

4.1 Information guideline to industrial fellow

4.1.1 IFP programme objectives relevant to industrial fellow

IFP program is intended for the establishment of sustainable partnership between universities and industry through hosting industrial fellows (graduates and engineers from industry) in research and academic centers, with the aim to realize advanced targeted trainings of industrial fellows and joint research according to the needs of industrial sponsor. Working in a team with experienced researchers, industrial fellow can acquire research experience and knowledge by being involved in ongoing projects that are vital for further development activities of the sponsoring enterprise. Flexible IFP duration, organized several times during the year, enables the hiring of industrial fellow on development and innovation projects of mutual interest for academic and industrial partner. The IFP program is an excellent opportunity for technology transfer and involvement of young people in innovative projects that contribute to the exchange of experience, ideas, knowledge, and increase of innovative potential and competitiveness of enterprises.

4.1.2 Benefits for industrial fellows

An industrial fellowship is particularly valuable for graduates. The main benefits the fellows will experience can be summarized as follows:

- to be provided by an interesting working experience, developing an important contact with the university research environment;
- to enhance his/her own creative thinking, problem-solving, project management and team-building skills;
- to enhance his/her own ability to communicate with academy in order to identify solutions for problems and issues of interest;
- to be provided by a customized learning experience based on skills, talents, and developmental needs;
- to work in a collaborative environment with both academics and industrial people, forming long-term contacts and networks for future collaborations.
- to access to academic services (on-line databases, software, laboratory equipment, academic network) and the possibility of attending ongoing courses and seminars
- to have the possibility of publishing papers and patent applications with the research team at the University

4.1.3 Industrial fellow responsibilities

For successful implementation of IFP programme, it is necessary that there is a full inclusion of industrial fellow in the research team at the university, whereat the access to all investigative resources necessary for a determined plan of research and training is ensured. That entails a great deal of responsibilities of a fellow to the industrial institution that will host him, as follows:

- Before the beginning of IFP implementation, industrial fellow is obliged to agree to and sign the Sworn statement (see Annex 4.4), which largely defines his responsibilities
- Understanding specific obligations, training and research plan within IFP programme that were agreed upon with research/academic mentor and sponsoring enterprise
- Defining and respecting additional responsibilities with research mentor (if needed)
- Hardworking and responsible approach to work and readiness to take the initiative
- Respecting work ethics and codes of conduct defined by the hosting research institution
- Compliance with working time, agreed upon with research mentor

- Respecting confidentiality and keeping secrets related to current research projects
- Knowingly refer to the property of hosting research institution and carefully handle the equipment, instruments and software
- Respect the rules of using academic network, defined by the applicable Regulations act at the level of university and/or research institution that hosts the industrial fellow
- Regular communication with the research mentor and reporting to sponsoring enterprise on the progress during IFP implementation
- Submission of Periodic and Final report on the implemented IFP programme

4.1.4 IFP implementation

a) Selection of hosting R&D institution

One of the main advantages of the IFP programme is flexibility, both in terms of duration as well as the procedure of choosing industrial fellow, sponsoring enterprise and research group. Although the CTC centers at home Universities of Kragujevac, Rijeka, Banja Luka and Podgorica were initially put in charge of coordination of IFP programme, connecting the key stakeholders for the implementation and defining of all necessary procedures, other academic institutions are expected to join this program in the territory of the Western Balkans.

Therefore, the interested enterprises and individuals can contact the CTC centers that will refer them to the nearest info centers about the programme and provide them with the contact details of local IFP coordinators.

In addition, databases of available R&D institutions, which have expressed their willingness to host industrial fellows, and on the other hand the registered sponsoring enterprises, will be available to engineer graduates on the websites of CTC centers (www.ctc.kg.ac.rs , www.ctc.uniri.hr , www.ctc.unibl.rs , www.ctc.ac.me).

b) Application and contracting practical placement

Industrial fellow who is employed in the sponsoring enterprise will fill out the Application form with the defined areas within which the IFP is implemented, duration, and proposal of R&D institution (and research mentor) in which the programme will be realized. If the industrial fellow is employed in a sponsoring enterprise, his application is conformed to the developmental needs of the enterprise in agreement with the person in charge. After analyzing the proposal and assessing the eligibility of candidates, the IFP coordinator helps three contracting parties (R & D institution, enterprise and industrial fellow) to define all implementation procedures and the final contracting.

An important part of these activities is the elaboration of IFP work program, which presents an integral part of this Agreement, as his annex, and which should inter alia include:

- Field of research and advanced trainings
- IFP programme goals
- Expected results and outcomes of IFP
- Action plan
- Budget structure (salary of industrial fellow, travel costs, supplies and experiments' costs, reimbursement for research mentor, IPR and patenting costs, other costs)
- Dissemination activities and publication of results

c) IFP realization

In accordance with the established IFP work programme, industrial fellow conscientiously carries out all planned activities and assigned tasks under the supervision of research mentor and possibly the person who is in charge of progress monitoring (IFP coordinator). Fellow fills Monthly progress reports, as the basis for monitoring progress and making of Interim and Final reports.

During the first week of programme implementation, industrial fellow must undergo the so-called Initial training in order to get familiarized with the institution he is hosted in, its resources, current projects, regulations referring to the rights and obligations of employees, considering that the fellow holds a considerable part of authorities as the enterprise's employee.

Apart from developing research experience, industrial fellow is expected to develop time management skills through making daily and/or weekly action plans, with a set of different activities on different locations and training/research sub-areas, under the supervision of research mentor. Self-initiative and self-organization are also skills that need to be developed at this point.

Depending on the affinity and previous knowledge, planned thematic trainings, fellow can be involved during the second phase of IFP implementation in the ongoing projects of hosting research institution by being included in the team and the realization of specific tasks, thereby increasing fellow motivation for further scientific career development and commitment to a particular occupation. At the same time, research mentor can evaluate the fellow in different situations, his ability to solve concrete problems. Finally, Sponsor Company and fellow can define proposal for joint project with research team for specific project aligned with industry needs.

During the realization of practical placement, the industrial fellow is required to maintain regular communication with sponsor enterprise, who is also required to monitor IFP implementation, fellow progress and the level of expected training/research outcomes and practical skills acquisition.

4.1.5 Reporting and Monitoring

As described in paragraph 3.5 of the programme, progress monitoring will be done on two levels. First, the monitoring of general progress in the implementation and development of the IFP programme at the level of coordinator's institution, in this case CTC centres and local coordinators in the region of Western Balkans. On this occasion, the following will be considered:

- the number of fellowships (both in terms of founded years and number of recipients), compared to average values for other local and foreign academic institutions;
- the variation in the number of fellowships in time;
- the number of industrial fellows;
- the number of industrial and academic projects (national and international) proposals generated by IFP;
- the number of publications and patents generated by IFP collaborations;
- the career development/progress for industrial fellows.

Second level of control and progress monitoring refers to the individual IFP, that is, progress monitoring and reporting on the agreed IFP work programme and particular industrial fellow. Besides the so-called field monitoring, which is realized by IFP coordinator's visits of fellow in the host R&D institution (minimum 2 visits), and continual monitoring of fellow's progress and realization of training/research activities by research mentors and responsible person of sponsor enterprise, the realization of IFP will be additionally monitored by e-mail communication and fellow reporting. Fellow communicates progresses and issues about activities within the IFP, through regularly Monthly reports and Interim progress report, as well as on as-needed bases. If situations are encountered that significantly delay the study, change the study design or procedures, or change the costs of the research, these issues should be communicated to IFP coordinator, research mentor and sponsor enterprise responsible person as soon as possible.

At the end of the fellowship period, Final report with description of the overall activity will be evaluated on the basis of those scheduled tasks and success indicators defined at the beginning of the specific IFP, that is in IFP work programme. Also, when IFP is successfully completed, a Certificate is issued to the trainees involved (see model in annex 4.7). The certificate includes fellow's personal details, abstract of the performed research and signature of both IFP coordinator and research mentor.