Self-evaluation Report about completing a short-term research visit to Delcam PLC by undergraduate Yulia Gaylis

- 1. Hosting country: Great Britain
- 2. City/town: Birmingham
- 3. Dates of staying: from June 2^d 2013 till July 28th 2013
- 4. Visit details:
 - 4.1. Official name of the hosting company: *Delcam PLC*
 - 4.2. Aims of visit: Familiarization with the software of the host company, the application of these programs in the chosen research areas and development of software for design and analysis of the jewelry production technology in the work on the master's thesis.
 - 4.3. Tasks of visit: To pass the Delcam's software training courses in accordance with the program of the host company; to use its software as part of the development program for the design of production processes technological modes; to create rolling tool 3D-model its processing simulation using Delcam programs.
- 5. Initial plan of visit: To pass training courses during seven weeks devoted to the most popular software products of the host company and for one week to visit laboratories and plants using these programs in their work.
- 6. Results of visit

During the internship working skills with software were mastered according to host company program, (PowerSHAPE Pro, PowerMill 5 Axis, PowerMill Pro, PowerINSPECT, FeatureCAM, ArtCAM Pro, ArtCAM JewelSmith).

- 7. Evaluation of the visit efficiency
 - 7.1. evaluation of training suggested at the host institution (if applicable)

Training courses were built in a convenient form, provided detailed information on the functionality of the software, solutions step by step examples of tasks and exercises to gain practical experience.

7.2. teaching staff efficiency (if applicable)

In the role of teachers were employees of various departments of the company, including software development and technical support departments, who own not only the theoretical foundations, but also the practical skills to work with the programs.

7.3. new knowledge and competences

As a result of the internship were acquired basic skills to work with Delcam software products, intended for the design, modeling and control of turning and milling parts. Opportunities to apply the knowledge within the selected research area and in work on a master's thesis were identified.

7.4. involvement into multicultural and multinational environment/ awareness about other social systems

During the trip practical language experience was got as a result of the communication with native speakers. Enterprises and several universities were visited in the host country.

7.5. awareness of innovative approaches to solving professional problem

This experience is applied to extend the capabilities of the process analysis, as well as to cover not only basic but also support the production processes of the technological chain (modeling and manufacturing of rolling tool by turning and milling).

7.6. new contacts/expanding professional network

During the trip were developed business relationships with employees of the host company, which acted as lecturers, and master students, were studying in the same program in the same period.

8. Percentage of completing the initial plan of visit

The tasks are solved in full volume in accordance with the internship program.

9. How much the visit contributed to your future professional/research activities?

Results of trip greatly expanded the functionality of the developing software, perform a number of tasks in the research work. That fact allows to model section rolling process and carry out more detailed analysis of this process, which is one of the main in the technology chain of jewelry production. In general, results of the trip expanded area of research interest.

10. List of documents confirming your successful completion of the research visit (should be attached)

Certificates of attendance of intensive course in the software is attached to the report

(PowerSHAPE Pro, PowerMill 5 Axis, PowerMill Pro, PowerINSPECT, FeatureCAM, ArtCAM Pro,

11. Overall evaluation of the visit

ArtCAM JewelSmith).

The trip has significantly extended the range of research interests, methods for the analysis of the technology, functionality of the developing software for its support.

12. What changes would you have made if you were preparing for the next visit of a similar kind?

The trip covered mostly training in company and familiarity with the production, however, little attention was paid to the academic and research activities of universities in the host country. It would be useful to learn the experience of foreign colleagues in that field.

Y.D.Gaylis