Diaspora Workshop

Chisinau

9.02.2018

Cooperation opportunities within Horizon 2020: Research-Development Institutes and Scientific Diaspora

Dr. Julieta Gradinaru, University of Neuchatel, Switzerland

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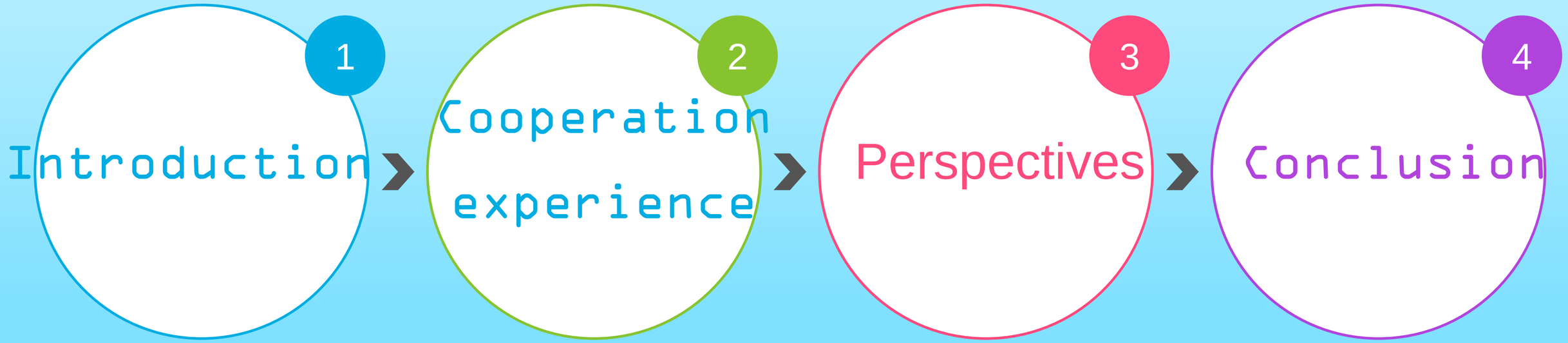
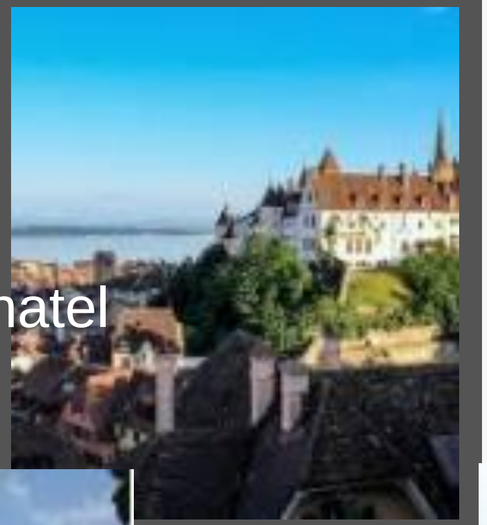


Introduction

Julieta Gradinaru
PhD , chemist
Coordinator of
apprentices 'training
University of Neuchatel
Switzerland



Presentation

Knowledge and Methodological Expertise

1. Coordination Chemistry, University of Neuchatel
2. Analytical Chemistry (UPLC, validation) CHUV, VD
3. API manufacturing, development , B.Braun Medical
4. Pharmacochemisty (Membrane permeability, UGTs Phase II Metabolism), University of Geneva
5. Teaching (Inorganic Chemistry courses) University of Neuchatel)

Education:

2016-2017: **Master of Advanced Studies,** Lausanne University of Teacher Education

1988 – 1991: **PhD study, 1993 – PhD diploma Coordination Chemistry, Prof. N. Gerbeleu**

1981 – 1986: MS Inorganic Chemistry, Moldova State University, Department of Chemistry

The sources

Professor, Academician Nicolae Gerbeleu, head of the Laboratory of Coordination Compounds from 1978-2006 .

Professional Profile

2018 – **Coordinator of the training of apprentice**, University of Neuchatel.

2016-2017 – **Lecture,** General chemistry courses for biology, medicine and pharmaceutical students, University of Neuchatel

2015 – Administrative employer **SMIG**, Services des migrations

2014- **Researcher**, Cemex Research Group AG

2012-2013- **Scientific collaborator, University of Geneva, CTI project**

2010- 2011**- Researcher** (Biochemistry and Clinical Psychopharmacology unit of CHUV)

2008-2009 **Scientist, responsible of pilot study**, PDVR (Development Department), B.Braun Medical

2001 – 2008- **Postdoc, maître assistant, scientific collaborator,** University of Neuchatel.

1988-2001- Researcher, Institute of Chemistry, ASM

The present activity : University of Neuchatel:

3 research laboratories:

- **Prof. Robert DESCHENAUX**, professeur ordinaire, directeur
  Laboratoire de chimie macromoléculaire
- **Prof. Stephan VON REUSS**, professeur ordinaire
  Laboratoire de chimie bioanalytique
- **Prof. Edith JOSEPH**, professeure assistante
  Laboratoire de technologies pour les matériaux du patrimoine

Academic area

Prof. Dr. Thomas R. Ward,

Artificial Metalloenzymes Laboratory

University of Basel

Associate Professor Chin B.Eap,

Unit of Pharmacogenetics

and Clinical Psychopharmacology,

CHUV, Lausanne

Prof. Serge Rudaz ,

Laboratory of Pharmaceutical Analytical Chemistry

University of Geneva

Professional Network

Industrial Area:

Dr. Samuel Constant

Epithelix SA, a biotech company

Geneva

Dr. Vincent Adamo

Manager Pharma Development.

B. Braun Medical SA, Crissier.

Cooperation experience

Phase I : Short term individual visits in EU institutions

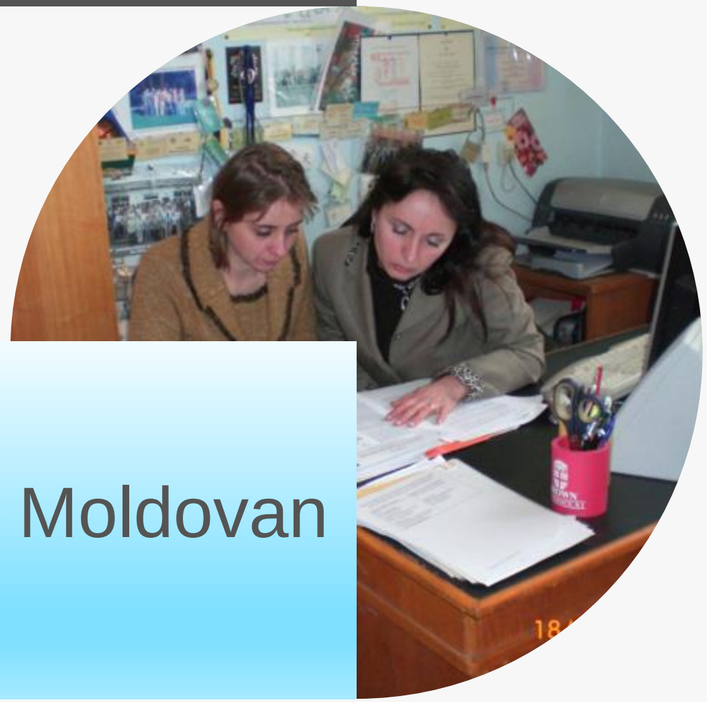
Individual grants for research (NATO Outreach fellowship grant, 2000,Supervisor Prof. S. Quici, University of Milano, Italy.

DAAD grant, 1999 Supervisor: Dr. H.-J. Buschmann, Textilforschungzentrut, Krefeld,Germany.

Individual visit grant, Royal Society, 1998, Prof. D.Fenton, University of Sheffield, U.K.

Grants for conferences (Spain, France, Switzerland)

Cooperation experience



Phase II

Scientific collaboration: Scientific Diaspora – Moldovan RD institutes projects

- *Diaspora meeting EPFL: Round table discussion Moldavan and Rumanian associations, 6.09.2010, G.Tejada, scientific collaborator at Cooperation@epfl, Mr. S. Porcescu and Mr. Vitalie Varzari (ASM)*

- *Workshop: "Connecting the scientific diaspora of the Republic of Moldova to the scientific and economic development of the home country" , a joint research Project of EPFL and ASM, 2.02.2012*
- *OIM short visit collaboration project: "*Synthesis and structure study of new bitopic macrocyclic compounds 14-25.02.2011, Institute of Applied Physics; *Participants:* J.Gradinaru, V.Kravtsov, E.I Melnic.

Phase III: New bilateral-projects

- “Design, synthesis and characterization of new organometallic compounds showing NLO activity” , CNR-ASM (Dr.A.Forni, Dr. M. Fonari, Dr. V. Kravtsov) 2013-2014

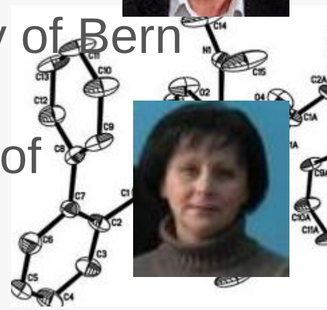
- “Organic & inorganic new hybrid optoelectronic active material based on tri-imidazol ligands

- Investigation of new multifunctional acentric metal-organic materials for opto-electronic applications” 2015-2016

SCOPES programme:
Eastern European partner countries of Switzerland

SCOPES supported by the Swiss National Scientific Foundation)

Prof. Silvio Decurtins, Department of Chemistry and Biochemistry, University of Bern



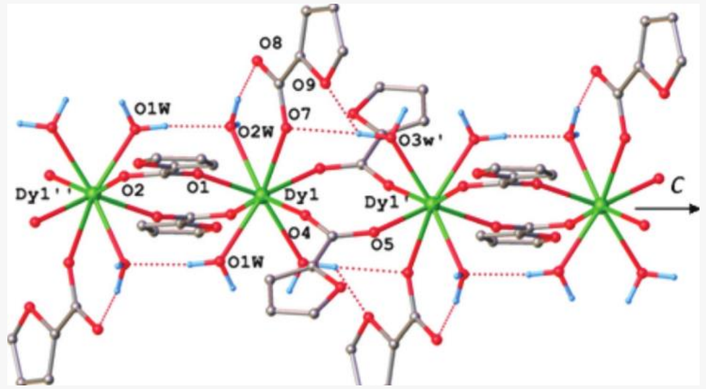
Assoc. prof. Svetlana Baca, Institute of Applied Physics, Chisinau, Moldova

SCOPES, project IZ73Z0_152404/1 (**2014-2017**)
"Synthesis, Experimental and Theoretically Study of Bistable Magnetic Materials Based on 3d and 3d-4f Exchange Coupled Clusters: Prospects for Practical Applications".

SCOPES, project IZ73Z0_1 27925 (**2009-2012**) "Magnetic coordination polymers of the nanosized clusters".

SCOPES, project IB7320-110976 (**2006-2008**) "New Approaches for Building Potential Magnetic Materials: From Isolated Metal Clusters to Molecule-Based Magnets".

SCOPES, project 7MDPJ065712.01/1 (**2000-2003**) "Design and Synthesis of Polynuclear Systems with Potentially Unusual Magnetic Behaviour".



SCOPES 2005-2008: 110823

Prof. Stoeckli-Evans Helen, University of Neuchâtel,

Prof. **Turta Constantin**, Inst.Chem, ASM

Design, synthesis and study of co-ordination compounds of 3d- and 4f-metals using functionalised macro- and heterocyclic ligands for possible medicinal and therapeutic applications

Perspectives

The SCOPES programme, which was launched in 1990, came to an end on 31 December 2016.
There will be no further calls for proposals

STILL POSSIBLE (until 30 June 2018)

Valorisation Grants

Conference Grants

FNSNF
Swiss National Science Foundation

Expected in 2018:

A new programme called International Joint Research Projects (IJRPs)

Recommendations

- Strengthening of existing links
- Join efforts to establish permanent links
- Foster knowledge exchange
- Stimulate joint grant applications to HORIZON 2020 and COST
- Engage scientific diaspora in evaluation process
- Adapt education and training to the needs of a changing economy
- Return migration by new career opportunities for “study abroad” ex-students migration generation

Challenges/obstacles

- No freedom (to initiate linkages)
- Absence of inventory of the skills base within the diaspora
- No platform that would allow to participate in short-term visits to home country
- No grant-writing advice and mentoring
- Work permit restrictions
- Specificity of Switzerland academic research
- Poor physical presence of Moldavian scientists in Switzerland

Some solutions:

- ❑ promote mini-sabbaticals
- ❑ provide seed funding
- ❑ flexible time frames

Conclusions

Scientific diaspora is a unique resource : for expertise, experience, and catalytic potential, help build trusting relationships with scientists abroad

Old myths, new realities – the brain drain…

Exodus or Circulation (international mobility brain)?

Highly skilled scientific migration only “losing” for home country?

No… «winning» too, with new human bridges, knowledges and collaborations

Thank you for your attention!

Any questions?

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