meeting in Manchester our Academic Relations Department have reviewed your figures for the 2007 Impact Factor for Annals and have agreed that there may be a problem. As a result they will send your data on to the ISI for review/comment. If there is an error the impact factor should be corrected retrospectively either in October or next year.”

Independently of the defectiveness of the 2007 impact factor, it is of interest to examine at the official numbers of JCR, concerning the 2007 citation statistics related to the Annals (Table 2).

Number of times articles published in 2007 (in journals below) cited articles published in CIRP ANNALS (in years below).

Journals 1 - 20 (of 139) Page 1 of 7

Impact	Citing Journal	Cited Year											
		All Yrs	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	Rest
	<b>All Journals</b>	<b>2690</b>	<b>5</b>	<b>80</b>	<b>145</b>	<b>125</b>	<b>160</b>	<b>136</b>	<b>137</b>	<b>134</b>	<b>164</b>	<b>133</b>	<b>1471</b>
0.779	<a href="#">CIRP ANN-MANUF TECHN</a>	471	0	49	56	37	47	42	24	28	26	18	144
1.120	<a href="#">INT J MACH TOOL MANU</a>	307	0	3	12	15	16	7	13	17	16	10	198
0.378	<a href="#">INT J ADV MANUF TECH</a>	226	0	0	2	4	5	9	10	11	10	16	159
0.816	<a href="#">J MATER PROCESS TECH</a>	193	0	1	5	4	9	6	5	8	12	12	131
0.595	<a href="#">J MANUF SCI E-T ASME</a>	109	0	1	7	7	4	5	12	6	5	7	55
	KEY ENG MATER	108	0	6	5	9	8	8	5	4	4	9	50
0.203	<a href="#">P I MECH ENG B-J ENG</a>	87	0	0	4	3	5	3	2	6	6	4	54
	MATER SCI FORUM	74	0	0	0	2	4	3	7	6	4	4	44
	ALL OTHERS (74)	74	1	1	6	3	3	1	0	8	6	2	43
0.560	<a href="#">INT J PROD RES</a>	63	0	0	2	2	4	4	2	1	4	4	40
0.621	<a href="#">MACH SCI TECHNOL</a>	52	0	0	3	1	0	3	2	3	3	2	35
0.733	<a href="#">PRECIS ENG</a>	52	0	0	1	1	5	5	4	3	2	4	27
	AIP CONF P	47	0	6	9	3	5	2	5	2	2	2	11
	JSPE PUBL SER	43	0	0	3	2	4	3	4	1	2	1	23
	P SOC PHOTO-OPT INS	39	0	3	2	0	3	2	7	3	5	1	13
	ADV MAT RES	29	0	0	0	0	0	2	1	0	2	2	22
1.028	<a href="#">MATER DESIGN</a>	29	0	0	0	0	0	0	2	2	0	0	25
1.297	<a href="#">MEAS SCI TECHNOL</a>	26	0	0	1	3	1	2	3	1	7	0	8
1.930	<a href="#">J MICROMECH MICROENG</a>	24	0	0	0	0	0	0	1	2	1	3	17
1.457	<a href="#">MAT SCI ENG A-STRUCT</a>	24	0	1	0	1	2	1	2	1	2	1	13

Table 2: Data characterising which journals cite the Annals papers

Lessons from Table 2:

- In 2007 Annals papers received 2690 citations and 471 of them were made in the Annals papers published in 2007. I think these numbers are quite good, i.e., only about **17.5% of the citations are “internal”**, the rest comes from other sources.

- **A very large ratio of the citations refers to papers which were published 10 years ago or more** (1471 from 2690, i.e., nearly 55%). This is positive from the viewpoint that we publish long-lasting papers, but, on the other hand, the citations on papers published in the two preceding years really count.
- **Other journals react relatively slowly to our papers.** For example, the number of the citations made for Annals papers published in 2006 and 2005 are 80 and 145, respectively, and out of them 49 (61%) and 56 (38.6%) are “internal” citations. Because of the possible failures in the 2007 numbers, in the reality these numbers are **even worse**.

### Citation behaviours of the STCs

I have gone through all the papers published in 2007 and in 2006 in the Annals and investigated the citations made to Annals papers published before. The results are illustrated in Tables 3 and 4, respectively.

Citations in Vol 1 Annals papers in 2007 to former Annals papers													Cit.		Cit.		Distribution of citations (%)				
STC	Papers in 2007	Cited Annals papers										2005 & 2006	1998-2004	Cit. / papers	2006 / papers	2004 / papers	rest / papers	2005 & 2006	1998-2004	rest	
A	13	1	5	4	6	1	3	5	6	3	3	37	6	28	2,85	0,46	2,15	0,23	16,22	75,68	8,11
C	20	9	9	7	5	4	3	5	3	1	34	80	18	28	4,00	0,90	1,40	1,70	22,50	35,00	42,50
Dn	12	2	3	1	2	7	3	3	1	3	11	36	5	20	3,00	0,42	1,67	0,92	13,89	55,56	30,56
E	15	8	9	1	6	4	3	3	2	2	11	49	17	21	3,27	1,13	1,40	0,73	34,69	42,86	22,45
F	18	8	6		4	2	2	2		2	9	35	14	12	1,94	0,78	0,67	0,50	40,00	34,29	25,71
G	9	5	6	2	4	2	3	2	3	2	27	56	11	18	6,22	1,22	2,00	3,00	19,64	32,14	48,21
M	12	1	4	10	9	1	2	3	1	2	11	44	5	28	3,67	0,42	2,33	0,92	11,36	63,64	25,00
O	18	12	12	7	7	13	4	4	9	2	13	83	24	46	4,61	1,33	2,56	0,72	28,92	55,42	15,66
P	11	4	2	3	2	2	1				12	27	6	9	2,45	0,55	0,82	1,09	22,22	33,33	44,44
S	10	5	3	1	2	6			1	1	2	26	8	13	2,60	0,80	1,30	0,50	30,77	50,00	19,23
Sum	138	55	59	36	47	42	24	28	26	20	136	473	114	223	3,43	0,83	1,62	0,99	24,10	47,15	28,75
Citations in Vol 2 Annals papers in 2007 to former Annals papers													Cit.		Cit.		Distribution of citations (%)				
STC	Papers in 2007	Cited Annals papers										2005 & 2006	1998-2004	Cit. / papers	2006 / papers	2004 / papers	rest / papers	2005 & 2006	1998-2004	rest	
A	1	5	3	2	3	4	4	3	3	3	12	42	8	22	3,23	0,62	1,69	12,00	19,05	52,38	28,57
C	1	1	4	2	1	2	3	2	2	1	25	43	5	13	2,15	0,25	0,65	25,00	11,63	30,23	58,14
Dn	1	2	6	5	4	2	1	1	3	4	26	54	8	20	4,50	0,67	1,67	26,00	14,81	37,04	48,15
E	1	2			5		1				4	13	2	7	0,87	0,13	0,47	4,00	15,38	53,85	30,77
F	1		4					1			10	15	4	1	0,83	0,22	0,06	10,00	26,67	6,67	66,67
G	1					1	1		4		21	27	0	6	3,00	0,00	0,67	21,00	0,00	22,22	77,78
M	1	5	8	5	5	2	3	2	2	1	12	45	13	20	3,75	1,08	1,67	12,00	28,89	44,44	26,67
O	1	5		1	1	1	1		1		1	10	5	4	0,56	0,28	0,22	1,00	50,00	40,00	10,00
P	1	5	4	4	4	4	2	1			12	36	9	15	3,27	0,82	1,36	12,00	25,00	41,67	33,33
S	1	3	1	3	1				3	1	3	15	4	8	1,50	0,40	0,80	3,00	26,67	53,33	20,00
Sum	10	28	30	22	23	16	16	13	16	10	126	300	58	116	2,17	0,42	0,84	12,60	19,33	38,67	42,00
Citations in Vol 1 and Vol 2 Annals papers in 2007 to former Annals papers													Cit.		Cit.		Distribution of citations (%)				
STC	Papers in 2007	Cited Annals papers										2005 & 2006	1998-2004	Cit. / papers	2006 / papers	2004 / papers	rest / papers	2005 & 2006	1998-2004	rest	
A	14	6	8	6	9	5	7	8	9	6	15	79	14	50	6,08	1,08	3,85	1,07	17,72	63,29	18,99
C	21	10	13	9	6	6	6	7	5	2	59	123	23	41	6,15	1,15	2,05	2,81	18,70	33,33	47,97
Dn	13	4	9	6	6	9	4	4	4	7	37	90	13	40	7,50	1,08	3,33	2,85	14,44	44,44	41,11
E	16	10	9	1	11	4	4	3	2	3	15	62	19	28	4,13	1,27	1,87	0,94	30,65	45,16	24,19
F	19	8	10	0	4	2	2	3	0	2	19	50	18	13	2,78	1,00	0,72	1,00	36,00	26,00	38,00
G	10	5	6	2	4	3	4	2	7	2	48	83	11	24	9,22	1,22	2,67	4,80	13,25	28,92	57,83
M	13	6	12	15	14	3	5	5	3	3	23	89	18	48	7,42	1,50	4,00	1,77	20,22	53,93	25,84
O	19	17	12	8	7	14	5	4	10	2	14	93	29	50	5,17	1,61	2,78	0,74	31,18	53,76	15,05
P	12	9	6	7	6	6	3	1	0	1	24	63	15	24	5,73	1,36	2,18	2,00	23,81	38,10	38,10
S	11	8	4	4	3	6	0	4	2	2	8	41	12	21	4,10	1,20	2,10	0,73	29,27	51,22	19,51
Sum	148	83	89	58	70	58	40	41	42	30	262	773	172	339	5,60	1,25	2,46	1,77	22,25	43,86	33,89

Table 3: Own data showing the citation characteristics of papers published in the Annals in 2007 (number of citations to former CIRP Annals papers)

Citations in Vol 1 Annals papers in 2006 to former Annals papers													Cit.	Cit.	Distribution of citations (%)						
STC	Papers in 2006	Cited Annals papers										Cit. / papers	2004 & 2005 / papers	1997-2003 / papers	rest / papers	2004 & 2005	1997-2003	rest			
A	10	2	5	1	3	1	3	2	2	1	7	27	7	13	2,08	0,54	1,00	0,70	25,93	48,15	25,93
C	17	5	1	6	6	3	5	5	2	2	26	61	6	29	3,05	0,30	1,45	1,53	9,84	47,54	42,62
Dn	10	5	3	4	2	3	3	4	3	1	4	32	8	20	2,67	0,67	1,67	0,40	25,00	62,50	12,50
E	14	5	3	4	5	2	5	4	5	2	5	40	8	27	2,67	0,53	1,80	0,36	20,00	67,50	12,50
F	19	11	6	9	2	1					14	46	17	15	2,56	0,94	0,83	0,74	36,96	32,61	30,43
G	12	1	8	1	5	4	3	2	3	4	14	45	9	22	5,00	1,00	2,44	1,17	20,00	48,89	31,11
M	17	11	6	9	1	7	12	1	3	2	16	68	17	35	5,67	1,42	2,92	0,94	25,00	51,47	23,53
O	22	18	10	5	10	5	3	2	1	4	9	67	28	30	3,72	1,56	1,67	0,41	41,79	44,78	13,43
P	11	4	4	1		3	2	4			1	29	8	11	2,64	0,73	1,00	0,91	27,59	37,93	34,48
S	11	4	7	5	6	4	6	1	2	2	15	52	11	26	5,20	1,10	2,60	1,36	21,15	50,00	28,85
Sum	143	66	53	45	40	33	42	28	21	19	120	467	119	228	3,38	0,86	1,65	0,84	25,48	48,82	25,70
Citations in Vol 2 Annals papers in 2006 to former Annals papers													Cit.	Cit.	Distribution of citations (%)						
STC	Papers in 2006	Cited Annals papers										Cit. / papers	2004 & 2005 / papers	1997-2003 / papers	rest / papers	2004 & 2005	1997-2003	rest			
A	1	2	1	4	4	2	2				1	16	3	12	1,23	0,23	0,92	1,00	18,75	75,00	6,25
C	1	1	1	4	3	1	4	4	1	1	39	59	2	18	2,95	0,10	0,90	39,00	3,39	30,51	66,10
Dn	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0,00	0,00	0,00	0,00	#####	#####	#####
E	1	6	3	6	4	2	4	1	2	2	10	40	9	21	2,67	0,60	1,40	10,00	22,50	52,50	25,00
F	1	1	0	2	1						1	5	1	3	0,28	0,06	0,17	1,00	20,00	60,00	20,00
G	1	1	1	3	2	1	4	3	2	2	31	50	2	17	5,56	0,22	1,89	31,00	4,00	34,00	62,00
M	1	3	3		3	2	3	1		1	7	23	6	10	1,92	0,50	0,83	7,00	26,09	43,48	30,43
O	1	6	7	7	4	5	3	2	2	5	19	60	13	28	3,33	0,72	1,56	19,00	21,67	46,67	31,67
P	1	3	2	2	2	4	4	2	1	2	2	24	5	17	2,18	0,45	1,55	2,00	20,83	70,83	8,33
S	1	1		1	2			1		1	2	8	1	5	0,80	0,10	0,50	2,00	12,50	62,50	25,00
Sum	10	24	18	29	25	17	24	14	8	14	112	285	42	131	2,07	0,30	0,95	11,20	14,74	45,96	39,30
Citations in Vol 1 and Vol.2 Annals papers in 2006 to former Annals papers													Cit.	Cit.	Distribution of citations (%)						
STC	Papers in 2006	Cited Annals papers										Cit. / papers	2004 & 2005 / papers	1997-2003 / papers	rest / papers	2004 & 2005	1997-2003	rest			
A	11	4	6	5	7	3	5	2	2	1	8	43	10	25	3,31	0,77	1,92	0,73	23,26	58,14	18,60
C	18	6	2	10	9	4	9	9	3	3	65	120	8	47	6,00	0,40	2,35	3,61	6,67	39,17	54,17
Dn	11	5	3	4	2	3	3	4	3	1	4	32	8	20	2,67	0,67	1,67	0,36	25,00	62,50	12,50
E	15	11	6	10	9	4	9	5	7	4	15	80	17	48	5,33	1,13	3,20	1,00	21,25	60,00	18,75
F	20	12	6	11	3	1	0	3	0	0	15	51	18	18	2,83	1,00	1,00	0,75	35,29	35,29	29,41
G	13	2	9	4	7	5	7	5	5	6	45	95	11	39	10,56	1,22	4,33	3,46	11,58	41,05	47,37
M	18	14	9	9	4	9	15	2	3	3	23	91	23	45	7,58	1,92	3,75	1,28	25,27	49,45	25,27
O	23	24	17	12	14	10	6	4	3	9	28	127	41	58	7,06	2,28	3,22	1,22	32,28	45,67	22,05
P	12	7	6	3	2	7	6	6	1	3	12	53	13	28	4,82	1,18	2,55	1,00	24,53	52,83	22,64
S	12	5	7	6	8	4	6	2	2	3	17	60	12	31	6,00	1,20	3,10	1,42	20,00	51,67	28,33
Sum	153	90	71	74	65	50	66	42	29	33	232	752	161	359	5,45	1,17	2,60	1,52	21,41	47,74	30,85

Table 4: Own data showing the citation characteristics of papers published in the Annals in 2006 (number of citations to former CIRP Annals papers)

The citation behaviours of the different STCs can be investigated through Tables 4 and 5. The average numbers of citations per papers, e.g., are indicated for every STCs. It can also be seen which STC refers to papers published in the two preceding years, and where the ratio of citations is high to papers published 10 years before, or more, etc.

It is clear that serious consequences cannot be drawn from these numbers, but I think there are some indications which are worth taking into account.

### Comparison with similar journals

Table 5 is a modified version of the table which can be gained from JCR and compares journals data belonging to the “Engineering, manufacturing” category (as a whole 38 journals).



Abbreviated Journal Title (linked to journal information)	ISSN	Total Cites	Impact Factor 2007	Impact Factor 2006	Change %	Immediacy Index	Articles	Cited Half-life	Rank
<a href="#">PROD OPER MANAG</a>	1059-1478	770	2,123	2,516	84,38	1.020	51	5,4	1
<a href="#">COMPOS PART A-APPL S</a>	1359-835X	3412	1,662	1,875	88,64	0.365	255	5,4	2
<a href="#">CONCURRENT ENG-RES A</a>	1063-293X	233	1,482	0,569	260,46	0.120	25	5,6	3
<a href="#">INT J MACH TOOL MANU</a>	0890-6955	3014	1,12	1,184	94,59	0.180	245	6,0	4
<a href="#">DESIGN STUD</a>	0142-694X	541	1,017			0.133	30	8,1	5
<a href="#">IEEE T ADV PACKAGING</a>	1521-3323	760	1,011	1,443	70,06	0.146	96	4,7	6
<a href="#">J SCHEDULING</a>	1094-6136	331	1	0,811	123,30	0.065	31	4,9	7
<a href="#">INT J PROD ECON</a>	0925-5273	2601	0,995	1,183	84,11	0.066	212	6,2	8
<a href="#">CIRP ANN-MANUF TECHN</a>	<b>0007-8506</b>	<b>2990</b>	<b>0,979</b>	<b>0,989</b>	<b>98,99</b>	<b>0.036</b>	<b>148</b>	<b>&gt;10.0</b>	<b>9</b>
<a href="#">PACKAG TECHNOL SCI</a>	0894-3214	309	0,923	0,552	167,21	0.056	36	5,8	10
<a href="#">IEEE-ASME T MECH</a>	1083-4435	1061	0,908	0,979	92,75	0.156	77	5,7	11
<a href="#">IEEE T ELECTRON PACK</a>	1521-334X	352	0,903	1	90,30	0.054	37	5,4	12
<a href="#">IEEE T COMPON PACK T</a>	1521-3331	1198	0,902	0,816	110,54	0.073	109	6,4	13
<a href="#">J MATER PROCESS TECH</a>	0924-0136	9027	0,816	0,615	132,68	0.109	870	5,9	14
<a href="#">ROBOT CIM-INT MANUF</a>	0736-5845	514	0,804	0,81	99,26	0.100	70	6,0	15
<a href="#">IEEE T SEMICONDUCT M</a>	0894-6507	883	0,765	0,785	97,45	0.062	65	7,5	16
<a href="#">PRECIS ENG</a>	0141-6359	783	0,733	0,829	88,42	0.128	47	9,3	17
<a href="#">SOLDER SURF MT TECH</a>	0954-0911	175	0,727	1,194	60,89	0.000	16		18
<a href="#">MACH SCI TECHNOL</a>	1091-0344	163	0,621	0,352	176,42	0.000	30	6,0	19
<a href="#">MATER MANUF PROCESS</a>	1042-6914	414	0,612	0,606	100,99	0.027	149	4,7	20
<a href="#">J MANUF SCI E-T ASME</a>	1087-1357	908	0,595	0,536	111,01	0.048	124	5,5	21
<a href="#">PROD PLAN CONTROL</a>	0953-7287	689	0,561	0,438	128,08	0.068	59	6,9	22
<a href="#">INT J PROD RES</a>	0020-7543	4281	0,56	0,799	70,09	0.047	278	9,0	23
<a href="#">RES ENG DES</a>	0934-9839	292	0,517	0,667	77,51	0.000	11	8,4	24
<a href="#">INT J FLEX MANUF SYS</a>	0920-6299	255	0,452	0,448	100,89	0.750	4	8,9	25
<a href="#">J COMPUT INF SCI ENG</a>	1530-9827	119	0,446	0,531	83,99	0.000	43	3,9	26
<a href="#">HUM FACTOR ERGON MAN</a>	1090-8471	136	0,42	0,245	171,43	0.000	32	5,5	27
<a href="#">J INTELL MANUF</a>	0956-5515	430	0,419	0,598	70,07	0.019	53	6,6	28
<a href="#">INT J ADV MANUF TECH</a>	0268-3768	1496	0,378	0,418	90,43	0.047	514	4,9	29
<a href="#">ASSEMBLY AUTOM</a>	0144-5154	122	0,368	0,307	119,87	0.054	37	4,9	30
<a href="#">INT J COMPUT INTEG M</a>	0951-192X	290	0,297	0,383	77,55	0.016	64	6,2	31
<a href="#">AI EDAM</a>	0890-0604	179	0,279	0,405	68,89	0.000	20	6,5	32
<a href="#">INT J CRASHWORTHINES</a>	1358-8265	141	0,22	0,216	101,85	0.032	62	4,3	33
<a href="#">P I MECH ENG B-J ENG</a>	0954-4054	522	0,203	0,386	52,59	0.006	159	5,5	34
<a href="#">JSME INT J C-MECH SY</a>	1344-7653	362	0,12	0,154	77,92		0	7,6	35
<a href="#">INT J IND ENG-THEORY</a>	1072-4761	115	0,114	0,101	112,87	0.000	41	5,3	36
<a href="#">MANUF ENG</a>	0361-0853	74	0,053	0,067	79,10	0.024	85		37
<a href="#">J MANUF SYST</a>	0278-6125	387	0,032	0,15	21,33			>10.0	38

Table 5: Data of journals belonging to the “Engineering, manufacturing” category according to JCR (CIRP Annals data are corrected) ranked by 2007 impact factors

Some possible measures are as follows:

- To make our knowledge of the nature of impact factors real.
- To analyse the citation behaviour of the different STCs
- To enhance the PR activities, number of subscribers, downloads, etc.
- To accelerate the publication process for Vol. 2, i.e., if we could publish Vol. 2 before the General Assembly, we would gain about half a year which is significant if we consider the relative long publication process with most of the journals. This way, more “immediate” citations could be achieved. However, Vol. 1 and Vol. 2 should not be published at the same time!
- To make better use of our contacts with SME, etc.

I am convinced that the Annals can move upwards in this Table, if appropriate measures are taken, partly indicated in this report. A fundamental question is how to increase the impact factor while keeping the high “cited half-life” parameter high, i.e., to write “long-lasting” papers with high impact factor (which is a short-term feature)?

I hope this report will contribute to this process.

László Monostori  
Chairman of the Editorial Committee  
CIRP Annals – Manufacturing Technology

# Meetings, Conferences, Seminars

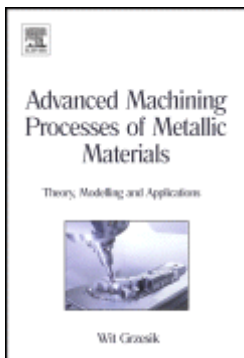
The CIRP and CIRP sponsored conferences are listed in chronological order. There is a hyperlink from the conference name to the website providing all further details.

<b>2008</b>	<b>Conference</b>	<b>Place</b>
8-10 October	<a href="#">The 7<sup>th</sup> International Meeting IDMME</a>	Beijing – China
22-24 October	<a href="#">5<sup>th</sup> International Conference on Digital Enterprise Technology - DET</a>	Nantes, France
22-23 October	<a href="#">2<sup>nd</sup> Intl Conf. On Innovative Cutting Processes And Smart Machining</a>	Cluny, France
27-29 October	<a href="#">CIMEC 2008</a>	Nantes, France
5-7 November	<a href="#">TRIZ Future' 08</a>	Enschede, Netherlands

<b>2009</b>	<b>Conference</b>	<b>Place</b>
16-19 March	<a href="#">XX Conference on Supervising and Diagnostics of Machining Systems</a>	Karpacz, Poland
26-27 March	<a href="#">11<sup>th</sup> CIRP International Conference on Computer Aided Tolerancing, CAT 2009</a>	Annecy, France
30-31 March	<a href="#">19<sup>th</sup> CIRP Design Conference</a>	Cranfield, UK
1-2 April	<a href="#">CIRP IPS2 Conference</a>	Cranfield, UK)
2-3 April	<a href="#">Intl Conference on Burrs-Analysis, Control and Removal</a>	Kaiserslautern, Germany
4-6 May	<a href="#">16<sup>th</sup> CIRP Life Cycle Engineering Conference</a>	Cairo, Egypt
7-8 May	<a href="#">12<sup>th</sup> CIRP Conference On Modeling Of Machining Operations</a>	San Sebastian, Spain
1-4 June	<a href="#">5<sup>th</sup> IWC TQM Conference</a>	Belgrade, Serbia
3-5 June	<a href="#">42<sup>nd</sup> CIRP Conference on Manufacturing Systems</a>	Grenoble, France
18-21 June	<a href="#">5<sup>th</sup> Intl Conf. on Design And Production of Dies/Moulds</a>	Kusadasi Aydin, Turkey
5 – 7 October	<a href="#">3<sup>rd</sup> CARV Conference</a>	Munich, Germany
6-10 October	<a href="#">VRAP'09 - International Conference on Advanced Research in Virtual &amp; Rapid Prototyping</a>	Portugal

<b>2010</b>	<b>Conference</b>	<b>Place</b>
3-5 February	<a href="#">COMA'10, International Conference on Competitive Manufacturing</a>	Stellenbosch, SouthAfrica
27-28 May	<a href="#">NAMCR 38</a>	Kingston, Canada
26-28 May	<a href="#">43<sup>rd</sup> CIRP Conference On Manufacturing Systems</a>	Vienna , Austria
June	<a href="#">2<sup>nd</sup> International Conference on Process Machine Interaction</a>	Vancouver, Canada
1- 4 October	<a href="#">6<sup>th</sup> International Conference "THE" Coatings and 3<sup>rd</sup> International Conference on Manufacturing Engineering - ICMEN</a>	Kallithea-Halkidiki, Greece
24-26 October	<a href="#">4<sup>th</sup> CIRP International Conference on High Performance Cutting,</a>	Nagaragawa, Japan

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