

IEEE Transactions on Automation Science and Engineering

AdCom Report

May 2006 – Orlando, Florida

Peter B. Luh, Editor-in-Chief

Ken Goldberg, Chair of T-ASE Advisory Board

<http://www.ieee.org/t-ase>

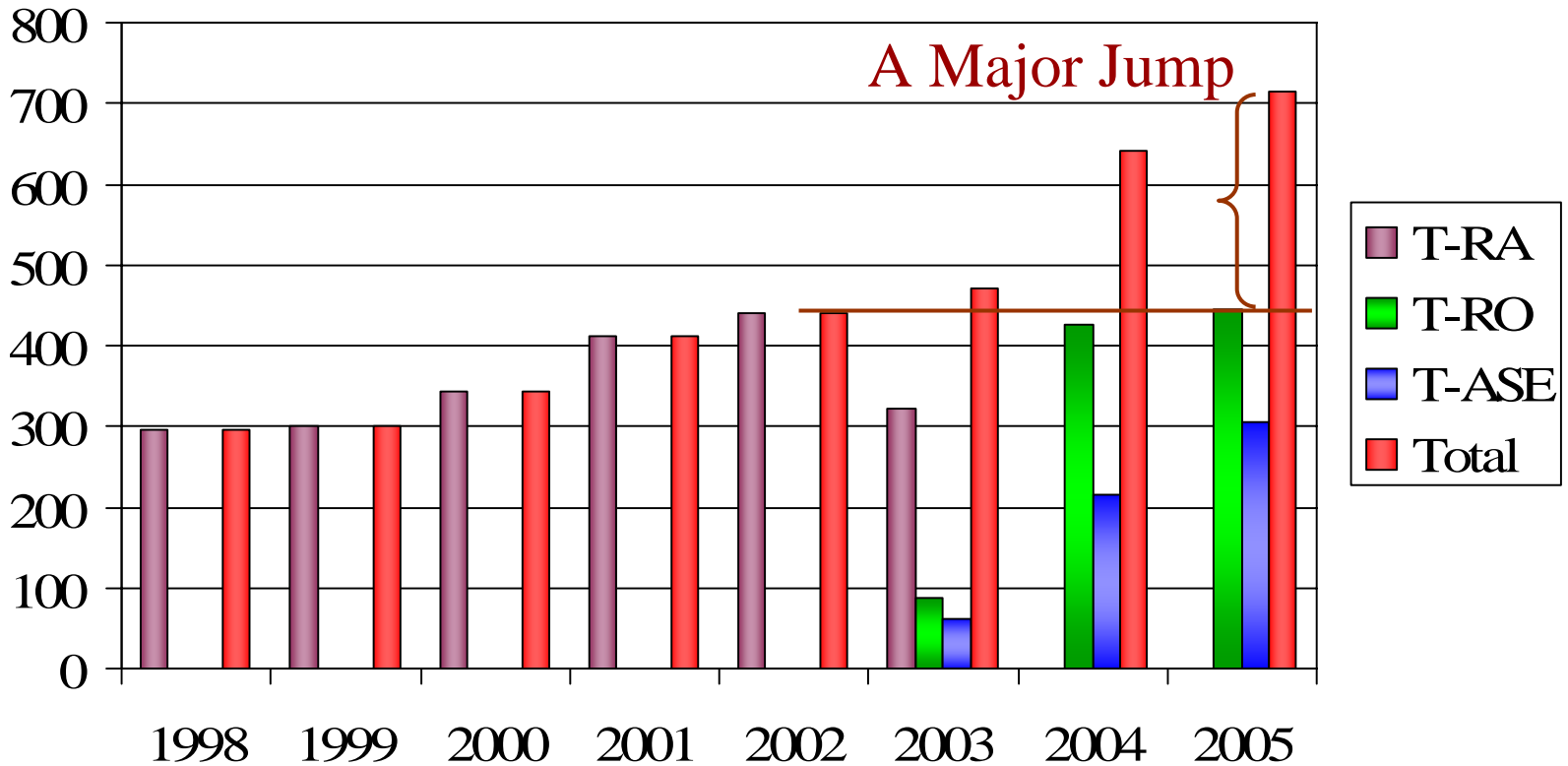
Rationale for T-ASE

- Automation is vital for the 21st century
 - No longer limited to factories
 - New needs and methods are emerging, e.g.,
Gene related R&D, high-speed book scanning, homeland security concerns, supply chains with RFID
- A critical element of RAS, broader than what you think!
- Automation lacked a flagship journal



- T-ASE was launched in 7/04 with full support of RAS officers and AdCom, and a broad view on automation
- **Special Issues/Sections**
 - Workholding and Fixturing, Oct. 04
 - Automation for the Life Sciences, April 06
 - Nano-scale Manipulation and Assembly, July 06
 - Distributed Sensing for Quality and Productivity Improvement, Oct. 06
 - Automation for the Home Environment, papers under review
 - eManufacturing in the Semiconductor Industry, due 7/1/06
 - Drug Delivery Automation, proposal just approved
- Accompanying conference IEEE CASE 05 and 06, complementary to ICRA

T-RA/T-ASE/T-RO Submissions



T-ASE overall acceptance rate of peer reviewed papers: 27.3%

- **Page Budget**

	2004	2005	2006	2007	
Page Budget	180	392	424	536	
Actual Pages	188	430	504		Exceeded the goal and with 100% on- time publication
Regular Paper	9	27	15		
Short Paper	5	12	1		

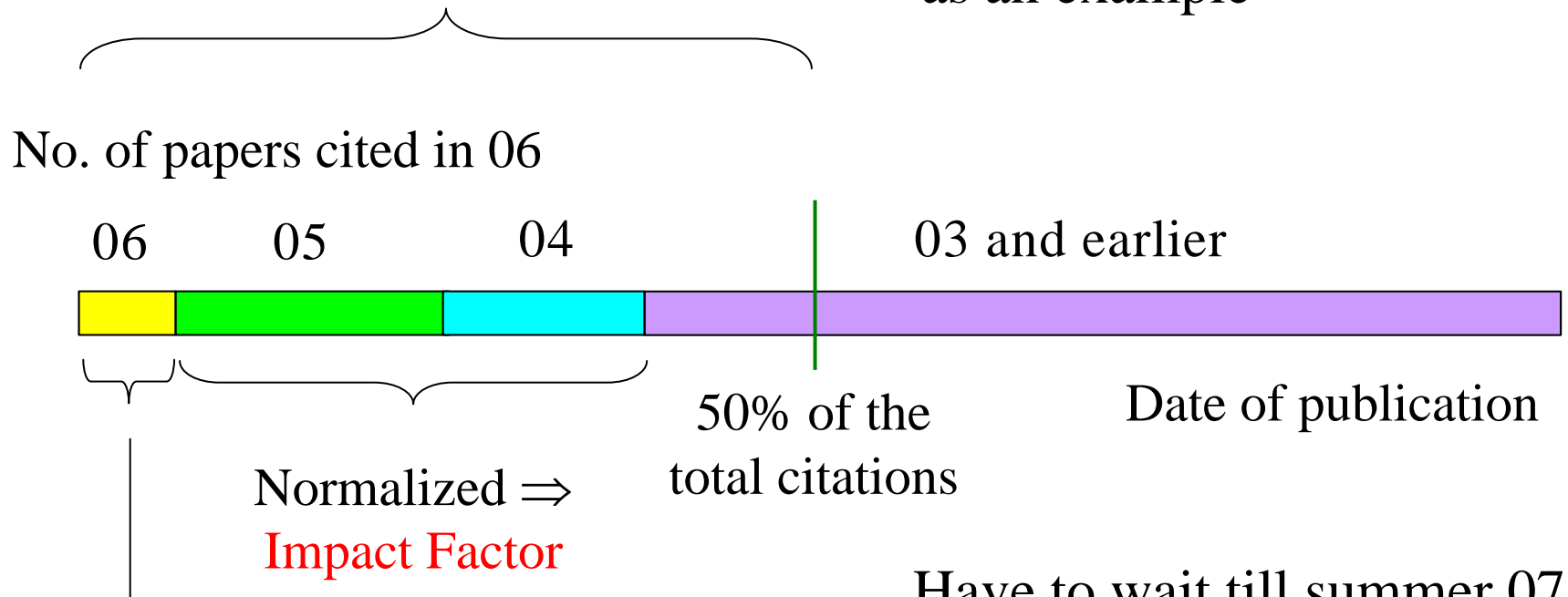
- **Review Statistics**

Year	5/05	7/05	5/06		
Rvw > 9 mos	5	4	0		Target: 90/90 – 90% of the paper should be completed within 90 days of submission Impact Factor?
Rvw 7-9 mos	7	8	2	0	
Rvw 4-6 mos	38	12	18	6	
Rvw 0-3 mos	63	65	43		
Total in Rvw	113	89	63		

Definition of the Impact Factor

No. of years \Rightarrow
Cited Half-Life

Using Impact Factor for 06
as an example



Normalized \Rightarrow
**Immediacy
Index**

Have to wait till summer 07

No. of IEEE Xplore downloads provides
a prelude, and is financially important

IEEEXPlore Downloads

T-ASE performs well

	05 views of 05 papers	05 views of 04 papers	04 views of 04 papers	Norm. 05 views of 05 papers	Norm. 05 views of 04 papers	Norm. 04 views of 04 papers
T-ASE	11662	4855	4984	299	270	277
T-RO	25388	10243	7407	195	228	165
T-CBB	8051	7155	4500	367	325	205
T-CST	33343	20481	27543	290	213	287
T-DSC	6752	7676	4776	241	404	251
T-DMR	7924	24727	16287	113	266	175
T-MEC	15146	17416	15552	180	252	225
T-MC	31294	18999	24625	614	543	704
T-NB	8336	8205	8146	245	200	199
T-NT	30305	16431	23506	283	231	331
T-WC	118324	96733	125554	364	371	481

- T-CBB: Computational Biology and Bioinformatics, IEEE/ACM Transactions on, 4 issues, first issue March 2004.
- T-DSC: Dependable and Secure Computing, IEEE Trans. on, 4 issues per year, first issue March 2004.
- T-DMR: Device Materials Reliability, IEEE Trans. on, 4 issues per year, first issue March 2001.
- T-MC: Mobile Computing, IEEE Trans. on, initially 4 issues now 6 issues per year, first issue January 2002.
- T-NB: NanoBioscience, IEEE Trans. on, 4 issues per year, first issue March 2002.
- T-NT: Nanotechnology, IEEE Trans. on, 6 issues per year, first issue March 2002.
- T-WC: Wireless Communication, IEEE Trans. on, initially 4 issues now 6 issues per year, first issue January 2002.

CONCLUDING REMARKS

- Two years old with excellent submissions, timeliness of review/publication, page counts, and Xplore downloads
- Passed IEEE TAB Periodical Review and Finance Committees \Rightarrow An assistant professor getting tenure!
- Our strength:
 - Broad vision on automation
 - Strong robotics background
 - Enthusiastic and capable Editorial/Advisory boards
- Marketing by MKPR under Ken Goldberg's leadership
- Forge the future of automation, and appreciate your efforts and support

