



THE REPUBLIC OF TUNISIA  
MINISTRY OF HIGHER EDUCATION  
SCIENTIFIC RESEARCH AND TECHNOLOGY

**NATIONAL SCIENTIFIC RESEARCH  
AND TECHNOLOGICAL INNOVATION  
CONSULTATION DAYS**



*El Kram, 19 & 20 november 2007*

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## **Scientific Research and Technological Innovation In Tunisia :**

# **Towards a Knowledge Based Society**

*Under the High Patronage of President Zine El Abidine Ben Ali, the Ministry of Higher Education, Scientific Research and Technology organises the National Scientific Research and Technological Innovation Consultation Days, on the 19th and 20th of November, 2007 at El Kram International Fair.*

### **Why are Consultation Days ?**

Tunisia is nowadays endowed with a national system of scientific research and technological innovation that is realising important breakthroughs. Thanks to the avant-gard policies of President Zine El Abidine Ben Ali, this sector is being enhanced on the institutional, legislative and financial levels. It is developing and contributing increasingly to the development of the country.

The national scientific research and technological innovation system comprises currently 33 Research Centres, 139 Laboratories and 638 Research Units hosting about 16000 full time Researchers. This network is being augmented by a set of 10 Technological Parks (the majority of which are in the making) having different fields of specialisation, and spread all over the Republic.

This research structure has consolidated the development of Human Resources. That is how our country comprises today 4.52 researchers (full time equivalent) per 1000 active citizens. This figure brings Tunisia closer to the OECD countries.

Along with this change, Tunisia has to position itself in an innovation oriented environment, that is to say, towards a model of society based on intelligence. It has opted for "The Knowledge Economy" where knowledge is the



source of wealth. As of now, it has to integrate and master the dynamics of this economy which requires not only the production of knowledge but also its diffusion, its renewal, and its appropriation by the economic actors.

The challenges are enormous and the strategic choices should inscribe our country in a viable system favouring a forward-looking approach, based on strategic foresight, a capacity for self-assessment, a willingness to adapt in a constantly changing world, and an ability to generate significant and concrete impacts on the lives of citizens.

The Tunisian competencies are diversifying and redistributing in space, both in Tunisia and abroad. New needs are emerging, and they are related to critical mass, the pooling of resources, coordination, quality and international cooperation.

Important questions are addressed to these consultation days: How to guarantee that the National Scientific Research and Technological Innovation System, thanks to the Presidential Programs and the Development Plans, leaps to qualitatively new levels in the definition of objectives, priorities and strategies as well as management along with a higher degree of openness on society, the private sector and international partners? How to strengthen the Culture of Excellence in scientific research?

The National Scientific Research and Technological Innovation Consultation Days, shall serve as a fertile forum for debate and collective thinking.

The debate process is organised in three distinct yet complementary levels in order to offer the opportunity to the greatest number of researchers to express their views on key topics. A first round of discussions has already taken place at the level of Institutions of Higher Education and Research as well as Universities involving about 1100 teachers/researchers. The second one was held on the regional level :

- Regional Consultation Days for the South, held in Gabes, 17th October, 2007.



- Regional Consultation Days for the Centre, held in Kairouan, 24th October, 2007.
- Regional Consultation Days for the North, held in Bizerte, 31st October, 2007.

These regional Consultation Days brought together more than 1200 teachers/researchers. As to the National Consultation Days, they will amass more than 1300 teachers/researchers, representing all research structures, the different ministries, the political parties, the national organisations as well as a large number of Tunisian competencies living abroad.

This national debate shall listen carefully to the experiences of the most developed countries. Policy-makers and researchers have been invited to report on the achievements and performance of their respective countries as well as their own ideas and views concerning research and innovation.

### **How will these Consultation Days be organised ?**

- Three workshops are to be dedicated to the triad: Research Policy (objectives, priorities, and strategy), the National Research System (realisations, prospects and challenges), Research Environment and Partnership (dynamics of innovation in the private sector, international partners). The National commissions have addressed each of these themes to identify their present state, to pin down their strategic orientations and to mobilize resources, in anticipation of future needs. International experts, highly active leaders in their respective environments, will put forward, for analysis and debate, the experience of their respective countries or even the results of an extended benchmark. The work undertaken in these workshops should lead to the elaboration of proposals and/or concrete recommendations.
- In addition to the main working sessions, five scientific workshops will be running simultaneously and dealing with emerging research fields: (i) Biotechnologies and Life Sciences, (ii) Information and Communication



Sciences and Technologies, (iii) Human Sciences and Society, (iv) Water, Energy and Sustainable development and (v) Food Security and Agriculture. These workshops are meant to provide an update on the research status, of each of these areas, in Tunisia, to point out their strengths and ambitions, in order to position our performances in relation to the state of the art, as well as identify niches and opportunities for cooperation and

- Two symposiums are devoted to two themes “Science and Ethics” and “Education, Science and Technological Development”. These are meant to engage the participants in a common discussion as to the relations between science and value systems, and the important question of the spreading of the scientific and technological cultures in educational programmes.
- The founding values of the economy of solidarity -redistribution, sharing and solidarity- should equally animate scientific and technological exchanges in our world, especially between North and South. A round table will bring together representatives of research structures and scientific associations in an interdisciplinary debate regarding science and solidarity.





**Monday, 19 november 2007**

**7:15 - 8:00 Registration**

**8:00 - 10:00 Inauguration of the Exhibition by Mr Mohamed Ghannouchi, Prime Minister**

**10:00- 13:00 Opening of the National Scientific Research and Technological Innovation Consultation Days**

- Address by Mr Lazhar Bououny, Minister of Higher Education, Scientific Research, and Technology
- Opening of the National Scientific Research and Technological Innovation Consultation Days by Mr Mohamed Ghannouchi, Primer Minister
- Political Parties and National Organization Representatives Speeches

**13:00 - 14:45 Lunch**

**15:00- 20:00 Workshops :**

1. Research Policy
2. National Scientific Research System
3. Partnership and Research Environment

**Workshop 1. Research Policy : Objectives, Priorities and Strategy**

*Room Mohamed Larbi Hachem*



*Session Chair* : M. Jemaiel Ben Brahim,  
President of the University of the 7<sup>th</sup> of  
November in Carthage

*Reporters* :

- M. Jelel Ezzine, Ministry of Higher Education, Scientific Research and Technology
- M. Farhat Drissi, Higher Normal School of Tunis

*Speakers* :

**15:00- 15:20** M. Hassen Maaref, Professor, Director of Higher Institute of Informatics and Mathematics of Monastir

**Presentation of the report of the “Research Policy” Preparatory Commission**

**15:20- 16:20** *Debate*

**16:20- 16:50** M. Claudio Bogliotti, General Directorate of the European Scientific Research Commission

M. Jean Audouze, Vice-President of the French National UNESCO Commission

**16:50- 17:20** *Debate*

**17:20- 17:50** M. Sungchul Chung, President of *Science and Technology Policy Institute*, Republic of Korea

Mme Ghislaine Filliatreau, Director of the Observatory of Sciences and Technologies, France

**17:50- 18:20** *Debate*

**18:20- 18:50** M. Peter West, General Secretary, University of Strathclyde, United Kingdom

M. Ferid Rachdi, Director of Research, University of Montpellier 2, France



**18:50-19:20** *Debate*

**19:20- 19:50** M. Abdelaziz Chikhaoui, Professor,  
Polytechnical School of Marseille, France

M. Ridha Abid, Professor, National Institute  
of Applied Sciences and Technologies of  
Tunis

**19:50- 20:00** *Debate*

## Workshop 2. National Scientific Research System: Realizations, Perspectives and Challenges

*Room Bechir Hamza*

*Session Chair* : M. Houcine Chebli,  
President of *Université Virtuelle* of Tunis

*Reporters* :

- M. Nejjib Lazhari, Ministry of Higher  
Education, Scientific Research and  
Technology
- M. Sami Sayadi, Centre of Biotechnology  
of Sfax

*Speakers:*

**15:00- 15:20** M. Mohamed Ennabli, Emeritus Professor,  
President of the National Committee of  
Scientific Research Activities Evaluation,  
Former Minister of the Environment and  
Town and Country Planning

**Presentation of the report of the “National  
Scientific Research system “ Preparatory  
Commission**

**15:20- 16:20** *Debate*

**16:20- 16:50** M. Jean-Marc Monteil, Special Adviser  
to the French Prime Minister, France



M. Roberto Schmid, Director of the Institut of Higher Studies of Pavia, Italy

**16:50- 17:20** *Debate*

**17:20- 17:50** M. Tetsuo Ida, Professor, University of Tsukuba, Japan

M. Elyes Jouini, Professor, Vice-President of the University of Paris Dauphine in charge of scientific research, France

**17:50- 18:20** *Debate*

**18:20- 18:50** M. Mohamed El Aoucet Ayari, NASA-University of Colorado at Boulder, USA

M. Carlos Renato of Almeida Matos Ferreira, President of the *Instituto Superior Técnico di Lisboa*, Portugal

**18:50-19:20** *Debate*

**19:20- 19:50** M. Youngjin Song, Ministry of Science and Technologies, Republic of Korea

M. Choujaa Mustapha Lahzami, Professeur, Business School of Geneva, Switzerland

**19:50- 20:00** *Debate*

## Workshop 3. Partnership and Research Environment: Innovation dynamics in the private sector, international partners

*Room Mokhtar Latiri*

*Session Chair* : M. Hamed Ben Dhia, President of the University of Sfax

*Reporters* :

- M. Mohamed Kerkeni, Ministry of Higher Education, Scientific Research and Technology



- Ms Sonia Abdelhak, Pasteur Institut of Tunis

## *Speakers:*

**15:00- 15:20** M. Bahri Rezig, Professeur, Director of the National Engineering School of Tunis

## **Presentation of the report of the «Partnership and Research Environment» Preparatory Commission**

**15:20- 16:20** *Debate*

**16:20- 16:50** M. Francesco Fedi, Chairman of the European Committee for Scientific Research Cooperation, European Commission

M. Jean Vaylet, Vice-President of ATMEL Corporation, Silicon Valley, USA

**16:50- 17:20** *Debate*

**17:20- 17:50** M. Yu Seong Su, Director General of Technopoles Planning, Ministry of Science and Technologies, Republic of Korea

M. Michel Cosnard, Director General of the National Institute of Informatics and Automatic Control INRIA, France

**17:50- 18:20** *Debate*

**18:20- 18:50** M. Salem Chouaïb, Director of Research, National Institute of Health and Medical Research, France

M. Ralph Reichwald, Professor, *Technische Universität München*, Germany

**18:50- 19:20** *Debate*

**19:20- 19:50** M Bjorn Sversvik, Chairman of the Scandinavian Association for Scientific Research, *SINTEF*, Norway

# PROGRAM

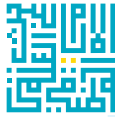


Ms Takoi Hamrita, Professor, University of  
Georgia Athenes, USA

M. Martin Gregory, University of  
Strathclyde, United Kingdom

**19:50- 20:00** *Debate*

**20:00** **Cocktail Dinner**





**Tuesday, 20 November 2007**

**8:30- 11:00 Workshop (Continues) :**

Debates, Recommendations and Reports of workshops

**1. Research Policy**

*Room Mohamed Larbi Hachem*

**2. National Research System**

*Room Bechir Hamza*

**3. Partnership, and Research Environment**

*Room Mokhtar Latiri*

**PARALLEL SCIENTIFIC WORKSHOPS**

**8:30- 12:30 Biotechnology and Life Sciences**

*Room Besma Hentati*

*Session Chair :* M. Mohamed Baker Rammah, President of the University of Monastir

*Reporters :*

- Ms Rafika Ben Chaouacha Chekir, Higher Institute of Biotechnology of Sidi Thabet
- M. Khmaies Zayani, Higher Institute of Science and Technology of the Environment of Borj Cedria

*Speakers :*

- 8:30- 9:00** M. Radhouane Ellouze, Professor Emeritus, Former Managing Director of the Center for Biotechnology of Sfax
- M. Henri Condé, Professor, former



President of the University of Orsay, France

**9:00- 9:30** *Debate*

**9:30- 10:00** Ms Naïma Khrouf, Professor, Faculty of Medical Studies of Tunis, Member of the Academy of Medicine of France

M. Andreas Dress, Professor, Head of Department, Shanghai Institute for Biological Sciences, Chinese Academy of Sciences, China

**10:00- 10:30** *Debate*

**10:30- 11:00** M. Pierre Feillet, Professor, Academy of Technologies, France

M. Abdelwahed Ghorbal, Professor, General Director of the Center for Biotechnology Research, Borj Cedria

**11:00- 11:30** *Debate*

**11:30- 12:00** M. Hechmi Louzir, Professor, Director General of the Pasteur Institute

M. Salem Chouaïb, Director of Research, The National Health Institute and Medical Research, France

**12:00- 12:30** *Debate*

## **8:30- 12:30** Information and Communication Sciences and Technologies

*Room Mohamed Ali El Annabi*

*Session Chair* : M. Mohamed Razzak Jday, President of the Université of Gafsa

*Reporters* :

- Ms Henda Ben Ghezala, Khawarizmi Computational Center
- M. Raouf Laroussi, Ministry of Higher



Education, Scientific Research and  
Technology

*Speakers :*

**8:30- 9:00** M. Naceur Ammar, Professor, Director of  
the Higher School of Communication of  
Tunis

M. Jean-Michel Contant, General Secretary,  
International Academy of Astronautics,  
France

**9:00- 9:30** *Debate*

**9:30- 10:00** M. José Manuel Perez Tornero, Professor,  
University of Bellaterra -Barcelone-, former  
President of the Mediterranean Network of  
Multimedia Training Centers,

M. Mohamed Moalla, Professor, Faculty of  
Mathematics, Physics and Natural Sciences  
of Tunis

**10:00- 10:30** *Debate*

**10:30- 11:00** Ms Leïla Saïdane, Professor, National  
School of Computer Sciences

M. Jean-Paul Haton, Director, Henri  
Poincaré University, Nancy 1, France

**11:00- 11:30** *Debate*

**11:30- 12:15** M. Tetsuo Ida, Professor, University of  
Tsukuba, Japan

M. Rachid Bouchakour, Director, *Ecole  
Polytechnique Universitaire* of Marseille,  
France

M. Jean-Yves Marzin, Research Director,  
National Scientific Research Center,  
France

**12:15- 12:45** *Debate*



## 8:30- 12:30 Water, Energy and Sustainable Development

*Room Slaheddine Amami*

*Session Chair :* M. Mabrouk Montacer,  
President of the University of Gabes

*Reporters :*

- M. Adel Alimi, National School of Engineering of Sfax
- M. Ahmed Ghrabi, Techno-park of Borj Cedria

*Speakers:*

8:30- 9:00 M. Ameur Horchani, Former Secretary of State for Agriculture and Water Resources

M. Rafael Rodriguez, Professor, *Consejo Superior de Investigaciones Cientificas, Spain*

9:00- 9:30 *Debate*

9:30- 10:00 M. Sassi Ben Nasrallah, Director General of the Research Center of Science and Technology for Energy, Borj Cedria

M. Daniel Champlon, Director of International Relations, French Petroleum Institute, France

10:00- 10:30 *Debate*

10:30- 11:00 M. Lucien Chabason, Institute for Sustainable Development and International Relations, France

Ms Nadia Ghrab, Professor, National School of Engineering of Tunis

11:00- 11:30 *Debate*

11:30- 12:00 M. Mohamed Annabi, Professor, former Director of the National Institute of



Scientific Research

M. Abdelmajid Jomni, Professor, Director  
National School of Engineering of Monastir

**12:00- 12:30** *Debate*

## **8:30- 12:30** Food Security and Agriculture

*Room Béchir Tritar*

*Session Chair* : M. Ahmed Helal, President  
of the University of Sousse

*Reporters* :

- M. Fethi El Lebdi, National Institute of  
Agriculture of Tunis
- M. Chérif Sammari, National Institute of  
Oceanographic Sciences and Technologies

*Speakers* :

**8:30- 9:00** M. Abdelaziz Mougou, President of the  
Higher Education Institute of Agricultural  
Research, President of the International  
Center for Advanced Mediterranean  
Agricultural Studies

M. Bertrand Hervieu, Director of Research,  
Secretary General of the  
International Center for Advanced  
Mediterranean Agricultural Studies, France

**9:00- 9:30** *Debate*

**9:30- 10:00** M. Ridha Mrabet, General Director of  
the National Institute of Oceanographic  
Sciences and Technologies

Ms Kalthoum Ben Hassine, Professor,  
Faculty of Mathematics, Physics, and  
Natural Sciences of Tunis

**10:00- 10:30** *Debate*

**10:30- 11:00** M. Houcine Khatteli, General Director of



The Institute of Arid Regions, Medenine  
M. Moncef Harrabi, Professor, former  
Director of the National Institute  
of Agronomics Tunis

**11:00- 11:30** *Debate*

**11:30- 12:15** M. Mohamed Neffati, Professor, Head  
of Laboratory, Institute of Arid Regions,  
Medenine

Ms Nejiba Zghal, Professor, Sciences  
Faculty of Sfax

M. Othman Jarboui, Research Director,  
National Institute of Oceanographic  
Sciences

**12:15- 12:45** *Debate*

## **8:30- 12:30** Human Sciences and Society

*Room Ahmed Abdesslam*

*Session Chair* : M. Mohamed Ali Drissa,  
President of the University of Kairouan

*Reporters* :

- Ms Faïka Skander Charfi, Institute of  
Higher Commercial Studies of Sfax
- M. Sahbi Allani, Doyen, Human Sciences  
and Letters Faculty of Kairouan

*Speakers*:

**8:30- 9:00** M. Hafedh Ben Salah, Professor, former  
Dean of the Faculty of Law and Political  
Sciences of Tunis

Ms Marie Françoise Courel, Scientific  
Director, National Center for Scientific  
Research, France

**9:00- 9:30** *Debate*



**9:30- 10:00** M. Ahmed Omrane, Professeur, Director of the Higher Institute of Legal Studies and Policies of Kairouan

M. Jean-Michel Mouton, Director of Studies, Practical School of Higher Studies-Sorbonne, France

**10:00- 10:30** *Debate*

**10:30- 11:00** M. Habib Dlala, Professor, former Dean of the Faculty of Social Sciences and Humanities in Tunis

M. Abdelmajid Bedoui, Professor, Higher Normal School of Tunis, former Director of the Bourguiba Institute of Languages of Tunis

**11:00- 11:30** *Debate*

**11:30- 12:15** M. Mohamed Karrou, Professor, Higher Institute of Human Sciences of Tunis

M. Abdellatif Mrabet, Professor, Faculty of Arts and Social Sciences of Sousse

M. Mohsen Bouazizi, Professor, Higher Institute of Human Sciences of Tunis

**12:15- 12:45** *Debate*



## SYMPOSIUMS

### 8:30- 12:30 Science and Ethics

*Room Chedly Bouyahia*

*Session Chair* : M. Abderraouf Mahbouli,  
President of the University of Tunis

*Reporters:*

- M. Messaoud Boudhiaf, Faculty of Economics and Management of Tunis
- M. Neji Baccouche, Faculty of Law of Sfax

*Speakers:*

8:30- 9:00 M.Chelbi Belkahia, Faculty of Law of Sfax

M. Henry Roussillon, President of the University of Social Sciences I Toulouse, France

9:00- 9:30 *Debate*

9:30- 10:00 M Jalloul Daghfous, Professor, Chairman of the National Committee for Medical Ethics, Faculty of Medical Studies of Tunis

M. Sebastien Balibar, Director of Research, National Center for Scientific Research, France

10:00- 10:30 *Debate*

10:30- 11:00 Ms Habiba Chaabouni, Professor, Faculty of Medical Studies of Tunis

M. Mohamed Mahjoub, Professor of Philosophy, Director General of the National Center for Translation

11:00- 11:30 *Debate*

11:30- 11:45 Ms Amel Aouij Mrad, Professor, Faculty of Law and Political Sciences of Tunis



11:45- 12:15 *Debate*

## 8:30- 12:30 **Education, Sciences and Technological Development**

*Room Bechir Tlili*

**Session Chair :** M. Mustapha Nasraoui,  
President of the University of Jendouba

**Reporters :**

- Ms Safia Mdimegh Belghith, School of Computer Science and Technology of Carthage
- Ms Chiraz Latiri, Higher Institute of Arts in multimedia Manouba

**Speakers:**

8:30- 9:00 M. Ali Belhani, Professeur, Faculty of Medicine of Tunis

M. Albert Claude Benhamou, Professor,  
Salpêtrière Hospital, France

9:00- 9:30 *Debate*

9:30- 10:00 M. Mongi Bousnina, Director General of the Arab Organization for Education, Culture and Sciences, ALECSO

M. Jean Audouze, Vice President of the French National Commission for United Nations Educational, Scientific and Cultural Organization, UNESCO

10:00- 10:30 *Debate*

10:30- 11:00 M. Lotfi Bouzaiane, Professor, Virtual University of Tunis

M. Dany Vandromme, Professor,  
Director of the National Network for Telecommunications for Technology, Education and Research, France

# PROGRAM

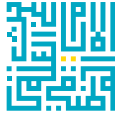


**11:00- 11:30** *Debate*

**11:30- 12:00** M. Mourad Abed, Professor, University of Valenciennes, France

M. Dirk Sterkendries, IDEALIST / 7<sup>th</sup> PCRD Network, Belgium

**12:00- 12:30** *Debate*





## 8:30- 12:30 ROUND TABLE: SCIENCE AND COOPERATION

*Room Habiba Jilani*

**Session Chair :** Ms Zeineb Mamlouk,  
President of the University of Tunis El  
Manar

**Reporters :**

- M. Mohamed Mohsen Ezzari, Higher Institute of Arts and Crafts of Gabes
- M. Abdelmajid Atouani, Higher Institute for Applied Studies in the Humanities Gafsa

**Speakers:**

- M. Ali Bousnina, Professor Emeritus, Faculty of Medical Studies of Tunis, former president of the University of Science, Technology and Medical Studies
- M. Jelel Bussedra, Faculty of Letters, Arts and Humanities of Manouba
- M. Refaat Chaabouni, Professor, National School of Engineering of Tunis
- M. Jameleddine Chichti, Professor, Business School of Tunis
- M. Mohsen Dhouib, Dean of the Faculty of Humanities and Social Sciences of Sfax
- M. Mohamed Naceur El Oued, Dean of the Faculty of Law, Economics and Management of Jendouba
- M. Khalil El Mehdi, Director General of Scientific Research and Education, Mauritania
- Ms Ndeye Arame Boye Faye, Director of



Research, Ministry of Scientific Research,  
Senegal

- M. Francesco Fedi, Chairman of the European Committee for Cooperation in scientific research, European Commission
- Adriano Gasperi, Director of External Relations of the Institute of Higher Studies of Pavie, Italy
- M. Ridha Jnaieh, Professeur, Faculty of Law, Political Sciences a and Economiques of Sousse
- Ms Julie Ramsey, Office of International Affairs, University of Strathclyde, UK
- M. Ralph Reichwalt, Professor, *Technische Universität München*, Germany

13:00-14:00 **Reports Presentation and  
Closing Ceremony**

14:00 **Lunch**

