Péter Dombi, IEF Fellow 2012-2014
Max Planck Inst. of Quantum Optics, Garching

Personal intro

M. Sc. in Physics, 2001 Szeged, Hungary

Ph. D. in Physics, 2005 Vienna

2005-2010 postdoc in Budapest (4ys) and Vienna (1y)

2011-2012 staff scientist in Budapest

2012-2014 IEF Fellow at Max Planck Inst. of Quantum Optics
(project UPNEX, „Ultrafast Phenomena in Nanoparticle Excitations")

research: femtosecond lasers, ultrafast (nano)science (all through)

plan: 2014- in Hungary again…

Proposal writing, experience

Dos

- Plan well in advance, get in touch with future „scientist in charge”

- Check the definition and weight of each criterion in evaluation

- Structure your proposal properly along guidelines

- Submit a proposal for 24 months unless good reason not to do so

- take into acount that you can spend 30% of your time also elsewhere (further collaborations, external experiments, networking, etc.)

Don’ts

- underestimate significance of „Training, implementation” parts of proposal (concrete details are very much needed)

+ „less is more” – do not plan too many research tasks

Proposal example – optimize for evaluation process

5 evaluation criteria (check definition and weight!)

1. Scientific quality of proposal, 7 pages incl. 23 references

Strengths

- **„socio-economic reasons** for research described”
- „referenced description of research”, novel experiments, proper methodology
- host researcher and institute are good

Weaknesses

- „fabrication of nanoparticles not described”
- laser technology not described in details **– focus on methods as well**

2. Researcher, 6 pages including publication list

Strengths

- International research experience, publications
- Teaching experience, thesis supervision, leadership etc.

Weakness

Lack of experience in nanoparticle fabrication

Proposal example – optimize for evaluation process

3. Training, 2 pages

strengths

- „**new laboratory skills** can be acquired"
- **Soft skills** offered by MPG, IPR, proposal writing, paper writing, project management etc.

Weakness

No data on the host's expertise in training experienced researchers, nor the corresponding data for the host group (number of trained PhD students)

4. Implementation, 4 pages incl. Gantt diagram, strengths:

- „**infrastructure and collaborations of host group** are excellent"
- „solid work plan divided into **tasks and milestones**"

Weaknesses

- „milestones not sufficiently detailed"
- „no details on fabrication of nanostructures"
- „no risk analysis for each scientific objective" – **make a plan B, risk analysis etc.**

5. Impact, 2 pages – only strengths

- Expected **increase in professional maturity** of fellow, good science impact
- Good **outreach activity** of host
- Genuine mobility, new culture etc.

Project implementation until now (half time)

• **3 research tasks** in proposal, **2 are being implemented, 1 substantially modified**

• **Training and other costs** (800 EUR/month provided)
– only conferences and Marie Curie Network meetings until now, several talks
– laboratory consumables etc. provided from other sources

• Planned **course in IP management** (European Patent Office),
planned external collaborations (experimental campagins for some weeks)

• **Assistance of EU, Personalstelle etc. offices** @MPQ was very useful
(for moving with kids, finding accomodation etc....)