

Technology Keywords

1. ELECTRONICS, IT AND TELECOMMS

1.1. Electronics, Microelectronics

- 1) Automation, Robotics Control Systems
- 2) Digital Systems, Digital Representation
- 3) Electronic circuits, components and equipment
- 4) Electronic engineering
- 5) Embedded Systems and Real Time Systems
- 6) High Frequency Technology, Microwaves
- 7) Magnetic and superconductive materials/devices
- 8) Microengineering
- 9) Micromachining
- 10) Nanotechnologies related to electronics and microelectronics
- 11) Optical Networks and Systems
- 12) Peripherals Technologies (Mass Data Storage, Display Technologies) related to electronics and microelectronics
- 13) Printed circuits and integrated circuits
- 14) Quantum Informatics
- 15) Semiconductors
- 16) Smart cards and access systems
- 17) Environmental and Biometrics Sensors, Actuators

1.2. Information Processing, Information System, Workflow Management

- 1) Advanced Systems Architecture
- 2) Archivistics/Documentation/Technical Documentation
- 3) Artificial Intelligence (AI)
- 4) Computer Games
- 5) Computer Hardware
- 6) Computer Software
- 7) Computer Technology/Graphics, Meta Computing
- 8) Data Processing / Data Interchange, Middleware
- 9) Data Protection, Storage Technology, Cryptography, Data Security
- 10) Databases, Database Management, Data Mining
- 11) Electronic Commerce, Electronic Payment
- 12) Imaging, Image Processing, Pattern Recognition
- 13) Information Technology/Informatics
- 14) Internet Technologies/Communication (Wireless, Wi-Fi, Bluetooth)

2. INDUSTRIAL MANUFACTURING, MATERIAL AND TRANSPORT TECHNOLOGIES

2.1. Design and Modelling / Prototypes

2.2. Industrial Manufacture

- 1) Cleaning (sandblasting, brushing)
- 2) Coatings
- 3) Drying

15) Knowledge Management, Process Management

16) Simulation

17) Speech Processing/Technology

18) User Interfaces, Usability

19) Electronic Signature

20) Building Automation Software

21) Remote Control

22) Smart Appliances

1.3. IT and Telematics Applications

1) Applications for Health

2) Applications for Tourism

3) Applications for Transport and Logistics

4) ASP Application Service Providing

5) e-Government

6) Environment Management Systems & Documental Management Systems

7) GIS Geographical Information Systems

8) CRM - Customer relationship Management

9) Quality Management System

10) Maintenance Management System

11) Operation Planning and Scheduler System

12) Didactic System

13) ICM - Internet Content Management

14) Analysis Risk Management

15) Work Hygiene and Safety Management

1.4. Multimedia

1) Cultural Heritage

2) E-Learning

3) E-Publishing, Digital Content

4) Human Language Technologies

5) Information Filtering, Semantics, Statistics

6) Visualisation, Virtual Reality

1.5. Telecommunications, Networking

1) Audiovisual Equipment and Communication

2) Broadband Technologies

3) Mobile Communications

4) Narrow Band Technologies

5) Network Technology, Network Security

6) Radar

7) Research Networking, GRID

8)

SatelliteTechnology/Systems/Positioning/Communication in GPS – Global Positioning System

9) Signal Processing

10) Hi-Fi

11) Description to Sound and Music Computing

12) Description Image/Video Computing

13) Communications Protocols, Interoperability

14) Residential Gateway

4) Erosion, Removal (spark erosion, flame cutting, laser/plasma cutting, electrochemical erosion, waterjet cutting)

5) Forming (rolling, forging, pressing, drawing)

6) Hardening, heat treatment

7) Joining techniques (riveting, screw driving, gluing)

8) Jointing (soldering, welding, sticking)

9) Machine Tools

- 10) Machining (turning, drilling, moulding, milling, planning, cutting)
- 11) Machining, fine (grinding, lapping)
- 12) Mixing (powder, etc.), separation (sorting, filtering)
- 13) Moulding, injection moulding, extrusion, sintering
- 14) Surface treatment (painting, galvano, polishing, CVD, PVD)

2.3. Process control and logistics

2.4. Plant Design and Maintenance

2.5. Packaging / Handling

- 1) Foil, films
- 2) Laminate
- 3) Packaging for machines
- 4) Packaging for materials
- 5) Plastic bags

2.6. Construction Technology

- 1) Building Materials, Components and Methods
- 2) Civil engineering
- 3) Construction Equipment
- 4) Fire Resistance/Safety
- 5) Mechanical Engineering, Hydraulics, Vibration and Acoustic Engineering related to construction technology
- 6) Pipeline Technology
- 7) Pulp Technology related to construction technology
- 8) Sensory/Multisensory Technology, Instrumentation related to construction technology
- 9) Simulation, Simulation Engineering
- 10) Sound Insulation
- 11) Vacuum / High Vacuum Technology
- 12) Gas Safety
- 13) Security

2.7. Materials Technology

- 1) Adhesives
- 2) Building materials
- 3) Ceramic Materials and Powders

3. OTHER INDUSTRIAL TECHNOLOGIES

3.1. Other Industrial Technologies

- 1) Cleaning Technology

3.2. Process Plant Engineering

3.3. Apparatus Engineering

3.4. Chemical Technology and Engineering

- 1) Agro chemicals
- 2) Anorganic Substances
- 3) Colours, dyes related to Chemical Technology and engineering
- 4) Electrical Engineering and Technology / Electrical Equipment
- 5) Man made fibres
- 6) Organic Substances
- 7) Pharmaceuticals
- 8) Plastics and Rubber related to Chemical Technology and engineering
- 9) Soaps, detergents
- 10) Special chemicals, intermediates

- 4) Colours and varnish
- 5) Composite materials
- 6) Fine Chemicals, Dyes and Inks
- 7) Glass
- 8) Iron and Steel, Steelworks
- 9) Materials Handling Technology (solids, fluids, gases)
- 10) Metals and Alloys
- 11) Non-ferrous Metals
- 12) Optical Materials
- 13) Paper technology
- 14) Plastics, Polymers
- 15) Properties of Materials, Corrosion/Degradation
- 16) Rubber
- 17) Stone
- 18) Advanced Textile Materials

2.8. Transport Infrastructure

- 1) Air Transport
- 2) Intermodal Transport
- 3) Logistics
- 4) Railway Transport
- 5) Road Transport
- 6) Traffic Engineering / Control Systems
- 7) Transshipment Systems
- 8) Water Transport

2.9. Transport and Shipping Technologies

- 1) Design of Vehicles
- 2) Hybrid and Electric Vehicles
- 3) Railway Vehicles
- 4) Road Vehicles
- 5) Shipbuilding
- 6) Traction/Propulsion Systems

2.10. Aerospace Technology

- 1) Aeronautical technology / Avionics
- 2) Aircraft
- 3) Helicopter
- 4) Satellite Navigation Systems
- 5) Space Exploration and Technology

- 11) Care, Hygiene, Beauty

3.5. Textiles Technology

- 1) Component adhesives for strengthening of seam
- 2) Dry filling related to Textiles Technology
- 3) Dyeing related to Textiles Technology
- 4) Finisher related to Textiles Technology
- 5) Non weaving related to Textiles Technology
- 6) Solvent based glues for strengthening of edges and seam
- 7) Thermoplastic textile fibres
- 8) Weaving related to Textiles Technology
- 9) Woven technical textiles for industrial applications

3.6. Footwear / Leather Technology

- 1) Dry filling related to Footwear / Leather Technology
- 2) Dyes related to Footwear / Leather Technology

3) Tanned leather process related to Footwear / Leather Technology

3.7. Sound Engineering/Technology

3.8. Mining Technologies

4. ENERGY

4.1. Energy Storage and Transport

- 1) Heat storage
- 2) Heat transport and supply, district heating
- 3) Storage of electricity, batteries
- 4) Transmission of electricity
- 5) Transport and storage of gas and liquid fuels
- 6) Transport and storage of hydrogen

4.2. Energy production, transmission and conversion

- 1) Fuel cell, hydrogen production
- 2) Fuel liquefaction, gasification
- 3) Furnace technology, construction of heating boilers
- 4) Generators, electric engines and power converters
- 5) Heat exchangers
- 6) Heat pump, cooling technologies
- 7) Heating, ventilation
- 8) Turbines, fluid machinery, reciprocating engines, combined heat and power

4.3. Fossil Energy Sources

- 1) Coal and Hydrocarbons

5. PHYSICAL AND EXACT SCIENCES

5.1. Astronomy

5.2. Chemistry

- 1) Analytical Chemistry
- 2) Computational Chemistry and Modelling
- 3) Inorganic Chemistry
- 4) Organic Chemistry
- 5) Petrochemistry, Petroleum Engineering

5.3. Earth Sciences

- 1) Geology, Geological Engineering, Geotechnics
- 2) Oceanography
- 3) Tectonics, Seismology

5.4. Mathematics, Statistics

- 1) Algorithms and Complexity
- 2) Mathematical modelling
- 3) Statistical Analysis

5.5. Meteorology / Climatology

- 1) Biosensor
- 2) Moisture sensors
- 3) Temperature monitoring

5.6. Physics

6. BIOLOGICAL SCIENCES

6.1. Medicine, Human Health

- 1) Biostatistics, Epidemiology
- 2) Care and Health Services
- 3) Clinical Research, Trials

3.9. Printing

- 1) Flexography
- 2) Printed Reel Material

3.10. Household Goods & Appliances

2) Gaseous fossil fuel

3) Solid fossil fuel

4) Liquid fossil fuel

4.4. Nuclear Fission / Nuclear Fusion

4.5. Renewable Sources of Energy

- 1) Gaseous biomass
- 2) Geothermal Energy
- 3) Hydropower
- 4) Liquid biomass
- 5) Photovoltaics
- 6) Solar/Thermal energy
- 7) Solid biomass
- 8) Unconventional and Alternative Energies
- 9) Waste incineration
- 10) Wind energy

4.6. Rational use of energy

- 1) Energy management
- 2) Lighting, illumination
- 3) Process optimisation, waste heat utilisation
- 4) Thermal insulation, energy efficiency in buildings

4.7. Other Energy Topics

- 1) Combustion, Flames
- 2) Fuel Technology

1) Acoustics

2) Astrophysics / Cosmology

3) Laser Technology

4) Nuclear Physics

5) Physics of Fluids

6) Sensors/Multisensor Technology, Instrumentation

7) Solid state physics

8) Thermodynamics

9) Vibration and Acoustic engineering

10) Optics

5.7. Mechanical Engineering

1) Micro-Mechanics

5.8. Hydraulics

5.9. Separation Technologies

- 1) Filtration and Membrane Processes
- 2) Extraction
- 3) Adsorption
- 4) Distillation
- 5) Sublimation
- 6) Other Processes

5.10. Micro- and Nanotechnology related to physical and exact sciences

4) Cytology, Cancerology, Oncology

5) Dentistry / Odontology, Stomatology

6) Diagnostics, Diagnosis

7) Diseases

- 8) Environmental Medicine, Social Medicine, Sports Medicine
- 9) Gene - DNA Therapy
- 10) Gerontology and Geriatrics
- 11) Heart and blood circulation illnesses
- 12) Electromedical and Medical Equipment
- 13) Medical Research
- 14) Medical Technology / Biomedical Engineering
- 15) Neurology, Brain Research
- 16) Pharmaceutical Products / Drugs
- 17) Physiology
- 18) Surgery
- 19) Virus, Virology / Antibiotics / Bacteriology
- 20) Laboratory Equipment
- 21) Rescue and Emergency Equipment
- 22) Physiotherapy, Orthopaedic Technology
- 23) Single Use Products and Consumer Goods
- 24) Medical Textiles

7. AGRICULTURE AND MARINE RESOURCES

7.1. Agriculture

- 1) Agriculture Machinery / Technology
- 2) Animal Production / Husbandry
- 3) Biocontrol
- 4) Crop Production
- 5) Horticulture
- 6) Pesticides
- 7) Precision agriculture
- 8) Seed coating

8. AGROFOOD INDUSTRY

8.1. Technologies for the food industry

- 1) Drink Technology
- 2) Food Additives/Ingredients/Functional Food
- 3) Food Packaging / Handling
- 4) Food Processing
- 5) Food Technology

9. MEASUREMENTS AND STANDARDS

9.1. Measurement Tools

- 1) Acoustic Technology related to measurements
- 2) Analyses / Test Facilities and Methods
- 3) Chemical material testing
- 4) Electrical Technology related to measurements
- 5) Mechanical Technology related to measurements
- 6) Optical material testing
- 7) Optical Technology related to measurements

10. PROTECTING MAN AND ENVIRONMENT

10.1. Safety

- 1) Acoustic safety
- 2) Assessment of Risk
- 3) Fire Safety Technology
- 4) Hazardous Materials
- 5) Radiation Protection

10.2. Environment

- 25) Medical Furniture
- 26) Medical Biomaterials

6.2. Biology / Biotechnology

- 1) Biochemistry / Biophysics
- 2) Cellular and Molecular Biology
- 3) Enzymology / Protein Engineering / Fermentation
- 4) Genetic Engineering
- 5) In vitro Testing, Trials
- 6) Microbiology
- 7) Molecular design
- 8) Toxicology

6.3. Genome Research

- 1) Bioinformatics
- 2) Gene Expression, Proteom Research
- 3) Population genetics

6.4. Micro- and Nanotechnology related to Biological sciences

- 9) Veterinary Medicine
- 7.2. Sylviculture, Forestry, Forest technology**

- 1) Forest technology
- 2) Paper Technology
- 3) Pulp Technology
- 4) Sylviculture, Forestry
- 5) Wood Products

7.3. Resources of the Sea, Fisheries

- 1) Aquaculture
- 2) Fish / Fisheries / Fishing Technology
- 3) Marine Science

8.2. Food quality and safety

- 1) Detection and Analysis methods
- 2) Food Microbiology / Toxicology / Quality Control
- 3) Safe production methods
- 4) Tracability of food

8.3. Nutrition and Health

- 8) Other Non Destructive Testing
- 9) Sensor Technology related to measurements
- 10) Thermal material testing

9.2. Amplifier, A/D Transducer

9.3. Electronic measurement systems

9.4. Recording Devices

9.5. Reference Materials

9.6. Standards

- 1) Quality Standards
- 2) Technical Standards

- 1) Air Pollution / treatment
- 2) Biodiversity
- 3) Ecology
- 4) Environmental Engineering / Technology
- 5) Measurement and Detection of Pollution
- 6) Natural Disasters
- 7) Remote sensing technology
- 8) Soil Pollution

9) Water Pollution / Treatment

10.3. Waste Management

1) Biotreatment / Compost / Bioconversion

2) Incineration and Pyrolysis

3) Land and Sea Disposal

4) Recycling, Recovery

5) Radioactive Waste

11. SOCIAL AND ECONOMICS CONCERNS

11.1. Socio-economic development models, economic aspects

11.2. Education and Training

11.3. Information and media, society

11.4. Technology, Society and Employment

11.5. Infrastructures for social sciences and humanities

11.6. Citizens participation

11.7. Foresight tools

11.8. Sports and Leisure