

Academic Offer description template for EMP-AIM Project:

Institution:	Johannes Kepler University Linz
EU subject code:	13.2 - Physics
Type of Mobility:	Staff
Title of the programme:	Nanoscience and Technology
Language:	English
Website with List of Courses relevant to the programme:	www.nanoscience.at http://www.jku.at/content/e262/e242/e2380/e1832/ http://www.jku.at/STA/content/e4426/e3098/e2380/e1832/e1825/e1823/4_MS_TechPhysNanoBiophys_Curric_MTB26_220611_ger.pdf
Duration (months):	1
Earliest start date:	1.10.2012
Latest end date:	31.1.2012
Academic requirements:	holds PhD, research experience in Optics and Nanoscience
Language Requirements: [e.g.: Have a good command of English, certified by a TOEFL score of minimum 550 (electronic 213) or a IELTS of 7.5. Candidates who can prove that their entire university education was taken in English (for example in a Commonwealth country) can be exempted from this requirement]	Fluent English
Academic calendar:	Winter semester: 1.10.2012 – 31.1.2013 (arrival mid-February) Summer semester: 1.3.2013 – 30.6.2013 (arrival mid-September)
Contact name:	Univ. Prof. Dr. Kurt Hingerl
Contact e-mail:	kurt.hingerl@jku.at
Additional information: [e.g. specific remarks could be provided for applicant to know in advance – f.e.]	The guest staff member shall give within one to two months a lecture on Optical properties of nanostructures, with special emphasis on the production of nanostructures, the deviation of the bulk dielectric function to the dielectric function of nanoparticles. Furthermore experience in either of these techniques is highly desirable: linear optical techniques, nonlinear (second harmonic generation), polarization optical techniques,

<p>„Courses are opened only if minimum number of exchange students register for the course“]</p>	<p>(spectroscopic ellipsometry, etc.) Further emphasis shall be put on investigating by optical techniques applications of nanostructures (e.g. catalysis, crystal growth, etc.) or on photochemical changes of nanostructures.</p>
<p>Explanatory text (short description of the programme): [What are the learning outcomes of the programme Compulsory courses, is thesis required, placement possibilities, etc.]</p>	<p>The Master's degree program in “Nanoscience and Technology” focuses on fundamental, physical and chemical properties of low-dimensional systems, applied experimental and engineering methods geared towards the production and analysis of nanomaterials and nano construction elements, as well as the development of suitable applications. Students are educated as interdisciplinary specialists possessing solid education in selected areas of natural and artificially produced nanostructures. Program graduates will have the necessary skills to implement new applications in engineering and research.</p>
<p>Mechanism of recognition and transfer used by the University:</p>	<p>According to ECTS standards</p>