



Rede Nacional de Ressonância Magnética Nuclear



Portuguese NMR Network
2010/2012: Overview

Outline



- The PT NMR network
 - Organization and objectives
 - Management and Accessibility
- Activities and Scientific Impact
- Funding
- Perspectives

Mission Statement



The **PTNMR** provides a service in NMR spectroscopy to the scientific community and companies

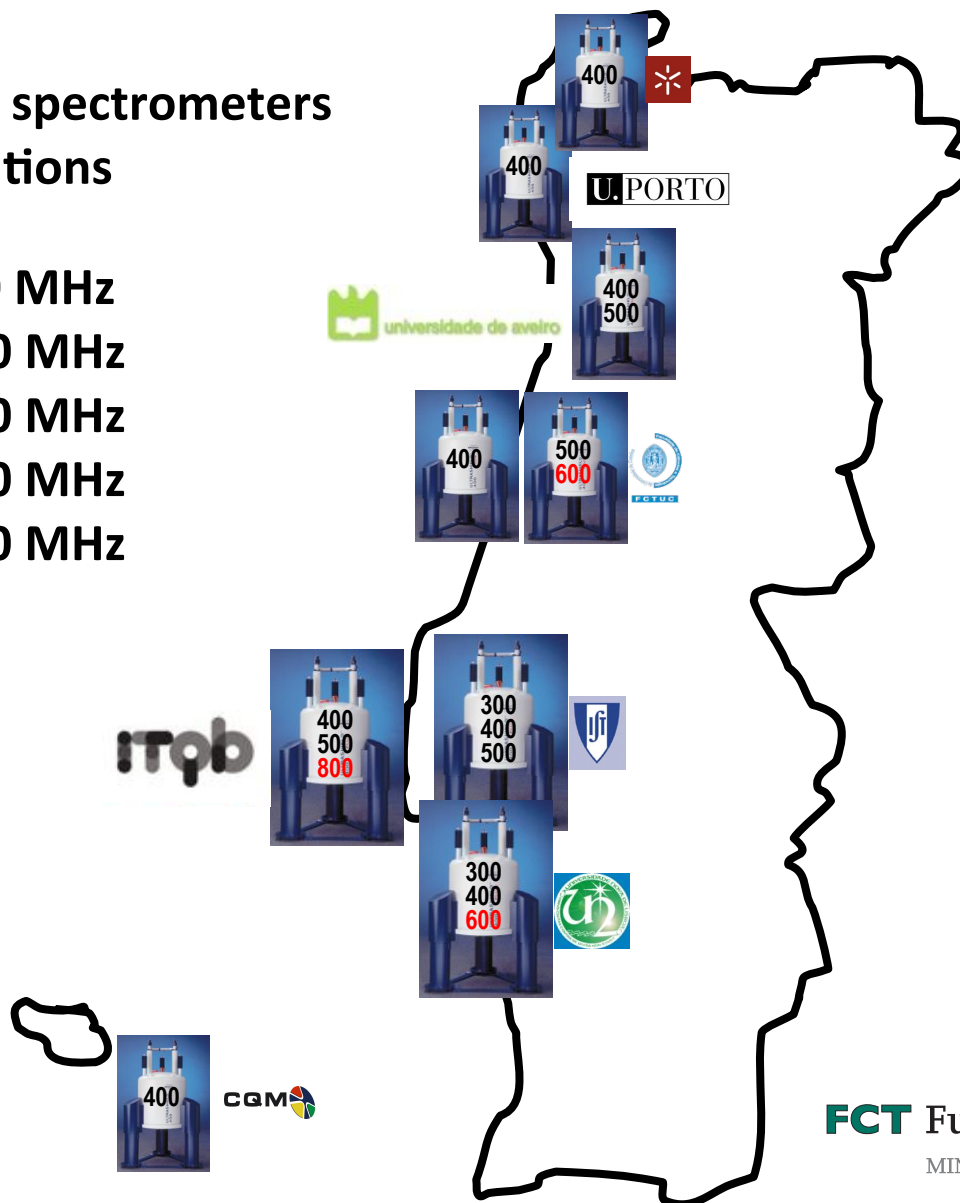
- access to modern NMR equipment,
- service spectra for regular/occasional users,
- training in NMR methods for regular users,
- consultation and collaboration on experimental design, data collection and analysis,
- support of NMR teaching activities.

PTNMR Network: 2012



20 NMR spectrometers
9 Institutions

1 × 800 MHz
2 × 600 MHz
6 × 500 MHz
8 × 400 MHz
3 × 300 MHz



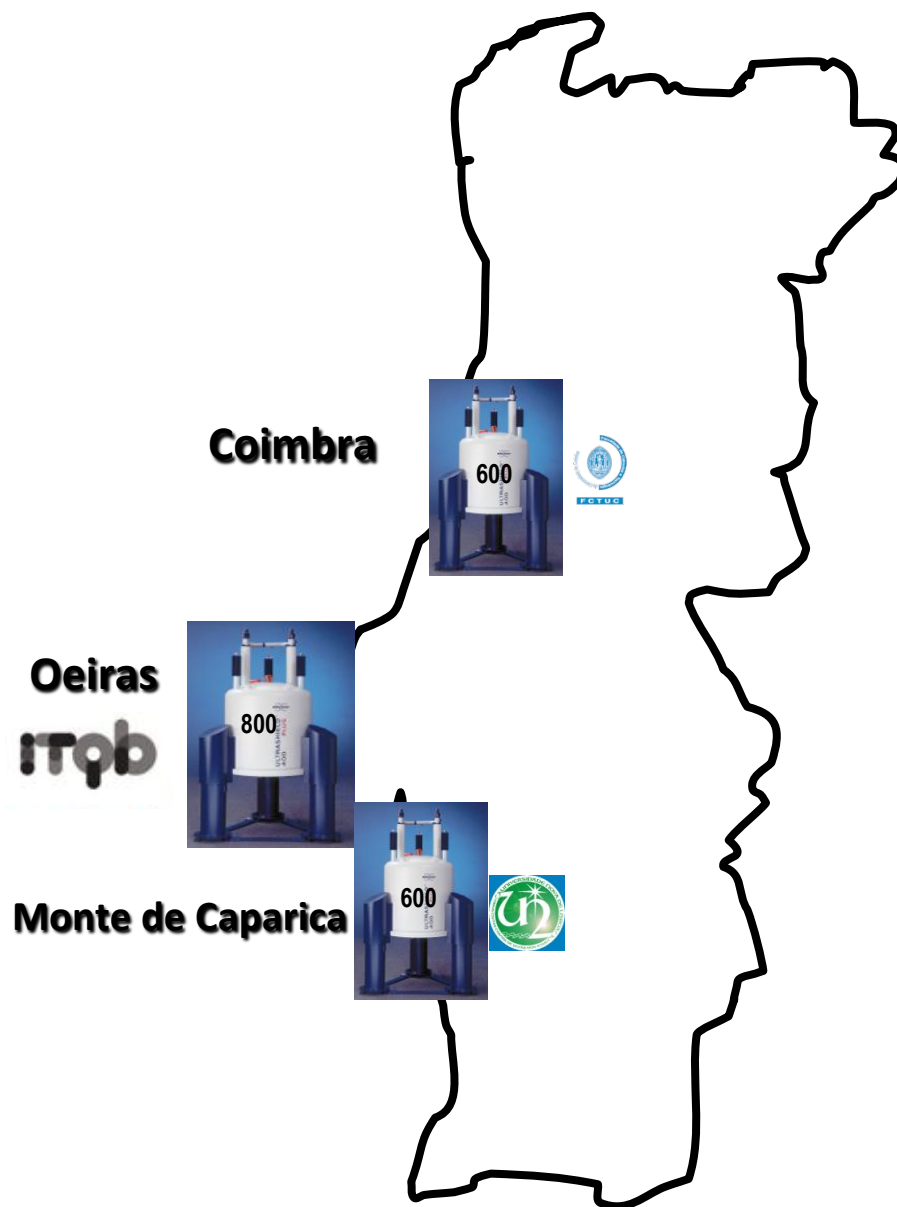
2007 – Reequipment
Scientific Laboratories

13 NMR spectrometers
8 Institutions
€ 6.5 Million investment

1 × 800 MHz
2 × 600 MHz (1 with cryoprobe)
3 × 500 MHz
5 × 400 MHz
2 × 300 MHz

FCT Fundação para a Ciência e a Tecnologia
MINISTÉRIO DA EDUCAÇÃO E CIÊNCIA

High-field service in PTNMR



**CENTRO DE
RESSONÂNCIA
MAGNÉTICA
ANTÓNIO XAVIER**

Service in PTNMR



Low field Spectrometers – (300, 400 and 500 MHz)

- Routine analysis
 - Support of internal analytical services of host institutions (research and teaching)
 - Analytical services to industry
- Some specialized services

High field Spectrometers – (600 and 800 MHz)

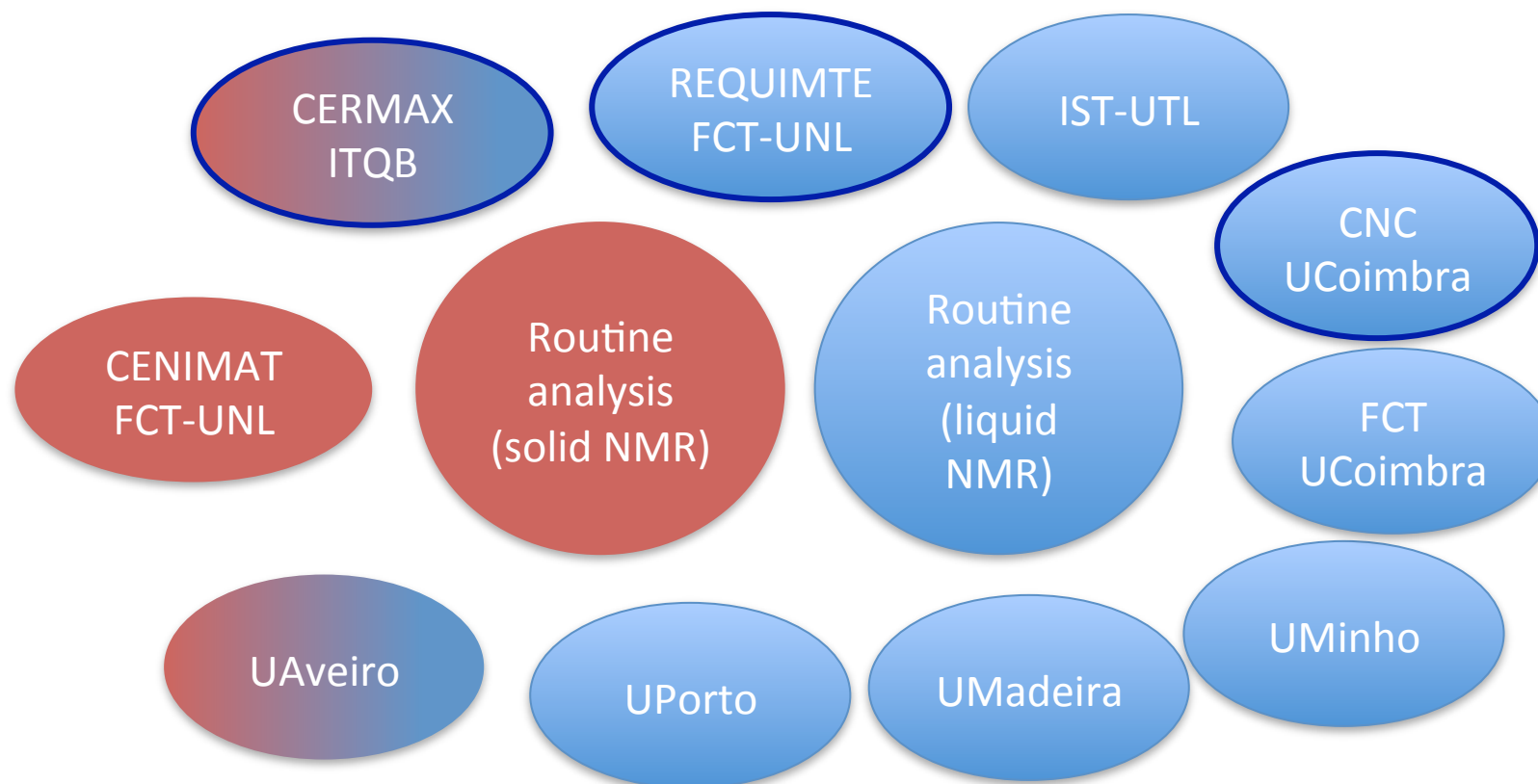
Highly specialized, research & development oriented

essential for the competitiveness of the Portuguese scientific community in advanced human resources formation (Masters, PhD, post-docs) and fund raising

Service in PTNMR

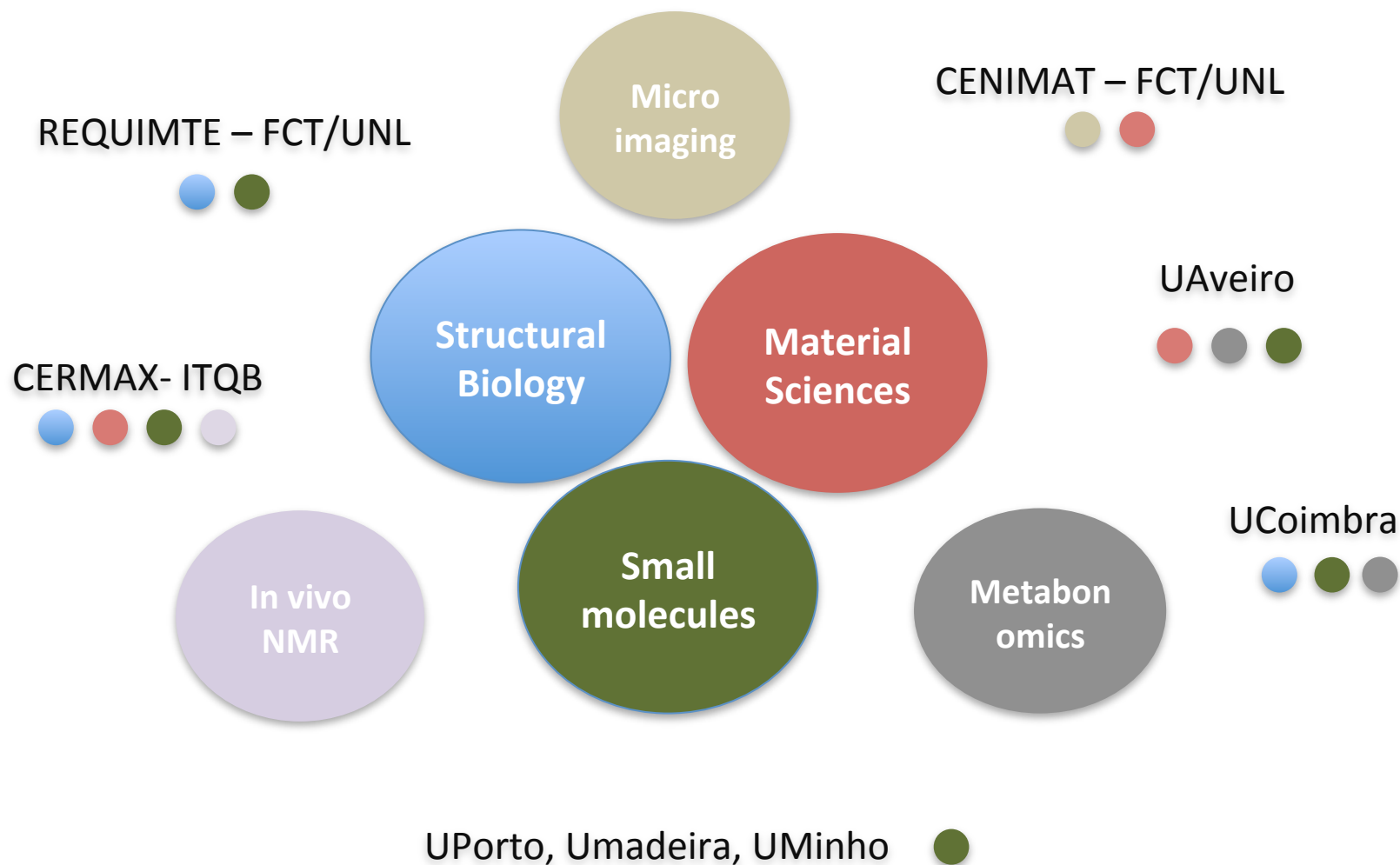


Solid vs Liquid state analysis



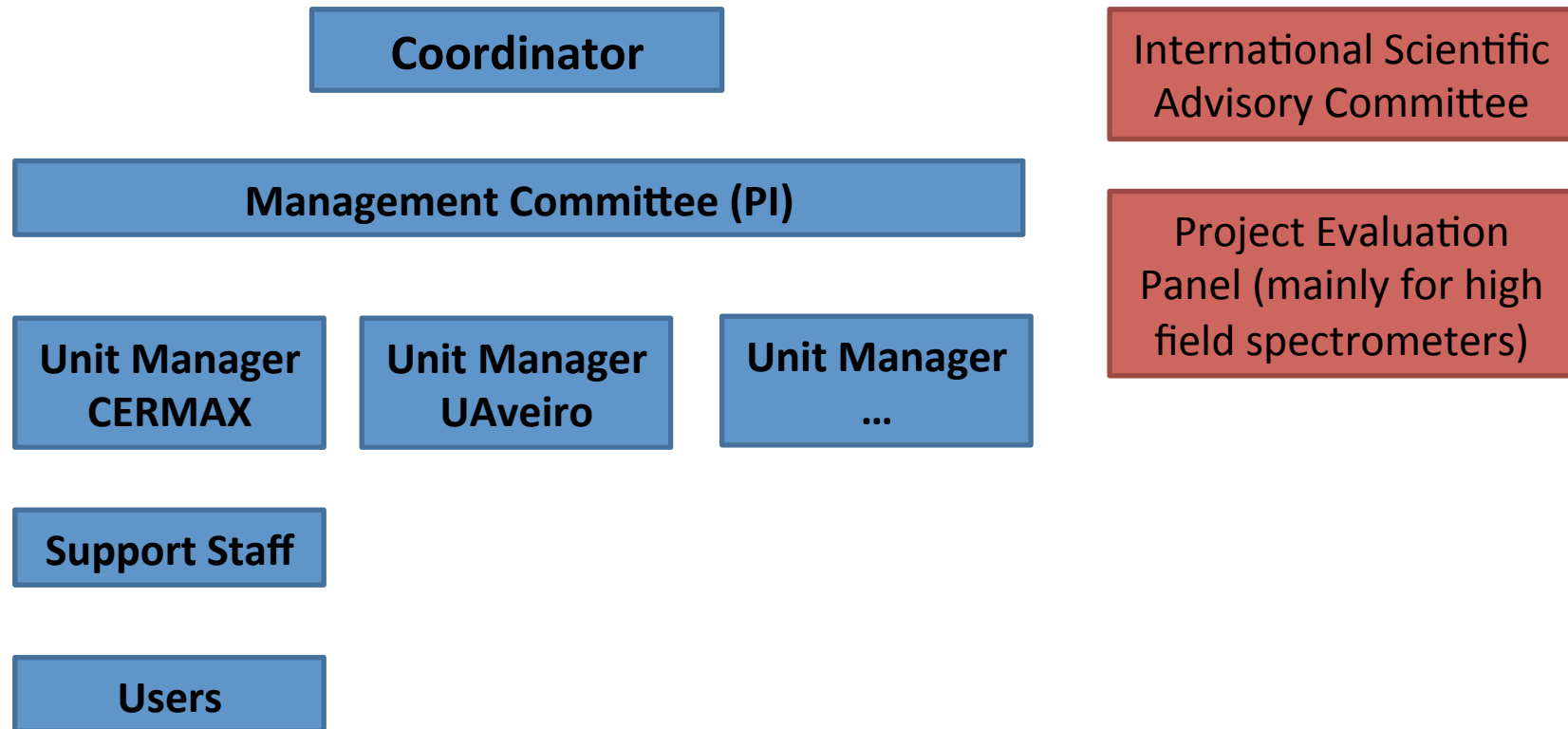
Service in PTNMR

Specific expertise within the Network



Management and Accessibility

According to a policy agreed between all partners and FCT-MEC – **Management Protocol**



Management and Accessibility

<http://ptnmr.dq.ua.pt> Equipment, services, accessibility, ...



The screenshot shows the homepage of the Portuguese Nuclear Magnetic Resonance Network (PTNMR). The header features the PTNMR logo on the left and a banner image of an NMR spectrometer on the right with the text "Portuguese Nuclear Magnetic Resonance Network". Below the header is a navigation menu with links: Home, Network, Services and Access, NMR Centers, News, NMR Links & Resources, Contacts, Jobs & Grants, Partners, and PTNMR Activities.

Photo Gallery

Home

2nd PTNMR Meeting - NMR in Portugal: an overview

2nd PTNMR Meeting
NMR in Portugal: an overview

3rd February 2012
Auditório da Biblioteca - FCT/UNL

2nd PTNMR Meeting - NMR in Portugal: an overview
3rd February 2012 - Auditório da Biblioteca, FCT/UNL, Caparica
2nd meeting of the Portuguese Nuclear Magnetic Resonance Network
The meeting is free of charge but registration is required. Please visit the meeting [website](#) for more details
REGISTRATIONS CLOSED

[Read more...](#)

Instruct-PT

Portugal have signed an International Collaboration Agreement to formalise membership to [Instruct](#) for 2 years.
Instruct is the dynamic hub of structural biology providing an integrated infrastructure of cutting edge technology, scientific expertise and pioneering training. Learn about Instruct Centres and apply for access through a straightforward online process [here](#).
PTNMR represents the Portuguese NMR community in the [Portuguese Affiliate Instruct Center](#) providing its infrastructure to the hub.

Welcome Message

Accessibility

Individual Unit Homepage: Booking and availability

Advance 800 calendar

http://vermax.rdg.ac.uk/Calendar/800/month.php?date=20120101

ChemDOS NMR - architecture | Códexis reg. SAPO Videos | Bacterial st. - expression | NMR DQ-FCT | Maps in Chemistry | Proteins NMR | local Guide | Apps | Google Maps | YouTube | Wikipedia | Dia 1 | 30

My Calendar Reports Search Help

Month: Jan 2012 Week: Dec 25 - Dec 31 Year: 2012 Login

December 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

January 2012
Public Access

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

February 2012

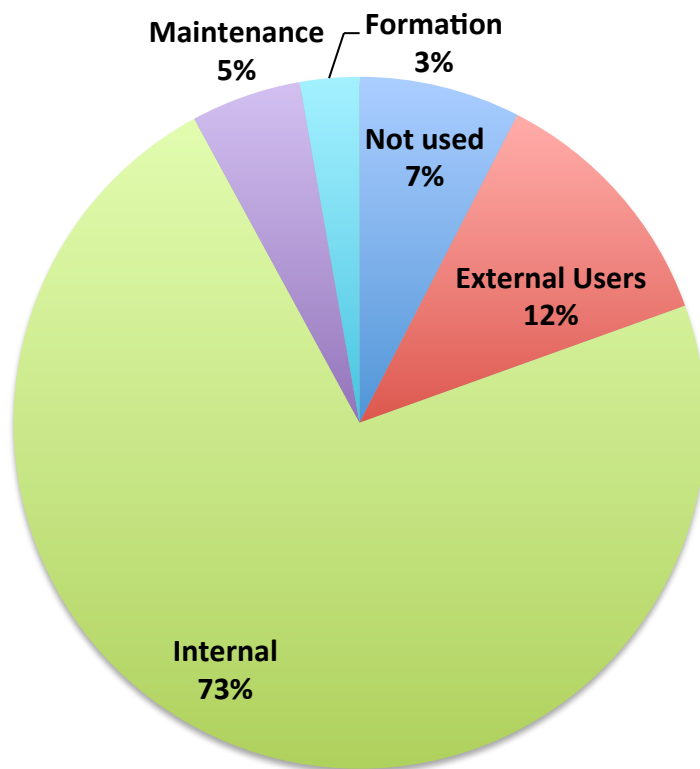
Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
81		82		83		84	
85					86		87
88							
89							
90							
91							
92							
93							
94							
95							

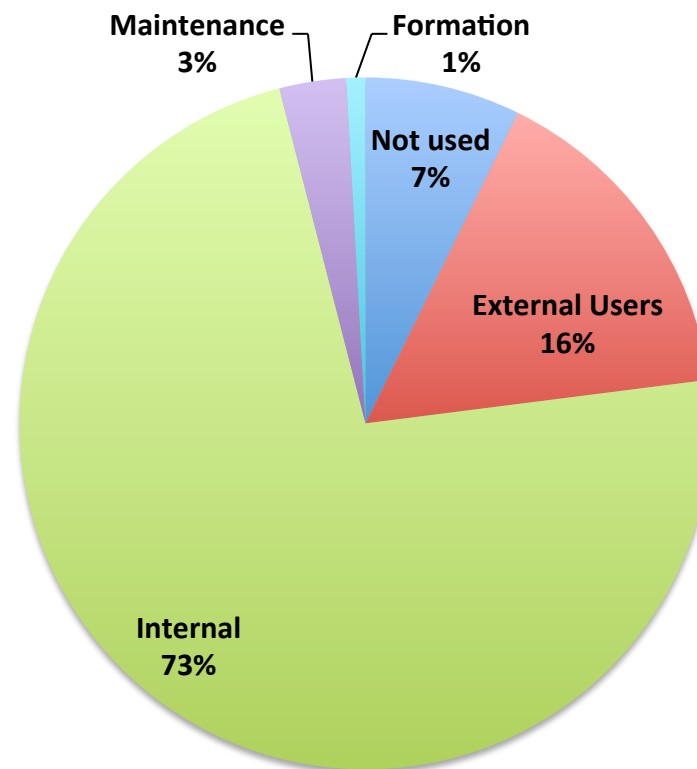
Accessibility

High-field spectrometers

2010

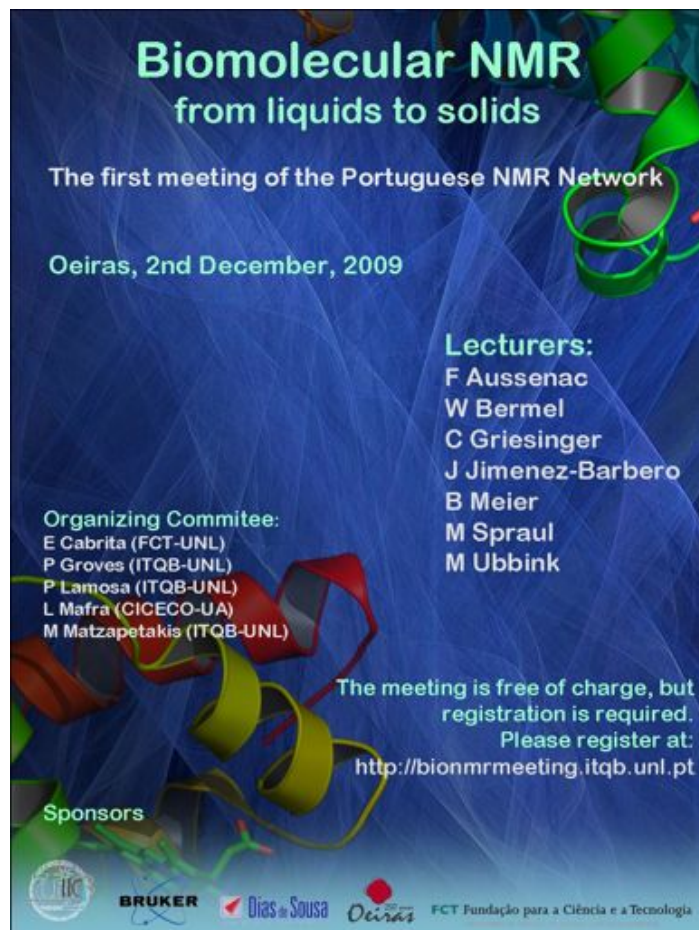


2011



Activities and Scientific Impact

Networking activities: First Meeting of the National NMR Network

The poster features a blue background with a network of white lines and several 3D ribbon diagrams of protein structures in green, red, and yellow. The text is arranged in a structured layout with various fonts and colors (green, white, black) to distinguish different sections.

Biomolecular NMR
from liquids to solids

The first meeting of the Portuguese NMR Network

Oeiras, 2nd December, 2009

Lecturers:
F Aussenac
W Bermel
C Griesinger
J Jimenez-Barbero
B Meier
M Spraul
M Ubbink

Organizing Committee:
E Cabrita (FCT-UNL)
P Groves (ITQB-UNL)
P Lamosa (ITQB-UNL)
L Mafra (CICECO-UA)
M Matzapetakis (ITQB-UNL)

The meeting is free of charge, but registration is required.
Please register at:
<http://bionmrmeeting.itqb.unl.pt>

Sponsors

Logos for sponsors: FCT, BRUKER, Dias de Sousa, Oeiras, and FCT Fundação para a Ciência e a Tecnologia.

- Mobility of users
- Formation
 - Courses
 - Seminars
 - Conferences
- Support to NMR related events

Activities and Scientific Impact

Beginner courses – held annually

- Practical NMR course at **CERMAX-ITQB**, held annually since 2008
- NMR: From theory to practice (**FCT-UNL**) held annually since 2007



You are here: Home → News → 4th CERMAX practical course on basic NMR

Home

About Us

Associate Laboratory

Research

Education

Services & Facilities

Science & Society

Events

Contact us

Search Site Search

4th CERMAX practical course on basic NMR

Registrations are now open

Oeiras, 11.03.11

Registrations are now open for a four day course with theoretical and practical covering basic aspects of the technique and oriented towards both beginner NMR users. The course, organized by CERMAX, will take place at ITQB Oeiras, 14-17 June.

Course topics include basic theoretical aspects of NMR, introduction to commonly used 1D and 2D homonuclear and heteronuclear techniques and processing with a "hands-on" approach.

The course is open and free of charge for members of the National NMR Society (Oeiras). Other students will be required to pay a fee of 200 euros. The applications to this course please send an e-mail to lamosa@itqb.unl.pt and applications will be evaluated on the 1st of June and acceptance confirmed by the 15th of June.

4th CERMAX practical course on basic NMR

Oeiras, 14-17 June 2011

Welcome Objectives Program Schedule Registration How to Get to FCT

11th-14th OCT 2010

NMR
FROM THEORY
TO PRACTICE

FUNDAMENTALS OF LIQUID STATE NMR
STRUCTURAL ANALYSIS OF SMALL MOLECULES
HANDS ON ACQUISITION AND PROCESSING

The graphic features a 1D NMR spectrum at the top and a 2D NMR spectrum below it. To the right of the spectra are two chemical structures: a cyclohexane ring with protons labeled 'H' and a more complex heterocyclic structure with nitrogen atoms labeled 'N'. The text 'NMR FROM THEORY TO PRACTICE' is prominently displayed in a red, torn-paper style box.

Activities and Scientific Impact

Advanced courses – different specialized topics

- Ligand based NMR interaction studies (FCT-UNL) – Mar 2010, Sep 2011
- CCPNMR10 analysis (IGC/CERMAX) – June 2010

12TH-15TH SEPTEMBER 2011

2ND HANDS ON COURSE
LIGAND-BASED NMR INTERACTION STUDIES

INVITED TUTORS
JESUS ANGLADE
MANUEL MARTIN PASTOR

Fundamentals of diffusion and NOE based experiments
Case Studies
Hands-on practice: DOSY and STD-NMR

Registration Deadline:
5th September 2011

Organization:
Eurico Gabriel (FCT-UNL)


PTNMR
BRUKER
FCT
requimte

CCPNMR10
Macromolecular NMR assignment with CcpNmr Analysis
In cooperation with the Portuguese NMR Network and the CCPN consortium.

PTNMR **CCPN**


IMPORTANT DATES for CCPNMR10
Deadline for applications: **May 19th 2010**
Notification of acceptance dates:
EARLY: May 14th (on special request, see [Application](#))
NORMAL: May 21st 2010
Course date: **May 31st - June 4th 2010**

Instructors:



Manolis Matzapetakis got his Ph.D. in Biological Chemistry (de novo Protein design and NMR) from the University of Michigan in Ann Arbor and then did his PostDoc at the Center of Magnetic Resonance (CERM) in Florence, Italy, working on the NMR of large proteins. He is currently the head of the lab of Biomolecular NMR group at ITQB in Oeiras, Portugal and his interests are in the fields of structural proteomics and ferrous homeostasis. He is interested in high-throughput structure determination by NMR, using rapid data acquisition techniques as well as the study of protein-protein interactions.

Affiliation: Instituto de Tecnologia Quãmica e BiolÃ³gica, Oeiras, PT



Pedro Lamosa has a degree in Biochemistry from the University of Lisbon, and a PhD in Biochemistry (Protein structure and protein dynamics by NMR) from the New University of Lisbon. He is currently the manager of CERMAX (Centro de Ressonância Magnética António Xavier). Having devoted his research to the adaptation of microorganisms to high temperatures, Pedro Lamosa has mainly used NMR to study protein stabilization by compatible solutes. These studies have focused in the discovery and structure determination of novel compatible solutes accumulated by hyperthermophiles, and their action upon protein structure and protein dynamics.

Affiliation: Instituto de Tecnologia Quãmica e BiolÃ³gica, Oeiras, PT

Activities and Scientific Impact

Support to NMR related events

- SMARTER Workshop (UAveiro, 2010, 2011)
- Modern Methods of Structure elucidation (IST-UNL, 2010, 2011)
- Summer School on “Proteins and Proteomics” (FCT-UNL, 2010, 2011)
- Biomedical Magnetic Resonance: Molecular imaging and Metabolism (CNC Doctoral Program – Coimbra, 2010, 2012)



SMARTER 2 WORKSHOP
Structure elucidation by
combining mAgnetic Resonance
compuTation modEling
and diffRActions

23-27 MAY, 2011

Home Committees Programme Registration info Venue Presenter Guidelines Sponsors

DOWNLOAD [here](#) the SMARTER 2 book of abstracts!

Welcome Message

We cordially invite you to the Second SMARTER Crystallography Workshop (Structure elucidation by combining mAgnetic Resonance, compuTation modEling and diffRActions), which will be held on 23-27 May 2011 at the University of Aveiro, Portugal.

Group photo

Conference Major Sponsors

BRUKER IUCr PANalytical JEOL

FUNÇÃO PARA A CIÊNCIA E A TECNOLOGIA, PORTUGAL PTNMB

For a complete list of sponsors click [here](#)



ORGANIZED BY THE CENTRO DE QUÍMICA ESTRUTURAL

IN COLLABORATION WITH THE INSTITUTO TECNOLÓGICO E NUCLEAR

Home

Main idea of the MMSE-2011

Scientific programme

Organizing & Scientific Boards

Invited Speakers

Register for participation

Sponsors

Contacts & How to reach us

When: November 14th-18th, 2011

Hosted by: Centro de Química Estrutural – Instituto Superior Técnico (CQE-IST)

To whom: Bachelor, Master & Ph.D. students, Post-docs and Young Researchers

Format: Theoretical and Hands-on sessions, Case Studies, Discussions in small groups, Demonstrations of techniques, Participant's Flash presentations, Book of Abstracts

How to participate: Consult the official website of MMSE-2011 for details

Important dates: Registration: **until October 9th**
Last days of registration – last places are available
Flash presentation submission: **October 9th to 15th**
Acceptance: **October 16th**

Additional information: Contact Dr. Konstantin Larygin

FROM THEORY TO PRACTICE IN Solution and Solid-state NMR, EPR spectroscopy, Mass spectrometry, and X-ray diffraction

SELECTED TOPICS

1D&2D NMR methods in analysis of (bio)organic and inorganic molecules
High resolution Solid-state NMR
Mass spectrometry techniques
Single crystal vs. powder X-ray diffraction
EPR spectroscopy in characterization of organic and organometallic species

INVITED SPEAKERS

João Rocha (CQE/CQ-UNL)
Solid-State NMR spectroscopy tools for 21st century research

Margarida Archer (FCB/UNL)
The world of proteins conquered by X-ray diffraction

Isabel Tomás (FCB)
EPR spectroscopy of metal complexes

Rui Alberto Pereira (BIAL)
NMR spectroscopy in discovery of new pharmaceuticals

Invited speakers from Bruker AXS
Emerging X-Ray diffraction techniques

Ana Gil (UAveiro)
Insight into Metabolomics principles and applications

Manuel Mota de Freitas (FCB)
Nature of ionic liquids in the gas phase probed by FTICR-MS

Activities and Scientific Impact

Support to NMR related events

- SMARTER Workshop (UAveiro, 2010, 2011)
- Modern Methods of Structure elucidation (IST-UNL, 2010, 2011)
- Summer School on “Proteins in Proteomics” (FCT-UNL, 2010, 2011)

In 2010/2011

PTNMR supported/organized/co-organized:

- 21 - Courses/Workshops
- 18 – Scientific Seminars
- 3 - Scientific Meetings

We cordially invite you to the Second SMARTER Crystallography Workshop (Structure elucidation by combining magnetic Resonance, computation modelling and diffractions), which will be held on 23-27 May 2011 at the University of Aveiro, Portugal.

Conference Major Sponsors:

BRUKER IUCr PANalytical JEOL

For a complete list of sponsors click [here](#)

Book of Abstracts

Download [here](#) the SMARTER 2 book of abstracts

Aveiro pictures

PTNMR 2011

PORTUGUESE NUCLEAR MAGNETIC RESONANCE NETWORK

PORTUGUESE MAGNETIC SPECTROSCOPY NETWORK

FUNDACAO PARA A CIENTIA E A TECNOLOGIA, PORTUGAL

REV. Producao para a Ciencia e a Tecnologia

Additional Information

Contact Dr. Konstantin Goryunov

Invited speakers from Bruker AXS

Emerging X-Ray diffraction techniques

Ana Gil (U.Aveiro)

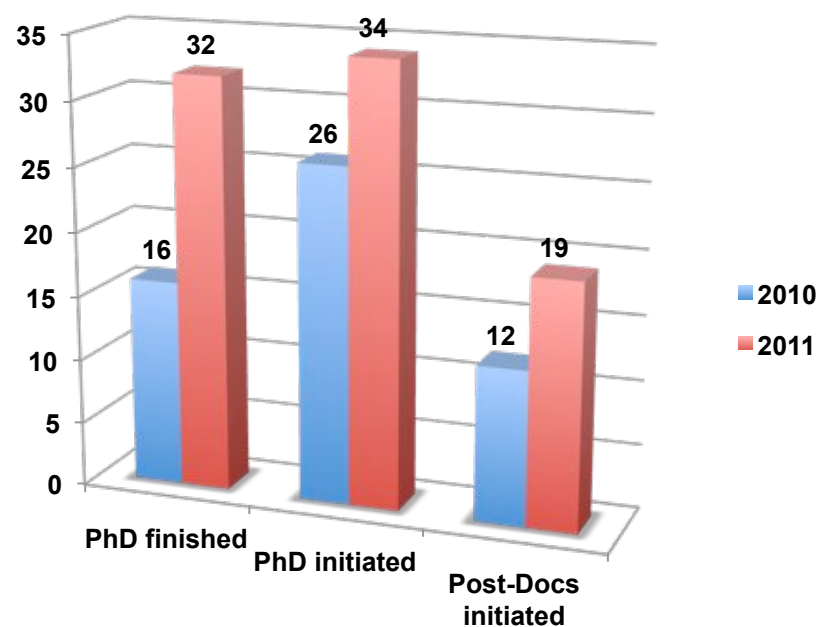
Insight into Metabolomics principles and applications

Manuel Micaes da Silva (FCUL)

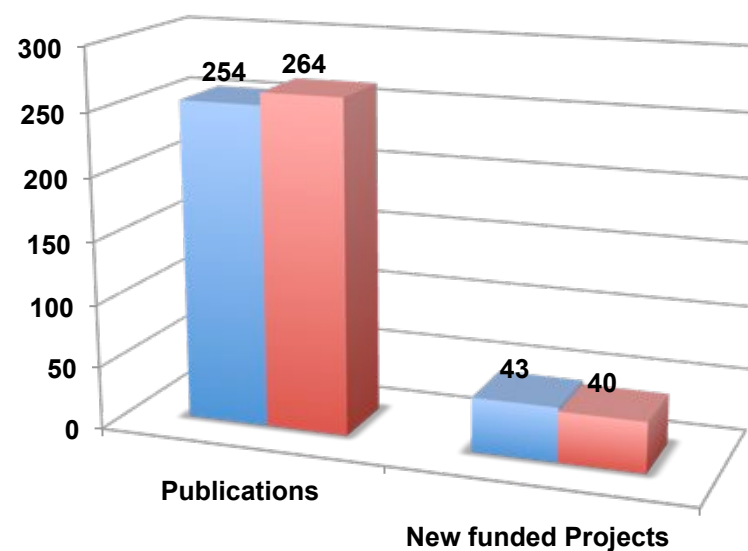
Nature of ionic liquids in the gas phase probed by FTICR-MS

Scientific Impact

Advanced formation with significant NMR contribution



Publications and Projects with relevant NMR contribution



more than **100 PhD supported** with strongly NMR dependent work program

Funding

Rede Nacional RMN/FCT-MEC

82 %

Contrato-Programa 2010-2012

FCT Fundação para a Ciência e a Tecnologia
MINISTÉRIO DA EDUCAÇÃO E CIÊNCIA

18 %



Funding

Contrato-Programa 2010-2012

Rede Nacional RMN/FCT-MEC

Aprox. 1,4 M €

96 %- Maintenance and Operation Costs

- 82,1 % FCT
- 17,9 % Units

4% - Networking Costs

- 71,8 % FCT
- 28,2 % Units

- Human Resources
PhD - 5
MsC - 5 **100 % FCT**

- Service and Maintenance
Maintenance contracts
Maintenance of peripherals

- Current Expenses
Cryogenic Fluids
Solvents, lab material, etc

- Mobility of users
- Formation (courses, seminars,..)

Perspectives



- Continue to **support** the scientific and Academic community (**services and education**)
- Establish partnerships and exchange programs with other related European Networks – **Internationalization**
- Increase the awareness of the PTNMR infrastructure in terms of **contribution to the competitiveness** of the Portuguese R&D in Academia and Industry – New Units
- **To ensure an integrated maintenance and updating plan of the infrastructure**

**Fundamental Tool to Keep
the Network Running**

FUNDING



IV IBERO-AMERICAN NMR MEETING

VI REUNION BIENAL DEL GERMN III IBERIAN NMR MEETING

Univ. of Aveiro, Portugal 25th-28th September 2012

WELCOME

COMMITTEES

PROGRAMME

REGISTRATION

ABSTRACT SUBMISSION

TUTORIAL COURSES

VENUE

KEY DATES

SPONSORS

CONTACTS

IMPORTANT DATES

April 30, 2012
Abstract submission

May 31, 2012

WELCOME

Welcome to the IV Ibero-American NMR Meeting - VI GERMN Bienal Meeting - III Iberian NMR Meeting Web site.

In 2012, the IV Ibero-American NMR Meeting will be celebrated along with the VI GERMN Bienal Meeting and the III Iberian NMR Meeting in Aveiro (Portugal), organized by the Portuguese NMR Group of the Portuguese Chemical Society. This special arrangement will offer the Ibero-American NMR spectroscopists a large audience and a great opportunity to present their results.

The Bienal Meeting of the Specialized Group of NMR (GERMN) of the Royal Spanish Society of Chemistry (RSEQ) started in 2002 in Calella de Mar (Barcelona) and since 2008 (Sevilla) has been jointly organized with the NMR Group of the Portuguese Chemical Society (SPQ) as the Iberian NMR Meeting, to foster the exchange and sharing of scientific ideas on all aspects of NMR between colleagues of both countries.

The 1st Ibero-American NMR Meeting was organized by the Brazilian NMR Society (AUREMN) in 2005 in Angra dos Reis (Brazil). Following meetings were held in 2007 in Tarragona (Spain) and again in Angra dos Reis (Brazil) in 2009. The intention of the involved organizing committees is to organize a meeting alternatively in Europe and in America offering an international forum to discuss scientific topics and to expand the collaboration between NMR groups in the Ibero-American community.

SPONSORS



universidade de aveiro



Sociedade Portuguesa de Química

100 ANOS



PTNMR
EUROPE



GERMN
2012