

if at,0(a7
bne at,at,20
or v0,at,at
or at,a0,a0
sc at,0(1)



Women's Postgraduate College
for Internet Technologies



TECHNISCHE
UNIVERSITÄT
WIEN

VIENNA
UNIVERSITY OF
TECHNOLOGY

Women's Postgraduate College for Internet Technologies (WIT)

Dr. Beate List

Women's Postgraduate College for Internet Technologies (WIT)

Institute of Software Technology and Interactive Systems

Vienna University of Technology

list@wit.tuwien.ac.at

<http://wit.tuwien.ac.at/>

- **Head of the Project** : Prof. Dr. Gerti Kappel
- **Project Affiliation**
 - Business Informatics Group
 - Faculty of Informatics
 - Vienna University of Technology
- **Funding**
 - Austrian Federal Ministry for Education Science, and Culture
 - European Social Fund (ESF)
- **Duration**: 2003 - 2007
- **Positions**
 - 8 Ph.D. Students
 - 1 Senior Research
 - 1 Project Manager
 - 1 Administrative Assistant

WIT – The Group



Situation

Vienna University of Technology: Staff



Professor (m+f)	150	
Female	6	4 %
Associate Prof. (m+f)	254	
Female	22	8 %

Source: TU Wien, 2005

Computer Science Students

ETH Zurich (2003)	10 %
EPFL (ETH Lausanne) (2006)	14 %
Cambridge (2003)	14 %
TU Wien (2005)	17 %
South Africa (2001)	37 %
Carnegie Mellon (2000)	40 %

...despite the lack of highly trained and qualified people in research and industry women are underrepresented in education as well as in the professional life.

Source: Austrian Council for Research and Technology Development

Initiated



Women's Postgraduate College for Internet Technologies

as a Solution

- **More women into IT!!!**
- **Qualification at highest level**
- **Mentoring and promoting women at all levels of their professional career**
 - High School Students
 - Students
 - Graduates
 - Researchers
- **Reduce barriers, motivate, initiate networks**
- **Raise awareness and visibility: make women in IT more visible**

3 Main Areas

- **1. Ph.D. Programme**
- **2. Career Development**
- **3. Communication**



1. Ph.D. Programme

■ Ph.D. Curriculum

■ 8 Positions for Women

- Full-Time contracts for 4 years including benefits, like
 - Healthcare
 - Accident Insurance
 - Pension fund
 - Unemployment Insurance
- Salary: 1.950 EUR per month / 14 times a year
- WIT received more than 60 applications in total
- Annual Travel Budget: 6.000 Euro per student
- Background MSc in Computer Science (3) or Information Systems (5)

■ Goal

- Train Ph.D. students for **careers in teaching and research** in the academic world as well as industry

■ Advantages

- Fosters a **goal oriented realisation of the thesis research** within 3 – 4 years
- Provides a **detailed job specification** of a Ph.D. student

■ Analysis of international „Computer Science“ PhD Programmes

- Stanford University
- Massachusetts Institute of Technology
- University of Berkeley
- Carnegie Mellon University
- Cornell University
- Princeton University
- Imperial College London
- King's College
- University of Edinburgh
- University of Manchester
- University College London
- University of Bristol

■ Reports

- Ph.D. proposal
- Research poster

■ Publications

- Publish at least 5 peer reviewed papers
- Review and asses research papers

■ Teaching

- MSc + BSc theses
- Lectures, labs, practical, seminars, etc.

■ Examinations on Courses

■ **Prototype Engineering**

- Specification, Design, Implementation of Prototypes

■ **Transferable Skills**

- **Communication Skills:** Rhetoric, Effective Presentations, Negotiation, Moderation, etc.
- **Project Planning and Management Skills:** Time Management, Work-Life Balance, Fiscal Law, etc.
- **Research Methodology:** Scientific Writing, Philosophy of Science, Informatics Research Methods, How to do a Ph.D. etc.

■ **Career Development**

- Mentoring
- Coaching

■ **Doctoral Dissertation**

■ Further Education / Professional Experience

- Visiting researcher (University of Paderborn, Germany and Massey University, New Zealand)
- Engineering Internship (HP Research, IBM Research)
- Summer School
- Ph.D. Workshops

2. Career Development

■ Admina.at

- Hands on training for students



Admina.AT

■ Mentoring

- Big Sister first Steps: mentoring for beginners
TU!MentorING for professional researches



BIG.SISTER
FIRSTSTEPS

■ Transferable Skills

- Seminars, Career Coaching, etc.



TU! MentorING

- **Practical HW+SW administration workshops**
- **Women only! Female trainers and students**
- **Role Model:** Admina at the University of Hamburg
- **Workshop:** Hardware, Operating Systems (LINUX), Programming (Java), Databases (MySQL)
- **Goal:**
 - Support the creation of study groups
 - Teach technical skills female students often do not have
 - Reduce number of drop-outs



■ Strengths

- Positions dedicated to women only!!!
- Comprehensive approach of WIT
- Ph.D. curriculum
- Integration into the university
- Shows that **great women scientists are available**

■ Weakness

- **NO SUSTAINABILITY:** People & Project
- **NO TOP-DOWN APPROACH AND SUPPORT**
- **ONLY 1 PhD STUDENT wants to continue a research career!!!** (due to very bad employment conditions at universities – no tenure tracks)

■ Opportunities

- WIT can **increase number of women researchers** in an organisation – **Requirements:**
 - **Long term career development policies** at scientific institutions
 - **Provide tenure-tracks** + permanent contracts
 - Promotions based on performance, evaluations
- **Women in CS are available**
- **Retention** is the big issue - HR
- Changes of **employment conditions** are required
- **Short term projects cannot solve the leaky pipeline problem**
- **Change structures of organisation + curricula!!!**



**We are happy to share
our experiences!**