

Career Development Plan - Year 1 (first 6 months)

Name of fellow: Petra D'Odorico

Position: ESR3

Organization: Kayser Threde GmbH Munich

Name of Supervisor: Stefan Hofer

Starting Date: 01 September 2007

BRIEF OVERVIEW OF RESEARCH PROJECT AND MAJOR ACCOMPLISHMENTS EXPECTED:

Kayser-Threde GmbH is a leading systems house specialized in the design and development of high-technology solutions for aerospace, the automotive industry and for the rail sector. The broad array of solutions includes applications in manned and unmanned space missions, data measurement and management, telematics, optics, and process control.

KT is currently leading the first German hyperspectral satellite mission known as the Environmental Mapping and Analysis Program (EnMAP), whose launch is scheduled for 2011. Thus a main goal of the first six months of the fellow's Hyper-I-Net appointment is to provide the fellow with an insight into the basic concepts, methods and technologies of a hyperspectral imaging mission.

The second main goal of the stay at KT is to compile an inventory on calibration/validation methods, processors and equipment. The preparation of this document is based on an extensive literature review and on collaboration with experts in the field.

SHORT-TERM OBJECTIVES (for the 6 months at KT):

1. Research Results

- Hyper-I-Net Deliverable D5.1 CalVal Inventory:
Conducting an inventory of existing methods and processors for laboratory, onboard and vicarious calibration and assimilation.
- Attendance of conference, workshop, courses, and /or seminar presentations:
 - APEX Science Product Day, Zurich 11/09/2007
 - HYPER-I-NET summer school, Caceres 29-31/10/2007
 - IDL Programming course, CREASCO GmbH Munich 04-07/12/2007

2. Research Skills and Techniques:
 - Basic concepts, methods, technologies and applications of hyperspectral imaging
 - Basic concepts, methods, technologies of instrument/data calibration/validation
 - Basic IDL programming
3. Research Management:
 - No particular management activities foreseen at this early stage except structuring of own work and collaboration with colleagues
4. Communication Skills:
 - Manuscript writing
 - Presentation of own work at the 1st Hyper-I-Net summer school in Caceres
5. Other Professional Training (course work, teaching activity):
 - None foreseen at this time
6. Anticipated Networking Opportunities:
 - Conducting a survey within RS community on the topic of CalVal
 - Hyper-I-Net summer school Caceres/Spain
 - Collaboration with other Hyper-I-Net partners: RSL/Zurich, SPECIM/Oulu

LONG-TERM CAREER OBJECTIVES (over 5 years):

1. Goals:
 - Complete a PhD
 - Do postdoctoral research towards qualifying for a junior faculty position at a university
2. What further research activity or other training is needed to attain these goals?
 - To conduct research of good quality, truly worthy of publication
 - Good supervision and mentoring
 - Training in scientific writing and presentation

Date & Signature of fellow:

01/02/2008

Retna D'Obrico

Date & Signature of supervisor

01/02/2008

Steph Hof