



COST STSM Application Form

To be sent by the applicant as attachment by e-mail together with all the documents he/she would like to submit to support the application (full CV, detailed work plan, motivation, etc.) to the

- * Host (who will send his agreement to host the applicant to the MC Chair)
- * MC Chair for evaluation and approval

COST Office Science Officer: DR GIUSEPPE LUGANO, giuseppe.lugano@cost.eu

COST MC Chair: PROF. PIERRE PAROT, parot@cea.fr

COST STSM Manager: PIERRE PAROT, pierre.parot@cea.fr

COST STSM Reference Number: COST-STSM-TD1002-12165

Period: 2012-11-18 00:00:00 to 2012-11-25 00:00:00

COST Action: TD1002

STSM type: Regular (from France to Spain)

STSM Applicant: Mr jean-marie TEULON, cea/dsv/sbtn,F-30207 Bagnols sur Cèze(FR) , jean-marie.teulon@cea.fr

STSM Topic: Standardization in Cell Mechanics Measurements

Host: Daniel NAVAJAS, Universitat Barcelona, 08007 Barcelona(ES), dnavajas@ub.edu

Budget Request: Year-2012

Travel	600 Euro
Subsistence (hotel/meals)	800 Euro
Total	1400 Euro

Short CV:

30/01/1962

research ingeneer

Work Plan Summary:

The aim of this short-term scientific mission is to obtain a training of the applicant on techniques applied to evaluate cell nanomechanical properties using Atomic Force Microscopy. The applicant has already experience in biological application of Dynamic Force Spectroscopy techniques and will like to acquire expertise in measurement and assessment of nanomechanical properties of biomaterials. There is an ongoing experiment in the COST action regarding a project on `Standardization in Cell Mechanics Measurements` in which the main goal is to evaluate the accuracy of elastic modulus measurements by AFM in different working groups. The group of Daniel Navajas in Barcelona is one of the leading team in this topic. It is the perfect place to learn the basics of nanomechanical measurements on soft samples.

Practical work includes:

- Preparation of polyacrilamide gels
- Determination of experimental acquisition settings
- Calibration of the photodiode and the spring constant
- Tip-sample contact models
- Data processing



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I request the approval of a COST Short Term Scientific Mission as described above

Applicant

Mr jean-marie TEULON

31 Oct 2012