



**TÜBİTAK**

# **Use of Progress Reports in Post-Evaluation at TUBITAK**

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ACADEMIC RESEARCH FUNDING PROGRAMMES DIRECTORATE



**TÜBİTAK**

## About TUBITAK

- Academic Research Projects
- Evaluation Method

## Post evaluation

- Progress and Final Reports
- Contribution to Science and Technology
- Contribution to Career Development
- Public Interest and Media Coverage

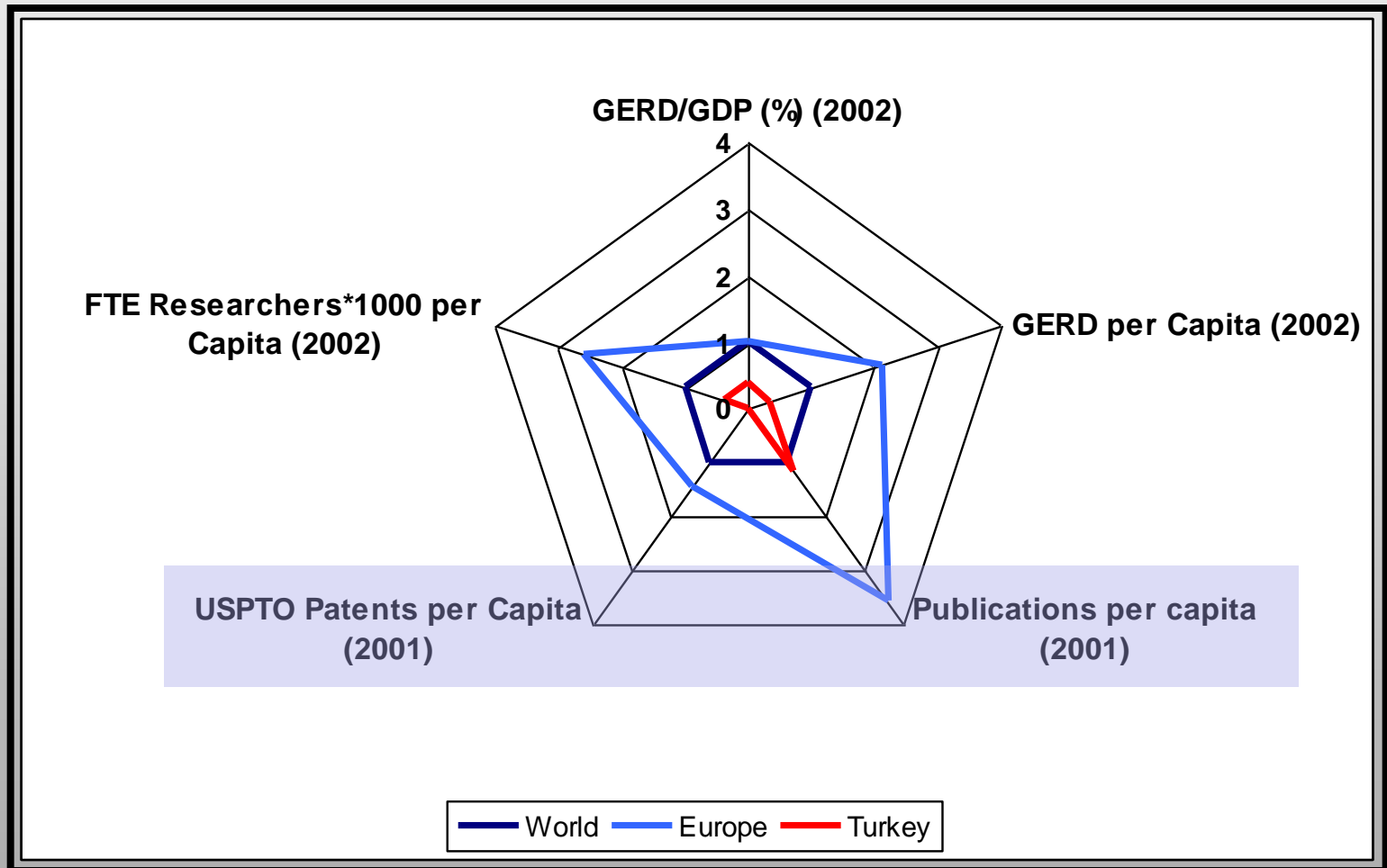
## The Scientific and Technological Research Council of Turkey

Established in 1963

Total Budget : ~ 600 million Euros / year

- Science, Technology and Innovation Policies
- Research – Institutes
- Funding (~300 millions Euros / year)
  - ✓ Academic research projects
  - ✓ Industrial research, development and innovation projects  
(>7000 projects, < %30 selected for funding)
  - ✓ Student Scholarships

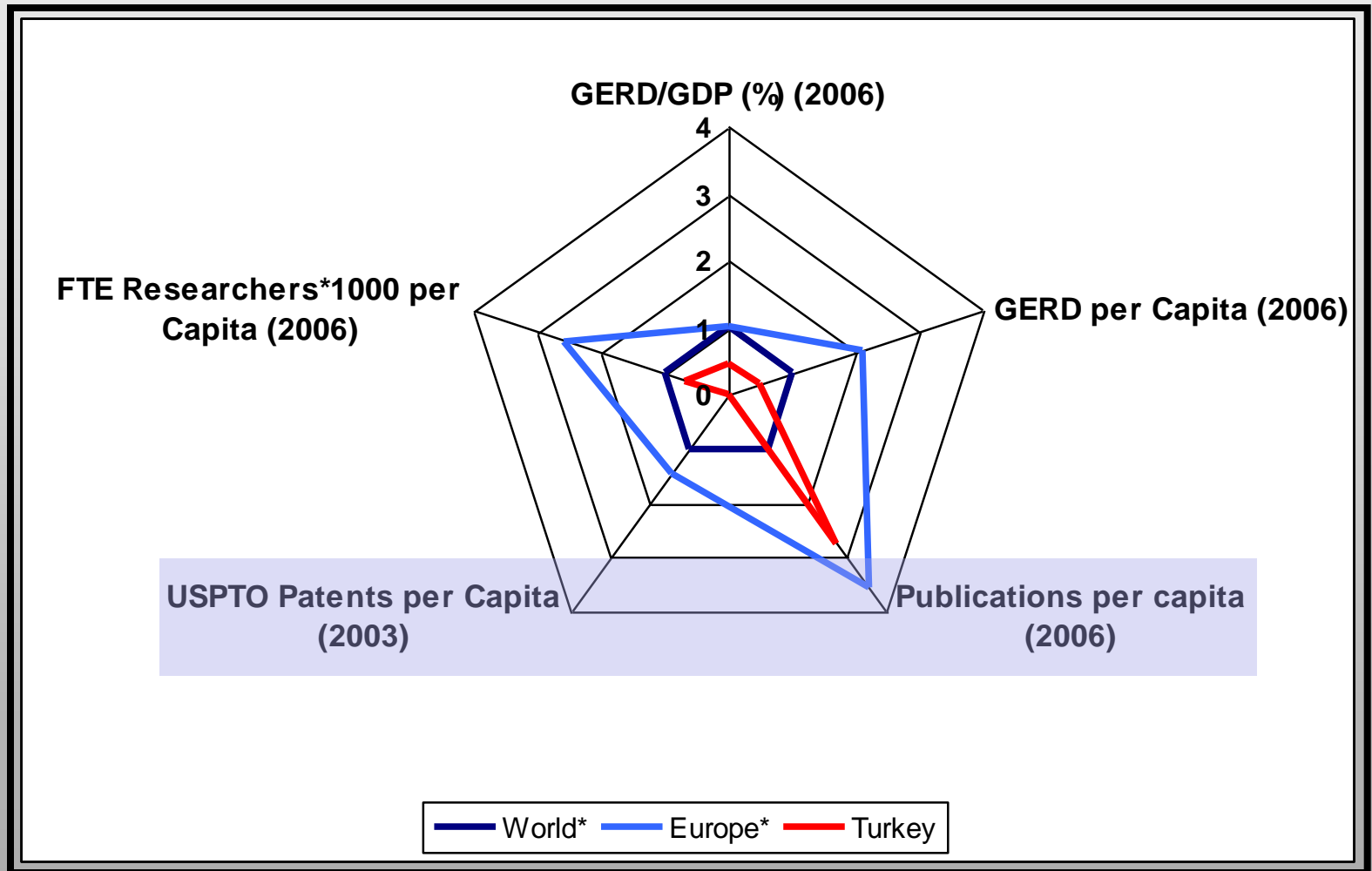
# Science and Technology Indicators



**Sources:** World, Europe: UNESCO Science Report 2005

Turkey: TURKSTAT, Thomson's ISI Web of Science, OECD MSTI 2007/2

# Science and Technology Indicators



\* Reference year is 2002

\*\*Sources: World, Europe: UNESCO Science Report 2005

Turkey: TURKSTAT, Thomson's ISI Web of Science, OECD MSTI 2007/2

# ST Indicators for TURKEY

	2000	2001	2002	2003	2004	2005	2006
<i>Triadic Patents</i>	5	9	10	12	17	27	
<i>FTE Researchers</i>	23.083	22.702	23.995	32.659	33.876	39.139	42.663
<i>FTE R&amp;D Personnel</i>	27.003	27.698	28.964	38.308	39.960	49.252	54.444
<i>Publications</i>	6.426	7.811	10.314	12.425	15.347	16.580	18.735
<i>GERD/GDP (%)</i>	0,64	0,72	0,66	0,61	0,67	0,79	0,76
<i>GERD per capita (PPP\$)</i>	40,5	43,8	42,8	41,6	51,4	60,7	68,3

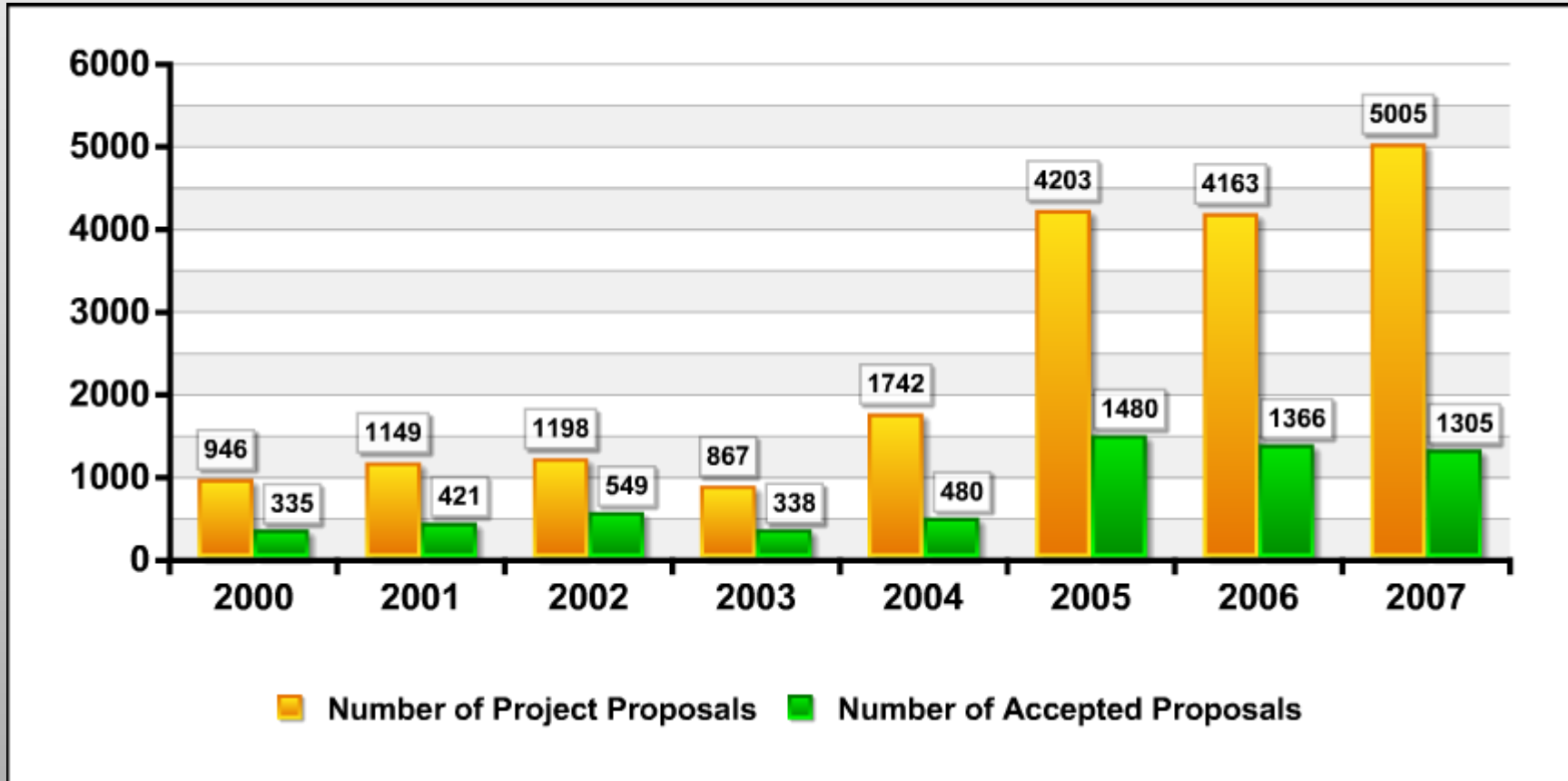
# Academic Research Projects

## Recent Boost

	2000	2001	2002	2003	2004	2005	2006	2007
<i>Project Proposals</i>	946	1149	1198	867	1742	4203	4163	5005
<i>Accepted Proposals</i>	335	421	549	338	480	1479	1366	1305
<i>Ongoing Projects</i>	843	1001	1242	1227	1353	2358	3160	3472

# Statistics of Academic Research Projects

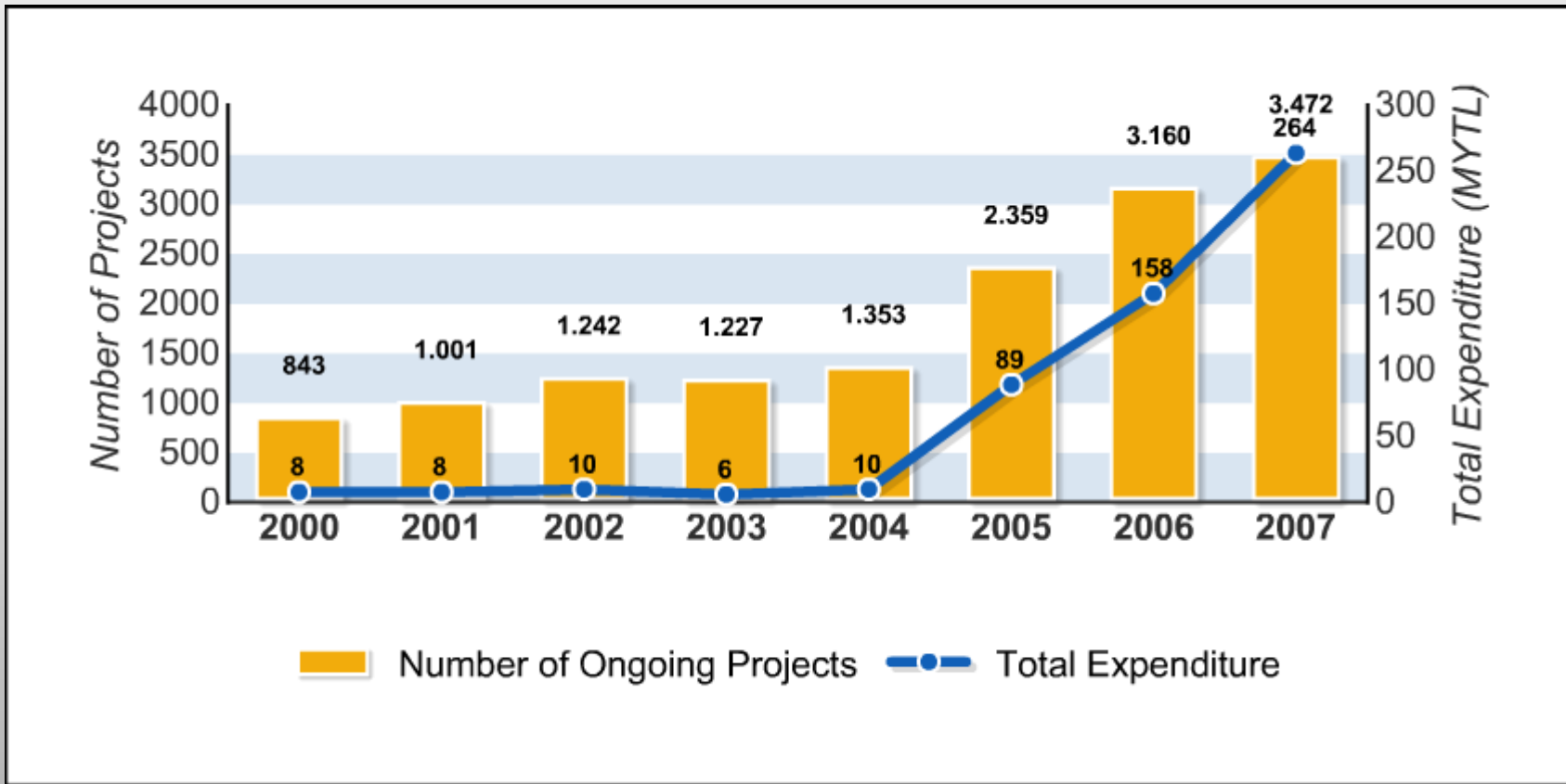
## Proposal Applications vs. Funded Projects



\*Public projects are included.



# Ongoing Projects and Total Expenditure



1 YTL = 0.5 €

\*Expenditure is deflated to 2005.

\*\*Public projects are included.

# Evaluation Method

- To cope with mounting interest and expectations of researchers, TUBITAK reviewed and revised its project evaluation system.
- Since 2004 a panel-based **three dimensional evaluation** method is adopted.

# Evaluation of Academic Research Projects

Three dimensional evaluation  
(Ö. Ekici, ESF, Den Haag, March 10-11 2008)

1. intellectual/scientific/professional **merit**
2. expected **impact** of the anticipated outcome
3. **feasibility** of the research with the proposed research team, equipment/facilities and methods

# Need for Post-Evaluation (**General**)

- To assess the effects of technology policies and programs
- To learn from the past and improve the funding and follow-up processes
- To justify the continuation of those policies to a sometimes skeptical audience

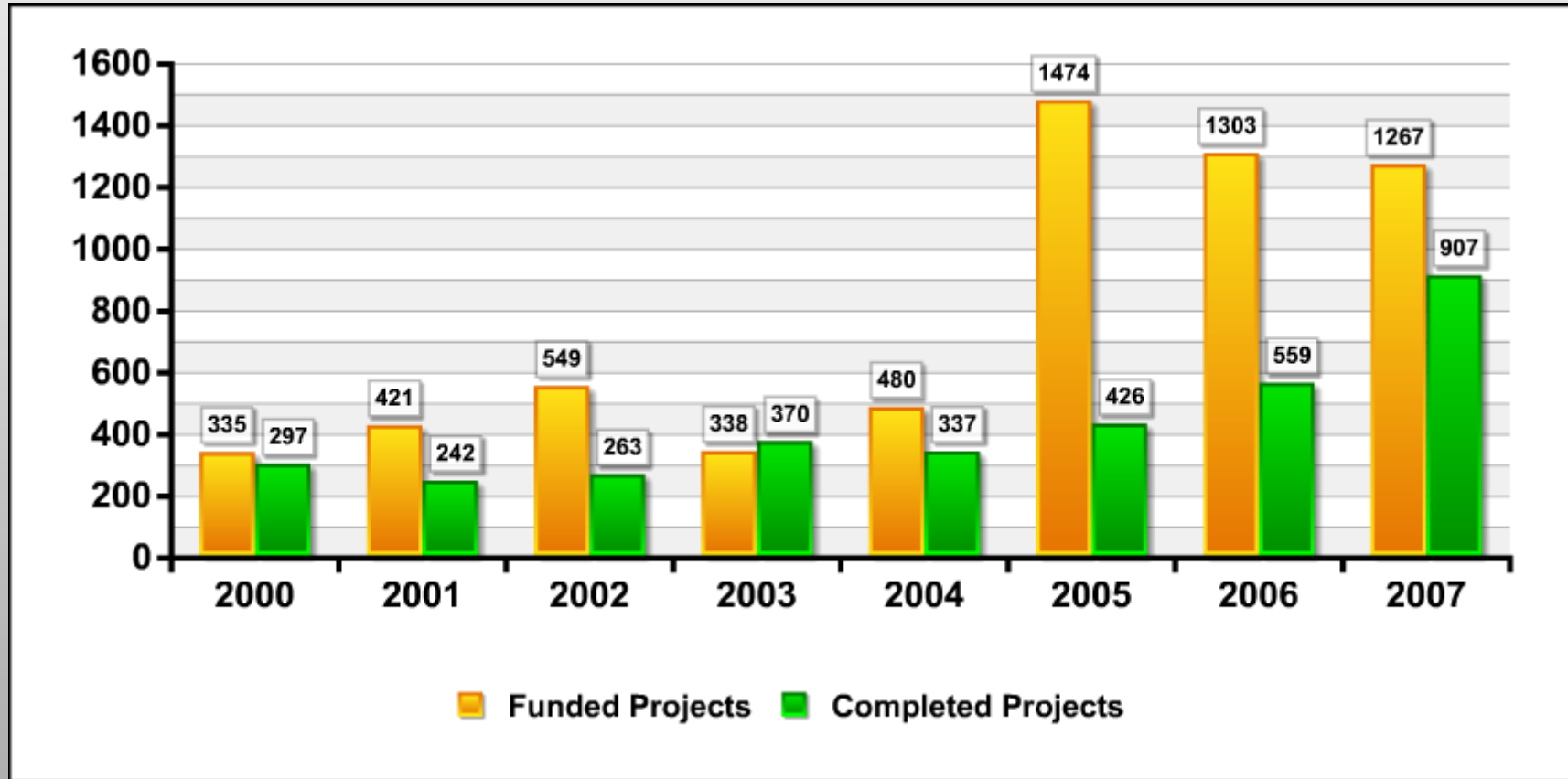
# TUBITAK's Goals

- Improve the quality of proposals
- Control the quantity of proposals
- Evaluate the effectiveness and impact of projects
- Provide feedback to future project funding policy adjustments and improvements

## Academic research projects

- **Output** (Final Reports)
- **Outcome** (Publications, Theses, IP)
- **Impact** (ST Indicators)

## Funded vs. Completed Projects



\*All project types are included.

# Progress and Final Reports

Reports describe the research activities using the criteria in the three-dimensional evaluation method.

## Typical indicators:

- Contribution to Science and Technology
- Contribution to Career Development
- Public and Media Interest



# What is being done at TUBITAK ?

- The scientific papers published as the outcome of funded projects (number of acknowledgements)
- The number of accesses to the final reports for the projects supported by TUBITAK
- The number of MSc and PhD theses written as a result of projects funded by TUBITAK

# Questionnaire Used to Collect Data

- Type of publication-conference, journal, survey, etc.
- Number of graduate degrees, theses and dissertations
- Number of citations received and classification of publications (journal's impact factor)
- Patents applied for and/or granted

# Forms Used to Collect Data (Sample)

## Scientific Publications

EK -1 : YAYIN BİLGİLERİNE AİT FORM

TÜBİTAK tarafından desteklenen projeleriniz ile ilgili yayınlarınız (makale<sup>1</sup>, kitap ve bildiri<sup>2</sup>) için bu formu doldurabilirsiniz. (Proje ekibinden bir kişinin doldurması yeterlidir)

### PROJE BİLGİLERİ

PROJE NO :		PROJE ADI :	
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### YAYIN BİLGİLERİ

YAYIN TÜRÜ	YAYIN/KİTAP/BİLDİRİ ADI	YAYINLANDIĞI DERGİ/KİTAP	ISSN NO	YER ALDIĞI INDEX	BASIM YILI	CİLT/ SAYFA NO	BİLDİRİNİN SUNULDUĞU ETKİNLİK ADI	ALDIĞI ATIF SAYISI
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<input type="checkbox"/> KİTAP				<input type="checkbox"/> SSCI			<input type="checkbox"/> Uluslararası	
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YAYIN TÜRÜ	YAYIN/KİTAP/BİLDİRİ ADI	YAYINLANDIĞI DERGİ/KİTAP	ISSN NO	YER ALDIĞI INDEX	BASIM YILI	CİLT/ SAYFA NO	BİLDİRİNİN SUNULDUĞU ETKİNLİK ADI	ALDIĞI ATIF SAYISI
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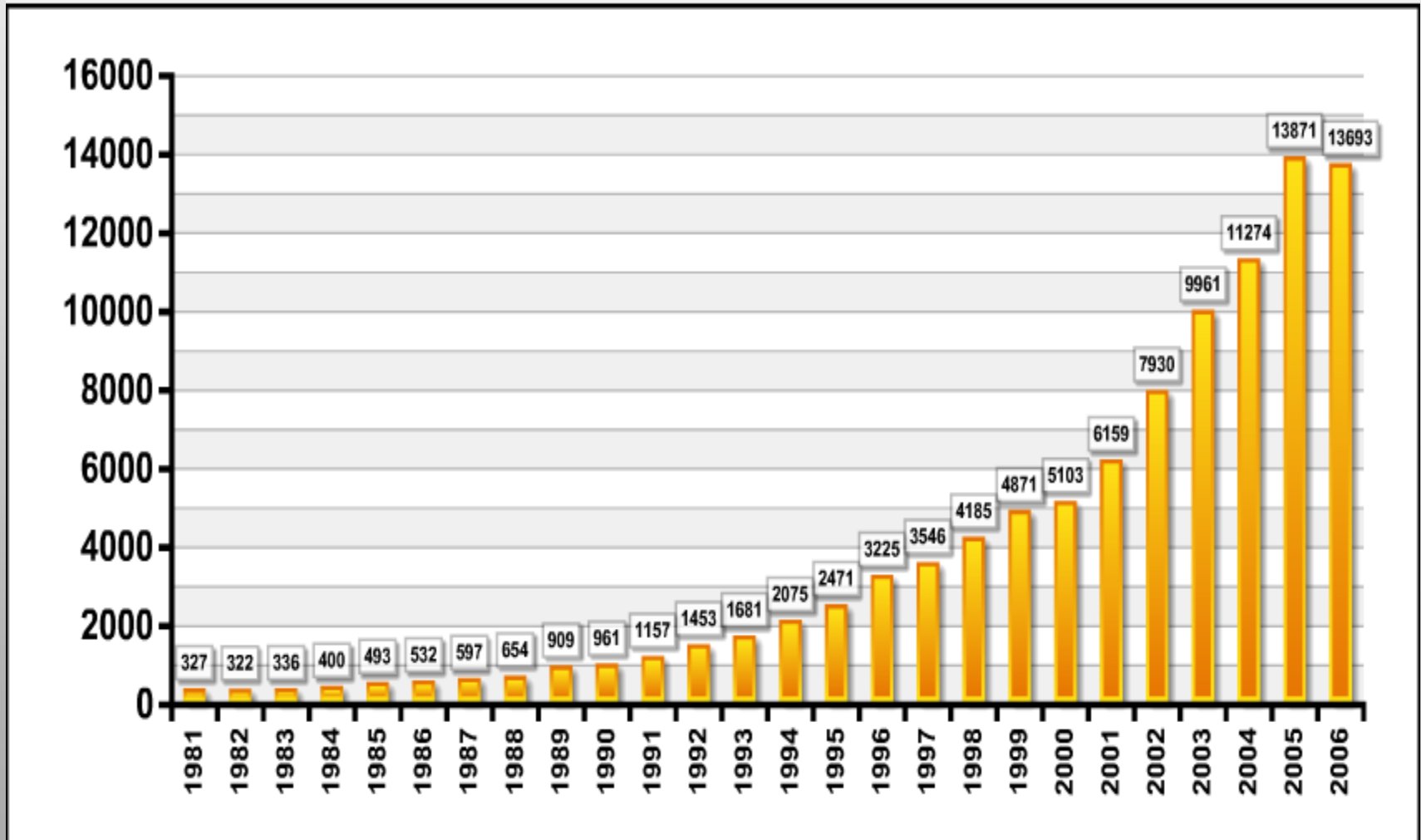
<input type="checkbox"/>	FORMU DOLDURANIN ADI SOYADI :		PROJEDEKİ GÖREVİ :		T.C. KİMLİK NO :	
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Not : Birden fazla projenizin olması durumunda bu formu çoğaltabilirsiniz. Ayrıca bir projeye ilgili birden fazla yayın olması durumunda da yayın bilgilerini çoğaltabilirsiniz.



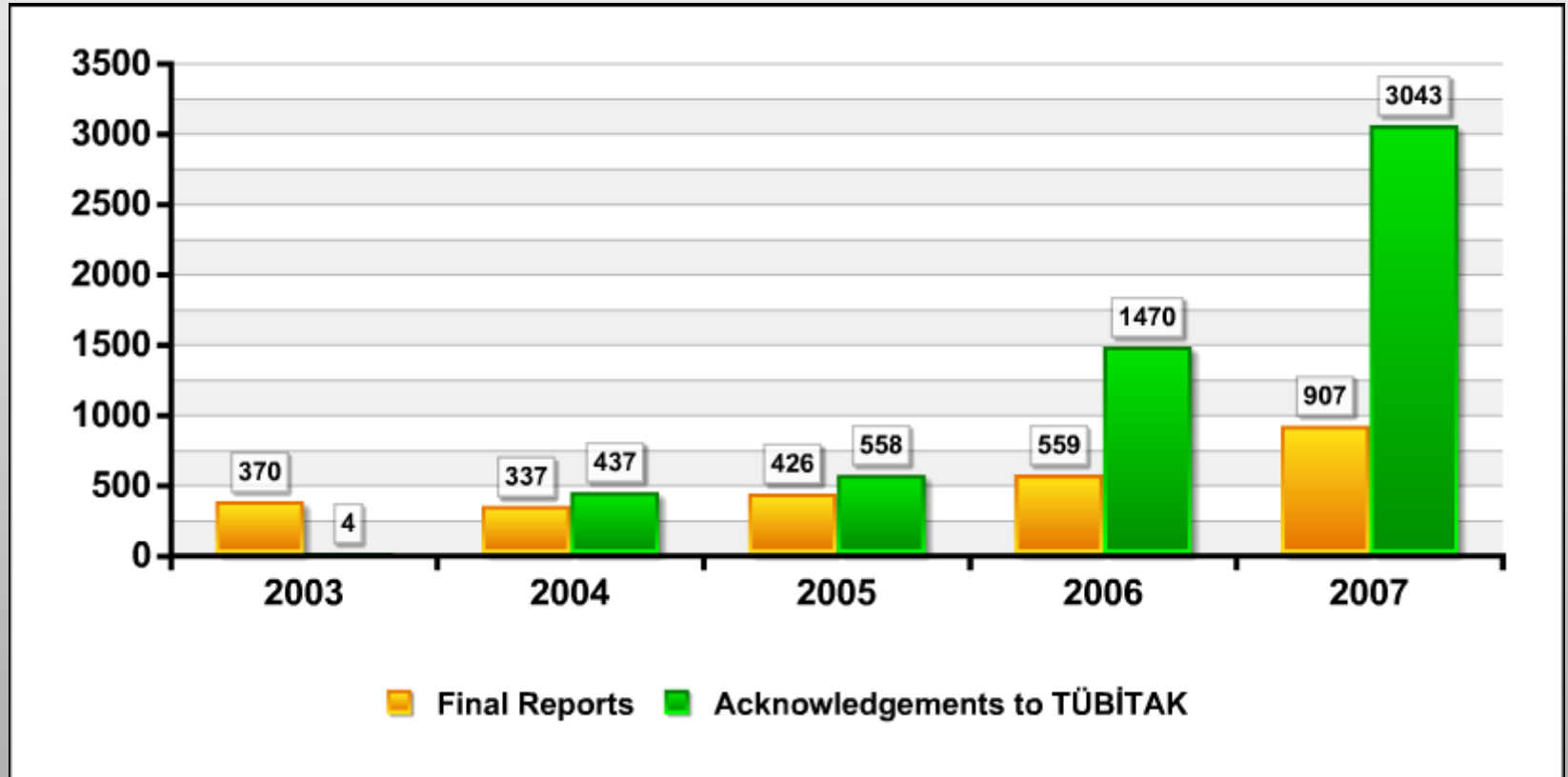
# Contribution to Science and Technology

## NUMBER OF PUBLICATIONS IN TURKEY BETWEEN 1981-2006



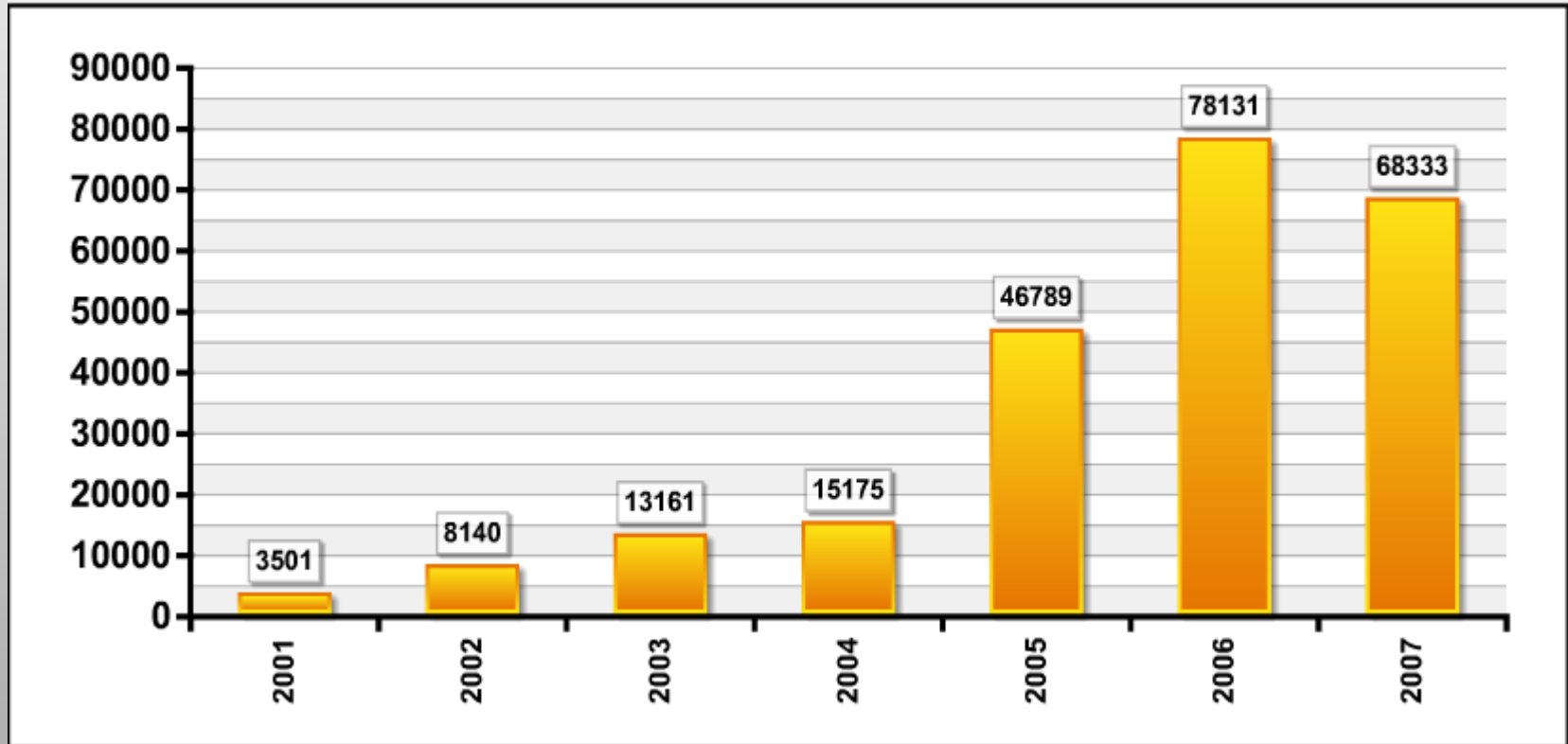
# Contribution to Science and Technology

## Number of Acknowledgements to TÜBİTAK in Scientific Papers



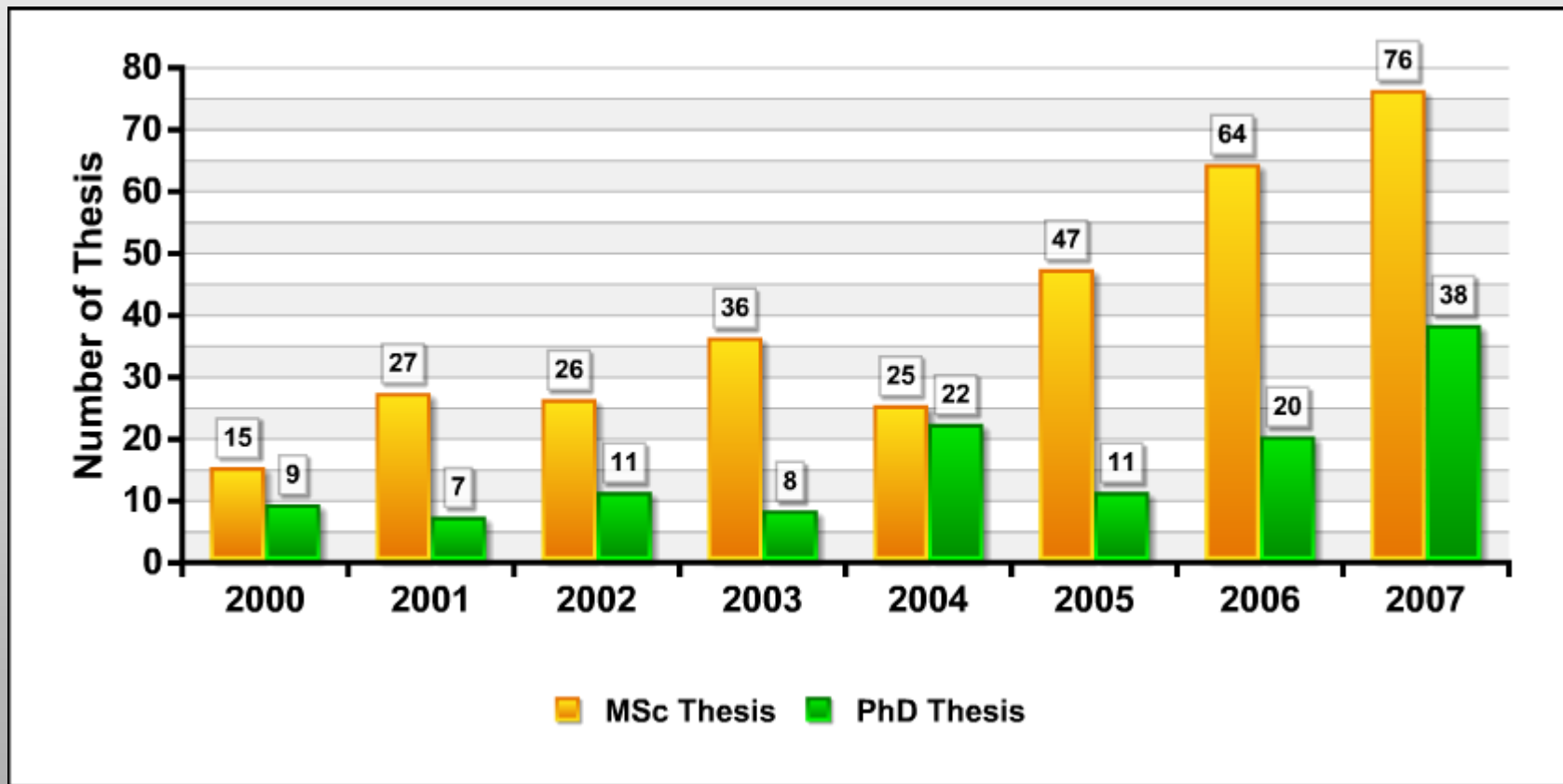
# Contribution to Science and Technology

NUMBER OF ACCESS TO FINAL REPORTS (IN ULAKBIM WEB PAGE)



The number of MSc and PhD theses written as the outcome of the projects is monitored.

# Contribution to Career Development





# Public Interest and Media Coverage

Media coverage of the project outcomes is not sufficient.

However, TUBITAK has been organizing events to highlight success stories of the project outcomes.

## **Project Title:** *Creating Wide Band Infrared Light in Nanofibers*

- ❖ One of the articles from this project is published in “Nature Materials” (6, 336 - 347 (2007)) and announced from the cover of the journal.

### Administrator Organization:

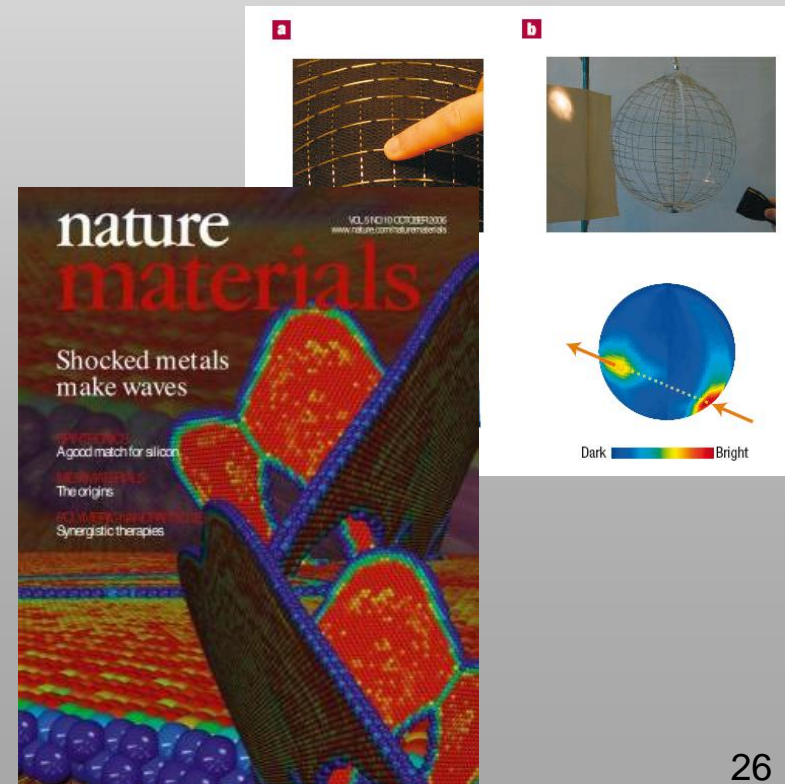
- Bilkent University

### Beginning Date of the Project:

- 01.06.2006

### Project Duration :

- 24 months



## ***Project Title:*** *The Solution of Biggest Electromagnetic Integral Equation*

- ❖ The coordinator of the project, L. GUREL, won World Record in Computational Electromagnetics: solution of an integral-equation problem involving 85 million unknowns

### **Administrator Organization:**

- Bilkent University

### **Beginning Date of the Project:**

- 01.06.2006

### **Project Duration :**

- 36 months



## ***Project Title: Nanocrystal Additive*** *Original Devices for Optoelectronic Applications*

- ❖ One of the articles from this project is published in “Nanotechnology” which is the first journal in field of interdisciplinary nanoscience and nanotechnology. The article is announced from the cover of this journal.
- ❖ The coordinator of the project, H.V. DEMİR win European Young Investigators Award-EURYI in 2007.

### **Administrator Organization:**

- Bilkent University

### **Beginning Date of the Project:**

- 01.09.2006

### **Project Duration :**

- 36 months



# Success Stories

## **Project Title:** *Evaluation of the Eirenis (Reptilia: Serpentes) Types in the East Meditterreanean (Hatay, Osmaniye, Adana, Mersin, Kilis ve Gaziantep)*

- ❖ Professor Kurtuluş Olgun and academicians from Adnan Menderes University discovered a new snake type, which is unknown in te world, as a result of their studies funded by TUBİTAK.



- ❖ They named this new snake type as *Rhynchocalamus barani* Olgun et al, 2007. Professor Kurtuluş and other researchers in the project published their findings in Zootaxa (Zootaxa 1399:57-68, 2007)

***Project Title:*** *Building Control, Measurement and Protection System Design for Hydroelectric Stations (HESKON Project)*

**Administrator Organization:**

- TÜBİTAK-UZAY

**Beginning Date of the Project:**

- 01.07.2006

**Project Duration :**

- 24 months



# Next Steps

- Development of cohesive post-evaluation criteria for assessing and improving the effectiveness and impact of funded projects
- Design, implementation and automation of a project post-evaluation system

## Thanks.....

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