



Initial Training Network (2009-2012)



How does plate tectonics work: From crystal-scale processes to mantle convection with self-consistent plates

First workshop

9-12 October 2009
La Grande Motte, France











How does plate tectonics work: From crystal-scale processes to mantle convection with self-consistent plates

7 institutions: Geosciences Montpellier, FAST-Orsay, Bristol, ETH, Roma 3, Utrecht, CISC-Granada ~25 permanent researchers

4 associated partners: Rockfield, Schlumberger, Total, Oxford Instruments

2 ERs (postdocs) & 10 ESRs (PhD)

4 workshops (annual)

4 short courses (Texture & Anisotropy, Seismic Signal, PERPLEX, Convection in complex fluids)







Training program



ESR1, ESR5, ESR6,

ESR7, ER1

ESR3, ESR4, ESR9

- Core of the training program = collaborative research projects (ESR= PhD)
- 3 scientific work packages

ESR1, ESR2, ESR9, ER2

- WP1: How to create new plate boundaries (A. Davaille & J.L. Bodinier)
- WP 2: Plates and convective patterns in subduction (M.Kendall & T. Gerya)
- WP3: Plates in mantle convection: the global story (P. Tackley & N. Ribe)

WP1 ESR1 ESR3 ESR₂ ESR4 ESR5 How to create new plate Role of external forcing and Observations and modelling Relations between magma Processes and properties boundaries? Thermo-mechanical laboratory of the preexisting structure of fluid transport and transport and deformation controlling the formation of models of subduction of the lithosphere on segregation processes during the erosion of lithosphere-scale shear zones the evolution of a at the mm to m-scale Coordinators: A. Davaille & J.L. Bodinier the lithosphere subduction ESR2, ESR5, ESR6, ESR7, ESR1, ESR5, ESR8, ER2 ESR4, ESR6, ESR9, ESR10 ESR4, ESR6, ESR9 ESR2, ESR8 ESR8, ER1, ER2 ER1 ESR7 ESR₆ WP2 Upper mantle heterogeneity Observations and models Plates and convective patterns Imaging the distribution of and depth-dependent of the interactions between anisotropy in the western fluids and of the deformation fluids and deformation in subduction settings Mediterranean above the active Indonesian above a subduction zone and the Gulf of California subduction zone subduction zones Coordinators: M.Kendall & T. Gerya ESR1, ESR4, ESR5, ESR1.ESR6.ESR8.ER2 ESR1, ESR2, ESR6, ESR7 ESR7, ESR8, ER1 ESR9 ESR₁₀ ER2 ESR8 WP3 Geochemical probing Analytical and numerical Plates in mantle convection: of the mantle dynamics: Thermal convection with How do mantle plumes help models of buoyancy-driven Time and length scales plate tectonics in to thin and break up the global story subduction of heterogeneity in the mantle the laboratory the lithosphere?

ESR2, ESR3, ESR4,

FSR5, FSR10





Recruitment results

Project Number	ESR's Name	Nationality
ESR1	Ms. Flora BAJOLET	French
ESR2	Mr. Tobias ROLF	German
ESR3	Ms. Kate HIGGIE	British
ESR4	Mr. Erwin FRETS	French
ESR5	Mr. Marcel THIELMANN	German
ESR6	Ms. Diana DYMKOVA	Russian
ESR7	Ms. Jeanette DI LEO	German
ESR8	Ms. Anna MASSMEYER	German
ESR9	Mr. Roberto AGRUSTA	Italian
ESR10	Ms. Katherine ADENA	Australian
ER1	Ms. Sonja GREVE	German
ER2		





Tutoring & Evaluation (1)



- Advisory Committee: 2 supervisors + 2 members (external to the PhD project)
- > follow-up of the ESR/ER projects & personal career development plan
- > assist for the assessment
- > meeting at the end of the contract for final evaluation, plans/perspectives discussion, and help with integration into the professional world
- Personal Career Development Plan IMPORTANT: basis for assessment of ESR/ER progress
 - Long-term career objectives (goals & what is planned to reach them)
 - Short-term career objectives (research project, skills & techniques to be acquired, management = work plan, scientific & PCD courses planned, other professional training, networking activities planned)
- > to be completed with the assistance of AC in the first 3 months
- > assessed and adjusted yearly with the assistance of the AC
- > report on the success of the objectives: included in the ITN report



Tutoring & Evaluation (2)



EVALUATION at the end of the 1st year (2nd CRYSTAL2PLATE workshop):

- ➤ fellows will report and defend their work progress to the CRYSTAL2PLATE Supervisory Board
- > SB decides whether the candidate is eligible to continue in the programme or not, taking into account the recommendations of the AC

Other Tutoring Issues

- ➤ Practical assistance concerning working and living in another country:
 - coordination team: Nathalie Modjeska
 - locally : supervisor, young permanent researcher of the group, or host inst. administrative officer
- ➤ Gender issues: implementing, if desired by the female ESRs/ERs, an individual tutoring by one of the female PIs



CRYSTAL2PLATE Management Structure



Partners' Administrative Staff

 \Longrightarrow

European Commission

Project officer: G. Donini

Coordination team (Univ. Montpellier 2) executive body

A. Tommasi, N. Modjeska

7 Pis+ M.Dutko + ESR

Supervisory Board decision-making body

Enlarged Supervisory Board

assessment

conflic

+ Y. Ricard (Lyon) & C. Thomas (Munster)

Working Group 1 Scientific Training

- Training
- recruitmentresearch projects
- training program
- short-courses
- summer schools
- field trips
- ESRs and ERs relations

A. Davaille J. Wookey Working
Group 2
Career & Personal
Development

- CPD formation offer
- personal development activities
- careers' advice meetings
- ESR-ER-PIs networking
- contacts with fellows after end of contracts

H. Paulssen N. Modjeska Working Group 3 Relations with Industry

- professional training
- reinforcement of industries' participation to the network
- fellows' visits to associated partners sites

M. Kendall A. Tommasi Working Group 4 Communication

- communication aspects (website, e-newsletter, leaflets ...)
- positions publicity
- result's dissemination strategy
- participation to meetings
- publications database

F. Funiciello A. Tommasi



Recruiting and employing the ESRs/Ers Employment contract & salary



Salary: EC funding corresponds to the gross salary (net salary + employer social security charges):

- Living and Mobility allowance (Budget Category A) = fixed amount depending on family status @ the date of recruitment, adjusted for country of host institution
- -Travel allowance (Budget Category B) = fixed amount, depends on distance between country of origin and host institution (€250-2500, paid once a year)
- Career Exploratory allowance (Budget Category C) = € 2000 paid once for each researcher with a stay of at least 1 year in the host institution

> All these allowances are for personal use, not for research, training, or tuition fees!

Expenses related to training & research: funding administrated by supervisors

> Career Development Plan





Marie Curie Fellow's obligations

- Devoted <u>full-time</u> and <u>exclusively</u> to the project
- <u>Dissemination:</u> remember to inform us on all your dissemination and send us pdfs of articles/posters/abstracts together with links and references.
- <u>Acknowledge Crystal2Plate properly in all situations: "The research leading to these results has received funding from Crystal2Plate, an FP7-funded Marie Curie Action under grant agreement number PITN-GA-2008-215353".</u>
- Commit to <u>complete</u> evaluations and <u>questionnaires</u> = EC evaluation of the ITN
- Maintain <u>contact details</u> so as to be reachable <u>up to 3 years after the end of project</u>





Useful links

In addition to reviewing the official documents describing the project (Grant Agreement, Annex 1, Annex 2, Annex 3) we invite you to find out more about your status as a Marie Curie fellowship recipients by visiting the sites below:

- Marie Curie Actions home page http://ec.europa.eu/research/mariecurieactions
 For general information and career opportunities in research
- Euraxess at http://ec.europa.eu/euraxess/index_en.cfm?
 for resources on your rights, national specificities, research opportunities and more
- Marie Curie Fellows association at http://mcfa.eu
 for good tips from fellow Marie Curie recipients