

Europos Medžiagotyros draugijų konfederacija bei LtMRS veiklos perspektyvos

Vytautas Grivickas

Lietuvos medžiagų tyrinėtojų asociacijos prezidentas



Kaunas , Lapkričio 17, 2006



The Federation of European Materials Societies

Networking for European Materials Scientists and Engineers

24 European Societies

20,000 Materials Scientists and Engineers

EUROMAT Congress on Advanced Materials and Processes

Junior EUROMAT conference for the younger generation

Contributions to European Science Policy

Added value for Member Societies

Awards to eminent materials researchers

FEMS Lectures by talented young scientists & engineers

Job Opportunities

FEMS Newsletter - July 2006 edition available now



EUROMAT

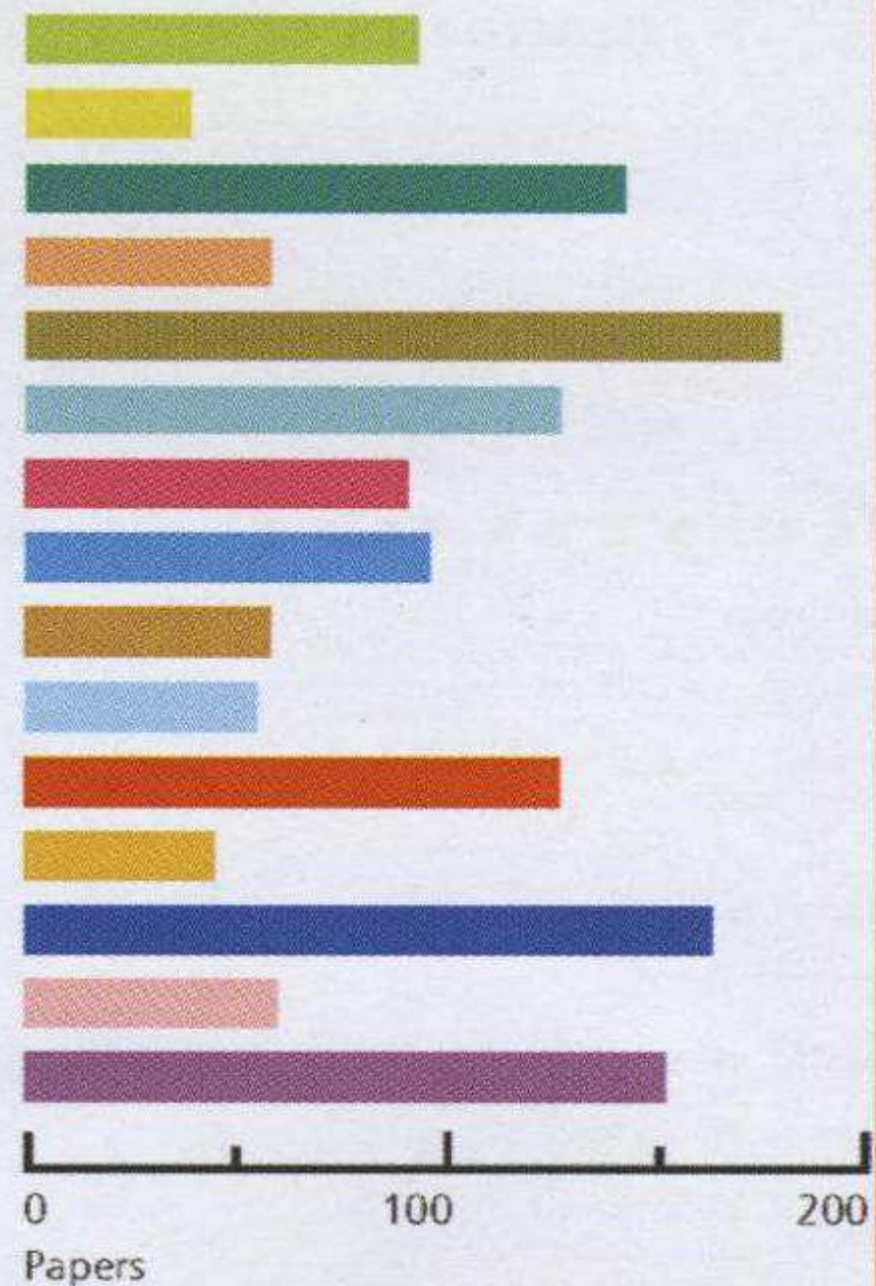
2003

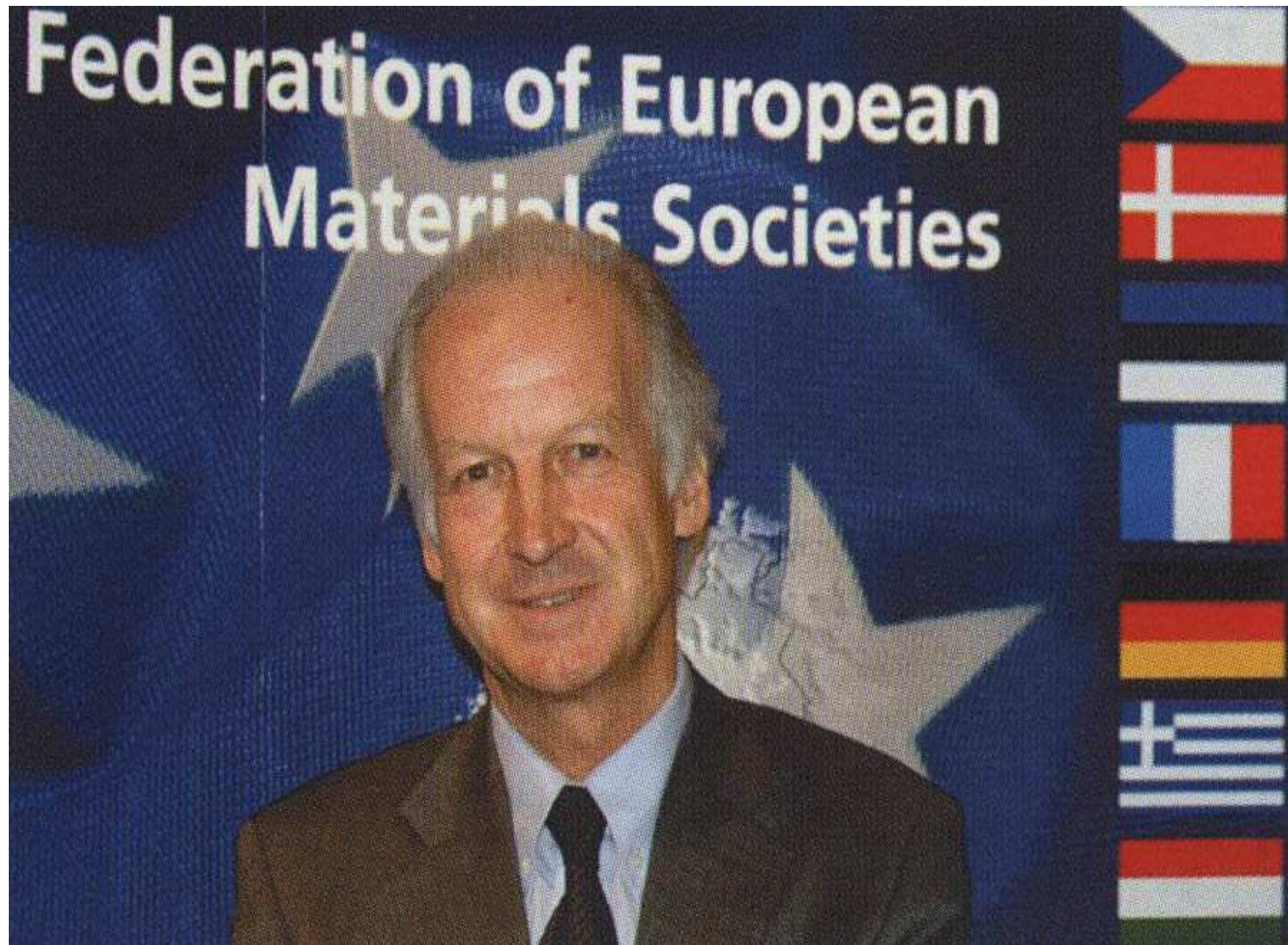
2005

participants	1250	1700
papers	1350	1800
authors	1050	1350
invited lectures	184	177
participants from industry	190	160
countries represented	50	60
topics	15	16
symposia	47	52
parallel sessions	13	16
exhibition	50	16
short courses	-	3

Papers by Topic

- A** Information Technology
- B** Simulation
- C** Biomimetics
- D** Biofunctional Materials
- E** Nanostructures
- F** Coatings
- H** Energy/Transportation
- L** Light Design
- M** Joining
- P** Building Materials
- Q** Ceramics and Glass
- R** Polymers
- S** Transformation
- T** Constitution
- U** Characterisation





Professor Wlfried Kurz, President of FEMS



Aims for the future:

The President Reveals his Hand

The goal of my two-year presidency, which began in January, is to improve the services that FEMS offers to its members. This concerns in particular the scientific conferences we organise as well as our lobbying activities on behalf of the materials community.

The most recent FEMS EUROMAT conferences, in Lausanne (2003) and Prague (2005), have grown in success, both in terms of the quality of the scientific programme and the atten-

tion they received. We hope to continue this trend in Nuremberg 2007 (see back page). We will aim specifically to draw more people from applied research and industry without neglecting our traditionally strong base in fundamental science. To this end, in Nuremberg the conference will be accompanied by an industrial exhibition and symposia topics will be chosen accordingly.

The activities in the European Materials Forum in recent months have in-



Robert Singer

cluded a presentation to the Research Committee of the European Parliament in Strasbourg and a visit to Research Commissioner Potocnik in Brussels.

Main topics were the size of the research budget and funding instruments. The now expected increase of EU research funds by 30 % is a success where we contributed. In the near future we will have intensive discussions with the research directorate about the "European Institute of Technology" and the role of materials science in this context.

We have recently embarked on a mission to pull in other materials societies that are not yet

members of FEMS. This is in the interest of the community because it would strengthen our voice. This is also in the interest of FEMS because it helps to procure fees.

In my position as president I can build on the success of my predecessor, Professor Wilfried Kurz. He has launched the EMF activities that look very promising at present. He has also put FEMS on a better financial footing by raising income from conferences and cutting costs.

The Event for Younger Scientists and Engineers:

FEMS Junior EUROMAT 2006

FEMS prides itself on the support given to the younger members of its Member Societies. Foremost is its biannual conference for young scientists and engineers working in the materials field, Junior EUROMAT.

The brainchild of Peter Schepp, Chief Executive of DGM, the larger of the two FEMS Member Societies in Germany, and a past Secretary of the Federation, it is going to be held for the eighth time this year, on 4-8 September.

As usual, the venue will be UNIL, on the banks of Lake Geneva in Lausanne.

For the third time running, the event will take place as a poster-only conference. However, the authors, most of whom are studying for masters or

PhD degrees, are encouraged to give a brief oral introduction to their posters in one of the lecture theatres.

Registration fees for students range from about €190 for those from Western Europe down to €140 and €90 for those from Central and Eastern Europe, respectively. Senior academics and industrialists are also welcome to participate and in their case the fees will be in the range €150-300.

Lausanne is a beautiful venue for the meeting and



Peter Schepp



Prizewinners at Junior EUROMAT 2004

an added attraction is that youth hostel and bed-and-breakfast accommodation are available from about €50 per night, with even cheaper opportunities in the local barracks.

Junior EUROMAT will have a truly international

flavour this year. Well over 300 posters will be presented by authors from 40 different countries, including China, Japan and USA. The 13 main themes will ensure that there will be much to interest everyone.

Lithuania: LtMRS

The LtMRS is a voluntary, non-profit organization uniting individuals and collective members of Lithuania involved in materials science and related applications (established on 1999).

It consist of 130 members including of about 40 graduated students. Following sections have been established: Materials of Electronics and Optics, Construction Materials, Metals and Alloys (thin films), Textile Materials, Polymers and Composites, Active Materials. The acting president before 2006 is Dr. V. Grivickas (see also www.ltmrs.lt).

Austria: ASMET

ASMET – The Austrian Society for Metallurgy and Materials – represents the Austrian manufacturers and processors of metallic materials.

ASMET is composed of roughly 1200 personal members and 70 companies. Scientific work is performed within 25 technical committees, each related to a certain technological field. Our intention is to foster dialogue between producing and processing companies including the final consumer. ASMET was founded in 1925 as “Eisenhütte Österreich” (see also www.asmet.at).

EUROPEAN MATERIALS FORUM (EMF)

European research is going through important transformations :

- 7th Framework Programme on preperation
- European Research Council created

European Materials Societies have to increase their impact in presenting a unique voice of the highly diversified field of Materials to the European Parliament and the Commission.

FEMS is working with ***E-MRS*** and others, to build a strong and credible EMF

ADDED VALUE FOR MEMBER SOCIETIES

- The creation of a European Materials forum could play an active role in the long term strategy of European MSE. It could become a transmitter of the opinion of FEMS member societies
- More active contacts with overseas societies is planned (China, Japan, TMS-USA)
- Euromat and Junior Euromat will become even more a platform for international information exchange
- Prizes will become more valuable for member societies (through a higher visibility) The importance of young researches is stressed
- A new website is intended to become more attractive for information flux between members and FEMS
- Database for key people in MSE in Europe, of Materials Departments and Curricula will be established

EUROPEAN MATERIALS FORUM (EMF)

Vision

- stimulate, foster and promote education, research and innovation in materials science and technology
- provide assistance for decision-making in the field of materials science and technology in Europe
- organise and focus European research activities

FEMS CONTRIBUTION FROM MEMBER SOCIETIES (2004)
UPDATED: 10 March 2005

Country	Society	Actual 2002	Fees	Members	Actual 2003	Fees	Members	Actual 2004	Date of Payment	Fees	Members	Bank Charges
B	BM	500	500	200	500	500	200	500	24/06/2004	500	200	0
CZ	MSS	385	385	154	385	385	154	385	22/07/2004	385	154	0
CZ	CSNMT	205	205	82	198.95	205	82	205	10/02/2005	205	82	0
Den	DMS	670.46	675	270	650	650	260	628.57	05/07/2004	640	256	11.43
Est	EMSS	75	75	30	100	100	40	100	08/02/2005	100	40	0
F	SF2M	2500	2500	1000	2587.5	2587.5	1031	2502.5	23/06/2004	2502.5	1001	0
Ger	DGM	5530	5530	2212	5192.5	5192.5	2077	4837.5	14/07/2004	7837.5	1935	0
Ger	DVM	735	735	294	735	735	294	735	17/06/2004	735	294	0
Gr	HSSTCM	295.5	300	120	300	300	120	300	27/07/2004	300	120	0
H	OMBKE							222	30/08/2004	227	30	5
I	AIM	2835.5	2840	1136	2811.7	2840	1136	2816.24	22/07/2004	2840	1136	23.76
L	LMRS	202	202	81	202	202	81	202	28/09/2004	202	81	0
Lt	LtMRS	175	175	70	175	175	70	175	05/07/2004	175	70	0
NL	BvM*	2246.37	2250	900	2246.37	2250	900	2245.46	Not known	2250	900	4.54
N	NMS	543.25	550	220	443.95	450	180	440.92	20/07/2004	450	180	9.08
Os	ASMET*	500	500	200	500	500	200	500	Not known	500	200	0
Pol	PTM	400	400	160	500	500	200	500	12/08/2004	500	200	0
P	SPM	395.5	400	160	384.55	400	160	380.34	16/07/2004	400	160	19.66
SK	SNMTS	110	110	44	110	110	44	110	06/07/2004	110	44	0
SL	SDM	368.25	375	150	368.95	375	150	375	23/07/2004	375	150	0
Sp	SEMAT	390	390	156	382.96	387.5	155	350	06/01/2005	350	140	0
S	SFMT	625	625	250	590	590	236	362.5	18/08/2004	362.5	145	0
CH	SVMT**	728.25	745	298	735	745	298					
UK	IOMMM	11,964.66	12,005	12,005	11949.61	12000	12000	11350	11/01/2005	11400	11400	44.56
Total		32379.74	32472	20192	32049.04	32179.5	20068	30223.03		18918	18918	118.03

* Paid into Brussels account: date of payment not known

**Resigned 2003

Proposed FEMS Budget for 2006 Updated 17/08/2005			2005	2006	2006
INCOME			(approved Ga)	(Proposed)	% of Total
	Society Fees		€ 31,338.00	€ 29,000.00	76.6
	EUROMAT Contribtion		€ 10,000.00	€ 8,000.00	21.1
	Interest		€ 1,500.00	€ 850.00	2.2
		Overall Total Income	€ 42,838.00	€ 37,850.00	100.0
EXPENDITURE					
	Secretariat	Fees	€ 14,160.00	€ 14,160.00	31.1
		Office Costs	€ 2,840.00	€ 2,840.00	6.2
		Travel, Subsistence and Consumables, including Postage	€ 4,000.00	€ 3,000.00	6.6
		Administration (Brussels)	€ 200.00	€ 200.00	0.4
		Sub-Total	€ 21,200.00	€ 20,200.00	44.3
	Executive Committee Costs	President (Travel & Subsistence)	€ 3,000.00	€ 2,500.00	5.5
		Vice-President (T & S)	€ 2,000.00	€ 1,750.00	3.8
		Past President (T & S)	€ 1,000.00	€ 1,000.00	2.2
		Honorary Treasurer (T & S)	€ 1,500.00	€ 1,000.00	2.2
		Other Committee Expenses	€ 2,500.00	€ 1,750.00	3.8
		Sub-Total	€ 10,000.00	€ 8,000.00	17.6
	Communications	Advertising	€ 1,000.00	€ 750.00	1.6
		FEMS News	€ 4,000.00	€ 3,500.00	7.7
		FEMS Website	€ 4,000.00	€ 4,000.00	8.8
		Webserver Costs	€ 0.00	€ 1,600.00	3.5
		Room Hire in Prague	€ 0.00	€ 0.00	0.0
		Hosting Costs	€ 1,500.00	€ 1,000.00	2.2
		Sub-Total	€ 10,500.00	€10,850.00	23.8
	Interactions	IOMMMS	€ 500.00	€ 500.00	1.1
		European Materials Forum	€ 2,000.00	€ 2,000.00	4.4
	Awards	Prizes & Medals	€ 2,000.00	€ 1,000.00	2.2
		FEMS Lecturers	€ 5,000.00	€ 3,000.00	6.6
		Sub-Total	€ 7,500.00	€ 4,000.00	8.8
		ING MasterCard Annual Charge	€ 0.00	€ 20.00	0.0
		Overall Total Expenditure	€ 51,200.00	€ 45,550.00	100.0
BALANCE			-€ 8,362.00	-€ 7,700.00	

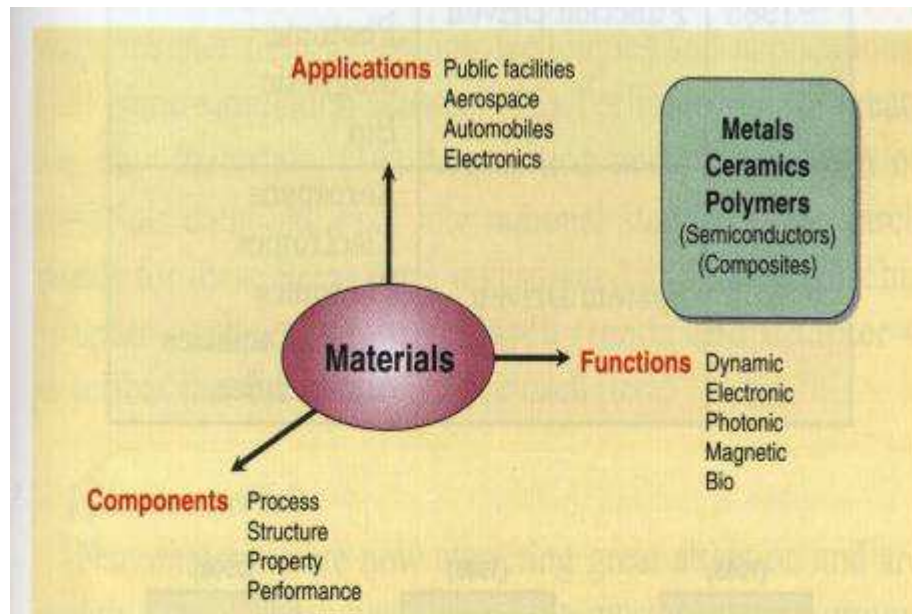


Fig. 1 Components, functions, and application systems of materials

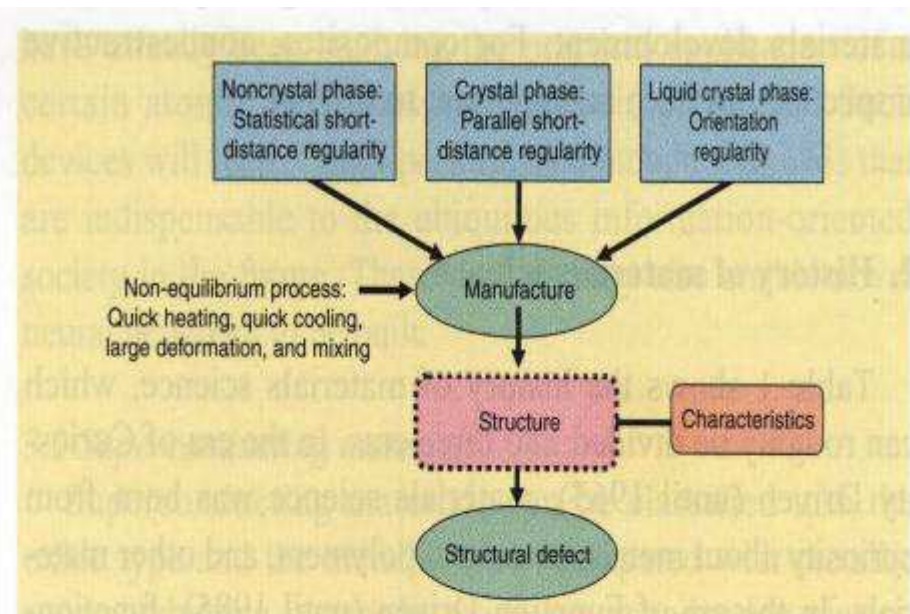


Fig. 3 Materials classification by structure

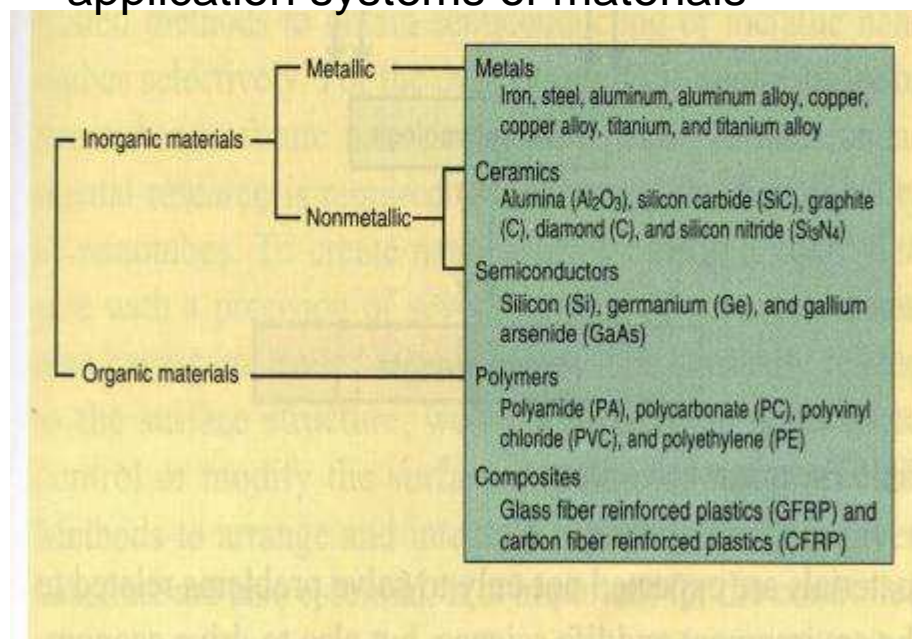


Fig. 2 Classification of materials

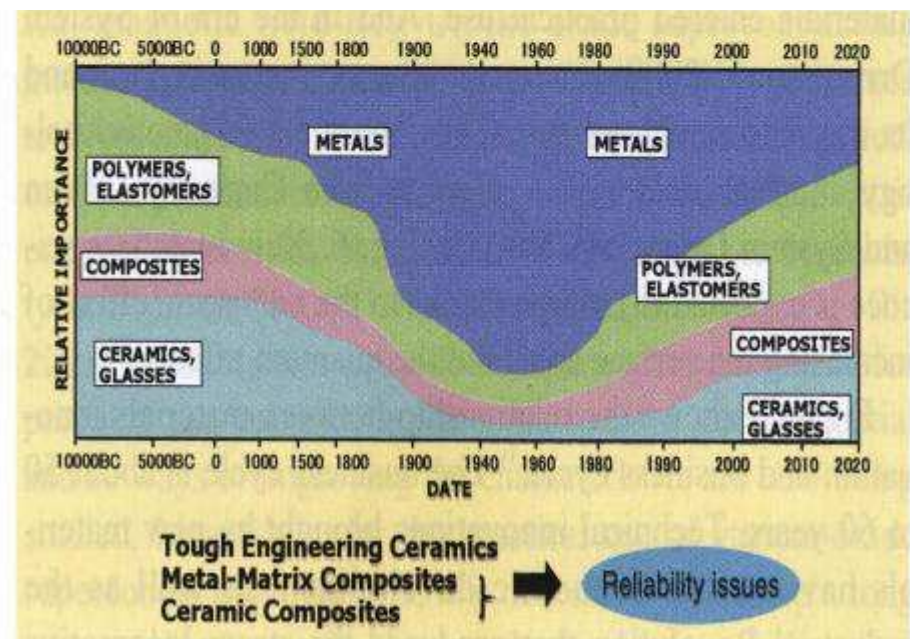
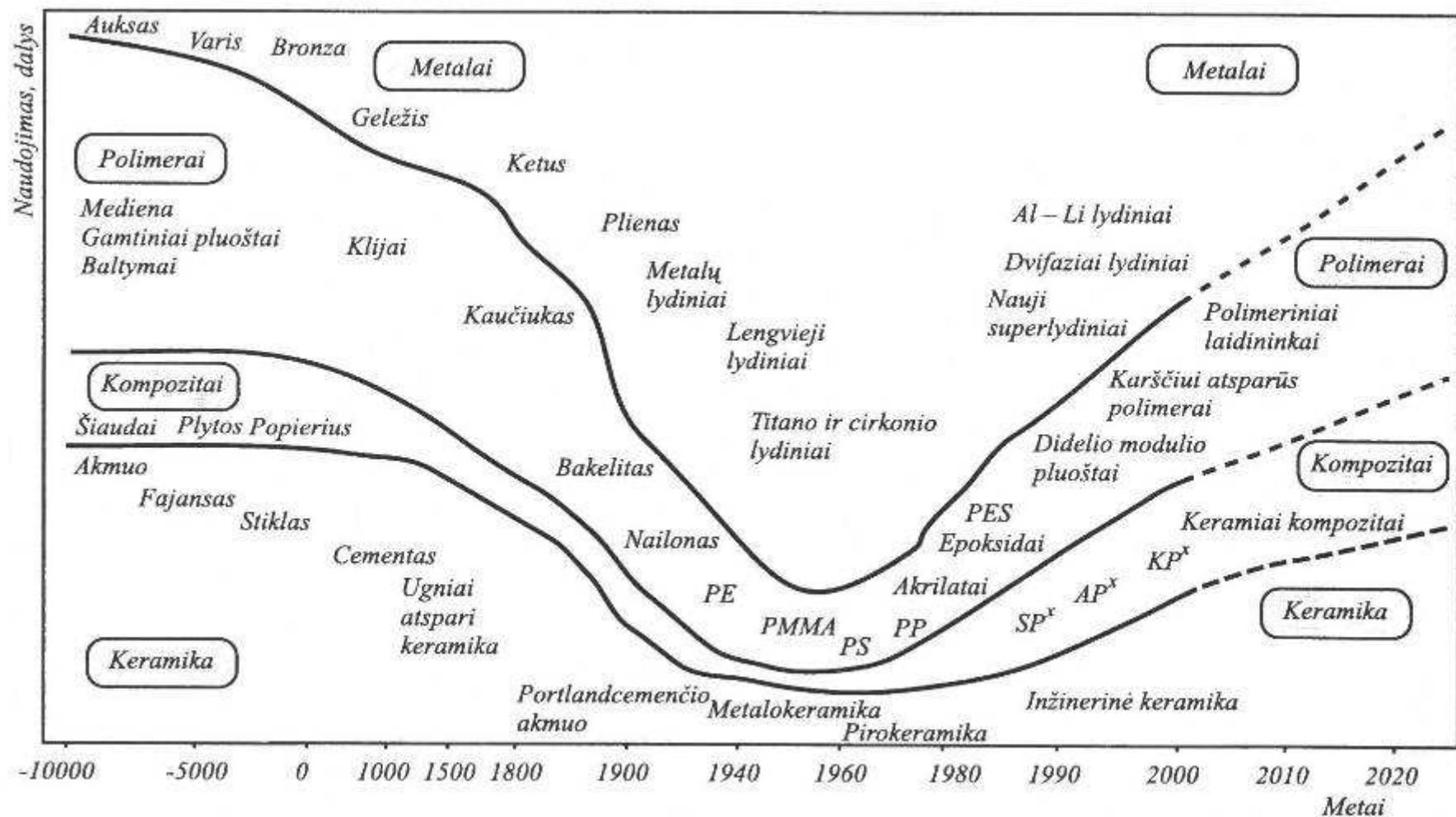
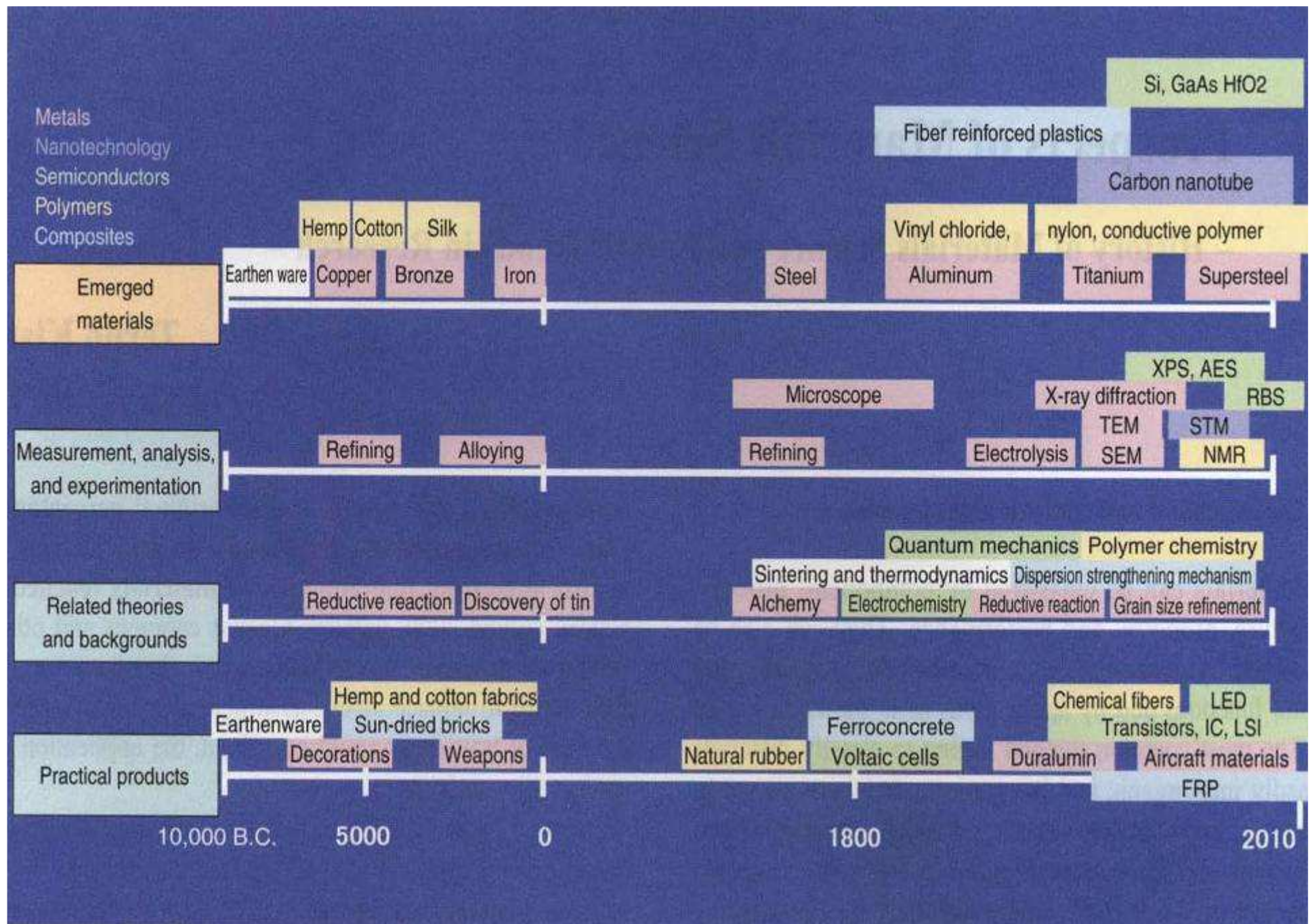


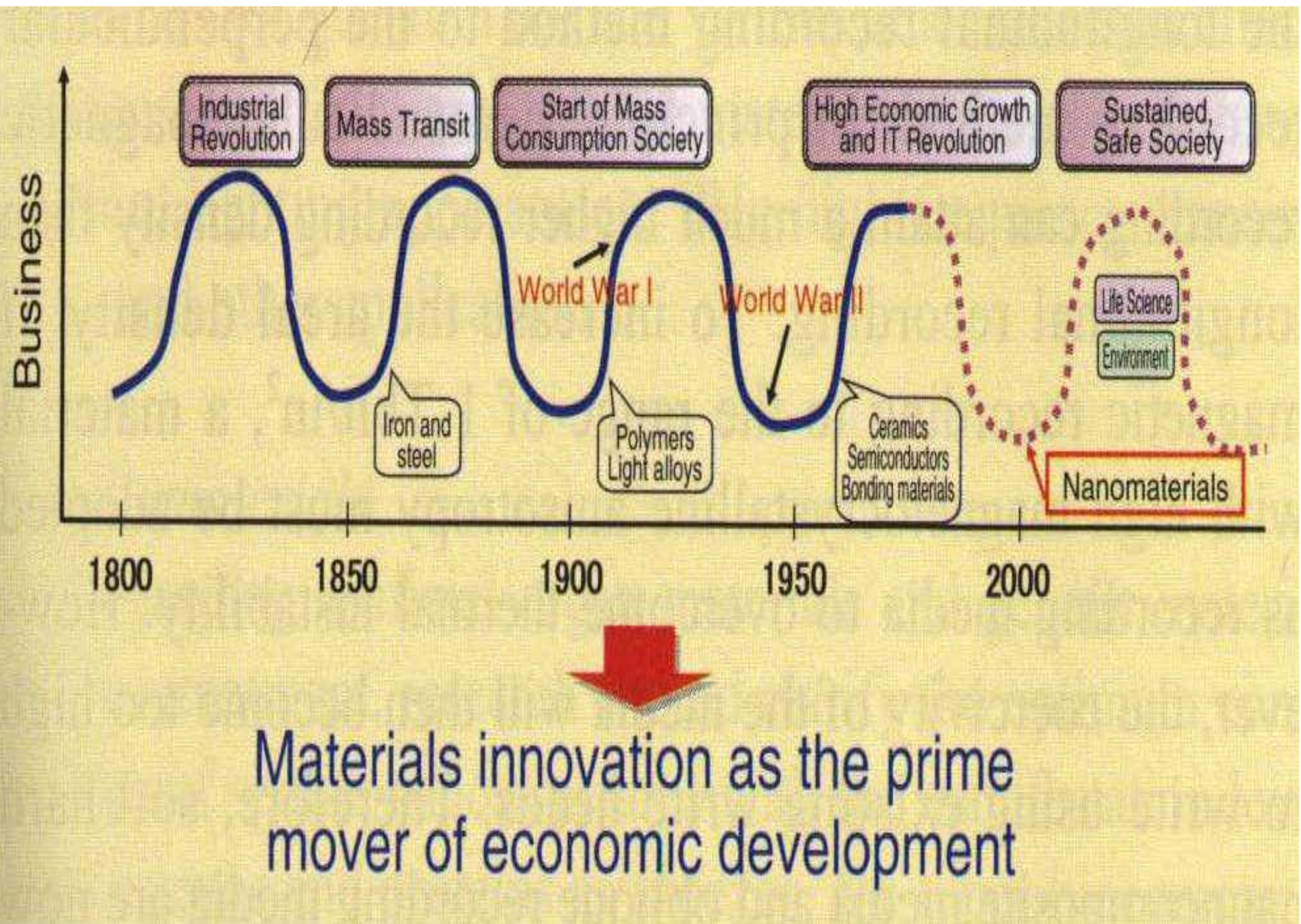
Fig. 4 Transition of materials



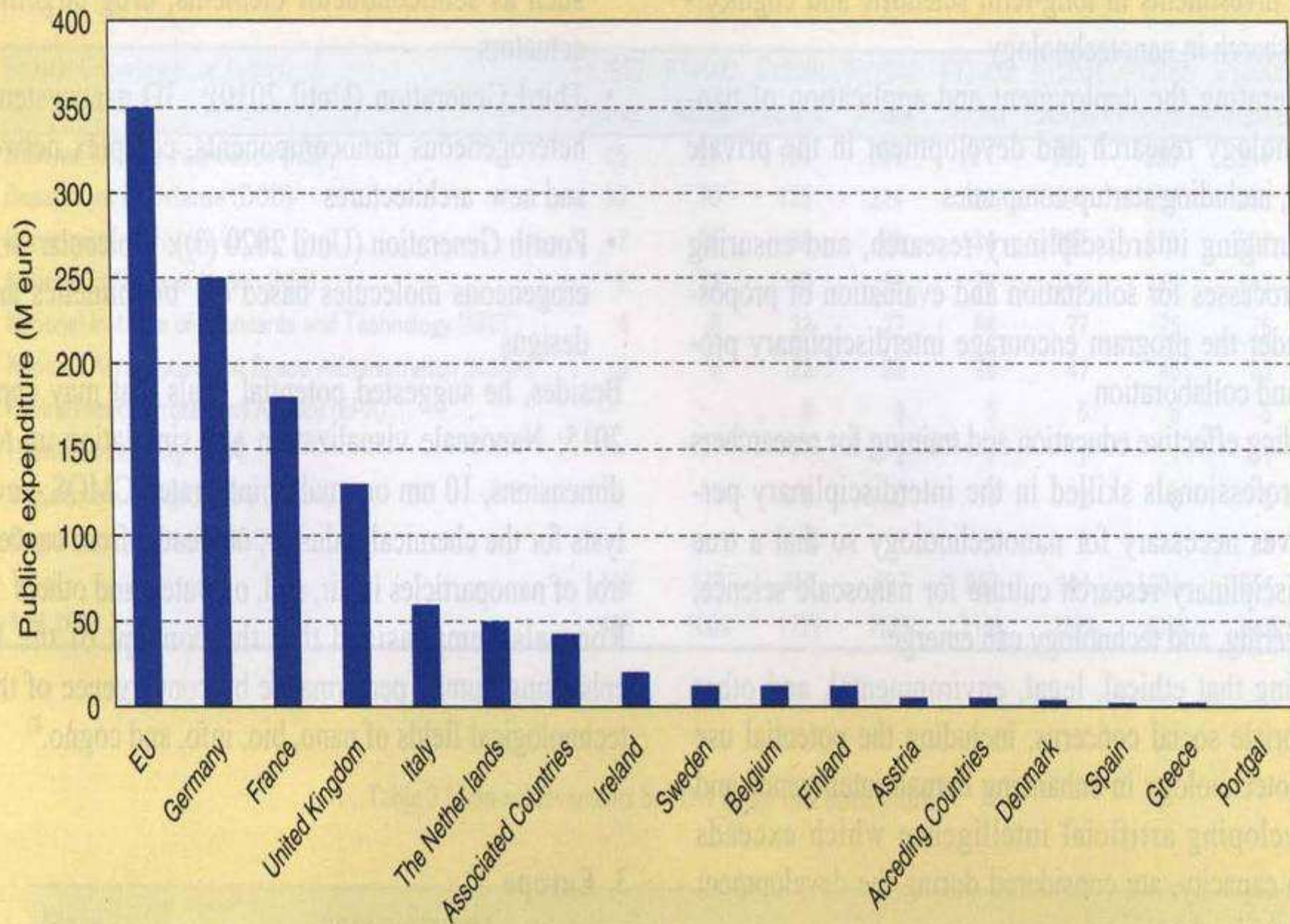
5-1 pav. Pasaulinė konstrukcinių medžiagų naudojimo dinamika. SP^x stikloplastikai, AP^x anglies plastikai, KP^x kevlaro plastikai



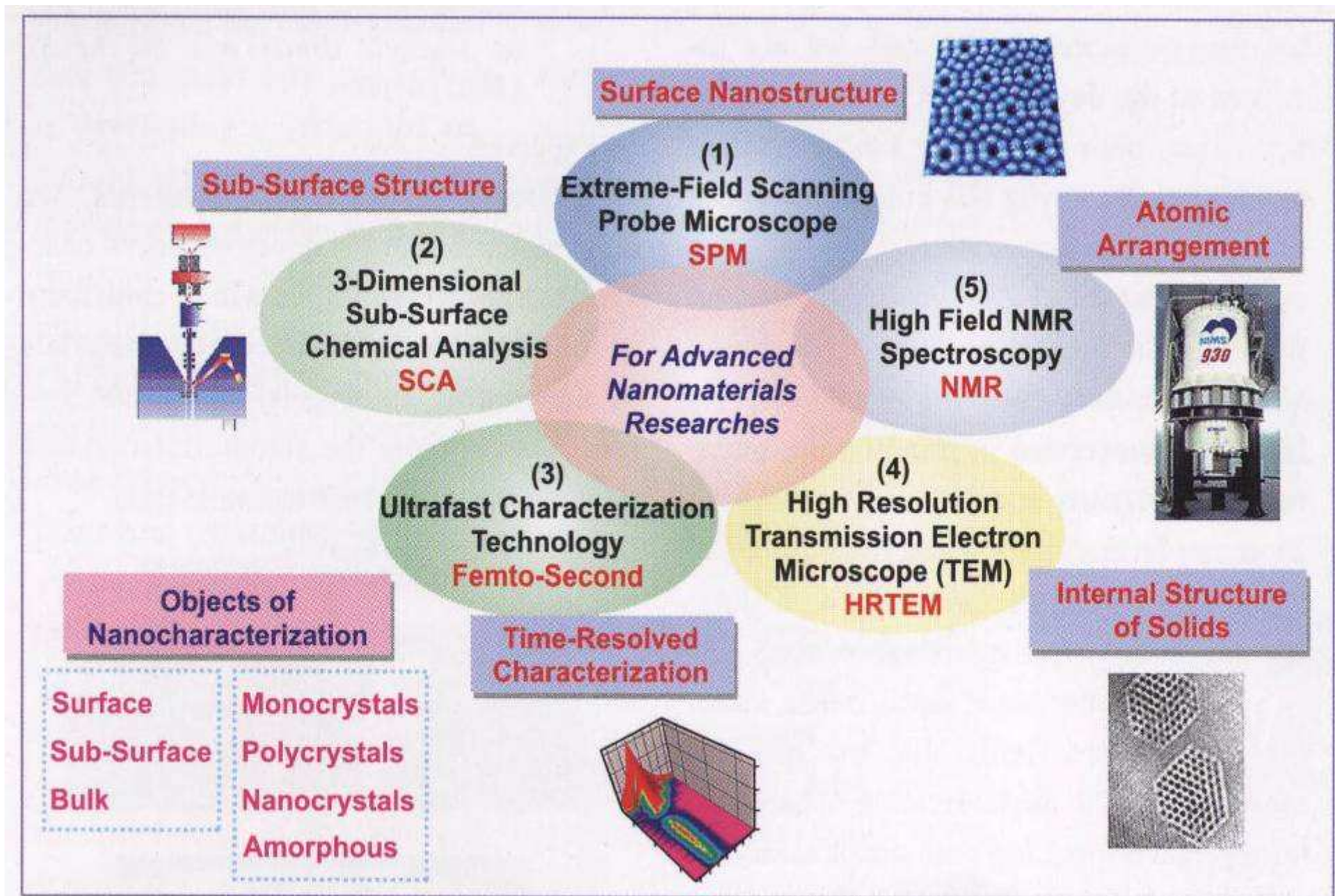
Techniques and theories supporting the transition of materials



Relationship between technical innovation and business cycle



Nanotechnology R&D funds by the EC and European countries (2004) Until: million euros



Development of the state-of-the art technologies for in-depth characterization of nanomaterials